Interdependency in Transnational Education Governance[1]

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1. Introduction: Interdependence in a complex world

The dominance of International Organisations in the production of global metrics has not only penetrated the transnational social and policy fields; numbers have become an integral part of the fabric of International Organisations themselves. However, amidst avid critics and unapologetic fans, surprisingly little is known about the ways in which global processes of quantification are reconfiguring the field. Metrics have infiltrated not only organisational cultures and the environments these organisations inhabit; crucially, they are reshaping the ways International Organisations co-exist, compete and survive in an increasingly quantified yet uncertain world. Recent decades have seen fervent activity by International Organisations to build working collaborations and broad alliances for finding 'global solutions' to 'global crises'. Financial investment in these collaborations is increasing and so is hope: *If only we had known, we could have acted*. Given the moral dimension that these new indices of progress have taken, as well as the enormous human and environmental cost of their failures, there is growing recognition for the need to examine the interplay of International Organisations in producing quantification for transnational governance[2].

Building on International Relations (IR) theory, Science and Technology Studies (STS), and using theoretical strands from Organisational Sociology, as well as the newly emerging field of the social studies of metrics, this paper examines the interrelationships of International Organisations (IOs) in constructing the global metrological field. Education is the focal case for this examination since IOs have been central to processes of standardisation, de-contextualisation and performance management through numbers; as a result, they have been instrumental in commensurating, and therefore transforming the policy field. In addition, Education has been attracting larger policy significance, as it is increasingly considered central to

[2] 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).

both economic prosperity and social cohesion. Thus, it is a productive arena to examine how quantification impacts on the ways IOs reconfigure their governing work.

Thus, a central focus of this chapter is the –concomitant with the lure of numbers, albeit less spectacular– recent moves of large IOs not only to establish collaborative partnerships through connections with governments and local agencies, but crucially with one another. The encoding of data processes and organisational cultures that these collaborative endeavours require (in order for data to be shared and co-produced), allows a comprehensive analysis of the workings of quantification for transnational governance. In other words, the examination of the interplay of IOs at their first formative state (rather than later, when they are more established), is a unique opportunity to open, rather than stack yet another 'black box' in the field of global monitoring (Bhuta 2012).

This is a novel, problem-driven perspective that goes beyond the role of IOs in 'governing by numbers': instead, the chapter brings together diverse bodies of knowledge in order to cast light on the role metrics play in re-shaping the relationships between the data collectors themselves. It focuses on the impact of quantification in altering the ways IOs co-exist, compete and survive in an increasingly quantified yet uncertain world. Although there have been some in-depth studies of the impact of measurement on reforms in various policy fields, little attention has been paid at those early, yet crucial, venues, actors and activities that determine processes of problematisation (the construction of the 'problem') and institutionalisation (the moment the 'problem' enters institutional agendas). Third, and most important, the chapter's starting point is that numbers and (international) organisations have come to be mutually constitutive. Numbers move: this seemingly simple, yet unique quality has created fluidity between internal organisational arrangements and external environments, as well as amongst IOs themselves. Hence, going beyond classic organisational sociology's distinction between internal structures and external contingencies and environments, this article purports that numbers –with their qualities to simplify, stabilise and travel- reconfigure relationships, dependencies and structures of organisations and fields in fresh and politically salient ways; in other words, they come to govern them.

Despite the renewed prominence given to the need for alliance-building by IOs, collaboration has always been central to their operation, since they have traditionally needed to work closely with governments, NGOs and the private sector. Yet, the complexity of 'wicked' problems, 'donor duplication' (Ringel- Bickelmeier and Ringel 2012), resource-pooling and data overload have become some of the most common reasons that IOs are increasingly compelled to work together. Indeed, most major global strategies, such as the Millenium Development Goals (2000-2015), the post-2015 Development Agenda or major education testing regimes, such as the OECD Programme for International Student Assessment (PISA), are collaborative endeavours, dependent on pooling of resources and expertise. How do these IOs learn from one another? In the making of numbers, how do they negotiate financial resources and knowledge controversies? How do they actively produce collective sense-making (Weick 1995) and issue-framing

strategies (Baumgartner and Jones 1993)? How much do we know about their expert networks? Ultimately, if rating and ranking practices are a 'zero-sum' game for the assessed, how much do we know about the rules of the game for the assessors?

Empirically, as already suggested, the chapter examines two separate cases from the field of Education; 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. Education can be a productive vantage point, since assessment and quantification of performance have a very long history in education. 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. 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.

The chapter is informed by current research in the European Research Council funded project 'International Organisations and the Rise of a Global Metrological Field'. It begins with a short review of the literature of the politics of quantification; it then moves on to a consideration of the theoretical underpinnings of the analysis and continues with the presentation of the two case studies under examination. Finally, it is concluded by a discussion of international organisations, interdependency and metrology in the field of transnational education governance and beyond.

2. '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; Desrosiéres 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 small but 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 and international law 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 international organisations as data experts that this chapter focuses upon; following the literature on the capacities of numbers to both be stable yet travel fast and without borders, the chapter sheds 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).

3. Theoretical frame and key intermediary concepts

The chapter follows a 'constructivist-institutionalist' approach (Smith 2009), as it works 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, it 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 the proposed project's 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. 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).

Before moving on, two intermediary concepts used need more explicit attention: these are the notion of the 'field' and the concept of 'knowledge controversies'. To start with the latter, Barry (2012) uses the notion of 'political situation' to explain the ways that STS could have been misguided in their definition of knowledge controversies as conflicts that relate principally to a clash of scientific evidence and ideas. Instead, he suggests that 'the significance of a controversy needs to be understood in relation to a shifting and contested field of other controversies and events that have occurred elsewhere and at other times' (Barry, 2012; 324). Whereas STS initially mostly focused upon the 'black box' of science by looking at issues of credibility, objectivity and reliability (Shapin and Schaffer 1985), it then moved on to the analysis of public knowledge controversies, where expert knowledge would clash with public, lay knowledge (Wynne 2003). Yet, Barry argues that despite the growth of transnational standardization processes, the issue of knowledge controversies has not been addressed either by the IR or the STS literature, as if the simplification of data (and the consensual expert practices it involves) decreases rather than increases the possibility of knowledge disputes and failures. However, it is widely known that achieving transnational standards is infinitely difficult; and political contestation often gets submerged and hidden behind the popular imagination's oddity of the expert, 'geek' professor. Knowledge contestations are then seen as an impediment to the call for urgent action – and IOs are swiftly required to form another committee, reach consensus and quickly move on. In fact, it appears that it is precisely in the knowledge controversies that one has to focus upon, if one aims to understand the very process of simplification and the exclusion of unwieldy or awkward data (or awkward experts for that matter). To return to Barry then, 'what the concept of political situation captures, is how the

significance of a controversy is not so much determined by its specific focus, but needs to be conceived in terms of its relations to a moving field of other controversies, conflicts and events, including those that have occurred in the past and that might occur in the future' (2012; 330).

Second, the chapter suggests the need to examine the inteplay of IOs as they construct the 'global metrological field'. Emanating from physics, the notion of field has been used in the social sciences in order to broadly refer to actors' relational topographies. Nevertheless, it is often reduced to merely looking at specific geographical and relational spaces. Yet, as Djelic and Andersson also suggest (2006), such a conceptualization of fields misses a vital ingredient from the way fields operate; that is an understanding of the field as a field of power. Drawing on Bourdieu, transnational governance appears as a field of actors who constantly negotiate and push their own agendas forward; according to Bourdieu (1993), the logic of positionality is what gives the notion of the field meaning. In other words, the positions occupied by the different agents in the field, their advances and withdrawals, relate to their efforts for distinction within this field as an expression of their professional, educational, or other interests. Meanwhile, the structure of the field is neither static, nor does it change in any systematic way. On the contrary, it is endlessly reformulated, according to the agents' struggles for recognition and improvement of their situation. Agents use the force of their economic, social, cultural, or in the case under examination, knowledge capital, to raise their game and advance their front. It is the relational nature of these advances that gives the field its explanatory significance. Thus, following Bourdieu, the chapter uses Djelic and Andersson's idea of fields as 'complex combinations of spatial and relational topographies with powerful structuring forces in the form of cultural frames or patterns of meaning' (2006;27). An examination of the interplay of IOs in the rise of the global metrological field is therefore necessary, as it is vital to examine transnational governance not only as a field of numbers or as a field of actors, but as both.

Thus and to conclude, the chapter adopts a constructivist standpoint by focusing on the social and political conditions that influence the production of numbers, adopting the ontological position that their existence is not organic but rather the product of the interconnectedness of IOs, as outlined above. It examines those for whom this transnational game exists and it is their life ('what keeps them running' as Bourdieu would put it) and those who just utilise it as an instrument in their local political battles.

4. Education and Metrology

The field of Education is a rich arena for the examination of the interplay of IOs. Education has had a long history of measurement by establishing the first international networks for the development of testing back in the 1930s; IOs, like the OECD, began developing international comparative data on education performance as early as the 1960s. The recent couple of decades have seen an explosion of indicator development by all major IOs in education, as it is increasingly associated with the development of human capital and economic prosperity. From global university rankings (Kauppi 2013), to the development of

global testing of adult competencies (Grek 2014), this is a field which despite the national legal frameworks that prima facie rule it, is largely dominated by the measurement agendas of IOs.

Similar to their commensuration processes, the ideological swings and alliance-building strategies of large IOs in the field of education are striking. The OECD openly uses an economistic education discourse suggesting that comparisons are essential if education systems are to be competitive in the global economy. Interestingly, because of PISA's success, the OECD has begun expanding its work in the global South, which previously was in the sphere of influence of the World Bank and UNESCO. All three major IOs have been working together on a series of large statistical projects, despite competition for scarce resources and their clashing worldviews. For example, in contrast to the OECD, UNESCO prides itself in its humanistic approach to education, yet it was the UNESCO Institute of Statistics that turned to the OECD to 'learn' how to do education statistics. In Europe, similar alliances are being built between the European Commission and the OECD. Both organisations signed a memorandum of cooperation in 2013, suggesting that they are going to collaborate in adult skills analysis and forecasting, country analyses and international assessments; indeed, as we will see further, the Directorate General Education and Culture has been the prime funder of OECD work in Europe for at least a decade now.

In order to study the IOs' interdependence in developing quantification projects, the chapter focuses on the development of two co-constructed data and indicator projects: this is the emerging collaboration between the European Commission and the OECD in the field of European education governance; and the construction of World Education Indicators, co-produced by a range of expert actors as we will see below.

The 2013 Education and Skills Cooperation Arrangement

In 2013, the European Commission (EC) and the OECD signed the 'Education and Skills Cooperation Arrangement', whereby, according to the EC, 'the Commission coordinates political cooperation with and between the Member States... The OECD values the Commission's expertise and capacity for analysing and assessing education systems. The OECD's work also comprises countries outside Europe which are of strategic importance for the EU as partners and peers. *The aim is to align efforts in order to help both organisations to provide a better service for member countries, and enable the avoidance of duplications* (2013; my emphasis). A result of this memorandum of cooperation was the development of Education and Skills Online, a data portal that will allow 'intensified cooperation in three key areas: skills strategies; country analyses; and assessments and surveys' (2013).

ESO is the evolution of the Programme for the Assessment of Adult Competencies (PIAAC), an OECD project funded mainly by the European Commission; as we will see, the collaboration was fraught with conflict for which organisation's expertise would 'count' more, as well as, ultimately, which actor of the two would have more policy influence in the member states (Grek 2014). Nonetheless, instead of folding the cooperation back, the EC is now entering a new phase in European education governance by signing a

memorandum of cooperation with the OECD and agreeing to share expertise in most (if not all) key policy areas. But how did we get there?

The analysis of ESO developed here builds on previous research (Ozga et al 2011) which suggested that European Commission (EC) and OECD recommendations are often received at the national level as homogenous (Grek 2009). Thus, questions about the relationship between the two organisations in terms of policy direction emerge. More specifically, the case in question points towards moving beyond top-down accounts of the mere and one-directional transfer of policy from the international to the national, towards more attention to the *interaction* and *mediation* across 'levels' and actors. The empirical research focused mainly on the analysis of discourse through an examination of eight key texts, through a focus on their 'texturing' effects and their role in establishing a new 'order of discourse', their chaining, and the extent to which boundary genres were being produced. A firm set of 15 actors from both the Commission and the OECD, as well as other relevant research agencies, was identified and interviewed; the interviews focused on the actors' role in processes of coordination (conferences, meetings, project work); their interactions with other actors within and beyond their organisations; and other relational ties that link them and others through channels of flow of data, ideas and/or material resources. The analysis here is built using mainly this latter work, namely the interviews with the key policy actors. The policy actors interviewed and quoted in this chapter have had positions of power and significant decision-making leverage, and therefore in all cases first-hand experience and participation in meetings and debate between DG EAC and the OECD in regard to the financing and conduct of large international assessments.

Hence, although previous work showed how the OECD became a major Europeanising actor, having not only entered the European education policy arena but in fact monopolising the attention and policy influence within it (Grek 2009), this chapter goes one step further; working with the specific case of international comparative testing, it examines how the OECD became a dominant education policy actor as a result of its deliberate and systematic mobilisation by the European Commission[1], which found in the OECD not only a great resource of data to govern (which it did not have before) but also a player who would be pushing the Commission's own policy agenda forward, albeit leaving the old subsidiarity rule intact. As I will show, testing is important because it produces numbers and consequently ratings and rankings; once the OECD has created this unprecedented spectacle of comparison in European education, no system can remain hidden and separate any longer. The field of measurement becomes instantly the field of the game.

Although the Programme for the International Student Assessment (PISA) has become the brand name for the OECD success, historically there has been a range of such studies that the OECD has been organising since the early 1990s. The majority of these were adult literacy studies initially, followed by PISA, and more recently PIAAC, the Programme for the International Assessment of Adult Competencies (2011). The first

[1] By 'European Commission', I refer more specifically to the Commission's Directorate General Education and Culture (DG EAC)

literacy study for example, the International Adult Literacy Survey (IALS) was the first and largest international comparative testing regime of its kind. Conducted from the early 1990s, it was an innovative study, as it was the first time ever that an international comparative dimension was added to the construction of a literacy survey instrument. As it was an original and new endeavour, slowly at the start but increasingly later on, IALS boosted confidence in the construction of measurement tools of this kind, increased their persuasive power in regard to their validity and transparency and created substantial revenues to the research agencies administering them. Finally, and perhaps above all, it created a circle of like-minded expert communities, who found in these studies a platform for promoting the problematisation of specific issues, their institutionalisation through their exchanges and the setting up of the study, as well as their legitimation, in the form of advice to failing countries, once the results were published.

Following the successful IALS endeavour, PISA, the Programme for the International Student Assessment, became more than simply a testing regime –it is constructed and operates under a clear and specific policy framework, which is to be adopted by the participant countries if they are to improve their future PISA assessments and thus improve their standing in attracting economic and human capital investment. In other words, the involvement of the OECD with the steering of education policy in participant countries does not stop with the publication of the PISA results; on the contrary, this is perhaps where it begins. Expert groups write expert reports, analysed and taken forward by other national and local experts, while the Commission expert committees are also on board in order to keep the game in sight and keep it running.

Nonetheless, how has the OECD become such a powerful player in education governance in Europe? As some of the people who work there might have argued, the Education Directorate staff who are based in Paris take few decisions, if any; the OECD, as they argue, is no other than the participant countries and the national actors and experts sent to the OECD committees and meetings. Thus, how accurate is to examine the emergence of this new policy arena by simply focussing on a single international actor? This is where the notion of knowledge controversies is helpful, as the story of the emergence of the OECD as an influential actor (mostly on the basis of its large international tests) is yet again a story of tension – a story of the expert loves and expert wars that have been forming the history of international comparisons of performance measurement for over a decade.

'So around 2003-2004, we [OECD and Commission] started becoming far more involved. Meetings all over the world, I don't know how many countries I visited but what is important is that the Commission is there…. The European member states should see that the Commission is there because one of the criticisms of the Commission since all this started was that we didn't take into account all the good work of the OECD. Which was wrong but they said it. The way of showing them was to actually be there –not an empty chair.' (EC4)

Indeed, although the Commission and the OECD had been leading quite separate ideological paths, a new much closer relationship began emerging. This relationship would gradually strengthen and eventually become the sine qua non for the governing of European education systems. Another interviewee was even more eloquent in his discussion of this flourishing relationship:

> We used to have great competition between the two institutions [OECD and the EC] which was that they were research-based, we were policy-based. And we needed that. They needed the policy aspect to mobilise the European consciousness…it was in their interest working with us …We had some differences but we are working closer and closer together, we are very very good friends now, there is no conflict (EU3).

On the other hand, OECD actors appear also as quite open to the Commission, stressing from their own point of view, the reasons that the DG Education would work closely with them:

> First of all I think we've been very lucky that on the Commission side, that they've given a lot of emphasis to skills recently …and so I think we were fortunate that the work that we decided to do on PIAAC corresponded extremely well with their areas of interest and research priorities….I think they have been attending these international expert meetings that have taken place developing the proposal for PIAAC and so they were already onboard …. So they made a direct contribution, an actual contribution to the international costs and also eventually agreed to subsidise EU countries, the cost that they had to pay as well to the OECD. So we got just a block of direct funding and indirect funding to countries that they then had to pay us for the international costs. That made a big contribution in financial terms and therefore of course enhanced interest in the project (OECD3).

Another OECD actor also suggested the way that the relationship rather than hostile, has been much more close recently, in fact 'hand in hand':

> We have the same perceptions like other international organisations that it is important that we work together and that we avoid duplication of effort and that we know what the other organisations are doing and that there are often occasions that jointly we can do more than what we can do individually. I think we were always aware of that but I think that has become increasingly important that we work hand in hand. And inevitably because we have some common goals. The OECD has had for some time its own job strategy, the Commission has its own employment strategy and its Lisbon goals and there is a lot of overlap. So I think it is quite normal that we can cooperate on a lot of areas (OECD5).

Finally, another account which describes the conflict and competition for securing contracts for education research in Europe, comes from another interviewee, a key member of staff of one of the Commission's research agencies:

> I think because the OECD is very much looking for member states' subsidies and grants and financial support for each separate research activity, they are also keen in showing that they do something unique and innovative in order to get such funding. And so then in a way they are in competition with us. An example is they did a recent policy review which is called 'Learning for Jobs' which basically deals with VET. And they didn't invite us to some national expert groups and so on that are in development –and they did very little use of our work because they wanted to do something that was different and specific so that they could sell it to the member states –this is my interpretation, of course. But I think that there is this kind of competition, differentiation between European institutions because we are in competition for funding. (EC3)

The quotations above suggest that descriptions of a field of actors who come together regularly and on equal terms to achieve consensus for the pushing of might be certain agendas false. On the contrary, they highlight the need to also focus our attention and study on those meetings that never happen, as well as those actors who are consistently not invited to expert meetings. They direct us to an understanding of a field, which is riddled with internal and external competition for funding, especially in times of reducing national budgets in an era of austerity.

INES and the development of the World Education Indicators (WEI)

As a joint UNESCO Institute of Statistics (UIS)-OECD (Organisation for Economic Cooperation and Development) collaboration, this program developed education indicators with national coordinators from 19 middle-income countries that comprised over 70% of the world's population. The project was one of the first collaborative endeavours of large IOs. In order to understand this history, we need to investigate some of the historical developments that led to it; and this was none else than the work of the OECD in developing the Indicators in Education Systems (INES) project. This is the history the chapter will turn to briefly here.

The first volume of *Education at a Glance* (the official INES publication) was published in 1992, with the purpose of providing an insight into the comparative functioning of the education systems of member countries. Its thirty-six key indicators provided information around three areas of interest: the demographic, economic and social context of education; costs, resources and school processes; and outcomes of education. Subsequent volumes continued to provide data that reflected both on the resources invested in education as well as on its returns, illuminating 'the relative qualities of education systems' (OECD CERI, 1996a, p. 9). By 1998, the original categories had been reorganised and expanded around six themes: the demographic, economic and social context of education; financial and human resources invested in education; access to education, participation and progression; the transition from school to work; the learning environment and

the organisation of schools; and student achievement and the social and labour-market outcomes of education.

The OECD argued that this exercise in international comparison was designed in order to assist in the processes of policy formation in member countries and to contribute to the public accountability of education systems:

At a time when education is receiving increased priority but, like other areas of public spending, is facing the prospect of limited public funds, understanding better the internal processes that determine the relationship between educational expenditures and educational outcomes is particularly important. (OECD CERI, 1995b, p. 7)

Thus, we see that even in these early days of comparative analysis of education systems, the efficiency and effectiveness perspective provided not only relevant comparative information to member countries, but also aimed at shaping their policy agendas and priorities. Thus, and as argued by Henry et al. (2001), INES provides a useful illustration of the shift in the OECD's role from a technical expert organisation to a policy instrument and forum - that is, the OECD became an international knowledge broker and a catalyst facilitating policy development in member countries and assisting processes of policy dissemination, adaptation and borrowing.

A brief excursion into the history of OECD illustrates the changing attitude to performance indicators within that organisation. Throughout the 1970s and 1980s, amid continuing ideological and philosophical debates about the nature and applicability of performance indicators to education, the OECD, and CERI in particular, explored issues of educational reform, social equity and innovation in terms that were more conceptual and philosophical than evaluative and statistical. This was the time of equity taking priority over efficiency. Within CERI, a culture of distrust towards performance indicators had developed over the years. By the mid-1980s, however, even CERI could not easily dismiss the pressures for a new effort to develop indicators. Henry et al. (2001), drawing on interview data, show how the US, in particular, repeatedly called for work on outcomes indicators, particularly in relation to school effectiveness, at one stage threatening to withdraw its support from CERI if its demands were not met. However, Henry et al. (2001) also demonstrate that, from a different ideological direction, France - with its bureaucratic interest in statistical data collection - joined with the US in pushing the OECD towards the direction of developing educational indicators. With both the US and France, there was also probably a republican tradition (and possibly a bureaucratic one in France as well) of numbers used for progressive policy purposes, somewhat akin to a 'political arithmetic' tradition within British sociology and social administration. Thus, by the early nineties, the doubters had been won over and the Indicators project had become fully established within the OECD's educational work.

Interest in education indicators was of course not restricted to the OECD and its member countries. Other inter-governmental organisations such as UNESCO and the Asian Pacific Economic Cooperation forum (APEC) have pursued similar agendas - indeed, the OECD and UNESCO's work on indicators was

acknowledged as a context for APEC's interest in developing indicators of school effectiveness. In 1995 UNESCO, OECD and EUROSTAT (the statistical wing of the EU) joined forces in collaboratively collecting data on key aspects of education, thus consolidating a liaison formed when the OECD adapted the International Standard Classification of Education (ISCED) Systems originally developed by UNESCO, in turn based on the OECD's earlier developmental work (Papadopoulos, 1994, pp. 53-54). This collaboration, though fraught with difficulties as suggested by Henry et al. (2001), explored common definitions, use of criteria for quality control and improved data documentation in order to improve the international comparisons of education statistics. Reflective of this expanded terrain, the 1998 edition of Education at a Glance included data from a wide range of non-member countries through the 'World Education Indicators Programme' (WEI) conducted in collaboration with UNESCO and partially funded by the World Bank. World Indicators identified differing outcomes between OECD and WEI countries around matters such as student demography, levels of educational attainment, graduation rates and resourcing per student (OECD CERI, 1998a, pp. 29-30). By 1998, then, in the OECD's own words, indicators were covering, 'almost two-thirds of the world population' (CERI, 1998a, p. 6). Thus, it is to the World Education Indicators Programme (WEI) we will now turn.

The program began as a pilot project in 1997 with an original group of 12 countries which were invited to participate by UNESCO and OECD. Since then, the group expanded to cover every region of the world, through 19 countries: Argentina, Brazil, Chile, China, Egypt, India, Indonesia, Jamaica, Jordan, Malaysia, Paraguay, Peru, the Philippines, the Russian Federation, Sri Lanka, Thailand, Tunisia, Uruguay and Zimbabwe. Although the programme was developed through the shared technical expertise between the OECD and UNESCO, since its establishment, the UNESCO Institute of Statistics (UIS) was supported by the World Bank through its "Development Grant Fund". For the "World Education Indicator Program", the World Bank provided financial assistance for its organisation and administration, making WEI a collaborative indicator statistical project involving three major International Organisations in the field of education. According to UNESCO, 'from 2001- 2004 UNESCO received short-term support for project-based work from the World Bank. In 2005, *the mutual trust* that had developed between the two organisations manifested itself through World Bank making longer-term commitments to UNESCO' (2015, my emphasis).

Therefore, the joint nature of the development of WEI suggests fertile ground for an exploration of IOs' interplay in the production of global education indicators. In fact, according to the UIS project homepage, 'the WEI programme serves as a laboratory of ideas. Countries do not just collect data-- they design and test innovative surveys and methodologies collectively in this model of South-South cooperation' (UIS, 2015).

In many countries, this international perspective has been reflected by efforts to strengthen the collection and reporting of comparative statistics and indicators on education. Building on INES, the objectives of the WEI programme were to: 'explore education indicator methodologies; reach consensus on

a set of common policy concerns amenable to cross-national comparison and agree upon a set of key indicators that reflect these concerns; review methods and data collection instruments needed to develop these measures; and set the direction for further developmental work and analysis beyond this initial set of indicators' (ref xx). According to WEI reporting, 'during this time, participating countries have advanced the conceptual and developmental work in many different ways. They have applied the WEI data collection instruments and methodology at the national level. In collaboration with the OECD and UNESCO, they have co-operated in national, regional and international meetings of experts, and worked jointly on the development of the indicators, in areas such as governance, teachers and financial investments in education' (ref xx).

Periodic statistical reports from the OECD/UNESCO World Education Indicators Programme that include data from the 30 OECD countries and about 20 other UNESCO countries were written. The series focused on trends in education, identifying which countries made progress and the contextual and policy factors that contributed to the different educational outcomes. With the aim to develop a critical mass of education indicators that measure the current state of education in an internationally comparable manner, the group took on special projects that aimed to improve the comparability or broaden the scope of international education indicators. For example, there were special studies on levels of decision-making in education, based on surveys of primary schools conducted in participating countries. Finally, the programme was not only limited to the development of technical competence in comparative measurement; crucially, it also led to high-level ministerial cooperation and political commitment among the partner countries (UIS/OECD 1999; 2001; 2003; 2005)

International organisations: interplay and interdependence in the making of the global metrological field

Through the analysis of the emergent collaboration between the European Commission DG Education and Culture and the co-production of education indicators by UNESCO, the OECD and the World Bank, this chapter has evidently shown how IOs do not often constitute 'centres of calculation' independently from one another; increasingly we find that they need to collaborate in the production of global education metrics. However, according to Merry (2011), their combined technical expertise does not suggest that IOs are significant only in terms of their knowledge production capacities. By examining specifically the role of indicators in transnational governance, Merry elucidates the governing effects of numbers. Consequently, if we consider IOs central in the production of knowledge, we can infer that their operation -as the knowledge gatherers, controllers and distributors- must have crucial governing impact (2011). 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 this chapter tries to cast light upon. 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).

In light of this chapter's case studies and in the tradition of the seminal work of Barnett and Finnemore (1999), we need to question the early International Relations' conceptualisation of IOs as passive entities which merely distribute 'principles, norms, rules, and decision-making procedures', as the more economistic, rational-theory analysis would have seen them to be. Instead, building on sociological institutionalism, Barnett and Finnemore see IOs as powerful agents which have 'power independent of the states that created them'. Thus, they are purposive actors (Cox 1980, 1992; 1996; Murphy 1994; Haas 1992): 'they define shared international tasks (like 'development'), create and define new categories (like 'refugee'), create new interests (like 'promoting human rights'), and transfer models of political organization around the world (like markets and democracy)' (Barnett and Finnemore, 1999; 699).

However, given the prominence of IOs in IR literature, it is surprising how little attention has been given to the interplay, organizational overlaps and mutual dependencies of IOs. As this chapter has showed, rather than state-bound, IOs are increasingly dependent on other IOs to operate. For example, we find that new IOs are usually founded by other IOs, rather than member states (Shanks, Jacobson, and Kaplan 1996). In addition, staff mobility in IOs is very high: 'a large part of staff …is employed on fixed term contracts which generally run up to three years with the possibility, but not the obligation, of renewal' (Ringel-Bickelmeier and Ringel 2010; 525). In fact, the case of the OECD is particularly interesting, since it has 'annual turnover rates sometimes as high as 40 per cent for certain staff' (Ringel-Bickelmeier and Ringel 2010; 526). The 'revolving doors' of IOs may suggest that staff often move between them, or even occupy multiple positions at the same time.

Hence, the focus of the chapter is on organizational interplay; although, as Brosig (2011) suggests, IOs are dependent on states, the case of the rise of the global education policy field shows clearly that IOs do perform operations that states cannot and will not perform –in fact, most of them were founded in order to operate as cross-governmental diffusers of knowledge and norms. Barnett and Finnemore are again helpful in suggesting that cooperation between IOs may create mutual dependency, a situation that IOs would normally be seen to want to avoid (1999). Nonetheless, given the complexity of transnational governance and the technological advances of the last decade, we are facing a different situation altogether: IOs cannot and do not act independently to solve major social problems and challenges. Hence, and as the case of the education policy arena has shown, we see IOs as increasingly mobilizing their resources through their interaction with other IOs with comparable knowledge producing abilities and interests – an IO's success may be seen as its power and influence over a larger regime of organisations that work towards specific policy directions, rather than through their complete insularity and autonomy (Raustiala and Victor 2004). In addition, as we saw above, IOs are characterized by highly mobile workforces; what does this increased actor density and fluidity suggest about the coordination of measurement practices? Indeed, it appears that

states ask for the collaboration of IOs as it is seen as a way of increasing efficiency, resource-pooling and coordination of their agendas – the example of the ways that European Commission's DG Education and Culture was in effect compelled to work with the OECD because of efficiency concerns by the member states, is a good one here (Grek 2009; 2014).

The concept of organizational interplay is not entirely new to IR: there has been some stimulating work that has examined the interplay of international regimes and consequent attempts to produce typologies (Gehring and Obersthuer 2006; 2009; Raustiala and Victor 2004). Nonetheless, regimes lack precisely what Barnett and Finnemore (1999) suggest above: agency (Rittberger and Zangl 2006). However, even when IR theory has acknowledged IOs constitutive nature as actors, there are other problems. By examining treaty regimes, for example, Young suggested two typologies for organizational interactions: nested and overlapping institutions (1996). But, as Brosig (2011) suggests, 'research on regime complexes in which relations between institutions are of such density has indicated that disentangling them would compromise the collective character these regimes have acquired'. In addition, most of IR theory that has examined treaty regimes has done so from a rational theory perspective, one that would explain the interactions as serving specific IOs interests and benefit calculations (Galaskiewitz 1985; Oliver 1990; Van de Ven 1976). Nonetheless, even when IOs are assigned with agency, asymmetries and power relations are only explained on the basis of rational, interest-based behaviour. However, as the example of the European Commission's collaboration with the OECD has shown (Grek 2009; 2014), material resources do not always explain organizational interaction; IOs may actually be very well-off but lack the knowledge and expertise, even legitimacy to promote specific policy agendas. To use the same example again, the notion of subsidiarity would suggest that for the European Commission the OECD could act as a mediator of its own policies in the member states. In other words, DG Education and Culture lacked the legitimacy to enter national policy spaces; OECD, as an expert institution, did not. On the other hand, organisations like the OECD, may well have both the resources and the expertise, but could be lacking in policy direction and influence.

To conclude, it is evident that although important scholarship in the fields of IR, organisational sociology and the social studies of quantification exists, little has it enlightened us about the politics, processes and practices of the interdependence and interplay of IOs in the field of the production of global metrics. On the one hand, IR theory has given emphasis on the role of IOs in transnational governance; initially through an examination of treaty regimes, and later with an emphasis on IOs influence in power play, the field is dominated by rational, interest-based theoretical perspectives. Thus, it has failed to examine qualities of IOs that relate to their constitutive powers as independent, yet interconnected, actors in the shaping of global policy agendas through their expert knowledge work. On the other hand, organisational sociology, although rich in its intellectual history of competing views about how organisations work, has not as yet examined closely the role of numbers in re-shaping organisational behaviour. The insistence on separating the internal from the external organisational lifeworlds, fails to take into account precisely what numbers are able to do (that may have not been possible before): that is, diffuse boundaries and set IOs in a

more complex and fluid reality. Finally, studies of quantification, although growing in number and coming from a wide variety of disciplinary perspectives, have largely focused on the role of numbers as agents in themselves; there has been little, if any, attention, to the political work of the actors that organise these processes, that shape and are shaped by them.

Thus, the rise of a transnational metrological field in education is an excellent example of the kind of mobility that the policy making process requires; however, the in-depth study of the organisation, preparation and delivery of international education comparisons makes a case precisely for a close examination not only of the movement of policy in itself, but crucially of *those who move it*. The role of experts is central as their own in-depth and trusted knowledge allows them to be highly mobile; in the name of their specialised expertise, experts have to be numerous; they are employed by different policy-making and research organisations and are accountable to them alone; their expert knowledge suggests the need for them to be present and offer advice at different stages of the policy-making process, yet it is precisely this same trusted and objective knowledge that renders them invisible. They offer evidence for policy, yet their most important role is symbolic; that of the legitimisation of knowledge.

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