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Fabricating ‘non-knowledge’: International Organisations and the Numerical Construction of an Evaluative World

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1. Introduction

The dominance of International Organisations (IOs) in the production of global metrics has so far had a large impact on the production of transnational governance¹. Metrics have infiltrated organisational cultures and the environments these organisations inhabit; crucially, they are reshaping the ways International Organisations work, compete and survive in an increasingly evaluated and quantified, yet uncertain world. Although scholarship has devoted a lot of attention to the statistical knowledge production practices and effects of organisations like the OECD, the World Bank, UNESCO and many others, we know far less about their parallel construction of ‘non-knowledge’; that is, the ‘conscious or unconscious, concrete or theoretical... wilful ignorance or an inability-to-know’ (Beck, 2009; 123). Therefore, this chapter’s focus is to turn the lens of evaluation studies² in the enactment of non-knowledge in global governance, i.e. the strategic making of uncertainty, ignorance, ambiguity and even error.

Building on political sociology, science and technology studies (STS), and using theoretical strands from critical accounting, evaluation studies and organisational sociology, as well as the newly emerging field of the sociology of quantification, METRO³ examines the production of statistical knowledge by International Organisations (IOs) in their construction of the global metrological field (Grek 2020). Education and Development are the focal cases for this examination: in both policy areas, IOs have been central to processes of standardisation, de-contextualisation and evaluation management through numbers; as a result, they have been instrumental in commensurating, and therefore transforming both policy fields. In addition, Education and Development have been attracting larger policy significance, as they are increasingly considered central to both economic prosperity and social cohesion. The construction of the Sustainable Development Goals (SDGs), with monitoring processes that relate to both education and sustainability, has become a productive arena for an examination of how quantification impacts on the ways IOs reconfigure their knowledge - and non-knowledge- production work.

A central focus of our study are the moves of large IOs to establish partnerships in order to push for large transnational statistical agendas that monitor the performance of countries in a range of policy areas, such as education, health and the environment. The making of SDGs is probably one of the largest and most ambitious collaborative statistical projects so far devised. In particular, METRO examines the governing and monitoring architecture of a range of SDGs (SDG 1, 4 and 17, in particular) as an opportune moment to analyse a major shift in the production of global indicators through an in-depth

¹ Here we follow Djelic and Sahlin-Andersson’s preference of the term ‘transnational’ versus ‘global’ governance, since ‘the label “transnational” suggests entanglement and blurred boundaries to a degree that the term “global” could not’ (2006; 4 – for a more developed argument see also Hannerz 1996).

² Here it would be important to suggest that this chapter examines evaluation, its practices and effects, as a socio-political process, and one that has been having increasing influence in the governing of contemporary societies (Dahler-Larsen 2012; Raimundo 2018).

³ METRO is receiving funding from the European Research Council (ERC) under the European Union’s Horizon 2020 research and innovation programme, under grant agreement No 715125 METRO (ERC-2016-StG) (‘International Organisations and the Rise of a Global Metrological Field’, 2017-2022, PI: Sotiria Grek)

investigation of the knowledge production practices of IOs and their statistical agencies. The encoding and decoding of data processes and organisational cultures that these monitoring endeavours require (in order for consensus to be reached and data to be shared and co-produced), allows a comprehensive analysis of the workings and effects of quantification for transnational governance. Through the specific examination of the controversies over the making of indicators as part of the education-related SDG (SDG4), the chapter focuses on reconfiguring the assembling of these evaluative devices by focusing on the enactments of both knowledge and non-knowledge in this context.

Although we have not completed our fieldwork, two of our cases, those that examine the making of poverty and education indicators for 2030, point us towards a closer investigation of the construction of consensus around the specifying and monitoring of the measurement goals. These meetings that bring together a range of actors, from the local to the international levels are, as we shall show below, those slow and convoluted processes that ‘wicked’ problems (Guy Peters 2017) are discussed and a range of possible monitoring solutions agreed upon. As this chapter shows, the process of collective problematisation requires not only the co-construction of knowledge by the relevant IOs, but also another significant function of theirs: that of the making of ignorance, or as we prefer to call it, non-knowledge. The social production of non-knowledge is a necessary precondition for reaching agreement about what kind of knowledge will be pursued in order to achieve a minimum consensus, so as to ensure ‘buy-in’ but also maintain actors’ own interests, values and positionings intact (Grek 2020). The construction of non-knowledge is an essential part of the measurement process: rather than the opposite of knowledge however, or its reading as a binary, we like to view it as a symbiotic relationship, necessary for balancing out and achieving some kind of constant equilibrium –and hence movement– of the metrological field.

Indeed, although the focus of sociological analysis on the making of ignorance seems to be relatively recent, philosophically and historically there is a certain symmetry in the making of both knowledge and non-knowledge; a process which has been political, strategic and thus, for the purposes of METRO, particularly productive in making sense of processes of quantification. The argument here is that, at least in the field of transnational performance measurement agendas, the making of any knowledge implies simultaneously the omission of other routes to knowledge; or, in other words, the active production of non-knowledge.

Thus, this chapter puts forward the proposition that political sociology can become a productive tool for evaluation research in order to explain the simultaneous making of knowledge and non-knowledge; this is achieved through a focus on the triptych of problematisation, institutionalisation and legitimisation (Smith 2009). Rather than suggest that the process of the fabrication of non-knowledge is an a-political process (ie. the pre-requisite of the production of any knowledge, in that the latter is always selective and built on choices), we purport that it is precisely the opposite: it is political and represents governing at its most effective. This is because institutional orders can only be built on the basis of the selection of relevant, emergent ‘issues’ that turn into ‘problems’ through a continuous process of selecting, de-selecting, omitting and including parts (in METRO’s case usually datasets), so as to finally conclude in the construction of ‘*the* (policy) problem’, the solution to which usually lies in data already located and manipulated in order to ‘fit’ the problem in question. Here we follow Rayner (2012), who suggests that for every ‘wicked problem’, some ‘clumsy solution’ is already available: or, in other words, there can be no ‘wicked problem’ unless it has already found its response in a ‘clumsy solution’. As Rayner suggests, the denial, dismissal, or active omission of ‘uncomfortable knowledge’ is an essential tool for organisations to coalesce around a minimum consensus. Non-knowledge is an integral element of the making of powerful technocracies, such as large IOs. It seems that due to the focus of analysis on the epistemic authority that technocratic rationality lends to their work, we have continued this analysis too long without acknowledging the role that strategic ‘unknowability’ might have in the work of the actors that we observe.

Empirically, as already suggested, the project uses Education and Development as ‘cases’; education policy, both in the global South and the global North, has increasingly been dependent on the measurement of its performance for the improvement of human capital. In addition, education can be a

productive vantage point, since assessment and quantification of performance have a very long history in the field. It is a key element in the newly emergent well-being and 'better life' strategies that have prevailed the statistical governing project post financial crisis (Stieglitz et al, 2009). Education is closely congruent with the efforts to use 'softer' data sets for calculating the social. Last but not least, it is one of those policy areas that large IOs like UNESCO, the OECD, the European Commission and the World Bank have invested large amounts of data and expertise from the mid-20th century on.

On the other hand, Development is in itself an 'international regime': a concept constructed on the basis of the statistical and discursive work of major IOs. Hence, it is a field of work vital and central to the existence of many IOs, especially in their work in the global South. It features in some of the most prominent global indicator projects, such as the Millenium Development Goals. Both education and development are policy areas where clashes of norms and ideas are most likely to happen given the very different ideological stances and trajectories some of these organisations have had; notable examples are the clash of views between the Council of Europe and the OECD in defining the purpose of education, or in regard to development, the very different ideological trajectories of UNESCO and the World Bank.

In the following sections, I will first briefly review the growing literature on the politics and practices of quantification in governing, before moving on to a discussion of the theoretical underpinnings of the chapter's proposition for a new, sociologically re-invigorated, research agenda for evaluation studies. The chapter will finish off with a discussion of the rise of 'ignorance studies' and the promise of political sociology as a theoretical and empirical frame in the fields of measurement and transnational governance.

2. Producing 'non-knowledge': sensitizing concepts and theoretical underpinnings

'Governing by numbers' in transnational governance

Scholarship on the role of numbers in governing societies has been abundant and has attracted multiple fields of study, including sociology, history, political science, geography, anthropology, philosophy, STS, and others. Prominent authors have written lucidly about the role of numbers in the making of modern states and the governing role of measurement regimes in various areas of public policy and social life (Alonso and Starr 1987; Hacking 1990; 2007; Porter 1995; Power 1997; Desrosières 1998; Rose 1999; Espeland and Stevens 2008). Similarly, anthropologies of numbers suggest that 'our lives are increasingly governed by – and through – numbers, indicators, algorithms and audits and the ever-present concerns with the management of risk' (Shore and Wright 2015; 23; see also influential work by Merry 2011; Sauder and Espeland 2009; Strathern 2000). Further, important insights and perspectives on indicators in particular come from STS (Bowker & Star 1999; Lampland & Star 2009; Latour 1987; Saetnan et al. 2011), including actor network theory (Latour 2005). Finally, there is a growing body of studies relating to specific uses of indicators and quantification in transnational governance contexts (for example, Bogdandy & Goldmann 2008; Palan 2006; Martens 2007; Fougner 2008; Bhuta 2012).

Nonetheless, despite the burgeoning number of publications on the global 'governing by numbers', our understanding of the relationship of the politics of measurement and the making of transnational governance is less well-examined; as Djelic and Sahlin-Andersson (2006) suggest, due to the fluidity and complexity of the intense cross-boundary networks and soft regulation regimes that dominate the transnational space, transnational governance is a particularly productive field of enquiry on the role of numbers in governing. This lack of attention could be due to disciplinary boundaries; for example, scholars of IR have not paid much attention to the field so far, although there is a rise in some interesting literature of the role of numbers in global political economy (for example, Palan 2006; Martens 2007; Fougner 2008).

What are the properties of numbers that would suggest such a central role in the production of transnational governance? By contrasting numbers to language, Hansen and Porter (2012) suggest that, although it took scholars a long time to recognize the constitutive nature of discourse, we are now well

aware of the role of language in shaping reality. However, they suggest that numbers are characterized by additional qualities that make their influence much more pervasive than words: these elements are order; mobility; stability; combinability; and precision. By using the example of the barcode, they lucidly illustrate ‘how numerical operations at different levels powerfully contribute to the ordering of the transnational activities of states, businesses and people’ (2012; 410). They suggest the need to focus not only on the nominal qualities of the numbers themselves but, according to Hacking, ‘the people classified, the experts who classify, study and help them, the institutions within which the experts and their subjects interact, and through which authorities control’ (2007:295).

It is precisely on the data experts that METRO focuses upon; following the literature on the capacities of numbers to both be stable yet travel fast and without borders, we need to cast light on what Latour called ‘the few obligatory passage points’ (1987; 245): in their movement, data go through successive reductions of complexity until they reach simplified enough state that can travel back ‘from the field to the laboratory, from a distant land to the map-maker’s table’ (Hansen and Porter 2012; 412). IOs constitute such ‘centres of calculation’; this however, according to Merry, does not suggest that they are significant only in terms of their knowledge production capacities; as this chapter will show, it is equally pertinent to examine the choices they make in regard to *what not to know*. By examining specifically the role of indicators in transnational governance, Merry elucidates their governance effects (2011); consequently, if we consider IOs central in the production of both knowledge *and* non-knowledge, we can infer that their operation as large technocracies must have crucial governing impact. These effects empower IOs and set them in a complex and ever-evolving power game for influence and resources – through an examination of the interplay and interconnectedness of IOs’ data apparatuses, it is precisely this power game and its rules that we need to unravel. Indeed, Shore and Wright argue that, ‘while numbers and “facts” have both knowledge effects and governance effects, it is also important to consider how these are produced, who designs them, what underlying assumptions about society shape the choice of what to measure, how they deal with missing data, and what interests they serve’ (2015; 433).

Theoretical frame and key intermediary concepts

The chapter follows a ‘constructivist-institutionalist’ approach (Smith 2009), as we work with Lagroye’s definition of governing as ‘a set of practices which participate in the organization and the orientation of social life’ (1997: 25). Thus, METRO builds on the premise that far from being a system composed uniquely of ‘national’ and ‘transnational’ bodies, *governing the transnational* is an ‘Institutional Order’ made up of all the actors who participate in the construction and institutionalization of global problems (Smith 2009). In turn, transnational ‘governing’ is conceptualised as those ‘assemblages of apparatuses, processes and practices’ that make governing happen (Clarke and Ozga 2011).

As already suggested, a considerable body of research has already focused on the work of IOs in transnational governance. Yet this research has often seen them as monolithic institutions, or actors with similar interests in a similar context, without attention to the complex set of realities that bring them together and apart over time (with notable exceptions of course, see for example Cini 2008; Cram 2011). IOs are often also seen as *internally* stable –this means that divisions of authority, institutionalised norms, expectations and values are thought to be commonly shared by all actors within an IO. Nevertheless, ‘most of the time, [...] at least some of the actors within an IO will be seeking to change at least some of its institutions, whilst others will work to retain their stasis’ (Jullien and Smith 2010; 4). The examination of actor alliance formation and mobilisation is hence vital in order to understand these relations –both upstream, i.e. the setting of rules and problem framing, as well as downstream, namely the application and maintenance of rules amongst the actors who are all engaged in competitive relationships (Jullien and Smith 2010). Indeed, some of this actor mobilization and alliance-building is achieved not internally but through networking with other IOs.

Thus, one of the key concepts that mobilises this research is the notion of ‘political work’ (Smith 2009), as it is very rich at a number of levels relevant to our research agenda. When one studies political work, institutions themselves are not the objects of study per se; rather, the focus of the investigation is on the

continual cycle of institutionalisation, deinstitutionalisation and reinstitutionalisation of ideas and values within the organisation in question and the external environment it is part of. The study of quantification as a policy instrument, can become a particularly fruitful context for such an analysis as one can examine ‘political work’ as those processes that engender the construction of new arguments and the activation of new alliances; subsequently, they either produce change or reproduce institutions, namely actors’ rules, norms and expectations (Jullien and Smith 2010). In this context, the process of the construction of knowledge and hence non-knowledge is key in achieving some kind of consensus around what ‘the problem’ is and hence its solution. Empirically, and building on the rich literatures from STS, political and organisational sociology, and social studies of metrics, we operationalise the notion of political work through looking specifically at actors’ meetings and the work required to achieve consensus of the different actors at play. Through a focus on the making of knowledge and non-knowledge in the context of the production of the education-related SDG (SDG4), the next section will operationalize these conceptual tools, in order to give an illustration of what such processes of the making of non-knowledge entail.

Producing non-knowledge for Sustainable Development Goal 4: A field of contestations

In May 2015, a World Education Forum (WEF) was celebrated in Incheon (Republic of Korea) with the participation of over 1,500 people, including 120 Ministers of Education and representatives from a wide range of international governmental and non-governmental organizations. The gathering was organised and promoted as the successor or the Jomtien and Dakar meetings, which took place respectively in 1990 and 2000. Both of these meetings were widely acknowledged as milestones in the development and consolidation of the ‘Education for All’ movement. The main product of WEF 2015 was the so-called Incheon Declaration, along with the Framework for Action adopted by UNESCO Member States in November 2015. In conjunction, both documents established an ambitious and highly aspirational education agenda for the timeframe 2015-2030, condensed in the overarching goal to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” and a number of associated targets (UNESCO, 2016).

What is important here is that both documents were the product of a long, multi-layered and multi-sited negotiation process that involved numerous meetings and consultations, largely led by UNESCO under the auspices of the ‘Education for All’ (EFA) Steering Committee. At the same time, it should be noted that efforts towards the development of this agenda were in turn paralleled by the negotiation of the Sustainable Development Goals (SDGs)– the latter was one of the cornerstones of the 2030 Agenda adopted by the General Assembly of the United Nations in September 2015 and devised as a follow-up of the Millennium Development Goals. In fact, the EFA-led process and the debates facilitated by the UN Open Working Group on Sustainable Development Goals reinforced and informed one another through an intricate political process, eventually crystallizing in a single agenda conventionally known as SDG4/Education 2030 – a denomination reminiscent of the dual origins of the new set of goals.

Education 2030/SDG4 represented simultaneously a form of continuity and a departure from previous instances of goal-setting such as EFA and the Millennium Development Goals. As a programmatic document oriented at nurturing and securing a form of collective commitment towards a shared set of aspirations, the new agenda builds on a well-established tradition of consultation and collaboration that has come to be recognized as a characteristic of the UN system. However, Education 2030 entails a certain discontinuity regarding education goal-setting practices – both in content and procedural terms.

First and as different scholars have noted, the new set of goals is characterized by an unprecedented degree of ambition, shifting away from the focus on primary education and gender equality that characterized the MDG era, but also expanding on the vision set up by the EFA program. It establishes a truly universal agenda that contrasts with the prior focus on developing countries (King, 2017; Unterhalter, 2019). Secondly, the very *making* of Education 2030 (and of the SDGs more in general) represents a path-breaking development in the long history of goal-setting practices and UN summitry.

The open, inclusive and participatory nature of the consultative process facilitated by UNESCO and the EFA architecture was in many ways unprecedented, and the openly-negotiated and improvisatory character of the SDG debate contrasted with the technocratic origins of the MDGs (cf. Fukuda-Parr & McNeill, 2019).

In many ways, it is precisely this open debate and the participatory nature of the SDG governing architecture that has allowed a plethora of contestations to unfold: one of most prominent ones is the large emphasis on some indicators (especially those that measure performance in literacy and mathematics) that comprise goal 4 versus others. The table below offers a useful overview of the different indicators in goal 4:

11 Global Indicators for SDG 4

As the official data source for SDG 4—Education 2030 indicators, the UNESCO Institute for Statistics (UIS) helps countries to collect data by developing methodologies and applying standards to produce internationally-comparable indicators. For more information, consult: <http://uis.unesco.org>

TARGETS

4.1.1 #learning #reading #maths #proficiency <p>Proportion of children and young people (a) in Grade 2 or 3, (b) at the end of primary education, and (c) at the end of lower secondary education achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex.</p> <p>CONCEPT: Minimum proficiency level (MPL) is the benchmark of basic knowledge in a domain (mathematics, reading, etc.) measured through learning assessments. Currently, there is limited comparability of data from different learning assessments.</p> <p>DATA SOURCES: Cross-national learning assessments (PASEC, PIRLS, PISA, SACMEQ, TERCE, TIMSS) and national assessments.</p>	4.2.1 #EarlyChildhood #ChildDevelopment <p>Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being, by sex.</p> <p>CONCEPT: There is not yet a globally-accepted definition of 'developmentally on track', but one possible source, the MICS ECDI, defines 'on track' as children aged 3 to 4 years who are developmentally on track in at least three of these four domains: literacy-numeracy, physical, socio-emotional and learning.</p> <p>DATA SOURCES: Measures to capture children's early childhood experiences have been used in multiple countries in projects such as the UNICEF Multiple Indicator Cluster Surveys (MICS).</p>	4.2.2 #EarlyChildhood #ECEC <p>Participation rate in organized learning one year before the official primary entry age, by sex.</p> <p>CONCEPT: The official primary entry age is the age at which children are obliged to start primary education according to national legislation or practice.</p> $\text{Participation} = \frac{\text{Enrolled ECDI 0 or 1}}{\text{Population}}$ <p>DATA SOURCES: Enrollment data reported by Ministries of Education or national statistical offices, and population estimates produced by the UN Population Division or attendance data from household surveys and censuses.</p>	4.3.1 #formaleducation #nonformaleducation #training <p>Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex.</p> <p>CONCEPT: Methodology related to participation in formal education and training is established throughout most countries (OECD 2011). However, methodology for measuring participation in non-formal education and training varies substantially across the globe.</p> <p>DATA SOURCES: At the international level, surveys such as the European AES, PIAAC from OECD and the E.O. SWTS.</p>
4.4.1 #skills #ICT #technology <p>Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill.</p> <p>CONCEPT: The indicator measures ICT skills based on the number of people who report having undertaken certain computer-related activities in a given time period.</p> <p>DATA SOURCES: A standard methodology was developed by Eurostat and adopted by the International Telecommunications Union (ITU). Both organizations coordinate national surveys to collect this information.</p>	4.5.1 #equity #equality #gendergap <p>Party indices (femaleness, malefemaleness, bottom/top wealth quintiles and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators, on this list that can be disaggregated.</p> <p>CONCEPT: The indices represent the ratio of the indicator value for one group to that of the other. Typically, a value of exactly 1 indicates parity between the two groups.</p> <p>DATA SOURCES: Same as for underlying indicators.</p>	4.6.1 #proficiency #literacy #numeracy <p>Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (i) literacy and (ii) numeracy skills, by sex.</p> <p>CONCEPT: The fixed level of proficiency is the benchmark of basic knowledge in a domain measured through learning assessments. So far, there are no common standards, validated by the international community or countries.</p> <p>DATA SOURCES: Skills assessment surveys of the adult population (e.g. PIAAC, ITER, LAMP) and national literacy and numeracy surveys.</p>	4.7.1 #globalcitizenship #sustainabledevelopment <p>Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels, in: (a) national education policies, (b) curricula, (c) teacher education, and (d) student assessments.</p> <p>CONCEPT: It seeks to measure the quantity and quality of country inputs, as well as whether the quality of OECD and ESD provision is adequate to fulfil their transformational potential.</p> <p>DATA SOURCES: UNESCO consultation on the implementation of the 1974 Recommendation concerning Education for International Understanding, Cooperation and Peace and Education relating to Human Rights and Fundamental Freedoms.</p>
4.a.1 #LearningEnvironment #facilities #infrastructure <p>Proportion of schools with access to: (a) electricity, (b) internet for pedagogical purposes, (c) computers for pedagogical purposes, (d) adapted infrastructure and materials for students with disabilities, (e) basic drinking water, (f) single-sex basic sanitation facilities, and (g) basic handwashing facilities (as per WASH indicator definition).</p> <p>DATA SOURCES: Administrative data from schools and other providers of education or training.</p>	4.b.1 #scholarships #developmentaid <p>Source of official development assistance flows for scholarships by sector and type of study.</p> <p>DATA SOURCES: Administrative data on disbursement of official development assistance from OECD's Development Assistance Committee.</p>	4.c.1 #teachers #qualification #teachertraining <p>Proportion of teachers in: (a) pre-primary education, (b) primary education, (c) lower secondary education, and (d) upper secondary education who have received at least the minimum organized teacher training (e.g. pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country, by sex.</p> <p>DATA SOURCES: Administrative data from schools and other organized learning centres.</p>	

MEANS OF IMPLEMENTATION

Table 1: The SDG4 indicators are as follows: 4.1.1 on reading and maths proficiency; 4.2.1/2 on early childhood; 4.3.1 on VET; 4.4.1 on ICT skills; 4.5.1 on gender equality; 4.6.1 on adult literacy and numeracy; 4.7.1 on global citizenship and sustainable development. Available at <http://uis.unesco.org/sites/default/files/documents/11-global-indicators-sdg4-cheat-sheet-2018-en.pdf>

Although the development of SDG4 has been described as ‘arguably the most inclusive process of consultation in the history of the United Nations’ (Naidoo, 2016), this was not matched by the making of the relevant indicators to measure the ambitions (Smith 2019; McGrath and Nolan 2016). The process became quite technical from the start; as it was expected, statisticians and their considerations for valid and robust data took hold of the process and most non-statistical knowledge was excluded. This was not however the only omission; perhaps the more significant one took place when there was an early decision upon some indicators which would be considered ‘global’ versus those that were relegated to the description of ‘thematic’ (Smith 2019). This was a key moment, since,

While global indicators are universally applied and expected to be reported by all countries, thematic indicators are considered voluntary. Therefore, the majority of resources in indicator creation, monitoring, reporting and state action will focus on the global indicators while thematic indicators are not taken into account in the UN’s annual SDG report (Smith 2019;3)

The pendulum had already swung. Although target 4.1 was promising that ‘by 2030, ensure that all girls

and boys complete free, equitable and quality primary education leading to relevant and effective learning outcomes', the 4.1.1 global indicator that came to be associated with it was much more limited in reporting on 'quality' only, whereas free and equitable education were downgraded to 'thematic', if they were even considered at all (King 2017). In other words, the production of certain knowledge was privileged over others; this of course was done (and is always done) on the basis of the methodological robustness and validity of the exercise.

Indeed, many of the interviewees that METRO examined, suggested that the fundamental problem of the SDGs lies in the fact that it began the process by setting the ambitions and establishing the goals, rather than checking whether there was enough data or the right methodologies to monitor them. Nevertheless, the (limited arguably) resources that were put in the process, were invested in indicators that were already backed up with significant statistical evidence. The strategic choice to construct non-knowledge by emphasising some indicators versus others, become even more evident in the tensions that the negotiations around indicator 4.7 as created. As Antonia Wulff, from Education International, contends,

The expert group in charge of the SDG indicators rejected the proposed measurement strategy for target 4.7 on education for sustainable development, human rights and global citizenship... Education International is generally concerned about the slow progress made on key indicators and, importantly, the large disparity in the time, effort and resources put into developing 4.7 indicators as opposed to the learning outcomes under target 4.1. We are impatient to move forward (Wulff, 2018)

Although limitations of space in the present chapter do not allow for a more extensive empirical analysis of the privileging of certain kinds of knowledge over others, the above example serves as a useful illustration of the making of 'non-knowledge'; rather than simply an 'inability-to-know', we have seen how strategic decisions were made in relation to which knowledge was prioritized to be produced. One of the most significant repercussions of quantification has been the fact that whatever is quantified and measured becomes visible, in antithesis to aspects of social life less easy to count; although a collectively agreed ambition, indicator 4.7 on global citizenship, unless prioritized, measured and backed up with data soon, will always remain an unachieved utopia, rather than become a reality.

3. 'Non-knowledge' and the promise of political sociology

To return to the chapter's earlier discussion, recent years have seen the rise of the sociology of ignorance, a new field of studies that examines the other, less visible side of the politics of constructing knowledge: that is, the politics of ignorance, or as this chapter prefers to call, the politics of 'non-knowledge'. Linsey McGoeys has been one of the key advocates of the need for social science to examine 'the mobilisation of ambiguity, the denial of unsettling facts, the realisation that knowing the least amount possible is often the most indispensable tool for managing risks' (McGoey 2012a ;3).

The consideration of the symmetry of knowledge / non-knowledge is not of course new. Socrates insisted that his 'wisdom' was derived by his knowledge of what he didn't know. Philosophically and historically the realisation of the limits of the human knowledge has always been present; nevertheless, our over- emphasis on examining the political uses of knowledge in governing societies has resulted in not engaging nearly enough with non-knowledge. Non-knowledge (or, for others, ignorance) here is not seen as an impediment and obstacle to knowing, but as a *productive force*, that strengthens the role of knowledge and of the knowing subject. For scholars in the field of ignorance studies, we need to investigate non-knowledge as "regular" rather than "deviant" (Gross and McGoeys, 2015: 4). Yet, to date these discussions lack a coherent, agreed-upon nomenclature (Smithson, 2008). Although some scholars use ignorance and non-knowledge interchangeably (e.g. Kleinman and Suryanarayanan, 2013: 495), others distinguish between the two (e.g. Gross, 2012), emphasising the need to avoid the negative connotations that the word 'ignorance' implies. Further, there are also scholars who develop taxonomies

of different types of ignorance and non-knowledge (e.g. Aradau, 2017; Beck and Wehling, 2012; Gross, 2016).

A review of the literature in the growing field of ignorance studies would be beyond the scope of this chapter. However, the key message that most of this literature appears to agree upon, despite the differences in terminology, is that non-knowledge is productive and not just the negative side of knowledge. Actors may actively try to nurture and preserve ignorance to use it as a resource to advance their interests be it in claiming more funding, denial of responsibility, or assertion of expertise (McGoey 2012b: 555). Importantly, McGoey emphasizes that such production and use of non-knowledge may be strategic and deliberate, but not necessarily conscious. Mallard and McGoey go further to propose an epistemological position ‘which asserts as a general maxim that ignorance can be an equally powerful political resource as knowledge’ (2018:3). They suggest that

“A second exploration by social scientists of how policymakers, experts and bureaucrats contribute to the production of *soft forms of ignorance* in international affairs... is the literature on the production of indicators, ratings, benchmarks which now circulate everywhere in the world of IOs and global media (Davis, Fisher, Kingsbury, and Merry 2012; Espeland and Sauder 2007; Espeland and Vannebo 2007). As scholars of transparency and auditing practices have long pointed out (cf. Strathern 2000; Power 1997), such indicators help to make policy decisions appear as if they belong to the realm of the certain and unquestionable even when policy options are based on the flimsiest set of factual observations. Most ‘global governance’ apologists who applaud the increasing use of benchmarking in policy research rarely acknowledge that the production of most indicators (like ‘rule of law’ indexes) is based upon fragile methodological foundations, and that the process of turning measurements into policy recommendations most often turns uncertainties and approximations into certainties... (Davis et al. 2012)”.

Indeed, it is precisely the construction of the doxa of a governable, manageable world that paradoxically the production of non-knowledge results in: in such a world, actors that participate in its making, have to be selective and actively and purposefully ignore inconvenient data, or, as the empirical example above illustrated, systematically disregard the development of some measurement tools versus others. As recently one of the METRO interviewees emphatically suggested, ‘it is art, not science’. This art of assembling knowledge, while actively and strategically constructing non-knowledge, is necessary in order to leave the epistemic authority of the solutions uncompromised (no matter how ‘clumsy’ these may be), as well as having the door always open to the construction of new problems and solutions once the previous ones fail.

Although the field of ignorance studies has put a lot of emphasis on classifying kinds of non-knowledge, it has so far not achieved a coherent set of ideas about *how* to investigate the process of producing non-knowledge. The most notable exception to this is Scheel and Ustek-Spilda’s (2019) work; the latter use the notion of enactment from STS, whilst also making references to the concept of controversies, and in particular the examination of cases of non-transfer of knowledge – the moments of distortion, reinterpretation and loss that may occur when ‘data move between people, substates, organizations, or machines’ (Edwards et al., 2011: 669). We find that the attention to the particularities, representations and often visualisations (through graphs, maps and other visuals) that the enactment agenda allows could be seen a helpful, although limiting, way of investigating the tools and effects of the production of ignorance.

On the contrary, while METRO’s fieldwork is unfolding and our thinking continues to develop, our data derived from document analysis and interviews with actors point towards the need for a frame of analysis that goes beyond thinking of the production of knowledge and non-knowledge as simply an ‘enactment’ – as a performative event, of the kind that quantification practices are often seen as producing. Rather, we are working with a political sociology theoretical framing, in order to make sense of the ways that it is the construction of problems (‘problematisation’) that goes hand in hand with the

production of non-knowledge. The notion of problematisation leads to an analysis of the political work of selecting knowledge prior to –or in parallel with– the process of constructing problems that, in the case of the METRO research, large collaborative statistical projects need to monitor and solve.

How is one to examine processes of problematisation? The promise of political sociology is a return to sociological analysis for interpreting political phenomena that span nations and localities. Although the focus of a number of (French almost exclusively) political sociologists is an analysis and interpretation of European integration, METRO is utilising some of their analytical concepts and empirical tools in order to explain the rise of a global metrological field as a new *transnational institutional order*.

As suggested earlier, a focus on meetings and the processes of achieving consensus is the *sine qua non* component of the making of metrological realism. A focus on actors –and their involvement, shift, resistance or control– is nothing new; it has always been a significant tool for policy convergence theories. Nonetheless, through the triptych of ‘problematisation– institutionalization– legitimation’, political sociology offers the analytical and empirical toolkit to *combine* the study of formal institutions and informal practices with a variety of sociological indicators (social trajectories, academic background, careers and so on). Drawing on political sociology, we argue that focusing on people involved in transnational monitoring agendas can take us beyond classical dichotomies, such as structure/agency, individual/collective, rational/unconscious, in order to understand what social agents involved in these processes think and do. Following Georgakakis and Weisbein,

‘our aim is to understand social phenomena as the product of an encounter (rarely conscious but played out in practice) between, on the one hand, (individual and collective) dispositions to act (habitus), which may be inherited, acquired through social and professional paths or offered by the position, and on the other hand, so-called relational contexts, which may be analyzed under various forms, in organizations, institutions and fields...Based on these biographies, the actors’ positions are established, not only in terms of membership (to a country, an institution, a unit within an organization and so on), but according to the structure of the social actors’ resources and experiences’(2010; 6).

To conclude, this chapter mobilized relevant literature and used an empirical example in order to offer two propositions: first, that an investigation of metrological realism needs to focus on the social construction of non-knowledge as a vital component of studying the epistemic authority of transnational institutions; and second, that a political sociology agenda allows for a deeper understanding of the role of actors in advancing their position in the transnational field by either pushing or pulling the construction of new problems and the relevant knowledge –or non-knowledge– to solve them. Perhaps a skeptical turn in the study of transnational regulation, evaluation and monitoring must lead to an ‘unsettling’ of the classic studies of the political use of statistical knowledge, and offer the promise of a more creative, at times even inconvenient, analysis of the unaccounted and thus invisible processes of the construction of non-knowledge that the making of quantification requires.

References

- Alonso, W. and Starr, P. (eds.) (1987) *The politics of numbers*, New York: Russell Sage Foundation.
- Aradau, C. (2017) ‘Assembling (non)knowledge: Security, law, and surveillance in a digital world’, *International Political Sociology*, 11, 4, 327–342.
- Beck, U. (2009) *World at Risk*. Cambridge: Polity.
- Beck, U. and Wehling, P. (2012) The politics of non-knowing: An emerging area of social and political conflict in reflexive modernity. In: Baert P and Rubio FD (eds) *The Politics of Knowledge*. London: Routledge, pp.33–57.

- Bhuta, N. (2012) 'Governmentalizing Sovereignty: Indexes of State Fragility and the Calculability of Political Order', in Kingsbury, B., Merry, S. and Davis, K. (Eds) *Indicators as Technologies of Global Governance*, Oxford: Oxford University Press
- Bogdandy, A., Dann, P. and Goldmann, M. (2008) 'Developing the Publicness of Public International Law: Towards a Legal Framework for Global Governance Activities', *German Law Journal*, 9, 1375-1400
- Bourdieu, P. (1993) *The field of cultural production*, Polity Press
- Bowker, G. and Star, S.L. (1999) *Sorting Things Out: Classification and its Consequences*, Cambridge, Mass.: MIT Press
- Clarke, J. and Ozga, J. (2011) Governing by Inspection? Comparing school inspection in Scotland and England, Paper for Social Policy Association conference, University of Lincoln, 4-6 July 2011. [http://www.social-policy.org.uk/lincoln2011/Clarke_Ozga.pdf] [9 November 2011]
- Dahler-Larsen, P. (2012). *The Evaluation Society*. California: Stanford University Press.
- Desrosieres, A. (1998) *The Politics of Large Numbers: A History of Statistical Reasoning*, Cambridge, Mass.: Harvard University Press
- Djelic, M-L. and Sahlin-Andersson, K. (eds.) (2006) *Transnational Governance: Institutional Dynamics of Regulation*, Cambridge: Cambridge University Press
- Edwards PN, Mayernik MS, Batcheller AL, et al. (2011) 'Science friction: Data, metadata, and collaboration', *Social Studies of Science*, 41, 5, 667-690.
- Espeland, W. and Stevens, M.L. (2008) 'A sociology of quantification', *Archives Europeennes de Sociologie*, 49, 3, 401-436
- Fougner, T. (2008) 'Neoliberal Governance of States: The Role of Competitiveness Indexing and Benchmarking', *Millennium: Journal of International Studies*, 37, 2, 303-26
- Georgakakis, D. and Weisbein, J. (2010) 'From above and from below: a political sociology of European actors', *Comparative European Politics*, 8, 1, 93-109
- Grek, S. (2020) 'Prophets, saviours and saints: Symbolic governance and the rise of a transnational metrological field'. *International Review of Education*, 66, 139-166. <https://doi.org/10.1007/s11159-020-09844-z>
- Gross M (2012) "'Objective culture' and the development of nonknowledge: Georg Simmel and the reverse side of knowing", *Cultural Sociology* 6, 4, 422-437.
- Gross M (2016) 'Risk as zombie category: Ulrich Beck's unfinished project of the 'non-knowledge' Society', *Security Dialogue*, 47, 5, 386-402.
- Gross M and McGoe L (2015) Introduction. In: Gross M and McGoe L (eds) *Routledge International Handbook of Ignorance Studies*. London & New York: Routledge, pp.1-14
- Guy Peters B. (2017) What is so wicked about wicked problems? A conceptual analysis and a research program, *Policy and Society*, 36:3, 385-396, DOI: 10.1080/14494035.2017.1361633

- Hacking, I. (1990) *The Taming of Chance*, Cambridge: Cambridge University Press
- Hacking, I. (2007) 'Kinds of People: Moving Targets', *Proceedings of the British Academy*, 151, 285–318
- Hansen, K and Porter, T. (2012) 'What Do Numbers Do in Transnational Governance?', *International Political Sociology*, 6, 409–426
- Jullien, B. and Smith, A. (2010) 'Conceptualising the role of Politics in the Economy: Industries and their Institutionalisation', *Review of International Political Economy*, First published on 19 October 2010 (iFirst), DOI: 10.1080/09692291003723615
- King, K. (2017). Lost in translation? The challenge of translating the global education goal and targets into global indicators. *Compare: A Journal of Comparative and International Education*, 47(6), 801–817
- Kleinman DL and Suryanarayanan S (2013) 'Dying bees and the social production of ignorance', *Science, Technology & Human Values*, 38, 4, 492–517.
- Lagroye J. (1997) *Sociologie politique*, Paris: Dalloz-Presses de la FNSP
- Lampland, M. and Starr, S. L. (2009) (eds) *Standards and their Stories. How Quantifying, Classifying and Formalizing Practices Shape Everyday Life*, Ithaca: Cornell University Press
- Latour, B. (1987) *Science in action: how to follow scientists and engineers through society*, Cambridge: Harvard University Press
- Latour, B. (2005) *Reassembling the Social: an Introduction to Actor-network-theory*, Oxford: Oxford University Press
- McGrath, S., & Nolan, A. (2016). SDG4 and the child's right to education. *NORRAG News*, 54, 122–123.
- Mallard, G and McGoe, L. (2018), 'Strategic ignorance and global governance: an ecumenical approach to epistemologies of global power', *The British Journal of Sociology*, 69, 4
- Martens, K. (2007) 'How to Become an Influential Actor: The Comparative Turn in European Educational Policy', in K. Martens, A. Rusconi and K. Leuze (eds) *New Arenas of Education*, Basingstoke: Palgrave Macmillan
- McGoey L (2012a) 'Strategic unknowns: Towards a sociology of ignorance', *Economy and Society*, 41, 1, 1–16.
- McGoey L (2012b) 'The logic of strategic ignorance', *The British Journal of Sociology*, 63, 6, 553–576.
- Palan, R. (2006) *The Offshore World: Sovereign Markets, Virtual Places, and Nomad Millionaires*, Ithaca
- Porter, T. (1995) *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life*, Princeton, N.J.: Princeton University Press
- Power, M. (1997) *The Audit Society: Rituals of Verification*, Oxford: Oxford University Press

- Raimondo, E. (2018). The power and dysfunctions of evaluation systems in international organizations. *Evaluation*, 24(1), 26-41. <https://doi.org/10.1177/1356389017749068>
- Rayner, S. (2012) 'Uncomfortable knowledge: the social construction of ignorance in science and environmental policy discourses', *Economy and Society*, 41:1, 107-125.
- Rose, N. (1999) *Powers of Freedom: Reframing Political Thought*, Cambridge: Cambridge University Press
- Sauder, M. and Espeland, W. (2009) 'The discipline of rankings: tight coupling and organizational change', *American Sociological Review*, 74, 63–82
- Scheel, S. and Ustek-Spilda F. (2019) 'The politics of expertise and ignorance in the field of migration management', *EPD: Society and Space*, 0(0) 1–19. DOI: 10.1177/0263775819843677
- Shore, C. and Wright, S. (2015) Audit Culture Revisited: Ratings, Rankings and the Reassembling of Society, *Current Anthropology*, 56, 3, 421-444
- Smith, A. (2009) 'Studying the Government of the EU: The Promise of Political Sociology', Europa Institute Seminar Series, University of Edinburgh
- Smithson M (2008) Social theories of ignorance. In: Proctor R and Schiebinger L (eds) *Agnotology: The Making and Unmaking of Ignorance*. Stanford, CA: Stanford University Press, pp.209–229.
- Stiglitz, J. E., Sen, A. and Fitoussi, J.-P. (2009) Report by the Commission on the Measurement of Economic Performance and Social Progress. [<http://www.stiglitz-sen-fitoussi.fr/en/index.htm>] [22 January 2011]
- Strathern, M. (ed.) (2000) *Audit Cultures: Anthropological Studies in Accountability, Ethics, and the Academy*, London: Routledge
- UNESCO. (2016). *Education 2030: Incheon Declaration and Framework for Action for the Implementation of Sustainable Development Goal 4*. (ED-2016/WS/28). Retrieved from: <https://unesdoc.unesco.org/ark:/48223/pf0000245656>
- Unterhalter, E. (2019). The many meanings of quality education: Politics of targets and indicators in SDG 4. *Global Policy*, 10, Suppl. 1, 39–51.
- Wulff, A. (2018) 'SDG4 & education for sustainable development: Why we should celebrate an apparent failure?' in Education International website, https://www.ei-ie.org/en/woe_homepage/woe_detail/16107/sdg4-education-for-sustainable-development-why-we-should-celebrate-an-apparent-failure-by-antonia-wulff [1.9.2020]