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Travel, Translation and Governing in Education; the Role of Swedish Actors in the Shaping of the European Education Space

Sotiria Grek, Joakim Landahl, Martin Lawn and Christian Lundahl

Abstract

Within the field of history of education, there is a growing interest in the movement of influential actors and texts which have crossed national borders. One of the main driving forces for influence, knowledge and innovation is comparison, a tool used within the governing of education in diverse ways and with different intensities, over time, to shape education systems. This article looks beyond dichotomies such as the national versus the European or the global, in order to focus on those governing spaces and practices that lie in between bounded, predetermined and preconceived entities and education organisations. Our locus of enquiry is education actors and their practices as they use comparison to make governing happen. The article examines the case of Swedish education (its policy actors, governing elites and education practitioners) to examine this relation between comparison, governing and the transnational.

Keywords

Comparison, Sweden, transnational, governing, space

Introduction

The focus of this paper, and the project it is part of, is the role of actors and their practices in the making of the fluid, transient, and often imagined governing spaces of education in Europe in the 20th century.

In parallel with the internal construction of the nation state in Europe through objects, statistics and standards, nations compare themselves against one another internationally. Systems of schooling, including buildings, texts and technologies were often created after study visits, special reports and communications with other countries. Although international comparisons and ‘lessons’ had always been there, judging progress by adopting recognized models from leading systems elsewhere was still a pretty limited enterprise; education systems had usually been closed-off behind borders, local cultures and education histories. On the contrary, increasingly from the late 19th century, comparison became cross border; it is highly visible as a tool of governing at all levels at the level of the organization (to manage); and of the state (to govern). Indeed, comparison events or ‘political spectacles’ (such as the World Fairs or PISA later on) were used because of their visibility.¹

Within the field of history of education, there is a growing interest in the movement of influential actors and texts which have crossed national borders. The push or pull of influence in education has become a central question for the history of education. One of the main driving forces for influence, knowledge and innovation is comparison, a tool used within the governing of education in diverse ways and with different intensities, over time, to shape education

¹ E.g. Klaus Dittrich, *Experts Going Transnational: Education at World Exhibitions during the Second Half of the Nineteenth Century* (PhD diss., University of Portsmouth, 2010); Eugene F. Provenzo Jr, *Culture as Curriculum: Education at the International Expositions* (New York: Peter Lang, 2012); Martin Lawn, ed., *Modelling the Future: Exhibitions and the Materiality of Education* (Oxford: Symposium books, 2008).

systems. The ways in which governing processes in education have used cross border comparison is situated in the current trend of the transnational approach within the history of education.² ‘Paris to PISA: Governing Education by comparison, 1867-2015’, the research project we report on, has looked beyond dichotomies such as the national versus the European or the global; instead, our locus of enquiry is experts and policy makers and their practices as they make governing happen. It uses the case of Swedish education (its policy actors, education elites and practitioners) to examine this relation between comparison, governing and the transnational. The transnational frame opens out the spaces between borders and institutions, tries to avoid predetermined conceptions and emphasizes the actions of actors and their meanings as they practice comparison.³

The authors of this paper are a group of scholars who bring together disciplinary perspectives that stem from history, sociology and anthropology, as well as the study of public policy;

²Pierre-Yves Saunier, *Transnational History* (London: Palgrave Macmillan, 2013); Akira Iriye, *Global and Transnational History: The Past, Present, and Future* (London: Palgrave Pivot 2013); Eckhardt Fuchs & Eugenia Roldán Vera, ed., *The Transnational in the History of Education: Concepts and Perspectives* (Cham: Palgrave Macmillan, 2019); Barnita Bagchi, Eckhardt Fuchs and Kate Rousmaniere, ed., *Connecting Histories of Education: Transnational and Cross-cultural Exchanges in (Post-)Colonial Education* (New York: Berghahn Books, 2014); N. W. Sobe, "Rethinking 'Cosmopolitanism' as an Analytic for the Comparative Study of Globalization and Education" *Current Issues in Comparative Education* 12 (1), (2009), 6-13.

³ Sotiria Grek, "Socialisation, learning and the OECD's Reviews of National Policies for Education: the case of Sweden", *Critical Studies in Education*, 58 no. 3 (2017), 295-310; Martin Lawn, "Europeanizing through expertise." *World Yearbook of Education 2018: Uneven Space-Times of Education: Historical Sociologies of Concepts, Methods and Practices* (London: Routledge, 2017); Joakim Landahl, "Aesthetic Modernization and International Comparisons. Learning About Drawing Instruction at the Exhibition Universelle in Paris 1900", *History of education* 48 no. 1 (2019) 41-59; Christian Lundahl (2019) "Making testers out of teachers: the work of a Swedish State Research Institute 1946–1956", *History of Education*, 48 no. 5 (2019), 646-663, DOI: [10.1080/0046760X.2019.1565422](https://doi.org/10.1080/0046760X.2019.1565422)

placing our investigation in a particular space and time is key in using these diverse disciplinary resources and making them interact. Second, it has been crucial to our discussions, and to the research project work we present, that our empirical cases have been specifically rooted in time and space. This is a matter of contingency: it could have been otherwise, in other times and places, and this is an essential part of the intellectual argument we are seeking to make. The transnational governing of education that we describe is one which is forever in the process of being made, by particular actors in particular places, as they go about their work of governing.

There are three main inter-related concepts we are dealing with in this paper; these are the concepts of governing, the transnational and comparison. Governing implies acceptance of a shift away from a focus on fixed and bordered institutions towards flexible and adaptive modes of co-ordination of networks, for example⁴. The paper uses the notion of governing as distinct from governance; the latter is predominantly seen as a shift from top-down and hierarchical forms of government to the creation of horizontal and heterarchical mechanisms of decision-making; that is, governance mechanisms⁵. Governance is usually seen as a decentralised, heterarchical, future-driven, knowledge-based, and discursive form of political influence⁶.

⁴ Rod Rhodes, "Understanding governance: policy networks, governance, reflexivity and accountability", (London: Open University Press, 1997) ; Mark Bevir, "Governance: A very short introduction", (Oxford: Oxford University Press, 2012)

⁵ Niels Åkerstrøm Andersen, & Justine Grønbæk Pors, On the history of the form of administrative decisions: how decisions begin to desire uncertainty. *Management & Organizational History*, 12(2), (2017): 119–141; Jan de Munck, J., & Jacques Lenoble, (1995). *Transformations in the art of governance A genealogical and historical examination of changes in the governance of democratic societies*. Presented at the Forward Studies Unit of the European Commission on transformations in the art of governance, Bruxelles.

⁶ Poul Fritz Kjaer, *Between governing and governance: on the emergence, function and form of Europe's post-national constellation*. (2010) Oxford: Hart; Poul Fritz Kjaer, European crises of legally-constituted public power: From the 'law of corporatism' to the 'law of governance'. *European Law Journal*, 23(5), (2017): 417–430; Louis Meuleman, *Public*

Governance also tends to push for the inclusion of a large array of stakeholders within its processes: experts, consultants, trade unions, lobbies, knowledge brokers, NGOs, social movements and others. Instead of the normal hierarchies of government processes, responsibility of decision-making is shared by diverse political actors. Additionally, uncertainty towards the future creates an over-reliance of governance mechanisms on knowledge rather than on norms or on ideologies. Therefore, cognitive and “learning” processes become central within governance mechanisms, and in the framing and the making of political decisions.

However, despite the insightful contributions of the literature on governance (and especially EU governance, the field in which most of the original work on the concept was conducted), governance has come to be reliant far too much on the concept of ‘levels’ and their interactions; indeed, ‘multi-level governance’ is perhaps the most dominant concept within governance studies⁷. The paper is not dealing with governance mechanisms as tools for decision-making processes within specific ‘levels’. Our interest in ‘governing’ lies in its concern for the fluidity of the transnational interactions, the political work that actors do within them, as well as the artefacts that they use, in order to make meaning and attempt coherence in networked forms. The paper works with Lagroye’s definition of ‘governing’ as ‘a set of practices which participate in the organization and the orientation of social life’⁸ (1997: 25). Thus, it builds on the premise that far from being a system composed uniquely of ‘national’ and ‘international’

Management and the Metagovernance of Hierarchies, Networks and Markets: The Feasibility of Designing and Managing Governance Style Combinations. (2008) Physica-Verlag Heidelberg.

⁷ Liesbet Hooghe, & Gary Marks, Unraveling the central state, but how? Types of multi-level governance. (Reihe Politikwissenschaft / Institut für Höhere Studien, Abt. Politikwissenschaft, 87). (2003), Wien: Institut für Höhere Studien (IHS), Wien. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-246200>

⁸ Jacques Lagroye, *Sociologie politique*, (Paris: Dalloz-Presses de la FNSP, 1997), 25

bodies, transnational ‘governing’ is conceptualised as those ‘assemblages of apparatuses, processes and practices’ that make governing happen⁹. Governing draws heterogeneous sets of actors together, to generate connections between them, and to articulate them. What are created as a result are assemblages: amorphous, unstable and multidimensional organizational forms. Assemblages are dynamic, varied in scope, involving many agents within and across borders and levels, and shaped and reshaped in action¹⁰. Assemblages endure to the degree of alignment they achieve among the actors of which they are composed. By focusing on specific cases we will show the ways that these alignment practices span over time and space to create such assemblages of actors, instruments, beliefs and practices that together represent significant effects.

The movement of ideas, practices, objects and people means that they have to be studied within a de-centred context. Understanding the elements of movement is key. Cross boundary political work¹¹ emphasizes travel, connection, mediation and translation, for example

Transacting, translating, mediating and brokering characterise these new ways of working that are central to the forms of governance as partnerships, networks and collaborations¹².

In other words, intermediaries and brokers, the ‘go-betweens’¹³, work with texts and guides, and create regulations and standards, items which structure their mobility and interconnect

⁹ John Clarke and Jenny Ozga, *Governing by Inspection? Comparing school inspection in Scotland and England*, Paper for Social Policy Association conference, University of Lincoln: 2011.

¹⁰ Martin Lawn, “Soft Governance and the Learning Spaces of Europe”, *Comparative European Politics* 4, (2006): 272-288.

¹¹ Lagroye, *Sociologie politique*.

¹² John Clarke, Dave Bainton, Noemi Lendvai and Paul Stubbs, “Making Policy Move: Towards a politics of translation and assemblage” (Bristol UK and Chicago USA: Policy Press (2015):130.

¹³ Pierre-Yves Saunier, “Transnational History” (London: Palgrave Macmillan, 2013)

their work across major events, like exhibitions; major research projects; and informal meetings. These actors meet, correspond, publish, translate, convene and generally produce circulations.

Using Sweden as a case, we explore and analyse the ways in which national systems and their innovations were influenced, constructed and traded through the use of education comparisons. We see comparison as inherent in the making and distributing of knowledge and governing practices. Comparison is not simply informing policy; rather, it is crucial to the formation of the transnational as a field of practice, being always there as the glue that binds actors and their work together¹⁴. Comparison is a fundamental dimension of governing education in that it continuously affects, steers and transforms the things and the actors it compares.

This fluidity of movement does not fit neatly into academic disciplinary boundaries; instead, it requires a wide disciplinary approach, and the research group represent a number of disciplines and interests, following and understanding the work of many non-governmental actors, whose work and influence is often produced in a national context, sometimes supported by government actors and interests, but which is constantly recreated in transnational contexts. As the paper will show further on, in each of our cases, significant assemblages are present: these are not stable but amorphous and multidimensional organizational forms.

¹⁴ Richard Freeman and StevenSturdy, 'Doing comparison: producing authority in an international organization', in Littoz-Monnet, A (ed) *The Politics of Expertise in International Organizations. How international bureaucracies produce and mobilize knowledge*, (London: Routledge, 2017)

Therefore, central questions guiding our research and analysis are the following: how is the governing of education being enacted by the national policy and research actors who make it happen? How do they interpret and articulate their practice when they travel and translate their ideas to new audiences? How are governing spaces constructed and how do they evolve and change through the movement of these actors? Core notions in this kind of analysis are those of 'space' and 'comparison'. Indeed, the 'spatial turn' is predicated upon the understanding that 'spaces' are neither natural nor pre-given; education innovation and policy happens at many possible spaces simultaneously¹⁵. This stands by contrast with those operating from within a more methodological nationalism approach, for whom the spatial (and territorial) categories of the global/ European/ national/local are already assumed and separately conceived and defined¹⁶. Although we do of course accept the physical geographical presence of Sweden, we see the 'spaces' of education governing that its actors create as they travel and share their ideas as not assumed, but to be identified through empirical research of the kind which we conducted in the 'Paris to PISA' project. Thus, the notion of space allows us to examine its 'real' and 'imagined' properties, as well as to problematize core dichotomies in the history of education research between the national and the international, around the question of borders and borderlessness and the contingent and fluid nature of translation and travel. For the purposes of this paper, we follow Massey's work who conceptualises space 'as the product of interrelations; as constituted through interactions', 'relations' being defined as 'embedded practices of material engagement'¹⁷.

¹⁵ Doreen Massey, *For Space*, (London: Sage, 2005)

¹⁶ Roger Dale, & Susan Robertson, *Beyond Methodological 'ISMS' in Comparative Education in an Era of Globalisation*. In R. Cowen & A. M. Kazamias (Eds.), *International Handbook of Comparative Education*, Dordrecht: Springer Netherlands, 2009): 1113-1127

¹⁷ Massey, *For Space*

To return to our empirical investigation, in the late 19thC and 20thC, Sweden's reputation as a modern education state, albeit a poor country, depended upon some crucial independent actors, connections and events. The effect of major involvement in the World's Fairs, in international curricular reform and in design education, produced an image, often replenished, of an innovative society, with education and learning at its core. Images of Sweden were projected through the intensive and influential work of its entrepreneurs and experts, working in diverse periods and with technologies and local support. Through these assemblages, the governing of education was created anew. At different times in Sweden, in the 1870s, the 1890s and the 1930s, but extending in space and time subsequently, significant innovations in education had transnational effects. Here we are specifically concerned with primary and secondary schools, and -from the mid 1950s- with what was labeled the comprehensive school system. In the following cases, we look more closely at the ways in which nationally devised innovations became influential transnationally. The particular study here is of Swedish education but the ideas involved in the analysis could be applied in other arenas. The cases are presented in three sections. The first one concerns education at display in World Fairs in 1870-1930, the second one shows the transnational work of national research institutes in 1940-1950s and the third section deals with large-scale assessments in the 1960s-1980s.

Our three cases are at some length presented elsewhere,¹⁸ but here we look at them more closely from a transnational and governing perspective. We further highlight the importance of specific actors and institutions and how a knowledge of and within comparative education matures

¹⁸ Christian Lundahl, 'Making Testers out of Teachers – The work of a Swedish research institute'. *History of Education*. (2019). <https://www.tandfonline.com/doi/full/10.1080/0046760X.2019.1565422>; Joakim Landahl & Christian Lundahl, (ed.) *Bortom PISA. Internationell och jämförande pedagogik*. (Stockholm: Natur och kultur, 2017) ; Christian Lundahl, & Martin Lawn, 'The Swedish schoolhouse: a case study in transnational influences in education at the 1870s world fairs', *Paedagogica Historica*, 51(3), (2015),319-334.

through the development of skills, practices and spaces. Bringing the three cases together strengthens the understanding of Swedish travelling actors and their assemblages. Through this work, we try to show how governing is performed as a relational practice between citizens and the state, within specialised institutions and organisations; we show the encounters between researchers and other practitioners of education; and we discuss the making of these assemblages as they emerge between and within countries, alongside their enduring traditions. The three cases presented here portray how the knowledge of comparative education becomes aware of its own political relevance and governing potential which gives rise to further international research on educational planning and development.

Our cases are drawn from studies in several archives in Sweden, England and US. The combined analyses of the cases that is presented in this paper builds on a further deliberation within the project concerning its overarching interest in comparisons, governing and the intersection of national and international spaces that we conceptualized above. In doing this we were able to explore how new spaces of Swedishness develop as they travel and to show how new governing forms build on comparisons in education. We do not consider this a completed task but a truly open-ended endeavor. The nature of the construction of the transnational education policy and research space that we investigate is not that of a container, but rather one of loose ends and missing links.

World's Fairs, the Swedish Schoolhouse and Sloyd: Sweden in the world

In the 1870s, World's Fairs had education sections and displays which grew in significance from London 1862, to Paris 1867, London 1871, Vienna 1873, and finally at the Centennial Exhibition in Philadelphia 1876. Displays of textbooks or school plans grew into a full size school model [at Vienna] until, at Philadelphia, a full scale flat pack school from Sweden was assembled and fully equipped. This was in effect a working school system that could be examined closely, discussed and observed from all angles.

In this period, significant national actors were able to move beyond their administrative roles as state officials and become organisers of the presentations at the world exhibitions. In particular, two stand out: Per Adam Siljeström (1815-1892), a principal and school inspector in Stockholm and an expert on school building, and Carl Jonas Meijerberg (1816-1903), an ex School inspector, who became a Special Commissioner. Siljeström was an early traveller/researcher and had travelled in North America, studying its school buildings, and later, in his writings, influencing Swedish school plans. He was centrally placed in Ministry discussions, with his interests in education and design, to influence the planning of the Swedish entries in the Exhibitions. Siljeström was a key figure in Exhibitions at the Paris [1867], London [1871] and Vienna [1873] which strengthened the impression of a country with a modern education system, partly by its gradually increasing and complex representation with educational objects, plans and models. This reached a highpoint at Vienna where, as already suggested, a full scale Swedish school building was a focus of attention¹⁹.

The next Exhibition was at Philadelphia in 1876, the Centennial Exhibition, and the organisers

¹⁹ Lundahl, & Lawn, *The Swedish schoolhouse*, 319-334;
Klaus Dittrich, *Experts Going Transnational: Education at World Exhibitions during the Second Half of the Nineteenth Century*, PhD diss., (2010), University of Portsmouth.

were clear that Sweden should have a strong presence there. Sweden's Commissioner, C. J. Meijerberg, was part of a group of influential reform liberals embodying contemporary ideas for Swedish society. He had been a School inspector and a powerful, even authoritarian, leader of Stockholm school transformation. Before and after the Centennial, Meijerberg engaged in extensive correspondence with reforming educationalists in other countries and met them at the Exhibitions. Like him, they combined expert and official occupations, such in ministries of education, school directorships, university presidents, prominent teachers, politicians, medical doctors, manufacturers of school equipment and architects²⁰.

In Philadelphia, Sweden had produced a model Swedish school, shipped from Sweden, and fitted out with textbooks, maps, plans and objects. All these artefacts, together, comprised a working system. Charts, specimens, animal, vegetable and mineral objects, and appliances filled the schoolhouse in profusion. The pioneering representative of Ontario education, Hodgins, arranged with Meijerberg send some of the educational apparatus in the schools to Ontario, so impressed was he with the school and Meijerberg. Visitors were surprised not just by individual pedagogic innovations which could be purchased later and duplicated back home but by the idea that the objects coalesced into a system. This was Meijerberg's significant innovation: the school building was impressive but its depiction of a system of education, and not just its fabrication by material elements, was a modern revolution. Meijerberg could always be found lecturing visitors about Swedish education, for example, the New Yorker, Swedish newspapers, and Sweden's General Consul in Washington. Apart from the schoolhouse itself, many of the 40 Awards Sweden received were for student work or instructional devices (other than books). He had produced an ideal Swedish school, a representation of his own thinking

²⁰ Dittrich, *Experts Going Transnational*, 87-88.

about education, which visitors were impressed by and viewed as typical of all Swedish schools.²¹

Meijerberg was part of a small group of influential social reformers in southern Sweden²² which included August Abrahamson (1817-1898) and Otto Salomon (1849-1907), who established a major transnational network in curriculum and pedagogy. The World Exhibitions enabled them to display the elements and products of educational Sloyd, and reinforced the work of its spiritual and practical home in Naas, where Abrahamson had founded a seminar for Sloyd in the early 1870s. The training at Naas, supervised by Salomon from 1875, became widely known across many education systems and from the 1870s educationalists travelled over long distances to attend the short courses at Naas. The influence of Sloyd, an approach to educational development through handwork, combined values, education and a practical pedagogy. Salomon, who was the director of the school, promoted respect, independence, self-reliance, attention, and a sense of form in education²³. At a time when elementary education did not represent these values, the Sloyd movement became very influential, pointing the way to a reformed curriculum. It melded graded, practical work with a philosophy of learning which appealed to a number of audiences, but especially elementary school teachers. It attracted new educationalists and industrial and vocational trainers. Sloyd became caught up in England, for example, with the threat of industrial competition, modernization and national survival. Hand

²¹ Worth mentioning is that the School house of 1876 was later in 1877 on bought and moved to Central Park in New York where it still stands as the ‘Swedish cottage’ and serves as a marionette theatre: <https://cityparksfoundation.org/swedish-cottage-marionette-theatre/>

²² Anders Hammarlund, “Prayer for Modernity Politics and Culture in the World of Abraham Baer, 1834-1894”, Svenskt visarkiv/Statens musikverk (2013).

²³ Otto Salomon, *The Theory of Educational Sloyd* (London: Philip and Sons, 1892a) [Authorized, Revised and Edited by an Inspector of Schools, TG Rooper] Reprinted: Otto Salomon, *The Theory of Educational Sloyd*. (Boston, Silver Burdett & Co., 1900); Otto Salomon, *The Teacher’s Hand-Book of Slöjd*, (Boston, Silver, Burdett & Co. Reprinted:1904).

and eye training was associated with the new education, and in turn with a new skilled working class²⁴.

The effectiveness of Sloyd was built on Salomon's systematic approach which included texts, lectures, operational plans and specialised tools. Wherever Sloyd operated in the world, it had to have these key elements, and its disciples in North America, New Zealand or Mysore, India, for example, could supplement these artefacts but could not alter or modify them. In addition, Salomon published in several languages in newspapers and travelled extensively. He acted as an employment agency world-wide for trained Sloyd teachers and corresponded about requests for staff. Naas students were treated as future emissaries for Sloyd and established outposts in their countries, which sometimes developed into new hubs of production and influence. Sloyd fulfilled a growing demand for a widening of the elementary school curriculum, in its practices and its aims, and it created a system and a cadre of practitioners to support it as an innovatory method. As with the Schoolhouse, Sloyd had the benefit of a supportive state, especially through funding, but most of all, on important national actors or funded enthusiastic pioneers, connected to the governing of education. Sweden benefitted from their entrepreneurship, nationally and internationally²⁵.

²⁴ Martin Lawn, 'Transfers and Implementations of a Swedish Manual Work Program: Sloyd and Entrepreneurial Power', *Swiss Journal of Educational Research*, Vol40, N0 1, (2018) pp 29-48

²⁵ The Sloyd System *Otago Witness*, Issue 1971, (21 November 1889), 17; Jay Robertson, *Manual Training in Public Schools*, (The Macdonald Sloyd School Fund Ottawa, 1899).
Germund Larsson *Sloyd in India* (The Sloyd Record, Boston, 1902)
David Whittaker, *The impact and legacy of educational sloyd: head and hands in harness*, (London: Routledge, 2014); Anna Molander, *A Scientific Sloyd – a new original system*, (Syracuse Bardeen, 1902).

The constant impetus needed to keep international linkages working began to decline after Salomon's death in 1907. From the 1890s until 1914, key 'connectors' like Salomon and Larsson [a major Sloyd interpreter in Boston, US] used the International Exhibitions to display elements of Sloyd, to talk about it and to meet interested teachers and managers. This period was also the high point of publishing about Sloyd. By the 1920s, dominant circulations and connections about Sloyd had become more regional and local. The Sloyd network grew rapidly and consistently but over time its successful system appeared restrictive to practitioners and local authority or school board managers.

Figure 1

Swedish Sloyd. The Swedish exhibition at the World's Fair in St. Louis 1904.²⁶

In the case of the Swedish Schoolhouse, its demonstration of the space of educational modernity, which could be viewed, touched, measured and classified, had its major impact in the 1870s. The carefully managed and constructed spectacle of the model school had encouraged comparison with regional and national representatives and competition with larger countries, like the US or Russia, which increased in future years. Nevertheless, Sweden claimed the right to be seen as an educational leader. The growing and influential presentation and networking of Sloyd internationally reinforced this claim²⁷.

Using Soft Power: design and pedagogy in mid 20thC Sweden

²⁶ Riksarkivet, Utställningsbestyrelserna, Sveriges deltagande i världsutställningen i St. Louis 1904 (U9),

²⁷ The Swedish participation at the World's Fair in St. Louis [The National Archives, The national exhibition agency.] vol 8. SE/RA/[420463](https://www.nsa.gov/record/420463)/420463.09.

Later Swedish leadership in education was not created through an external initiative like the World's Fairs but as a consequence of internal developments within the country, which also created an international reputation. Its starting point is discernible in the national Stockholm Exhibition in 1930, which had a dual aim; to promote Swedish design internationally and to create a new internal market for visually attractive goods for mass consumption²⁸. It was focused on the education of the public; indeed, it was intended to construct a new public. Parallel to the new functional approaches to design in objects and architecture was a social modernization, with a distinctive pedagogy through which the public would be able to view new designs and understand how they were to be used. A major figure at the heart of this movement was Gregor Paulsson, the Commissioner General of the exhibition. He was very experienced in exhibition thinking and wrote, with others, a manifesto, *Acceptera*, which was about the need to accept and work with functionalism in modernism.²⁹

Visitors walked along the corso or street of buildings and exhibits and into apartments in which objects were placed in ideal settings. In a sense, citizenship was to be achieved through learning: the citizen had to become 'intellectually trained, morally mature'.³⁰ Modernity was expressed in material and in visual form: evidence was offered through touching, feeling and seeing, as in the pedagogy of the World's Fairs. The emerging social democratic ideal of the

²⁸ Anne- Marie Ericsson, Derek Ostergard, and Nina Stritzler-Levine, *The Brilliance of Swedish Glass, 1918-1939: An Alliance of Art and Industry* (Yale University Press, 2012); Forström, Stina *The Infancy of Fine Swedish Design in Kid size – the material world of childhood* (Vitra Design Museum 1997), 197- 201

²⁹ E.g. Carl Marklund & Peter Stadius: "Acceptance and Conformity: Merging Modernity with Nationalism in the Stockholm Exhibition in 1930", *Culture Unbound*, 2 (2010), 609–634; Allan Pred, *Recognizing European Modernities: A Montage of the Present* (London: Routledge, 1995), 97-174.

³⁰ Allan Richard Pred, "Recognizing European Modernities:a montage of the present" (London, New York: Routledge, 1995)

folkhem (the People's Home), where Swedish society was understood as a small family and as an equal welfare society, was symbolized and enacted through this new sensibility. This extended into an understanding of the economy of production of modern objects, and in later years, a wide-ranging series of study and discussion groups were organised by voluntary groups and by the powerful Cooperative Society to explain what was necessary in the home and society. Research followed as state commissions and inquiries were set up to study housing and everyday life.³¹

This deliberate performance of modernity, with its focus on pedagogy and research, attempted to create a new model Sweden which was later to become a brand, and when post war Europe admired and associated with Swedish modernism, it absorbed their model: the vision, the texts, the symbols, and most of all, expert guides. The postwar influence of Sweden in European education seems to be connected to the cultural and political example of Sweden in a war damaged Europe. The fact that Sweden was not a participant in 20th century European wars gave it a moral authority in post war Europe. The policies of the Social Democratic government in Sweden were very much in line with ideas strived for in European countries, and certainly as a positive example compared to Eastern Europe³². So, it is arguable that the inspiration of Swedish education, and its actors and policies in the early postwar period was heightened by the perception that they were representatives of an actual future. They were moral and practical embodiments of a work in progress, that others wished to emulate. Sweden was able to

³¹Göransdotter M., "A Home for Modern Life: Educating taste in 1940s Sweden", *Conference Proceedings 02* (Bangkok: Design Research Society, 2012)

Carl Malmsten 'Training of the Form-Sense in the Age of Machines' (Yearbook of Education, 1955): 323-328 ; Steenburg Elisa , Functional Aesthetics, (Swedish Society of Industrial Design Yearbook of Education, 1955): p329 - 334

³² Childs, Marquis W (1947) Sweden –the Middle Way [15th Ed], Yale University Press

influence, through a soft and persuasive power, European educational and cultural policies, and its representatives were welcomed in postwar development forums in design, social construction and education. And so, returning to our focus on educational governance, the post war world was attracted and influenced by a Swedish expertise on educational policy and research, and an evangelism about the state, about learning and about the next future³³.

In trying to understand the form of cross national connections by which ideas and influence in education move, it is clear that links with, or the construction of, international policy and research communities, have to be closely analysed. In the three cases, the Schoolhouse, Sloyd, and Modern education, Swedish influence in education was promoted by significant brokers, who were not direct state actors, and yet who took opportunities which were nationally located and embedded before they travelled. They built assemblages of major events, networks of interest, texts and material objects, and regulated systems. They produced more than events, but an ordering, a structuring, of influence through interconnections across distances.

One can also ascertain that through these assemblages, and their influence, Sweden benefited, in the contemporary sense, from soft power. Soft power is a persuasive power which uses cultural forms and values to attract, persuade and shape social and political opinion and values³⁴. The Swedish state could use cultural and political values, expressed in education, at a level and with a clarity which would not otherwise be available if these assemblages had not come into formation.

³³ William Holford, *The Swedish Scene – an English Architect in wartime Sweden* *The Architectural Review*, (Sep 1, 1943) 60-70; Kidder Smith, ‘An American looks at Sweden’, *The Architectural Review* (Sep 1, 1943): 87-88.

³⁴ Joseph Nye, “Soft Power: The Means To Success In World Politics”, (New York: Public Affairs 2005),

Another important actor in our understanding of the national and transnational governing of education was the modern research institutes that was formed in the 1930s and 1940s, which developed new skills in comparisons and sustained international networks of scholars.

The State Psychological and Pedagogical Institute (SPPI) in Sweden

National research institutes are often neglected³⁵ in understanding spaces of governing, but as we will show, these kinds of institutes served both as a hub for international idea(l)s on education, and as an incubator for national competences on educational research, that when further developed could reach out internationally. One such institute with special concern for education and competences needed to conduct comparative testing, was the State Psychological and Pedagogical Institute (SPPI) in Sweden.³⁶

The SPPI was created after great lobbying work by many of Sweden's most progressive educators that, in 1935, had formed the 'Society for a Psychological and Pedagogical Institute'.³⁷ A key figure here was Nils Hänniger (1887-1968), associate professor in the Nordic languages and a Director of Education at the National Agency for Education. Hänniger had spent time in 1921 at Teachers College (TC) in New York,³⁸ and through his contacts with

³⁵ With exceptions, of course: please see the work of Martin Lawn (2008), "An Atlantic Crossing? The Work of the International Examination Inquiry, its Researchers, Methods and Influence", Oxford: Symposium Books,

³⁶ SPPI was founded in 1944 and dissolved in 1959 when much of its tasks had been moved into the new Teachers College in Stockholm.

³⁷ Lundahl, Inter/national assessments as national curriculum: the case of Sweden

³⁸ When he came home he wrote the book *Den amerikanska uppfostringsvärlden* ['The World of American Upbringing'] in which he especially admired what he called 'Americanisation' – using education to create the unification of a fragmented society.

Paul Monroe and Isaac Kandel at Teachers College he made it possible for Sweden to become part of the international Examinations Inquiry, (IEI).³⁹ This was an international and well-funded scientific project, that operated over seven years (1931-1938). It attracted several prominent scholars in educational research from USA, Scotland, England, France, Germany and Switzerland, and from 1936 also Finland, Norway and Sweden; such like Thorndike, Monroe, Kandel, Thomson, Bobertag, Hylla and others. The main problem that united these scholars had to do with the expansion of secondary education and to find the most effective way to examine pupils for entry into the secondary school ⁴⁰.

The Swedish committee led by Hänniger contracted lecturer Frits Wigforss (1886-1953) from Kalmar in southern Sweden from early on, in order to investigate the possibilities to develop an effective examinations system. Wigforss had during the 1930s conducted his own research on standardised tests, in arithmetic, in order to help teachers to better identify which support individual pupils needed.⁴¹

Both Hänniger and Wigforss represented a progressive movement in Sweden that in the 1930s and 1940s, consisted of a discursive alliance that stood for a progressivism as a programme for teacher professionalism. One important ingredient in this professionalism was closeness between teaching and psychological and pedagogical research. Here Hänniger and Wigforss could bring their international experience from working in a scientific way on a practical and political educational matter, into the Swedish context. Once Hänniger had launched the SPPI,

³⁹ Lundahl, Inter/national assessments as national curriculum: the case of Sweden.

⁴⁰ Ibid.

⁴¹ In this work he was inspired by German writers, such as Johannes Kühnlner's classic text *Neubau des Rechenunterrichts*; see Jeremy Kilpatrick and Bengt Johansson, *Standardised mathematics testing in Sweden: The legacy of Frits Wigforss, Nordic Studies in Mathematics Education* 1 (1994)

he and Wigforss got influential positions there. The way they had worked in the IEI guided their aim of bringing teacher professionalism, practical educational matters and research closer together. This ambition was also strongly influenced by similar institutes in Germany, the USA, and Scotland, or more precisely, the Zentralinstitut für Erziehung und Unterricht in Berlin, Teachers College in New York, and the Scottish Council for Research in Education (SCRE).⁴²

These ‘research institutes’ had in common the ambition to make use of research to improve education, or at least direct it towards certain needs. The research institutes represented flexible ways of managing specific tasks and influencing policy: ‘they appear to conform to disciplinary procedures and yet they are free to inquire and suggest policy directions’⁴³. They did not, like the universities, have a specialized staff of researchers but worked cooperatively, as knowledge networks.

SPPI was clearly an institute for the internationalization of education. According to its regulations the institute should take over the running of the State Psychological and Pedagogical Library (1885-1999) and the National School Museum (1908-1966). Both of these institutions were built up partly from books and artefacts exhibited at the World’s Fairs.⁴⁴

⁴² Lundahl, Inter/national assessments as national curriculum: the case of Sweden. ; Christian Lundahl, Making Testers out of Teachers: the work of a Swedish State Research Institute 1946–1956. *History of Education*, 48 (5), (2019): 646-663.

⁴³ Martin Lawn, “The Institute as Network: the Scottish Council for Research in Education as a Local and International Phenomenon in the 1930s”, *Paedagogica Historica* 40, (2004):720

⁴⁴ The library as such was exhibited in Paris 1900 and in St. Louis in 1904 and was rewarded diplomas for its participation (the Swedish national archive SE/RA/[420635/#/1:1](#) and SE/RA/[420635/#/1:2](#)).

See also

Christian Lundahl, Swedish Education Exhibitions and Aesthetic Governing at World’s Fairs in the Late Nineteenth Century. *Nordic Journal of Educational History*, 3 (2), (2016): 3-30.

One of the SPPI's major purposes was to 'promote and conduct research activities on the psychological-pedagogical field with a direct focus on the needs of school'. In relation to the 'comprehensive school reform', the introduction of furthering standardized testing became logical in several ways, not least in relation to admission, and thus also as a way of legitimizing the comprehensive school reform as such. SPPI promoted standardised testing in three ways: (1) by itself developing tests and test theories and by supporting external research projects to do this; (2) by delivering introductory courses in psychology and pedagogy where theories about IQ and IQ testing were important; and (3) providing courses that actually trained teachers in the hand-craft of testing. In this process, internationalisation was vital.⁴⁵ The institute collected international texts and invited to Stockholm international psychology scholars,⁴⁶ specialists in testing, such as Louis Leon Thurstone, professor of psychology at Chicago University [and of Swedish descent].⁴⁷

Over the years one main task of the institute was to develop National standardised tests that had as their main purpose to govern teachers' pupil assessment grading. In this way, the school admission test could be abandoned. Among the countries participating in IEI, Sweden was the only country choosing this path, letting a standardized test, so to speak, 'override' teachers own judgment in grading. SPPI reported on this work both in English and in Swedish, thus also disseminating the testing competence built up within the institute further.

⁴⁵ See further Lundahl, Making Testers out of Teachers: the work of a Swedish State Research Institute 1946–1956

⁴⁶ Working committee protocol September 13, 1948

⁴⁷ He was paid the handsome sum of 375 SEK for his lectures (Board meeting protocol March 7, 1953)

When Wigforss died in 1953 the work on constructing the national standardized tests was handed over to Torsten Husén (1916-2009), a newly appointed professor in pedagogy and pedagogical psychology at Stockholms Högskola. Husén had since 1944 been involved with a team in Stockholm in charge with the development of a series of psychological tests for military purposes. Inspired by the German military test to get ‘the right man at the right place’ in the army, Husén learned psychometrics. Here the famous American Army Alpha and Army Beta test also became influential as well as working with the statistical factor analysis. Husén was not only involved in the construction of the first tests for military use in Sweden but was also responsible in organizing and implementing the results of the work. In some regard he can be considered as the father of Swedish military psychology.⁴⁸ Husén came to work with military testing for the government for ten years before he found a new ‘area of operation’. Education became the perfect field for advancing these skills further.⁴⁹ One important difference between Wigforss and Husén was that the former saw testing as a help in guiding teachers, whereas the latter, with a competence in factor analysis that Wigforss lacked, viewed test results as an objective outcome of intelligence factors. With this shift in ontology, testing and teaching got further de-coupled and a psychological view on learning started to govern educational policy and practice.⁵⁰ This view on learning of course also helped Husén in his forthcoming work on international comparisons. Partly ignoring contextual factors is a prerequisite for international comparisons based on knowledge assessments.

⁴⁸ Neville Postlethwaite, "Torsten Husén." *Fifty Modern Thinkers on Education: From Piaget to the Present*, (London and New York: Routledge, 2001): 96-102.

⁴⁹Edward Haertel and Joan Herman, “A historical perspective on validity arguments for accountability testing”, *Yearbook of the National Society for the Study of Education* (US: National Society for the Study of Education, [104](#) 2,(2005):1 - 34

⁵⁰ Christian Lundahl (2006), ”Viljan att veta vad andra vet: kunskapsbedömning i tidigmodern, modern och senmodern skola”, Stockholm: Arbetslivsinstitut.

SPPI indeed was built on translations. Its main purpose was to translate between the needs of teachers and the scholarly work carried out by researchers. It was supposed to be a bridge between national interests in education. Not least did it support the production of tests that translated the knowledge of pupils into comparable standards and numbers (Fig 2). A test production that Husén, when SPPI was closed down in 1959, already had continued in his service as the professor in practical pedagogy at the newly formed Teachers College in Stockholm (Lärarhögskolan).

Figure 2

‘Statistical analyses of test reliability’ (Husén et al 1956, p. 28, our transl.)

Picture by Yngve Svalander.⁵¹

To conclude, research institutes, like the SPPI, can be seen as a new kind of governing space, where national and international cross borders intersect; e.g. in an international library, in international artefacts in a school museum, international research exchange, national research, local teacher training etc. But it is not only the explicitly expressed need for an international import of knowledge that makes up for this new governing space. It is the kind of knowledge produced that became a ‘game changer’ in governing. With the funding of SPPI, and its operation of governmental regulations, politicians more clearly than before started to govern education with directed research; practical pedagogical and psychological research. This line of research, differing from the one conducted at the universities⁵², nourished and matured, as in an incubator, into competences requested by society. In relation to the expansion of

⁵¹ This picture, published in a popularized report on the national tests with teachers and parents as its main target group, is in itself an example of how ideas on psychological testing can govern education.

⁵² Martin Lawn, ‘The Institute as Network: the Scottish Council for Research in Education as a Local and International Phenomenon in the 1930s’, *Paedagogica Historica* 40. (2004), :720

secondary education these competences came to be very much about measuring pupils' knowledge. In parallel, as the results of this research were increasingly used by policy-makers for the reform of education, scholars became interested in the relationship between research and researchers and policy-making which in the years to come grew out to a research topic in its own right on educational change.⁵³

Thus SPPI served as an 'alignment practice', translating scholarly work into practical needs and promoting competences that eventually also reached a maturity that could serve international interests. As the argument goes in this article we see that SPPI can be understood as a web of actors and events, shaped by international and national traditions and ideals, that developed skills and competences of knowledge assessments that, not least due to Torsten Husén's work, could be used in the first international large scales assessments conducted in 1960s.

The actors that invented large-scale assessments: Reinventing comparative education

The late 1950s marks the beginnings of international large-scale assessments. Formed in 1958 as a group connected with Unesco, the International Association for the Evaluation of Educational Achievement (IEA) pioneered the use of international testing, starting with a pilot study published in 1962, a mathematics study in 1967 and the so called six subject study in 1973-1976. The Swedish professor of education, Torsten Husén was the chairman of the project for 17 years, between 1962 and 1978, and was convinced that the project, with its

⁵³ Torsten Husén, and G. Boalt, *Educational Research and Educational Change: The Case of Sweden*. Stockholm: Almqvist & Wiksell, and New York: John Wiley; 1967; Torsten Husén, and Maurice Kogan, (eds), *Educational Research and Policy: How do they Relate?* Oxford: Pergamon Press, 1984.

empirical and quantitative approach, differed from previous international research projects in the field of education. "So far, comparative education has been nearly verbalized opinions."⁵⁴

This paradigmatic break was in a 1960 report by the IEA described as a bold attempt that the maturation of educational science had made possible.

The development of educational science seems to have reached a point where a research, of the kind described in this report, can and should be attempted.

There is a process of maturation of ideas, of concepts, of methods and of instruments in this as in other fields of research; if we neglect this, we may court failure by attempting to advance too far or too fast, or we may delay or even inhibit progress by failing to seize on the critical moment. As in the education of children, so in the development of the educational sciences, learning and new discovery can only be built on past experience; but boldness is also essential if indeed real advances are to be made.⁵⁵

IEA as an international organization presupposed the existence of national research on education. IEA described itself as an international, non-profit-making scientific association. As such, the criteria for membership was clear. Only institutions that carried out research in education were eligible for membership.⁵⁶ Thus, it was not countries that were members, but research centers that represented the country. Such an international organization would have been hard or even impossible only some decades before, since there were no or few national

⁵⁴ Letter from Husén to Astin 7/7 1967. Husén archive, Riksarkivet, Vol 1:5

⁵⁵ International Project on the Evaluation of Educational Achievement (I.E.A.), Bulletin No. 1, Report of the Meeting at Hamburg, 17-22 October 1960, p. 1. IEA-Archive, Hoover institution, vol. 437.

⁵⁶ Information on the International Association for the Evaluation of Educational Achievement (IEA) 1968, p. 3. IEA Archive, vol 398.

centers. Pioneering steps towards establishing a national research organization for education were taken in the late 1920s, when the Scottish Council for Research in Education was formed in 1928, followed by similar organizations in Australia and New Zealand and then in the 1940s when a National Foundation for Educational Research was formed in England and Wales.⁵⁷ Each of these countries were supported by research funds from the IEI in the 1930s, in effect, US foundation monies. In Sweden SPPI was formed in 1944.⁵⁸ In other countries this happened later, and that establishment was a prerequisite for membership in the organization.

The central concept of IEA was written out in the name of the organization: achievement. The IEA wanted to measure the results of education, to compare the outcomes of schooling in different countries. It was an ambition that was based on a critique of traditional comparative education.⁵⁹ These claims for a new kind of expertise were controversial in some strands. Previous researchers in the field had often had a background in philosophy or the history of education, and could be skeptical towards using standardized test to make international comparisons of achievement. One of the leading researchers in the field of Comparative education, George Bereday, explained once to Husén. “My friend, you are trying to compare the incomparable.”⁶⁰

⁵⁷ Martin Lawn, “The Institute as Network: the Scottish Council for Research in Education as a Local and International Phenomenon in the 1930s”, *Paedagogica Historica* 40, (2004):720

⁵⁸ Christian Lundahl (2006), ”Viljan att veta vad andra vet: kunskapsbedömning i tidigmodern, modern och senmodern skola”, Stockholm: Arbetslivsinstitut

⁵⁹ C. Arnold Anderson, one of the key persons in the development of the IEA complained about “the almost total absence of information about the outcomes or products of education” in comparative education. C. Arnold Anderson, “Methodology of comparative education”, *International Review of Education* 7, 1 (1961): 1-23

⁶⁰ Torsten Husén and Arild Tjeldvoll, *Conversations in Comparative Education*, (Bloomington Ind.: Phi Delta Kappa, 2000): 53.

The work of the IEA is interesting as an example of how a pioneering venture is created collectively and transnationally. Since international large-scale assessments was something unprecedented, it was a way of working which had to be invented. While the individuals involved in IEA were experts in psychometrics, education, statistics and so on, they lacked expertise in international assessments. Looking back at the early IEA studies, Torsten Husén wrote: “This kind of evaluation was a totally new experience for the kind of educational psychologists like Bloom, Thorndike and myself, who had been specialized in conducting educational measurements in our own countries or in our own cultural spheres.”⁶¹ Even the concept of evaluation, launched by Ralph Tyler in the 1930s, was relatively unfamiliar to most of the researchers in Europe, and tests were something that was used for sorting and selecting students, not for assessing the quality of education in total.⁶² Furthermore, the invention of large-scale assessments, which included organization, knowledge-building, funding, creation of test-items etcetera, could only be achieved collectively: in cooperation between a vast number of individuals and research institutes. People who lacked experience of ILSAs were the ones who, together, developed the first ILSAs. The IEA was, thus, a transnational network of experts in the process of developing expertise.

The IEA consisted of scholars in different countries that were connected to national centers of educational research. The association was small-scale (they sometimes referred to themselves as ‘the IEA family’), and some persons were more central than others. The two key persons in the early years were arguably Torsten Husén, the chairman, and Neville Postlethwaite (1933-2009) as coordinator. Given that key researchers in the project were based in countries such as England, the United States, Sweden, Germany there was no clear center. In 1965 Husén

⁶¹ Torsten Husén, *Möten med psykologer, pedagoger och andra: anteckningar*, (Höganäs: Wiken, 1992):208 [our translation].

⁶² Torsten Husén, *Jämlikhet genom utbildning* (Stockholm: Natur och kultur, 1977), 81.

complained about the problem of not knowing whether decisions had been made in Stockholm, Chicago or Hamburg, and argued that the whole machinery had to change.⁶³ In 1969 the IEA center moved to Stockholm, which inaugurated the “Stockholm era” of IEA. Well in to the 1980s, IEA would from now on be based in Stockholm.

However, the organization was still governed from, and conducted in, a variety of places. An example of the geographical distribution of IEA’s work was the production, distribution and analyzing of answer cards used by the students in the six subject survey.

The plates from which the cards were printed were made in Copenhagen, and the actual printing took place in Stockholm. Then the cards were sent to London for identification punching and from there distributed to national centers. Each national center packaged them in individual student envelopes and sent them out to the schools in which they were testing – about 400 schools for each national center. After testing had been completed, the cards were returned to the national center which sent them to Iowa, USA for scanning and recording on to tape. The tapes were then sent to the IEA Data Processing Unit in New York City which carried out the editing, sorting and filing of the data, the production of univariate statistics, school reports, the within and between-school files and matrices. The resultant matrices were sent to IEA International in Stockholm for further multivariate analyses and distribution to the committee experts for interpretation. There is obviously a very close link between Stockholm and New York in carrying out many analysis tasks.⁶⁴

The involvement of Copenhagen, Stockholm, London, Iowa, New York in the production of data was partly a result of the novel character of the project, which created a need for

⁶³ Letter from Husén to Postlethwaite, 27 December 1965. IEA-archive, Hoover institution, vol 299.

⁶⁴ IEA Newsletter, “Introducing IEA”, 1971, Husén archive, Riksarkivet, 2:119.

specialization and division of labor. For example, there was no backup machine available in Sweden, nor indeed in Europe, and therefore Iowa had been proposed as an alternative.⁶⁵ While such technical division of labor was a way of making use of knowledge as effective as possible, it was also a source of potential problems. With data processing done in New York and analyses done in Sweden misunderstandings could follow. When the first correlations made in New York arrived in Stockholm the results were confusing. They showed that interest and achievement in science and literature were negatively correlated. As one of the researchers, Alan Purves, has described it:

Four of us spent a day and a half trying to find an adequate interpretation for the result. A telephone call to New York finally produced the reason: the scores on the internet measures were reversed so that a low score meant high interest. Other occasions have not been so humorous or so easily resolvable.⁶⁶

What this example also illustrates is the role of computers in the early history of large-scale assessments. Here it might suffice to notice that while computers simplified the work, they were also sources of doubts. As Husén expressed it when he with some years of distance looked back at his intense years working on the six subject survey:

We were also caught in a tremendous wealth of information that, due to time limitations, was only schematically analyzed [...]. Those who assisted us in planning data processing and statistical analyses were steering us, not we them.⁶⁷

Apart from all these technical issues there was a variety of questions that had to be addressed, and the most fundamental was possibly the issue of what is comparable. The first major study

⁶⁵ Statistiska centralbyrån: datamaskincentralen, IEA-archive, Hoover institution, vol 357.

⁶⁶ Alan C. Purves, "The Evolution of the IEA: A Memoir", *Comparative Education Review* 31, no. 1 (1987), 26.

⁶⁷ Torsten Husén, "An International Research Venture in Retrospect: The IEA Surveys," *Comparative Education Review*, 23, no. 3 (1979), 383.

that the IEA conducted was the mathematics study, and the subject was partly chosen because it was thought to be fairly easy to compare across nations. After that IEA decided to embark on a study of no less than six different studies, effectively covering most of what was happening in schools: English as a foreign language, French as a foreign language, Science, Literature education, Reading comprehension and Civic education. That gave rise to new discussions inside the researchers of IEA regarding what counts as knowledge and regarding valid assessments of knowledge in subjects that sometimes are hard to assess. Here several countries had to agree on common standards. In some cases, it proved impossible to reach a mutual understanding. In the case of the Civics study the problem was solved by some countries simply dropping off from the study, due to what was perceived as irrelevance of the test-items.⁶⁸ Another problem that arose had to do with translation. The IEA struggled hard with how to translate the test-items to the different national languages. The process involved translating the items to domestic languages, and then translating back to English, in order to check that nothing essential got lost in translation. But there was still disagreement of how such a translation should be made. One of the researchers (Thorndike) suggested that a list of untranslatable words should be compiled, but others argued that there were no such words – it was all about rephrasing – a difficult task that should be handed over to professional translators and not dealt with by the national centers.⁶⁹ An illustrative example of the problems of translation is the literature survey, published in English in 1973, which among other things attempted to measure interest in literature. One of the questions included a question about the biblical figure Samson. “Have you compared a person you meet in real life with people you have read about? (For instance, have you ever called a strong person Samson?)” The Swedish test constructors did

⁶⁸ Letter from Lamaimas Saradatta to Neville Postlethwaite, January 18, 1968. IEA archive, Hoover institution, vol 59.

⁶⁹ John B Carroll, Memorandum to Neville Postlethwaite and Robert Thorndike, August 15, 1969. Collection of IEA sources at the Department of education, Stockholm university.

probably regard him as too unfamiliar in a Swedish context, and substituted the name with the well-known comic series character *Stålmannen* (Superman).⁷⁰ Such a change indicates that there indeed were words and phenomena that were hard, or even impossible, to translate.

The IEA represented a new kind of actor on the international scene and a new idea of what educational expertise actually means. It is characteristic of the IEA that its origins are somewhat obscure, and that it lacks any clear “founder.”⁷¹ Instead, the standard account of the organization is that it emerged out of meetings between a group of educational scholars who met at the Unesco Institute of Education in Hamburg.⁷² As a collective enterprise, they were faced with a series of problems regarding translation, cooperation and standardization.

Characteristic of the IEA is also that they were not practicing pedagogues, and they were not promoters or representatives of a certain educational method. They did not “sell” sloyd, gymnastics, or some sort of progressive education in the way that for example Montessori or Dewey did in their time. If they sold anything, it was the idea that education can, and should be measured and compared globally. That contribution proved to be long lasting.

Discussion and conclusion

The idea of influence as a cross border phenomenon in the history of education is noted, and this project began with a conceptual reworking of influence, as a process of constant

⁷⁰ Gunnar Hansson, *Svensk skola i internationell belysning. Läsning och litteratur* (Stockholm: Almqvist & Wiksell, 1975), 197; Alan C. Purves, *Literature Education in Ten Countries: An Empirical Study* (New York: Wiley, 1973), 355.

⁷¹ Two Americans have been credited with coming up with the idea of making international tests: Arnold Anderson and Arthur Wellesly Foshay. Husén and Tjeldvoll, *Conversations...*, 45, but this is seldom mentioned in the literature about the IEA.

⁷² E.g. Torsten Husén & T. Neville Postlethwaite, “A Brief History of the International Association for the Evaluation of Educational Achievement (IEA)”, *Assessment in Education: Principles, Policy & Practice* 3 no. 2 (1996): 129-141.

comparison. Comparison was the engine of the World Exhibitions, and national investigations and international projects. Comparison led to major innovation, a reorganization of activity, the creation of new identities in diverse ways, and opportunities for new, national actors to advance their ideas and practices. Comparison is then a driving force for creative endeavor and generates a flow of ideas and practices into and from education systems. Sometimes comparison is disguised and its effects not known over short periods; nevertheless, this paper has shown how empirical investigation can see it at work in many ways and at different points in time. Comparative processes exist on many scales but our main interest in this paper, and in our project, is the production and effects of international forms of comparison. They exist in the discourses of national change and international competition and at the same time in material form as well, for example in manuals, systems, objects, research institutes and sponsor contracts.

As the pace and scale of comparison grew across borders, while it still existed as a human/material interaction, national contexts increasingly shed their bounded logics, in favour of achieving a sense of place in an emerging global ‘order’ of educational progress. Indeed, as the 20th century developed, a pressure to engage and to compete overtakes the more individualistic, voluntary and even inquiry based engagements of earlier times. Comparison now has all the features of an all-encompassing and often quite heavy-handed system, even as an autonomous activity that cannot be avoided: it is not difficult to view the OECD PISA study and its production of ‘failing’ nations in this way⁷³. Comparison can be seen as not simply informative or even reflective – in fact, it fabricates new realities and hence has become a mode of knowledge production in itself⁷⁴.

⁷³ Sotiria Grek, ‘Governing by Numbers: the PISA Effect in Europe’, *Journal of Education Policy*, 24, 1, (2009): 23-37

⁷⁴ Richard Freeman, “Comparison and Performance”, Unpublished working paper (2011)

Comparisons come to being within a growing mass of accumulated information in different forms, and from different sources, which are not always compatible or standardized. Comparison creates a common language, around the sharing or observation of texts and objects; the actors we investigated systematically used the production of objects and documents, as well as regular workshops, meetings, exhibitions and conferences to advance their efforts. We see how competences for making comparisons develops, especially within the field of knowledge assessments and how national and international knowledge tests, such as developed by SPPI and IEA functioned as interlinked incubators for the analytical skills of comparing. Slowly but surely the international stage that these processes took place in became important – the notion of ‘Europe’ and the global offered these expert communities a degree of meaning and solidarity that is vital in the encounter of complete (and powerful) strangers. Standardisation of rules and measures emerged from these interactions.

The reference to borders, and to our study of transnational history, and to the comparative state, means that the notion of space has been central in our framing of the research. Making use of insights from the geography of space means that we recognised space as ‘the product of interrelations, as constituted through interactions, from the immensity of the global to the intimately tiny’⁷⁵. As suggested earlier, space is not fixed or static or finished; it is always unstable and being made and ordered.

By following the Swedish education actors and artefacts in their European and sometimes global travels, we came to the conclusion that the spaces they moved across did not exist prior to the relationships that they formed; in fact, they were co-constitutive. Thus, we explored the

⁷⁵ Doreen Massey, *For Space*, 9

new spaces of Swedishness as it travelled abroad, as always open, and as never pre-determined or closed off. This was precisely one of the greatest challenges in our work. A historical perspective that attempts to make sense of the development of new governing forms and travelling ideas in education can never be a bounded nor holistic enquiry.

How does translation work in this movement, this process of transportation and transformation? Translations occur when specific forms of knowledge in education move and change as they travel between actors, practices, organisations and institutions. Therefore, analyzing actor's movements through the prism of translation, points us to these transformations and alterations. We see how national ideals can be translated into objects put on display at the World's fairs understandable beyond the verbal language, or how practices of testing moves from military uses into the evaluation and comparison of pupils in and the school system they perform, carried out by specialized research institutions such as SPPI and IEA. We can also see that the senders do not always have control of what they send, though they may wish to, rather they are affected with uncertainty and the exhilaration of the new destination⁷⁶. This is clearly illustrated by the fumbling for possible methods and interpretations within the early IEA. We have argued that assemblages endure to the degree of alignment they achieve among the actors of which they are composed, and this is crucial. It may be short term, and time limited, or it may be long term, and more fluid, and our cases do vary. The practices of our main actors exist on several levels; they are interpersonal, ideational and material, but they are always a mix. These assemblages [a term which works admirably for our purposes] are hybrid entities consisting of various actors, norms, values, knowledge and material components. They either take or create their own opportunities. We

⁷⁶ Tobias Berger and Alejandro Esguerra, "World Politics in Translation: Power, Relationality and Difference in Global Cooperation", (London: Routledge 2017)

have focused on a careful examination of how these assemblages travel and how they change while moving and settling anew. Sloyd, for example, became a hybrid entity of its founder but also the specific knowledge practices it communicated, the materiality of its teachings and the support it received from its disciples in Sweden and elsewhere. It created its own space which time fragmented. Thus, there is an inherent link between relationality with comparison (ie comparing ourselves to others), as well as recontextualisation with the notion of space – as new objects move, they are translated and mediated and thus new spaces are created.

To conclude, our project has cast a light on the Swedish travelling actors in their assemblages, as a way of understanding how governing is performed: as a relational practice between citizens and the state, between international researchers, between countries, between traditions. Actors and new ways of knowing had to cross borders ‘well’ – that is in a form that was unchallenged and clear. In working through archive and interview data, the project focused on the role of actors in the making of commensurability and comparison, along with their networks, as essential conduits and spaces of interaction/interrelationship.