

## TEXTS AND THE ART OF TRANSLATION. THE CONTRIBUTION OF COMPARATIVE EDUCATION

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**Abstract:** *The article emphasizes the relevance of comparative education for education research under the conditions of globalization and technical progress of data collecting and processing, and it draws attention to the task of further development of the methodology of comparing. Turning attention to the semiotic character of society and culture I propose to model them as "texts". Since comparing different societies and their subsystems is nothing else than "border crossing", we find analogy in the process of translating, and the text-model could help to contribute to an increasingly precise language of description and analysis in comparative education.*

**Keywords:** *comparative education, international education, empirical assessment, multilevel semantic system, text, binary encoding, translation.*

In the 1980ies the renowned comparative educationalist Edward R Beauchamp asked if comparative education is an own, independent discipline – concluding that for the "lack of own methodology ... my own reading of the substantial body of literature on the nature and methods of Comparative Education leads me to the inescapable conclusion that there is no such thing as Comparative Education, ... Comparative Education as a field of study does not exist." (Beauchamp, quoted from Epstein). Today, in a different context and for different reasons, we should ask if Comparative Education, assuming that it is a discipline and that it has survived Beauchamp's verdict, has not become obsolete.

Comparative Education is a genuinely interdisciplinary activity and as a discipline taught at universities it is supposed to develop and to teach students "border

crossing" knowledge (Klees 3). One can agree with the view that in academia "traditional disciplines always will be essential ... Yet the kinds of skills that individuals who face directly the challenges driven by changes in the global order need to have - 'how to think and act flexibly and strategically, how to move readily from one project or region to another, how to grasp a new situation quickly, and how to start solving pragmatic problems' - derive from interdisciplinary and comparative study" (Epstein 119). On the other hand, school systems, teaching contents, and teaching methods in a globalizing world seem to become uniform. This process is intensified by the empirical large-scale assessment education research provided by the Programme on International Student Assessment (PISA), the Trends in International Mathematics and Science Study (TIMSS) and other global data collections gathered by internationally

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operating organizations like the OECD, the UNESCO, and the European Union. Even more important: The PISA-study intentionally aims to propel a "world education revolution" based on "generally valid basic principles" which rely on "institutionalized cognitive rationality" (Baumert 21). This either means that the makers of the PISA believe in a common core underlying all cultures and societal contexts, or that they attempt to implant through PISA a standardized and uniformly normative construct of principles and rationality – of all basic concepts of education such as education goals, "achievement", "equity" etc. All these uniformly constructed concepts are expected to serve an "evidence based policy". Every aspect of expanding international and intercultural contact seems to push forward a world system society (e.g. Wallerstein and Meyer). Under these circumstances, is not comparative education becoming dispensable? By no means!

If nothing else, for its broader perspective (and the historically founded and inherent critical potential of education scholarship), it could develop the potential and the legitimacy of a critical voice of "dissent" versus the distortions of globalization (Torres viii). Apart from this, it is an illusion to believe that uniform education structures or tests for international comparison are free of cultural and societal bias - PISA-tests are sometimes not even free of trivial errors due to the translation from one language to the other (Jahnke & Meyerhöfer). Thus, Comparative Education can for instance unveil inconsistencies and biases and help construct comparable questionnaires across cultures. One way in doing so might consist of forming multicultural teams before starting to use questionnaires on an international scale in order to come to fully comparable concepts such as "intelligence", "performance", or "predispositions". Even the basic term

"education" is not self-evident in a comparative perspective. As Greenfield reminds us, Hispanic parents in California mean something very different when stressing the need for "educación" (which has a strong touch of "right behavior") than their English speaking neighbors accentuating "education" (as school achievement - Greenfield 1123). In cultural anthropology and history the consciousness of translating meaning is very strong and cultural translation is a standard practice. But in education, especially in empirical education research, similar attempts are very rarely to be found. For example, concerning international testing, a Chinese-American project adopted a method of discussing, evaluating and formulating terms used in questionnaires on school education (Bempechat et al. 143). In Europe, despite many cursory historical and cultural commonalities of education, children "come to school with significantly different attitudes towards themselves as learners, towards school and towards achievement". For example, schools in different countries can exert achievement control determined either by pedagogical-anthropological holistic ideals or by cognitive ideals (Osborn 287).

Another tendency shows that the amount of empirical educational data from a multitude of countries has grown immensely. It is paramount to structure these data and to relate them to theories. The possibilities of electronic computing may lead to a new quality of empirical research. Even though restrictions of access to data are in place, they may be less important in face of the new levels of computing sophistication. Recently, the American science journalist Stephen Baker traced the efforts of a few researchers to process huge numbers of scattered data in order to model consumer behavior. Apparently, only a small elite of mathematicians can process this complexity

of data using most sophisticated methods. Baker referred to those specialists as "numerati" (hinting at the role of the "literati" in historical China – Baker). However, consumer behavior modelling is a relatively simple matter compared to the complexity of education in its socio-economical and cultural context, and above all, it is the analysis of meaning of those data which counts. In other words, we do not face a technical problem of modeling and quantity processing, but a quality problem.

Under the conditions of a permanently growing pool of empirical data, it is necessary to readjust the quality of theoretical modeling and reflect anew the goal of modeling itself. In the sense of general model theory (e. g. Stachowiak), models are generally less complex than the modeled. Large quantities of data can be encoded into simple semiotic units, but they never come to an unequivocal correspondence between the model and the modeled. This "reductionist" character of modeling can be seen as an aspect of "translation" that establishes communicative (semiotic) ties between structurally different entities. A further aspect of the mentioned possibilities of data processing in the field of consumer behavior is the paradox that even anonymized data can end up in sets of individualized profiles, which fit all possible types of individual consumer behavior (in the context of education as a commercial good, in respect to "consuming" education"). In the field of education, computing the 'mass information down into individual information patterns' could have positive effects: It could lead to finding ways of best practice, causalities or beneficial conditions of learning. This, in turn, could be used for an individualized pedagogy offering incentives and learning methods adequate to the students' special interests. This, however, means to overcome the dictate of decontextualized

statistical reasoning which was already pitied by Coleman: "... statistical association between variables has largely replaced meaningful connection between events as the basic tool of description and analysis" (Coleman 1327f, quoted from Hedström 10). Methodologically, such an "individualization" can be operationalized by linking traditional quantitative approaches with the analysis of causal processes on the actor level (Hedström).

Third, if we truly have to deal with different qualities of models referring to different semiotic systems of different complexity, then it is consequent to assume that language, as the semiotic system per se, could provide us with valuable new insight for the modeling of societal systems and subsystems. Language in this broader sense is:

- the basic medium of teaching,
- the means by which we carry out and present our research,
- the basis of understanding cultural commonalities and differences of societies (and groups) which are encoded in the various languages,
- the basic means of information storage and transmission codes of evolution in biology and society; in this sense societies can be modeled as texts,
- a multiple, dynamic and complex stratification structure and, as such, a model and an excellent field for studying forms and functions of encoding complexity.

We are often confronted with the first three aspects. Thus, we know innumerable examples of how linguistic and cultural misunderstandings affect international and intercultural communication: When Matteo Ricci, one of the first two Jesuit missionaries came to Beijing (in 1601), he had studied the Confucian classics and concluded that they contained concepts which could be interpreted as hidden monotheistic thinking. Therefore, in his

view, the Chinese terminology could be applied to also refer to the Christian God. This would (and indeed did) facilitate the "indigenization" of the Christian faith. His successor, Niccolo Longobardi, came to a completely different conclusion. He proposed to use the phonetic translation of "deus" or "Jeho-vah" to reflect the absence of any notion comparable to the European understanding of God in Chinese. Longobardi was perhaps more correct in view of the cultural gap that separated the Christian and (Neo-) Confucian concepts; nonetheless, Chinese scholars found the latter less acceptable and more difficult to understand and the Catholic Church preferred a quick success. Ricci's concept won, although controversial discussions on this issue continued inside the Catholic Church over 300 years (Golden). A second example comes from the field of education: In Meiji Japan many educationalists when first reading about Herbart's five "ethical principles" (*sittliche Ideen*) concluded that they were directly compatible, and thus practically identical, with Confucius' Five Virtues. The translating problem we sketched here, is typical for the intercultural contact and translation (Wright).

In comparative culture and anthropology, researchers have always been well aware of their role as "interpreters", reaching this status by a process of deliberate acculturation ("learning the foreign language"), in which the person constantly transgresses "the confinements of the cultural horizon and hermeneutic circle of the original culture" (Golden 13).

In order to come to an operational notion of culture and society as a "text", the model discussed here refers primarily to the formal and functional properties of texts as semantic units (semantic in the linguistic sense as the study of the meaning of signs; comp. Nöth 1990). Thereby it is assumed that semantic units have common rules of construction one has to be aware of when

doing translations and that it helps to use a more precise language of description and analysis.

In order to use language as a model, it is paramount to observe some basic properties: the distinction between the abstract (and non-material) system of rules and semantic concepts of language ("langue") and language as a manifested, materialized (spoken or written) act of langue ("parole"), that is: texts in the sense used here. A second basic distinction has to be made between the different levels (from micro to macro) which are interlinked and all taking an active part in constituting a text in the totality of its formal, functional and content (meaning) aspects. This way of constituting texts depends on a functional pattern of different states of order which, in addition, show different levels of stability and instability. Theoretically (and in the light of increasing computing power of electronic data processing: more and more also practically) the amount of order - a definition of information in information theory - can be measured. The continuum of order states can be roughly divided into three main states: very strong (for examples on the micro levels of phonology or semiology), moderate (conventional) and weak. Max Bense defined these basic states of order as strongly (generally), moderately (conventionally) or weakly (selectively) deterministic conditions. The latter he also calls esthetic (Bense; for the concept of chaos and order see also Prigogine & Stengers, and Laszlo. This basic typology of order corresponds to Bühler's basic function of the language sign and its extension by Mukařovský who added the aesthetic function). Thus, in our model, language and texts are interdependent structures of macro and micro levels, of deep structure and of surface structure, of deterministic and indeterministic units and phases. All different states of order occur in all text units and they can be stable or very

dynamic (see e. g. the theory of Functional Sentence Perspective and Communicative Dynamism – Firbas). They can be identified by the characteristics of their described structures and functions.

Especially in Germany, Luhmann's system theory is also quite influential in education. In his view, the identity and classification of systems is ascribed by the researcher in terms of "singular differences". Since in this theory meaning and language play an important role, this concept shall be mentioned here. It is explicitly distinct from Saussure's linguistic concept, and, as a radically constructivist theory, it denies the possibility of translation (comp. Heyting). Luhmann, pointing to the "rarely considered moment" of the binary encoding of language (Luhmann 113), uses this observation for his system theory as constituent demarcation of systems by meaning and by means of "singular differences". This also applies for the 'system education' (with the singular difference of "knows" / "knows not" respectively "performs better / performs worse").

Of course, in tests, pupils and students are evaluated on the basis of binary oppositions: the answer is either right or wrong, yes or no, but this is only a very narrow sector of education - and, as we argued above, even correspondingly constructed tests need in many respects, and especially in an international setting, very thorough translation. Apart from the questionable relevance of a binary coded system construct for understanding and analyzing highly complex entities such as education systems, binarism marks an unhistoric concept, which is stressed by the proposition, that the "condensed complexity" of language "makes every sentence extremely improbable" (Luhmann 221). As we pointed out referring to research on the Functional Sentence Perspective, the probability of consecutive

words or sentences (text parts) is not equal, but constantly varying and dependent on a complex interaction of the functionality of the text and the history of the interaction. In certain texts (e.g. theoretical) the average level of probability is very high, whereas in aesthetic texts it might be very low.

I do not see binary encoding as appropriate for analyzing and comparing multilevel semantic systems. Binary encoding constitutes a very basic level of language, but whereas for instance this text, being written on a computer, is on a basic level organized in binary machine language, its meaning is certainly not intended to be summarized in a binary decision between 'yes' or 'no'. The semantic essence of texts and text parts is not binary encoded and if we construct such a binary encoding, the price for such a reduction of complexity is extremely high and ends up, for example in education, with the analysis of a one-dimensional person which in texts becomes the yes or no element in a monstrous machine language. Apart from this, even as a philosophical concept, binarism is not necessarily as striking as it could be assumed. We may find in Hegel's "positivizing the negative a breakthrough to plurivalent thinking" and a starting point for overcoming the "binary idiocy" (Sloterdijk 31).

In my view, texts constitute themselves in a way in which each time the particular level of probability and improbability depends on the history and the actual context of the unit (system), the context outside the text, and, finally, the whole "semantic gesture" (Mukarovsky) of the particular text (culture-text). This dependency is located on the continuum between complete (deterministic) order and complete disorder (chaos). In principle, the degree of order is exactly measurable. For comparative education in the sense of translating it is paramount to locate the given unit as the object of observation on



the pluridimensional matrix – something which happens in translating from one language to another constantly, and in the case of bilingualism, automatically. In scholarly research, translation is to be understood as a conscious and as much as possible scientific method.

Our model of language and text operates with the notion of "semantic units". We should try to come to a more precise understanding of this notion which is also relevant for comparing (culture and society) systems and subsystems as units. The theory of memes initiated in analogy to genetics by Dawkins (Dawkins), could be seen as promising a more formal and precise understanding and operationalizing of "units of cultural transmission" (Dawkins) which follow the general evolutionary rules of replication, transmission and selection.

Meme theory is not homogenous and is being discussed controversially. The terminology and concepts are partly ambiguous and they range from a very loose analogy and an understanding of meme including practically anything cultural, on the one hand, to a strict concept of demanding empirical evidence, on the other hand (cf. Blackmore 1998, 1999, 2008, and the state of the art work of Auger). The core questions in our context should be, if meme theory can provide us a) with new or additional insight and b) a more reliable and precise language of analysis. No doubt, meme theory as a general cultural study based on Darwinism, might provide us with interesting insight and additional understanding of the aspects of cultural evolution. In addition, old knowledge on the spread of ideas, fashions, ideologies etc. in society and new research about the spread via "contagion" (Christakis & Fowler; Hedström) could be expanded. This would be important not least in the field of education, where families, peer groups and schools can be described as "contagion

areas" with special institutional and environmental cultures, classroom climates, and peer influence on cognitive and moral behavior, on learning and career attitudes. If we stick to the central term of memetics as "copying" respectively "imitation", we easily understand the importance of this concept for school and education, although learning should not be seen as identical with meme transmission, and meme transmission not identical with contagion, all these are linked to each other in creating "semantic-cultural units". Altogether, memeology could become an important field of research for semiology and for our concept of translation.

The coherence of the very complex access presented here is seemingly far away from education and education research, but it is by no means voluntaristic or accidental. The various argumentations are held together by the constitutive "building material" of culture and society which is manifest in the different contexts as memes, meaning, information, communication, text units, texts and super texts. The different levels are not isolated from each other, but each one has its own "language", and communication between them needs "translation". Translation, as shown here, takes place on all the different levels on which semantic units are constituted, from morphological and syntactical constructs up to smaller or larger units of meaning. In case stricter rules for meme theory and instruments for identifying memes are found, the development of comparative translation is also furthered.

Summarizing, I should like to stress the need to promote a dialogue between quantitative and qualitative research (both understood in a broad sense). By no means I deny the great need for and the advantage of large scale assessments like PISA and the collection of as much as possible other empirical data in the field of education. But the tendency to reduce cultural effects (as

well as persons as the subjects and objects of education), as sets of variables in empirical research, proves to be highly problematic: "This kind of epistemological impasse has long kept qualitative and quantitative researchers from uniting in a common study of the cross-national causes and correlations of educational achievement" (LeTendre 200).

The second point is the need to model the relationship between micro and macro levels. Especially in education, which in its basic philosophy has to do with the individual, such a relationship should not be forced and kept out of sight. Though the "language-translation" model proposed here with its multilayer character is very complex, and though it is often useful and inevitable to reduce complexity, this should not lead to a loss of meaning and context.

Last but not least: a non-binary modelling and the dialogue between quantitative and qualitative, micro and macro research help overcome the gap between methods whose strength lies in inclusiveness rather than exclusiveness and in constructed singular differences which eliminate the possibility of translation. In a translation between languages in the everyday usage it may be difficult to transfer meaning in a one to one relationship. However, translating loosely deterministic (aesthetic) texts, as in our example here, with respect to other cultures, may create a third system which becomes a point of reference for the two previous "originals". Translating in such a conventional sense certainly is a part of comparative scholarship. In addition, translation in connection with the model proposed here is the reconstruction of different "text"-meanings which are based on and are interdependent with the various structural and functional levels of the given text. The analysis of this kind of translation aims to forward a more precise language of description and analysis in comparative scholarship.

## References

1. Aunger, Robert. *The Electric Meme. A New Theory of How We Think*. New York et al. The Free Press, 2002.
2. Baker, Stephen. *The Numerati*. Houghton Mifflin Harcourt, 2008.
3. Baumert, Jürgen (ed.): *PISA 2000. Basiskompetenzen von Schülerinnen und Schülern im internationalen Vergleich*. Opladen. Leske und Budrich, 2001.
4. Beauchamp, Edward. "Some Reflections on Comparative Education". *East West Education*, 6, 1985 (2) 12. Quoted from Epstein E.H. "The Problematic Meaning of 'Comparison' in Comparative Education". *Theories and Methods in Comparative Education*. J. Schriewer, Brian Holmes (eds.): Frankfurt. Lang, 1988, 3- 23.
5. Bempechat, Janine. "Cultural-Cognitive Issues in Academic Achievement: New Directions for Cross-National Research". *Methodological Advances in Cross-National Surveys of educational Achievement*. Porter, Andrew C.; Gamoran, Adam (eds.). Washington D.C.: National Academy Press (National Research Council) 2002, 117–149.
6. Bense, Max. *Einführung in die informationstheoretische Ästhetik*. Hamburg. Rowohlt, 1969.
7. Blackmore, Susan. *The Meme Machine*. Oxford and New York. Oxford University Press, 1999.
8. Blackmore, Susan. "Imitation and the Definition of a Meme". *Journal of Memetics – Evolutionary Models of Information Transmission*, 1998, vol 2, No. 2: <http://jom-emit.cfpm.org/>.
9. Blackmore, Susan. "Memetics is useful". *Contemporary Debates in Philosophy of Biology*, Version January 2009: <http://www.susanblackmore.co.uk/Chapters/CDPB.htm>

10. Christakis, Nicholas and James Fowler. "The spread of Obesity in a Large Social Network over 32 years". *The New England Journal of Medicine*. 357 (2007), No. 4, 370-379.
11. Dawkins, Richard. *The Selfish Gene*. Oxford. Oxford University Press, 1976.
12. Epstein, Erwin H.: "Editorial". *Comparative Education Review*, 41 (1997), No.2, 117-119.
13. Firbas, Jan. *Functional Sentence Perspective in Written and Spoken Communication*. Cambridge: Cambridge University Press, 1992.
14. Golden, Seán. *Cross-Cultural Transfer and the Imaginaire: Some Case Studies in Intersemiotic Sophistication*. [http://www.fti.uab.es/sgolden/imaginai re\\_\(English\).htm](http://www.fti.uab.es/sgolden/imaginai re_(English).htm) - last access: May 3, 2009.
15. Hedström, Peter. "Rational Imitation." *Social Mechanisms: An Analytical Approach to Social Theory*. Eds. P. Hedström and R. Swedberg. Cambridge: Cambridge University Press, 1998. 306-327.
16. Heyting, Frieda. „Die begriffliche Welt der Erziehung“. *Bildung und Weiterbildung im Erziehungssystem*. Eds. Dieter Lenzen & Niklas Luhmann. Frankfurt: Suhrkamp, 1997.
17. Klees, Steven. "What's wrong?" *CIES Newsletter* Nr. 106, May 1994, 3-10.
18. Laszlo, Ervin. *Evolution: The General Theory: Foundations of a General Theory (Advances in Systems Theory, Complexity & the Human Sciences)*. Cresskill, N.J. Hampton Press, 1996.
19. Meyer, John W. et al. "World Society and the Nation State". *American Journal of Sociology*. 103 (1997), 144-181.
20. Jahnke, Thomas and Wolfram, Meyerhöfer. *Pisa & Co - Kritik eines Programms*, Hildesheim. Franzbecker-Verlag, 2006.
21. Mukarovsky, Jan. *Aesthetic Function, Norm and Value as Social Facts*. New York: Oxon Publishing, 1979.
22. Nöth, Winfried. *Handbook of Semiotics*. Bloomington. Indiana University Press, 1990.
23. Osborn, Maryling. "National Context, Educational Goals and Pupil Experiences of Schooling and Learning in Three European Countries". *Compare*, 29 (1999) No.3, p. 287 - 301.
24. Prigogine, Ilya and Isabelle Stengers. *Order out of Chaos: Man's new dialogue with nature*. Flamingo, 1984.
25. Sloterdijk, Peter. *Sphären III - Schäume*. Frankfurt: Suhrkamp, 2004.
26. Stachowiak, Herbert: *Allgemeine Modelltheorie*. Wien: Springer, 1973.
27. Torres, Carlos A. "Globalization and Comparative Education in the World System. Editorial". In: *Comparative Education Review*. 45 (2001) No. 4, iii - x.
28. Wallerstein, Immanuel. *World-Systems Analysis: An Introduction*. Durham, North Carolina. Duke University Press, 2004.
29. Wright, David. *Translating Science: The Transmission of Western Chemistry into late Imperial China, 1840-1900*. Leiden: Brill, 2000.