Contemporary Comparative Cultural Studies: Theory, Contexts and Trends

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INTRODUCTION

For three decades cultural anthropology has been living through an intense self-critical debate: almost all concepts (including that of culture: Pinxten et al., 2004), methods (Fabian, 1983) and political perspectives have been scrutinized thoroughly. In that intriguing process, anthropology has branched out to or made alliances with other, often new disciplines: like post-colonial studies, cultural studies, multicultural studies and the like. Critiques on orientalism by Said (1978) and on exoticism and lack of interest for the urbanised world (e.g. Appadurai, 1989) have been taken seriously. Finally, the sole focus on ethnography with its danger of slipping into casuistic was countered by an appeal to develop a 'comparative consciousness' (Nader, 1993).

With this picture in mind we like to offer a few thoughts on the possible development of anthropology in our era. In our view, anthropology should be understood then as 'comparative study of cultures': that is to say, it should be studying cultures and it must go for comparison. It is impossible to give an overview in the genuine sense (see the yearbooks 'Annual Reviews in Anthropology'); rather, some important trends will be highlighted.

THE DECOLONIZATION OF THE STUDY OF CULTURE

Elsewhere (Pinxten and Orye, 1997), we defended the position that anthropology and other disciplines of cultural study became aware over the years of the need to shed what we called colonial habits: that is, the coercive involvement with definitions, and the 'colonial attitude'. We would like to add a third one to this couple: orientalism; reductionism and the faith in definition: a rather well known example of the utter uselessness of definitions in anthropology is the book of Kroeber and Kluckhohn (1952) under the title 'the concept of culture'. In that book the authors listed over 160 definitions. This was 1950. By now, we will have to consider a few hundred more, and with the advent of more and more non-western anthropologists, any number is to be expected. Each and every definition professes one or a small series of features to be the core of the matter, which immediately triggers an alternative definition with emphasis on a slightly different list, and so on. This way of dealing with things and staging scientific analysis is hopeless and unfruitful. Each definition implies the reduction of the phenomenon under study to a simpler and less complex one, which can be captured in a few lines. The belief, -and indeed it is nothing more than just a belief,- is that this reduction will prove powerful once we get the meanings right. The successful example referred to is that of the early natural sciences, where reductionism had been useful to some extent. Of course, while dealing with the most complex imaginable phenomena, researchers in culture might have expected that reductionism is an unlikely way: major successes of the past decades seem to be reached primarily in inventive interdisciplinary and synthetic research, rather than in mere reductionism. To study the most complex phenomena in reality (traditions, culture, values, and the like) by means of their simple building blocks (if indeed they exist) looks like a peculiar choice to us.

Moreover, natural sciences ever since Newton have shown a way out of definitional battles, which has been neglected by social and cultural scientists. Indeed, to break away from the theological and basically scholastic wars on definitions, the natural sciences opted for a different approach: it is not important to know and describe what is the object precisely as to know and describe in meticulous terms how it functions. Theology continued to indulge in endless fights over substance and essence, but science became powerful and showed progress in knowledge by putting the focus on the how question and thus leaving the definitional wars behind. This is not to say that some working definition is not useful. It sure is, but the matter should rest there. Dependable and powerful knowledge, which is able to better life conditions and to have a considerable level of prediction

does not focus on what is there, but rather on how it works.

A second point we notice in contemporary anthropology (and adjacent disciplines) is a shift away from what we called 'the colonial attitude'. To make this clear we start with an example from economic thought. The famous Jewish economist-philosopher Jacob Neusner (1995) discusses the now rampant notion of 'free market', in order to show that the notion itself is culture-laden. In Jewish tradition, he shows how profit, wealth and other so-called 'objective' economic variables gained different meanings. Some of these are in blatant conflict with the dominant notions in free market thinking today. His discussion is presented as a dispute between a Christian and a Jewish economist. (We would like to add an Islamic economist in the present-day world). Neusner's point is fundamental and well taken: the different parties do not discuss modalities of application or relative measures, but talk about incompatible notions of market, freedom, and so on. Examples like this can and should be multiplied in a world where a few thousand cultures live in ever closer contact with each other in cities and in states.

WHAT THEN IS THE COLONIAL ATTITUDE?

We have to return to the old views on science once more. According to these views the scientist has complete control over the quality and the procedures of the research process. In the positivistic theory, this means that the scientist can objectify and measure whatever is to be known. And in the phenomenological view this implies that the researcher adopts the worldview of the subject of research through empathy ('Einfühlen') in order to study it as if from the inside. For decades, both approaches fought against each other, accusing the other one of 'unscientific' behaviour. That was known as the 'struggle over Methods' (Methodenstreit). Bourdieu (1981) for one was an advocate to go beyond this irrelevant struggle: he demonstrated that any social or cultural study and research in the humanities is dealing with human beings, that is to say with so-called objects who can lie, hide, avoid, communicate and feel sympathy or antipathy with the researcher. Hence, any research is dependent on the quality of the interaction between scientist and subject (see also Campbell, 1973). He proposes the praxiological perspective to escape from the unhealthy and indeed irrelevant (almost theological) struggle over method. In our words, the positions of both the positivists and the phenomenologists are guilty of the 'colonial attitude'(Pinxten, 1997). That is to say, they both adopt an epistemological stand where the researcher is the only one to define the conditions and rules of scientific knowledge. The subject of study does not really enter into the process, since he is either objectified or by-passed (when the researcher takes the so-called inside view).

According to the epistemological critique of Bourdieu, which we adopt, the reality the researcher deals with is different from that of the natural scientist in that we have to interact in order to get data. And the quality of interaction matters fundamentally: the researcher in our disciplines has to build trust and be able to interpret 'together with the informant'. Methodologically speaking, this implies that the informant in fact becomes a co-researcher and is to be involved systematically in the gathering, but also in the interpretation and further processing of data. Neglecting or denying to do so is called the 'colonial attitude', since the (western) researcher conducts the research in a manner which subordinates the subject and denies her the due voice in the process of constructing knowledge about her. Breaking away from the colonial attitude involves that we learn to do research not so much about, but with the subjects we study.

Thirdly, there is the rather generalised critique of E.Said on orientalism. In his path-breaking analysis of modern literature in some European countries, Said launches the term 'orientalism' (1978) to identify a few deep-rooted features of the European view on other cultures and traditions. In his later 'Culture and Imperialism' (1990), he presents an even more encompassing perspective, we think. A basic tenet of Said is that we approach culture in general and individual cultures in particular from a 'textual perspective': we presuppose and hence take for granted that cultures are in a sense acting out a pre-established script. This perspective totally denies the relevance and even the impact of orality. With the imperialistic political cover of colonialism and post-colonial domination, this leads to a discriminatory approach of all non-western cultures till this day.

The literature of the 18th century and the later visual media only strengthened this approach. A

second feature of the past two centuries is that, through scholarly work in the Humanities and the social sciences, western tradition justified this one-sided and discriminatory approach with so-called scientific, or at the very least scholarly arguments about the religion, art and culture of non-westerners. Again, in our opinion, taking up Said's critique on the tradition of our disciplines, we should break away from it through a serious and deeply reflexive epistemological critique. Our view is that a thoroughly comparative consciousness, combined with a self-critical analysis of the colonial attitude, will offer the opportunity to emancipate and break away from the methods and from the theories of the past.

KNOWLEDGE: IS THERE A FUTURE FOR INDIGENOUS KNOWLEDGE?

In my own research, I worked primarily on spatial notions and teaching of intuitive geometry in the beginning. Later on I moved more and more to the study of notions of identity and ethnocentrism. The problematic is, according to me, very similar, notwithstanding the particularities (Pinxten, 1997).

The epistemological stand I adopted was that of early praxiology: the informants or consultants were involved in the research in a systematic way. That is to say, they were not the people who just 'gave information', and I was not the one 'who collected information'. Rather, the interaction involved that informants had a say in the delineation of the research questions (which are negotiated), in the interpretation of the data, in the discussion of cultural intuition (either in verbal terms or otherwise). Finally, some of the informants evaluated (to a considerable extent) the report in an initial form and the elder one of them was adopted as co-author of the book, which resulted from the first extensive field work (Pinxten et al., 1983).

All this expressed, at the time and today, my understanding of the nature of knowledge, or rather of knowledge traditions. I am deeply convinced that knowledge is produced or constructed and not gathered. Interpretation and interaction (for knowledge with and about human beings) is of the essence, and the methodologies we developed from the natural sciences do not really qualify here. On the other hand, and at the same time, knowledge is constructed by human beings who share a common 'frame of reference'. The latter has probably universal constraints (such as structure of the body, physical features of the senses and the like), combined with particularities in the environment (people live in different milieus) and in the learned traditions. This complex makes for differences and for universal aspects along a line I can best identify as 'unity in diversity'. Let me explain this in more detail through the particular case of spatial knowledge.

In the preliminary phase of the research, I developed what was called a Universal Frame of Reference (UFOR) as an analytic device to start ethnographic observations and cultural linguistic analyses. The UFOR consists of a set of just over one hundred spatial distinctions at three levels of space: the object space, the social-geographic space and the cosmological space. Within each of these three levels a variety of notions can be found: near-distant, movement, proportional notions, spatial forms of all kinds. A lot of these distinctions and notions are studied by a set of different disciplines, ranging from physics and geography to psychophysiology and anthropology. Throughout this literature, it appears that human beings have a body which in itself divides space in a three-dimensional frame, due to the fact that human beings walk on their hind legs and hence can make certain movements (e.g., walking forwards and back, roll), but not others (e.g., flying).

The stereoscopic vision caused by the fact that both eyes are directed towards the front (rather than one side each), the equilibrium system and lots of other conditions of the Homo Sapiens Sapiens make for a set of constraints on how space can be perceived, talked about and represented. In the UFOR, the set of what can be safely understood as spatial constraints and potentially universal distinctions is summarized. The UFOR is just that: non-cultural constraints (because of the natural features of human beings: they cannot fly, nor experience the cosmic elements except by distant vision, etc.) and potentially universal distinctions. The entries reach just over one hundred (Pinxten et al., 1983).

However, these constraints and distinctions are used in the actual research with particular languages and cultures as an analytic tool. When looking at observational material on spatial behaviour and most of all at linguistic data on spatial language, it becomes clear that each language and each cultural behaviour tradition

fills in the entries in a particular, and maybe even in an idiosyncratic way. In phonology one introduced the term 'phonemics' here to point to the language-specific system of sounds, as opposed to phonetics as the universal container of all sounds within the potential of the human sound producing organs. In anthropology one speaks about 'etic' for the universal frame and about 'emic' description for the mapping of each particular system construed in one of the 4000 cultures we reckon with. For example, the very notion of cardinal directions, as a system of spatial dimensions, can be understood as an entry of the spatial frame of reference on the etic level.

In a rather trivial way, one can point to the given that the human body orders space by means of a horizontal-vertical frame, induced at the same time by the movements of sun and moon. When looked at in any particular language (or maybe language family) and culture, this statement proves so trivial as to become almost void of meaning. For example, Navajo language is a verb language (that is to say, almost no genuine nouns exist and verbal stems form the basis of the language and hence of the world view). This language does not work with the past-present-future tenses, but rather employs a set of some twenty odd aspects. Stems are transformed in concatenations of prefixes and suffixes in one or the other aspectual form, such that infinite nuances are expressed in events, changes and movements which 'make up the stuff of the universe' (Farella, 1984). When dealing with the cardinal directions, the horizontal and vertical dimensions can best be understood as the voluminous space of movement between opposing mountain ranges, corresponding with the major movements of the sun over a day.

However, time is necessarily and inextricably woven into the spatial dimensions, such that the latter must indeed be thought of as complex notions involving expansion and movement at the same time. When investigating each and every spatial notion in this way, it appears that Navajo space is akin to European space in that we both use the same constraints and physiological distinctions. At the same time, they differ profoundly in that each of the distinctions, be they physical, physiological or purely cultural (virtual, artificial) expressed as an entry of the UFOR, yield a great variety of relative spatial notions. The latter compare only slightly and are responsible for most of the misunderstandings and cultural breakpoints in intercultural contacts, in translation and in intercultural educational. Navajo elders expressed interest in the research we conducted, because their local school board felt that the western spatialised notion of time (time as an arrow, 'going back and forth in time', etc.) was highly problematic for children. Also, the insight to go from a preschool understanding of the environment to mathematics (in a new math curriculum) caused a lot of problems.

Through this research we could shed some light here: the western preschool view on the world starts from a part-whole logic along the lines of an atomistic view on nature, dating back to the ancient Greeks. The Indo-European languages underscore this world view by distinguishing between the noun and verb categories, expressing 'things' versus 'actions and movements'. New mathematics, basically with set theory at the foundation, draws on this intuitive knowledge invested in preschool knowledge and the linguistic structure of this region in the world. The 'verb-language' of the Navajo goes hand in hand with a quite different view on nature: here we have an intuition of reality as a complex of processes and movements. From there to sets and their elements according to a part-whole logic is counter to the intuition of the tradition and of the language. In a special curriculum booklet for intuitive geometry we designed on request of the local tribal council, we introduced elementary mathematical notions (distance, point, volumes, etc.) by starting from the culture-specific 'processual' insights the children shared in their preschool knowledge of the world (Pinxten et al., 1987). It is clear that at every step a choice can be made to stick with and elaborate on the local cultural insight or device a bridge toward the now dominant western way of thinking. Personally, I rather fancy the more exotic perspective of sophisticating the native intuitions and 'many mathematics' or 'plural geometries', but the clients in this case wisely did not see a future for that line of development in their subordinate position as an Indian people within the United States.

One further example in a different field of knowledge will enable me to make the point in a more general way. In a famous book at the end of the '60s, Berlin and Kay (1969) launched the idea of the 'basic colour terms'. In their study they compared over 160 languages all over the world on the way they dealt with colour. I mention the case because it announced how indigenous

knowledge can be studied in a deep way, and at the same time be recognized as genuine and relevant knowledge. From the midst of the 19th century, psychophysiologists have been studying colour, that is they have been mapping meticulously how the human eye discriminates between colour shades and hues. Before that, of course, physicists (with Newton's Optics as a famous guide) determined that colour is physically a continuum in light. That is to say, depending on the power and measuring qualities of the observational instruments, an infinite subdivision of colour shades, hues and grades of brightness can be demonstrated. However, at the organismic level of the human being, and notably in the human eye, it proved to be the case that this infinite amount of differentiation can not be perceived by humans. The eye discriminates discontinuously between degrees of brightness, saturation and hue. In attempts to map the 'colour card' the physiologists produced the so-called Munsell card which can best be compared to the type of colour card one uses in the shop where one can go and buy paint of different 'colours'. The card holds an ordered series of colour patches, going from blues over yellows and greens to reds, and from whites to blacks. All in all, it has a bit over 400 colour patches, thus mapping all different colours that the human eye discriminates from one another. The differentiations between any random two adjacent patches escape the human eye: as an observational instrument it works through discontinuous discrimination. The Munsell card thus represents a mapping of a universal system in human colour vision, because it describes how the eye deals with colour.

With this universal frame of reference for colour vision, Berlin and Kay then posed the question how human beings as linguistic and cultural subjects dealt with colour. They went out and investigated the semantics of colour terminology. They used the Munsell card and had people point to domains or subsets of colour patches on the card which correspond with the terms available in their language. It thus proved to be the case that some languages only use two basic colour terms (not counting combinations, that is, but only genuinely basic terms): e.g., one of the Papua languages discriminates between two colours which correspond to two large coherent domains of the whole spectrum and were pointed to on the card as two half spheres (the blue-ish one from blue to green and purple, and the red-ish one from red to brown and orange). When three basic colour terms were available in a language, the domains pointed at on the card by informants would be blue and red, followed by green. And so on to the limit of 11 basic colour terms in some languages. The reason I mention this important and path-breaking research here is that it showed how universal features and culture- or language-specific characteristics both apply. That is to say, in this the biological (organismic) level holds universal features, due to the particularities of the human eye. The knowledge about this instrument of perception is then used as a frame of reference in the analysis of the semantic differentiation of the colour field, yielding a relativistic picture of diverging, structuring and discrimination of colour units depending on the categorical system of any particular language. In other words, here again, as in the case of spatial notions, a universal pattern at one level yields linguistically and culturally differential working and structures at the level of knowledge (semantics, cognitive structures, and the like).

In still other fields of cognitive and symbolic anthropology, similar types in insights seem to be reached: kinship and lineage systems might be rethought along similar lines (Goodenough, 1970), while even religious action (Turner's 1969 work on rituals, my work on religious types of activities (Pinxten, 2000) can be redirected in this way. Finally, a genuine comparative consciousness will yield similar results in a variety of domains of human knowledge; I profess (Nader, 2003; Geertz, 2000). It is obvious that these results in themselves are significant. In the final section I will dwell a bit on the conclusions we can be draw from this type of research.

SPECULATIONS ON IK AND DEVELOPMENT

In what sense does all of this speak about indigenous knowledge? Cognitive and symbolic anthropology have been breaking away from any former principal division between western and non-western thinking, which was based on a false interpretation of evolutionary theory (the 19th century racism and later Spencerian approaches) or on the false claim that other cultures would be pre-logical in one sense or another. Lévi-Strauss' book on classificatory thinking in cultures remains in this field a first systematic attempt (1962), but a long road of research can be pointed at since then.

Although the subdiscipline of cognitive anthropology does not exist anymore, its impact on cognitive linguistics (with George Lakoff and Mark Turner), linguistic anthropology, cultural psychology (Cole, 1996) and other vivid pools of contemporary research in this field is clear. In my view, these researches proved 'beyond any reasonable doubt' that dependable knowledge exists in other cultural traditions. Logical reasoning is not a unique find of ancient Greece, but can be found with human beings all over the world.

A further question then is whether this knowledge can be recognized, developed and implemented in a systematic way such as to better the living conditions in different areas of the world. It is difficult to answer such a question with one straightforward statement. We can only point to the likelihood of such a conclusion. When trying to be convincing, it is more appropriate to become specific, I think. I return to the issue of spatial knowledge and its possible implementation in mathematics teaching.

In the discipline which is now known as ethnomathematics, examples of the way indigenous knowledge is integrated in or serving as a basis for the insightful teaching of mathematics in different cultural traditions are rampant: Ascher (1991), Bishop (1988) and many others have been advocating within mathematics education that the cognitive capacities of subjects differ from culture to culture and from language to language. These differences matter in the sense that insights, procedures and strategies of thinking and problem solving tend to diverge accordingly. Taking these into account and integrating them in the educational process by incorporating them in the curriculum and in the class room practice, allows for emancipatory and empowering effects. The literature on these topics is substantial: major mathematics educations journals and book series have been devoted to the issue and UNESCO has been promoting the approach (Keitel, 1989). This does not mean that the point is granted in each particular case, but at the very least the proposals have been made and recognized and the programmes are implemented in some cases.

CONCLUSION

The present contribution investigated some major shifts in our understanding of knowledge in cultural context. The old divide (western and civilized versus non-western and uncivilized) was not treated anymore, since it does not hold in the scientific arena. Instead, the consciousness about one's biases and about the alternative which is dormant in other cultural knowledge traditions is on the table these days. With some examples, and with a particular focus on the analysis of intuitive geometry and its implication for mathematics teaching in other cultural traditions, I have tried to deepen the discussion.

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ABSTRACT This contribution investigates the important shifts in the field of the study of cultures over the past decades. The focus is primarily on cultural anthropology, although a disciplinary perspective is almost obsolete today. We state that the self-critical reflexive attitude of the past decades in anthropology is altering the approach to other cultures and other knowledge systems in a deep way. The major shifts are highlighted and some speculation is offered on the future development of the study of cultures and knowledge systems.

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Indigenous Knowledge Systems and Sustainable Development: Relevance for Africa
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