

Anthropology and Comparison: Methodological Challenges and Tentative Solutions

Michael Schnegg

Institute for Social and Cultural Anthropology, Universität Hamburg, Edmund Siemers Allee,
D-20146 Hamburg

Abstract. Comparison was once the corner stone of anthropology; ethnography later became a way to collect the necessary data and then became a rivaling paradigm. While the ways of doing ethnography have improved significantly over the last decades, comparison has been partly neglected and partly banned in the aftermath of postmodern criticism. At the same time, in casual talks, conference sessions, and edited volumes anthropologists have always sought common ground and differences among “their” cases. I argue that as anthropologists we should acknowledge the comparative nature of much of our thinking and strive more explicitly to improve its quality. To contribute to this effort I identify major methodological problems that arise when comparing ethnographic cases. Those include the definition of the case, their dimensions and the increasing connectedness of the world. To overcome these concerns I propose tentative formal solutions that combine into a new comparative agenda: multilevel comparison.

[Cross-Cultural Comparison, Research Methods in Anthropology]

Introduction

About 125 years ago Edward B. Tylor argued that anthropology needed a more rigorous scientific methodology and that culture should be investigated on the basis of classification and tabulation. This would allow finding universal laws of institutional development (Tylor 1889:245). The topic he picked to demonstrate his approach was kinship. Based on a comparison of 350 “peoples”, “tribes”, and “nations” Tylor proposed a universal relationship between postmarital residence patterns and avoidance rules. Rightly, his talk is often cited as the cornerstone of cross-cultural research. At about the same time anthropology experienced the birth of a second comparative research agenda. Comparison based on few cases. The works of Marcel Mauss on social relationships, Melville Herskovits on the economy, and Ruth Benedict on culture and personality equally demonstrated how cultural diversity can be studied through contrasting cases (Benedict 1934; Herskovits 1940; Mauss 1925).¹

¹ Whereas the former approach is often referred to as worldwide cross-cultural comparison the latter is sometimes called a “most different case study design” (Bollig 2012; Schweizer 1978:15).

Simultaneously a profound skepticism emerged. Franz Boas replied to Tylor that cross-cultural comparison has severe limitations and can lead to faulty conclusions if not embedded in sound historical analyses (Boas 1896). At the same time, Boas did not reject comparison per se. At the heart of the debate was a disagreement between evolutionists and diffusionists. Comparing cases, both Boas and Tylor observed that the same “trait” (i. e. residence patterns, etc.) or combination of “traits” often occur in two or more societies.² While evolutionists interpreted this as confirmation of universal human development, diffusionists argued that the “traits” had been transmitted through migration and contact.

The critique of the comparative agenda that emerged with Boas stayed alive in anthropological debates. At its core is widespread concern with explanatory models in a discipline characterized by particularistic and hermeneutic thinking (Schweizer 1978:23). Clifford Geertz made this especially clear when he argued that anthropologists should not generalize across cases but within them (Geertz 1973:26). More radically than Geertz, postmodern and postcolonial anthropology tried to put an end to generalizations and the comparative agenda. Lila Abu-Lughod reasoned that “[t]he very gap between the professional and authoritative discourses of generalization and the languages of everyday life (our own and others’) establishes a fundamental separation between the anthropologist and the people being written about that facilitates the construction of anthropological objects as simultaneously different and inferior” (Abu-Lughod 1991:151). Her position was extended by others who argued that comparisons “partake in and are actively symptomatic of the unequal and asymmetrical relationships that have and continue to structure the world in dominance (Radhakrishnan 2009:459).”³ Thus, comparisons are seen as forms of ethnocentrism and domination per se that should be dismissed from the scientific agenda (Radhakrishnan 2009).

At the same time and even at the height of the critique in the 80s and 90s anthropologists never stopped comparing: (1) Most conference sessions are comparative in nature. They propose a theme and invite people to present ethnographic evidence to contribute to a debate around it. (2) Not surprisingly, edited volumes, often the results of conferences, follow a very similar logic. (3) Monographs that compare few cases in the tradition of Mauss and Benedict did not disappear. Widely received examples are Eric Wolf’s *People Without History* and *Envisioning Power* in which he compares cases as different as the Kwakiutl, Aztecs, and Nationalist Socialist Germans. (4) Equally, the most popular introductory text books in anthropology are comparative (Ember and Ember 2010; Eriksen 2010; Haviland et al. 2010; Kottak 2010; Peoples and Bailey 2012). (5) Even in less formal conversations above a coffee or a beer, anthropologists

² I use the word *trait* as a quote from the debates cited.

³ The argument did not go unanswered and others have pointed out that it is precisely for political reasons and to challenge existing hierarchies that we have to compare (Fox and Gingrich 2002:9; Stanford Friedman 2011:755).

often search the common grounds and differences among “their” cases and theorize about them (de Munck 2000).

Beyond these examples, anthropology is currently experiencing a revival of research projects, comparative in nature and focused on the collection of primary ethnographic data. *Love, Marriage and HIV* (Hirsch 2009), *Kinship and Social Security* (Heady and Schweitzer 2010) and *Foundations of Human Sociality* (Henrich 2004) are three large projects deliberately designed to compare. The “new” comparisons often include relatively few cases (< 20) for which the data is collected using a uniform research design. This revival is accompanied by a number of publications and conferences that have brought comparison back to the forefront of anthropology (Friedman 2011; Fox and Gingrich 2002; Moore 2005; de Munck 2000; Nader 1994).

In this article, I argue that anthropologists should acknowledge the comparative nature of much of their scholarly thinking and strive more explicitly to improve its quality. Comparisons are an adequate and maybe the only way to build theory that generalizes across fields. Even further, also the particular or a “partial truth” can only exist against something general or contrasting. My focus in this paper is not the worldwide cross-cultural comparisons that use hundreds of societies coded in the Human Relations Area File (HRAF) and similar datasets. I have in mind instead comparisons that involve less than 20 cases. The focused data collection allows operationalizing the central concepts more adequately and assists choosing and defining cases that are appropriate. This, in return, can lead to more valid tests of hypotheses and theories. While the problems in focused data collection are in many ways comparable to those of larger datasets, they have been addressed much less frequently. Still the diminished numbers offer different possibilities for resolution. To my understanding the three most salient methodological problems arise with (1) defining cases as well as (2) determining dimensions for comparison and (3) the complexity of the increasing connectiveness of the world and thus the cases we compare. Having identified these, I offer tentative solutions, most notably to the problem of the interconnectedness. My solutions combine to form a new framework – multilevel comparison – drawing on comparative work in other disciplines and transferring concepts and techniques developed for quantitative data analysis (autocorrelation analysis, multilevel analysis) to qualitative research (Dow et al. 1984; Jahn 2006).

Why not compare?

Comparison is the essential method for explanation and hypothesis testing (Ember and Ember 1998; Ember and Ember 2000). Comparing often begins with the understanding that two things are related and the hypothesis that the relationship between the two phenomena may also be found elsewhere. As more cases are added the hypothesis is rejected or refined, often including more than one potential cause for an outcome observed and variations in that outcome itself. By comparing anthropologists

thus check the similarity or dissimilarity of phenomena or processes across cases. Comparison is one of the most fundamental cognitive capabilities of humans (Friedman 2011:755) and requires three fundamental operations: defining the cases and the dimensions to be compared and an operation to determine whether the observations differ or are the same. Let us consider an anthropological example. In semi-arid Namibia, we are trying to understand the ways pastoral communities govern their most important environmental resource, water. Here the cases to compare are groups of people who share one or more water sources. The dimension to be compared is the rules they develop to share ground water and to contribute to the costs involved. Those rules differ and we aim to explore under which conditions the one or the other rule is more likely to emerge. We hypothesize, for example, that economically more stratified communities come up with different solutions than those with less economic differences between the households. This thus adds a dimension, which we theorize to be a valid cause. Such a comparison may lead to establishing or rejecting the hypothesis about the level of economic stratification and rules of water management. In the following I call single-dimension comparisons descriptive and more complex examples causal (see Ember and Ember 1998 for a more detailed classification). In descriptive comparisons the distribution of a phenomenon (e. g. institutions of water management) across a set of cases is sought. As I develop later, only the first and the second of the three problems identified in the previous section apply here. In causal comparisons dimensions are interrelated (e. g. stratification and institutional regimes) and once a co-variation is found, explanations are sought. This poses the third problem as an additional challenge.

Problem 1: Defining cases

The cases in Tylor's work were 350 "peoples," "tribes," and "nations" (Tylor 1889). In the talk cited above Tylor uses the three terms without defining them. However, from the context of usage one may conclude that "tribes" and "nations" are thought of as subcategories of "peoples."⁴ In one of the comments to his presentation, however, Fowler criticized the lack of clarity and argued that comparison must guarantee that observations address comparable cases and dimensions. In much of the cross-cultural research that followed, the term *cultures* was substituted for "peoples," "tribes," and "nations." Murdock uses the concept of culture in the "The cross-cultural survey" and defined *culture* for HRAF to include "all local cultural variants exhibited by communities within a particular geographical area which speak mutually intelligible lan-

⁴ "During many years I have been collecting the evidence found among between three and four hundred peoples, ranging from insignificant savage hordes to great cultured nations" (Tylor 1889:245–246).

guages and have essentially similar forms of economic adjustment” (1953:478). The definition and the implementation in the HRAF thus foster a localization of the cases to compare. John Whiting even went a step further and argued pragmatically, that most ethnography, the basis of comparative work, does not describe culture, but particular local communities. He thus suggests that “the boundaries of a culture are best defined by the social group whose members share a set of customs. . . . I argued that the local community was the group that defined a culture in most ethnographies” (Whiting 2006:37).

This development shows a tendency toward controlling problems involved in the definition of cases by narrowing the scope from peoples or cultures to communities (de Munck and Korotayev 2000:335). As the groups become smaller it becomes easier to make valid claims with the ethnographic research approach. Narrowing the (geographical) focus is likely to increase the homogeneity of a population and the similarity of meaning systems and practices. It thus also reduces the problem of selecting informants that represent the groups compared. Although a significant step into the right direction, this was not yet a definite solution to the problem of establishing comparable cases.

The “writing culture” debate and related criticism made it evident that cultural boundaries are not given but made. Cultures are constructed entities and anthropologists must be aware that specific actors have interests in constructing homogeneous cultural entities. Such actors include neighboring groups (Barth 1969), ethnographers (Clifford and Marcus 1986), elites (Fischer 2001), and the market (Comaroff and Comaroff 2009) to name but few.

As one reaction to the critique Abu-Lughod proposed to write against culture. She argues that culture is always relational and that any fixation of cultural groups creates superiority and inferiority. Ethnographers should abstain from this practice. “Ethnographies of the particular” constitute her way out of the dilemma, allowing her to describe individuals and their lived experiences without treating them as representatives of some larger group (i. e., culture) (Abu-Lughod 1991, 1993).⁵ A second prominent critic of the use of the concept of culture is Adam Kuper. Difficulties in defining and using the concept properly lead him to reject it altogether. Kuper argues that “if the elements of a culture are disaggregated, it is usually not difficult to show that the parts are separately tied to specific administrative arrangements, economic pressures, biological constraints, and so forth” (Kuper 1999:246). He argues that anthropology should turn to the study of specific subfields and comparison should establish regularities for each subfield and across contexts (Kuper 1999:247).

But then, how do we define the cases to analyze and compare?

⁵ For a detailed critique and alternatives see Brumann (1999).

Proposition 1: Social fields and communities of practice

Admittedly, an all-encompassing concept of culture that dominated anthropology until the 1970s can hardly be the basis for a future comparative agenda. Ember and Ember have argued that the definition of the cases may vary from case to case and sometimes be a household and sometimes a community (Ember and Ember 2000:354). However, independent of whether a group is delimited as a household, a hamlet or a firm, anthropologists need to define the boundaries of potential cases and decide how to aggregate from its parts to the whole. This involves justifying the validity of a statement like “Fransfontein (the Namibian community I work with) is economically stratified” on the basis of data collected about its parts, households or individuals. It also involves defining the boundaries of the case (i. e. Fransfontein) which has become an increasingly challenging task in times where the movement of people and resources constitutes translocal spaces that are hardly geographically rooted.

To better define cases we need to advance the theoretical understanding of culture away from a homogenous totality to reflect a set of overlapping and connected social fields (called *social fields*, *semi-autonomous field* or *Lebenswelten*). Sally Moore defined a semi-autonomous field as a social setting including different actors, which can generate rules and coerce compliance to them (Moore 2000 [1978]:57). She calls those fields semi-autonomous to denote that they are embedded into larger social and political frameworks and connected to one another. The association of an individual with a specific *social field* may be socially inherited (e. g., clan membership) and/or the product of human agency and choice (e. g., being employed in a specific firm or settling around a specific water point) (Bourdieu 1977; Sewell 1992). However, people do not live and interact only as part of one *social field*, “their” culture, but as part of many (Gluckman 1955:18; Sen 2006; Simmel 1908).

As Moore pointed out, any of these social fields requires a certain degree of coherence about the norms and values that structure the behavior of its participants. Ethnographers commonly use key informants and participant observation to discover those rules. More recently, Romney, Weller and Batchelder have developed a formal method to approach this question and to test, whether rules and understandings are shared (Brumann 1999; Medin, Ross, and Cox 2006; Romney, Weller, and Batchelder 1986). The cultural-consensus model (CCM) consists of a set of techniques to statistically demonstrate the cultural consensus or the lack thereof. The model is based on the assumption that those who know more tend to agree among one another, that is, cultural experts are more likely to agree on an issue than novices or randomly selected informants. The cultural consensus model allows to (1) to identify the cultural model of a given domain (2) to quantify the degree to which knowledge is shared and (3) to evaluate the cultural competence of individual informants (Boster 1986; Weller 2007). For some social fields the cultural-consensus model promises the possibility of transforming the issue whether and where a group of actors shares norms and values into an empirical question. This allows drawing the boundaries around a social field empiri-

cally (Schnegg 2015). Ethnographic comparison must thus turn from constructed groups to communities of shared thought and practices often organized around a focal point (e. g., the totem, the workplace) where meanings and practices are experienced.

Problem 2: The Dimensions

In Tylor's work the dimensions to be compared were elements of the kinship system.⁶ Interested in understanding the relationship between post marital residence patterns and avoidance rules he had coded and classified these two dimensions of the kinship system. The first dimension, residence, was classified into "H to W" (husband to wife), "Removal" and "W to H" (wife to husband). For the second dimension, avoidance, he distinguished between "H. & W. FAM" (husband and wife family) and "mutual" to denote whether avoidance takes place at the same time or in a temporal order. Unfortunately, Tylor provides almost no information about who collected the data and how the concepts were defined and coded (Tylor 1889:251). It was still to become a major achievement of Murdock and his colleagues at Yale to make these procedures explicit and transparent in cross-cultural research (Ember and Ember 1998:651).

Murdock's student, David Schneider, was one of the first to point out the problems inherent in developing and applying universal classifications to a wide range of societies. He argued that anthropological kinship categories (e. g., neolocality, avunculocality) are deeply rooted in Western thought and could thus not be used to describe and much less to compare kinship systems across the globe (Schneider 2004:268). However, in his earlier work, the relativist Schneider did not turn his back on comparison in general but argued for comparisons without measuring the rest against the yardstick of the West. Schneider proposed to start with the Western definition and conceptualization, then to compare it to what is found in other societies and finally to end up with an array of different kinship systems and meanings. Anthropology ought to document the variations found for roughly similar, overlapping, and interlocking things (Schneider 1976:160). In his later work his skepticism toward the use of the comparative method grew significantly and he questioned not only the comparability of a concept like "lineages" or "incest" but of kinship in general (Schneider 1984:177).

In the decades following his relativistic critique the role of the ethnographer became a major concern. Reading ethnographies as literary texts revealed that the kinship system or other categories of social life do not exist independently of the observer and the author (Clifford and Marcus 1986). The debate soon unveiled the problem as not only methodological but also epistemological (Schnegg 2015). Through observing, describing, and writing the ethnographer constructs the entity at stake. Observer and ob-

⁶ I use the term dimensions to refer to the characteristics of a case. In a more technical sense, one could also speak of variables.

served are two sides that constitute the same coin. This means for a comparative endeavor that whatever is being compared is not only a comparison between the social realities observed but also a comparison between the ethnographers themselves. The picture gets even more complex if we assume, as many have, that the effects cannot be separated (Schnegg 2015).

Proposition 2: Variations and Biases

Intercultural comparison builds on certain epistemological assumptions. It rests on the condition that anthropologists can understand social realities and the way people construct them. Additionally, it assumes that these constructions can be analytically separated from the observer him- or herself. I have argued elsewhere in favor of such an epistemology and proposed conceptual and methodological tools to separate observer from the observed through a focus on constructions shared by a people of study and cultural consensus (Schnegg 2015). This allows identifying biases at different levels, including first and second order descriptions by informants and ethnographers themselves; strategies, that have partly been employed in statistical intercultural research as well (Ember and Ember 1998:671).

Following this line of thought it must become an essential part of comparative work to try to critically analyze the way the ethnographer forms the outcome he or she produces and thus the facts being compared. Only once researchers can ensure that those constructions contain relatively few biases can scholars address differences in the social world and not among ethnographers themselves. Practically this requires securing the reliability and the validity of the data and the analysis while laying open how results were achieved. This also involves sampling issues and the challenge to engage local voices in ethnographic writing (Hirsch 2009).

As Schneider has argued, the creation of dimensions and categories to describe the social world must be an inductive process starting with a definition and a basic understanding of the dimension and working towards an encompassing understanding of the dimension and its values (Schneider 1976:160). Garro came to a very similar conclusion when she tried to understand illness in an ojibway and a tarascan community through the application of three comparative schemes for the explanation of illness. She recognized that this can only offer satisfying solutions if social context and local meaning systems are taken into account. Otherwise, the implicit assumptions that underlie a classification limit their utility (Garro 2000).

Problem 3: Galton and Globalization

Interconnectedness and globalization constitute the most salient problems for comparison. In 1888 in Oxford Edward B. Tylor gave the above cited talk which had a lasting

impact on the discipline. The audience included fellow anthropologists and social scientists. Among them the president of the Royal Anthropological Institute, Sir Galton, a statistician. In his reply to Tylor he argued that “It was extremely desirable for the sake of those who may wish to study the evidence for Dr. Tylor’s conclusions, that full information should be given as to the degree in which the customs of the tribes and races which are compared together are independent. It might be, that some of the tribes had derived them from a common source, so that they were duplicate copies of the same original” (Tylor 1889:270). With these words Galton pointed to a phenomenon well-known in statistics.

The co-variation of two phenomena can be largely obfuscated and have little meaning if the observations compared are not independent. Independence in this sense means that the second case went through the same process and can thus fully serve as a confirmation that B follows from A. For Tylor’s analysis this meant that possibly many of the cases that combine two characteristics, for example, avoiding the wife’s relatives and matrilineal residence, had the same historical origin. They are, as Galton put it in the words of his time, “duplicates” of the same original. Consequently, they should not count as different cases but as a single one. This can drastically change the level of the statistical association. Tylor had no answer to offer and the statistician Galton had probably more impact on anthropology than any other statistician before or after him. “Galton’s Problem” applies to comparisons I have labeled as causal comparison because it hinders explanations. To descriptive comparisons, for example, showing the variations and the distribution of a phenomenon like water management institutions across a larger set of cases it poses no threat.

Franz Boas read Tylor’s talk and later admitted to his student Lowie that he at first admired it (Lowie 1946:227). However, he became suspicious when he returned to the interpretation of his fieldwork material from British Columbia. Boas observed that some societies in the hinterland had developed from patrilineal family organization to matrilineal clan and totem organization. This development was not in line with the then up-to-date evolutionary theories which saw a nuclear family organization as the final stage of the evolutionary model. It was also in contradiction to the interpretation he had proposed before (Boas 1964[1888]). Boas argued that the transformation could only be explained historically. The societies in the hinterlands had maintained intense contact with people from the coast and had been “assimilated” by them. Matrilineal social organization had thus diffused from the coast to the hinterlands leading to the transformation in the kinship system that struck Boas and others (Boas 1910:16, Lowie 1946:229). Similarity between society’s cultures was not the result of similar universal developments but of diffusion and adaptation.

Boas thus adds a second dimension to the problem: independence is not only flawed if populations as cases under comparison have the same origin and migrated but also if they are strongly connected otherwise. In his famous paper *The Limitations of the Comparative Method in Anthropology* Boas argued that comparison must rest on sound historical reconstructions to understand the *processes* that lead to similar forms

in two places (Boas 1896:908). In his view those comparisons should start with a limited geographical area where the interconnections could more easily be traced historically. Only in a second step are extensions beyond this horizon permissible (Boas 1896:906). Unfortunately, relatively few applied this agenda and historical description and intercultural comparison further differentiated to become rivaling paradigms in anthropology.

In the early days of the discipline interconnections among geographically disparate societies were seen as a result of (1) either a common historical origin and migration that made people spread out to distant areas or (2) diffusion within a regional context. Since then, globalization has drastically increased the interconnectedness of the world and the problems Galton recognized have not disappeared but multiplied. What was then called diffusion in anthropological debates is now much less a regional phenomenon but a reality that connects distant parts of the world. In addition, the ways in which sameness is shaped has changed. Global normative orders, including economic systems (e. g., socialism, capitalism), religious movements (e. g., pentecostalism), international and NGO-driven policies (e. g., environmental, family) structure many societies in much the same way independent of primary locations.

Proposition 3: Multilevel Comparison

Galton's remark was taken seriously and incurred significant attention for more than a century (Dow et al. 1984; Naroll 1961; Pryor 1976; Strauss and Orans 1975). The solutions follow two paths: (1) trying to select cases that are known to have little or no connections and (2) modeling and eliminating the effects that connections introduce. I first consider the sampling issue which gets more difficult as the number of cases increases. In the past intercultural comparisons with a few cases could choose geographically distant societies that had little direct contact. This approach became known as the "most different case study design" and work by the Whittings on socialization practices is a prime example (Schweizer 1999; Whiting and Whiting 1975). Both the risk of "diffusion" and "being of the same origin" are minimized by picking geographically distinct cases including a Gusii Community (Kenya), the Rajputs of Khalapur (India) and Mixtecos of Juxtahuaca (Mexico). While the Whittings could still argue that their cases had little in common this would be more difficult today. Even if no direct connections exist between two settings they are often embedded within global processes that may be a latent (i. e. hidden) variable behind associations observed. These processes may have such a strong effect that they turn what was thought as "most different" cases into a controlled comparison. An example can help to illustrate the point. If an anthropologist looks at human-environment relationships in comparing cases as distant as Namibia, the Philippines, and Brazil it must be acknowledged that each case has been subject to the same post-Rio environmental policy shaped and implemented by largely the same international NGOs. This platform in-

fluences the ways people perceive and govern nature today including concepts like gender-equality, sustainability, and community-based organization.

Selecting cases with few connections is more difficult if the size of the sample increases. For many intercultural comparisons the 858 societies currently listed in the HRAF still are the most frequently used data source (Ember and Ember 1998; Ember and Ember 2000). Addressing Galton's critique researchers tried to "eliminate" societies from the larger sample with confounding overlap and continue analysis with a smaller subsample thought to be "Galton Free." The most important attempt in this direction was done by Murdock and White who developed the Standard Cross Cultural Sample partly to reduce the Galton effect (Murdock and White 1969). They selected 186 societies to stand a distinctive entities representing the larger cultural areas. It is apparent that this strategy if it works at all will only work for worldwide cross-cultural comparisons.

With a similar aim in mind Strauss and Orans tried to reduce cultures and their characteristics to "pristine states." Again they tried to eliminate the effects of diffusion. Methodologically they proposed to compute the chance that a characteristic is shared with neighbors if they were randomly distributed and then reduce empirical cases till this baseline is met (Strauss and Orans 1975:581). The most recent attempt in this direction was made by Korotayv and De Munck, who show that the particulars of a problem are crucial in choosing culture areas for comparison and drawing boundaries. Depending on the research question at stake those areas in which cases are "duplicates" are different. Thus an area cannot always be the same and must be adapted to the question under consideration. Looking at marriage patterns religion may be significant while for the economy it may be topographical criteria that allow drawing those boundaries (Korotayv and de Munck 2003). These attempts have in common that they construct a sample in which the cases selected are less *interdependent* than in the original universe. The researchers thus seek to "solve" problems created by migration and globalization by constructing a world sample that minimizes these effects.

The solution I move on to develop, multilevel comparison, is different and borrows much more from the work of Boas but without swinging into a particularistic agenda that focuses only on a single case or a single relationship between two cases. Ethnographic comparison faces a challenge if we observed the same phenomenon in more than a single case. This may be a result of several possible conditions and allow different conclusions:

- Type a: The two phenomena may have been transmitted and/or negotiated between the two cases (networks, diffusion).
- Type b: The two phenomena may have both been shaped by the same larger context (origin, contexts).
- Type c: The two phenomena may have developed independently and have similar or different causes (co-variations).

Table 1 Five cases and two observed dimensions with characteristics/values A and B (fictive example)

Case	Dim1	Dim2
1	A	B
2	A	A
3	B	B
4	B	B
5	B	A

Each type has different possibilities for interpretation. Only in Type c) can the second observation be taken as a true confirmation of the former in law-seeking sense. Therefore one aim of comparative analysis must be to separate these three effects and to acknowledge that they account for social and historical processes distinctly. This strategy turns away from constructing a “Galton free” sample. It equally turns away from searching only historical connections and diffusions, as Boas did, an approach, in its current transnational version often labeled *entangled histories*, still upheld as an alternative to the comparative paradigm in history and anthropology (Conrad, Randeria, and Sutterlüty 2002; Espagne 1999). The approach introduced here, multilevel comparison, frames the problem of comparison by asking why two cases are alike. The resultant explanation may derive from one or more of the possibilities of “diffusion/networks” (Type a), “common origins/contexts” (Type b), and “co-variation” (Type c). Multilevel comparison thus searches for effects on and between different levels or scales. Co-variations operate on the same scale and “within the case” (e. g. stratification and preference for certain institutional regimes in a community). Networks connect the case with *specific* other cases through dyadic relationships of the same level. In contrast, common contexts constitute a larger historical or thematic frame that operates on a higher level.

Table 1 lists five cases that are characterized by two dimensions, Dim1 and Dim2. In the case of communal water management referred to above the first dimension would be the institution and the second dimension the stratification of the community. Both have two characteristics (A and B) and in the case of stratification those could be “egalitarian” and “stratified”. In search of co-variation the standard analysis of such a data table would be a cross tabulation of those two dimensions to explore how they relate, for example, how many of the cases show A and A, B and B, A but not B, B but not A, A and B. Trying to identify a “Galton free” sample would require identifying and eliminating cases that have connections or the same origins and to keep only those that appear independent thus reducing the number of observations. However, this leaves a significant part of the question why two cases are alike, unanswered. The choice between diffusion (Type a) or co-variation (Type c) is not addressed.

In order to separate these effects we must identify to what degree the similarity between two cases stems from one or more of the processes described above. One way to analytically separate the possible accounts for similar comparative observations is to

Table 2 Similarity matrix for the five cases shown in Table 1

Case/Case	1	2	3	4	5
1	–	0	1	1	0
2	0	–	0	0	1
3	1	0	–	1	0
4	1	0	1	–	0
5	0	1	0	0	–

ask for which cases the characteristics of the dimension analyzed is the “same” and for which it is not. This requires further examination of those cases that have the same value in Dim2 (i. e., 1, 3, 4 or 2, 5 as shown in the second variable column of Table 1).

The analytical tool to capture the sameness and difference is a similarity matrix. Table 2 illustrates the logic for the data presented above. In the similarity matrix we find two entries: ‘0’ and ‘1.’ If two cases show the same results (independent of the result itself) this is marked through a ‘1,’ otherwise zero. The matrix can easily be generated from Table 1 by hand or through multiplying the second variable (Dim2) by itself. This table becomes the dependent phenomenon in our analysis and contains the information of which cases are alike and which are not. More specifically, there are four pairs of cases (1–3, 1–4, 2–5, 3–4) which show the same characteristic Dim2 and thus call for an explanation.⁷

Networks

Diffusion through contacts and networks can result in two cases being alike. Boas was much concerned with the confounding effects of diffusion. The solution he posed was to focus first on the regional context where historical interconnections could be reconstructed reliably and only later to extend comparisons to larger scale. Quite some time later cross-cultural researchers offered a parallel statistical solution. Network autocorrelation analysis specifies the relationships that are thought to exist between cases. Those may be spatial, historical, or established by common criteria, for example, language (Burton and White 1991; Dow et al. 1984; Pryor 1976). This information is then used to test the effect of the relationship in a global model and results in a correlation coefficient that describes the strength of the relationship alongside the relationships established through variables that characterize the cases themselves.

The use of the procedure is widely recognized and is practiced not only by anthropologists but more recently also by political scientists and others interested in the study

⁷ Since we treat the relationships as non-direction we can neglect the reverse relationships (3–1, 4–1, 5–2, 4–3).

Table 3 Fictive network of relationships among cases

Case/Case	1	2	3	4	5
1	–	0	0	0	0
2	0	–	0	1	1
3	0	0	–	0	0
4	0	1	0	–	0
5	0	1	0	0	–

of large and connected social systems (Jahn 2006). However, my focus here is not the large scale cross cultural comparisons to which this procedure is usually applied but comparisons with relatively small N. In those cases a statistical autocorrelation analysis often does not make sense. However, the same logic applies and can be used to investigate similarities of type a or b. To find those similarities that may be based on globalization, diffusion, and networks we thus ask, which of the cases are connected or have been connected in the past. The following table shows a fictive matrix of interconnections as commonly used in network research.

Combining and comparing the two Tables 2 and 3 pairwise allows identifying in which cases similar historical processes took place for connected social fields. Those relationships are shaded in Table 3. The relationship between the cases 5 and 2 may be explained by similar historical processes and must be analyzed in detail to investigate the details of that history. This solves one (2–5) of the four explanatory tasks and attributes to the two cases a common historical process that involves flow between the units delimited. However, it does not explain all the variation in the data (1–3, 1–4, 3–4).

Contexts

A second aspect with growing importance in explaining the similarity and difference of processes are regional and global contexts, including governance norms, religion, and states (Moore 2005). To identify those processes the proposed analysis investigates in a final step which cases belong to the same, relevant context. This thinking is comparable to what de Munck and Korotayev have proposed for cross-cultural comparison when they argued that we must define “homogenous” areas according to a problem at hand and that they may be very different for the study of kinship or the economy (Korotayev and de Munck 2003; de Munck and Korotayev 2000). In statistical thinking this problem is solved through multilevel analysis, where individual and group level effects on a dependent variable are analyzed at the same time. This allows recognizing if a relationship exists globally or only for specific contexts. For qualitative comparisons this information can again be transformed to one (or likewise many) matrix of similarities and differences that indicate with ‘1’ that two cases are alike.

Table 4 Cases belonging to the same context (fictive example)

Case/Case	1	2	3	4	5
1	–	1	1	0	0
2	1	–	1	0	0
3	1	1	–	0	0
4	0	0	0	–	1
5	0	0	0	1	–

As above, we are able to compare the matrix in Table 4 with that in Table 2 to show where similarities may have been caused by a context effect. Again, the cells in which the same processes were observed and which are part of the same larger context are shaded. The fact that cases 1 and 3 are alike may be explained this way. This approach allows us to identify relevant social processes that lead to similarities and differences among cases. In the end of the analysis we remain with cases whose similarity cannot be explained through networks and contexts (1–4, 3–4). In these remaining cases the two phenomena may co-vary independently in a sense that A caused B or vice versa and should be analyzed using cross tabulations or the underlying logic.

Conclusion

I have argued here in favor of a comparative research agenda and agree with de Munck and others that ethnology should be the logical consequence of ethnography (de Munck 2000:281). The number of cases analyzed by anthropologists in comparative studies ranges from two to 858. I do not see the future of comparative studies as one involving research focused on large numbers of societies or cases. The potential of ethnographic comparisons based on primary data collected among relatively few cases has long been underestimated. Whether collected with the comparative aim in mind or later organized and assembled in edited volumes this research design has much potential to help answer prevailing societal and scientific challenges.

In contrast to the craft of doing and writing ethnography relatively little effort has been made to improve the quality of comparative research designs both methodologically and theoretically (cf. Fox and Gingrich 2002). My aim is to contribute to this debate and identify salient problems while also offering tentative formal solutions. I have argued that many of the problems commonly associated with worldwide cross-cultural research do apply to comparisons with smaller numbers, but that the problems are more manageable with smaller samples. More specifically, I have identified defining the (1) cases, (2) the dimensions and (3) the increasing interconnectedness as three main challenges. The first can be met by focusing on social fields that organize around focal points. The second can be resolved by developing definitions and classifications that are both locally meaningful and comparable. To address the third problem

anthropologists have tried to eliminate history and connections in order to produce a sample of independent cases that allows searching for law-like patterns. I argue that this search is doomed to fail. The connectedness has significantly increased over the last century as globalization has raised the degree and the speed by which people and ideas travel. In addition, global normative orders including policies and social movements shape norms and practices in very distinct places.

To meet this challenge anthropologists must distinguish more sharply in their research what makes two cases alike. I have developed an analytical framework, multi-level comparison, which identifies networks, contexts, and co-variations as three causes of similarity. Following this framework turns Galton's problem into an asset and allows understanding three different processes that contribute to similarity or difference between ethnographic observations.

Acknowledgement

I presented part this paper at the MPI for Social Anthropology (Halle) in 2012 and am thankful for the invitation and the discussion. Julia Pauli and Michael Bollig have largely influence my way of thinking about comparison and I am thankful for the discussions and their suggestions. Lena Borlinghaus, the editors of this volume and one anonymous reviewer provided valuable comments to the manuscript that largely helped to improve its quality.

References

- Abu-Lughod, Lila 1991: Writing Against Culture. In: Richard G. Fox (eds.), *Recapturing Anthropology*. Santa Fe: School of American Research Press, pp. 137–162.
- Abu-Lughod, Lila 1993: *Writing Women's Worlds*. Berkeley: University of California Press.
- Barth, Frederik 1969: *Ethnic Groups and Boundaries. The Social Organization of Culture Difference*. Little, Brown Series in Anthropology. Boston: Little.
- Benedict, Ruth 1934: *Patterns of Culture*. Boston: Houghton Mifflin Company.
- Boas, Franz 1896: The Limitations of the Comparative Method of Anthropology. *Science* 4:901–908.
- Boas, Franz 1910: Die Resultate der Jesup-Expedition. In: F. Heger (eds.), *Verhandlungen des XVI. Internationalen Amerikanisten-Kongresses*, vol. 1. Wien, Leipzig: A. Hartleben's Verlag, pp. 3–18.
- Boas, Franz 1964 [1888]: *The Central Eskimo*. Lincoln: University of Nebraska Press.
- Bollig, Michael 2012: Interkulturelle Vergleichsverfahren. In: Bettina Beer and Hans Fischer (eds.), *Ethnologie. Einführung und Überblick*, 7. edition, Berlin: Reimer, pp. 445–466.
- Boster, James S. 1986: Exchange of Varieties and Information Between Aguaruna Manioc Cultivators. *American Anthropologist* 88(2):428–436.
- Bourdieu, Pierre 1977: *Outline of a Theory of Practice*. Cambridge: Cambridge University Press.
- Brumann, Christoph 1999: Writing for Culture: Why a Successful Concept Should Not Be Discarded. *Current Anthropology* 40:S1–S27.
- Burton, Michael L; White, Douglas R. 1991: Regional Comparisons, Replications, and Historical Network Analysis. *Cross-Cultural Research* 25:55–78.

- Clifford, James; Marcus, George E. (eds.) 1986: *Writing Culture*. Berkeley: University of California Press.
- Comaroff, Jean. L.; Comaroff, John 2009: *Ethnicity, Inc.* Chicago: University of Chicago Press.
- Conrad, Sebastian; Randeria, Shalini; Sutterlüty, Beate 2002: *Jenseits des Eurozentrismus: Postkoloniale Perspektiven in den Geschichts- und Kulturwissenschaften*. Frankfurt am Main, New York: Campus.
- De Munck, Victor 2000: Introduction: Units for Describing and Analyzing Culture and Society. *Ethnology* 39:279–292.
- De Munck, Victor; Korotayev, Andrey. 2000: Cultural Units in Cross-Cultural Research. *Ethnology* 39:335–348.
- Dow, Malcolm M.; Burton, Michael L.; White, Douglas. R.; Reitz, K. P. 1984: Galton's Problem as Network Autocorrelation. *American Ethnologist* 11:754–770.
- Ember, Carol R.; Ember, Melvin 1998: Cross-Cultural Research. In: H. R. Bernard (eds.), *Handbook of Methods in Anthropology*. London, New Delhi: Sage Publications, Alta Mira Press, pp. 561–600.
- Ember, Melvin; Ember, Carol R. 2000: Testing Theory and Why the “Units of Analysis” Problem Is Not a Problem. *Ethnology* 39:349–363.
- Ember, Carol R.; Ember, Melvin 2010: *Cultural Anthropology*. Upper Saddle River, NJ: Prentice Hall PTR.
- Eriksen, Thomas Hylland 2010: *Small Places, Large Issues: an Introduction to Social and Cultural Anthropology*, 3rd edition. *Anthropology, Culture and Society*. London: Pluto.
- Espagne, Michael 1999: *Les Transferts Culturels Franco-allemands*, 1re éd. edition. *Perspectives Germaniques*. Paris: Presses Universitaires de France.
- Fischer, Edward F. 2001: *Cultural Logics and Global Economies: Maya Identity in Thought and Practice*. Austin, Tex.: University of Texas Press.
- Fox, Robert G.; Gingrich, Andreas 2002: *Anthropology, by Comparison*. Fox: Taylor & Francis.
- Garro, Linda C. 2000: Cultural Meaning, Explanations of Illness, and the Development of Comparative Frameworks. *Ethnology* 39:305–334.
- Geertz, Clifford 1973: *The Interpretation of Cultures: Selected Essays*. New York: Basic Books.
- Gluckman, Max 1955: *The Judicial Process Among the Barotse of Northern Rhodesia*. Manchester: Manchester University Press.
- Haviland, William; Prins, Harald; McBride, Bunny; Walrath, Dana 2010: *Cultural Anthropology: The Human Challenge*. Cengage Learning.
- Henrich, Joseph P. 2004: *Foundations of Human Sociality: Economic Experiments and Ethnographic Evidence from Fifteen Small-scale Societies*. Oxford: Oxford University Press.
- Heady, Patrick; Schweitzer, Peter P. (eds.) 2010: *Family, Kinship and State in Contemporary Europe: Volume 2*. Vol. 2. Frankfurt am Main, New York: Campus.
- Herskovits, Melville J. 1940: *The Economic Life of Primitive Peoples*. New York: A. A. Knopf.
- Hirsch, Jennifer S. 2009: *The Secret: Love, Marriage, and HIV*. Nashville: Vanderbilt University Press.
- Jahn, Detlef 2006: Globalization as ‘Galton’s Problem’: The Missing Link in the Analysis of Diffusion Patterns in Welfare State Development. *International Organization* 60:401–431.
- Korotayev, Andrey; de Munck, Victor 2003: “Galton’s Asser” and “Flower’s Problem”: Cultural Networks and Cultural Units in Cross-Cultural Research: (Or, Male Genital Mutilations and Polygyny in Cross-Cultural Perspective). *American Anthropologist* 105:353–358.
- Kottak, Conrad 2010: *Cultural Anthropology: Appreciating Cultural Diversity*. New York: McGraw-Hill Education.
- Kuper, Adam 1999: *Culture: The Anthropologists’ Account*. Cambridge: Harvard University Press.
- Lowie, Robert H. 1946: Evolution in Cultural Anthropology: A Reply to Leslie White. *American Anthropologist* 48:223–233.
- Mauss, Marcel 1925: *The Gift: Forms and Functions of Exchange in Archaic Societies*. London: Routledge.

- Medin, Douglas; Ross, Norbert O.; Cox, D. 2006: *Culture and Resource Conflict: Why Meanings Matter*. New York: Russell Sage Foundation.
- Moore, Sally 2000 [1978]: Law as Process. An Anthropological Approach. Münster: Lit.
- Moore, Sally 2005: Comparisons: Possible and Impossible. *Annual Review of Anthropology*: 34:1–11.
- Murdock, George P. 1953: The Processing of Anthropological Materials. *Anthropology Today*.
- Murdock, George P.; White, Douglas R. 1969: Standard Cross-Cultural Sample. *Ethnology* 9:329–369.
- Nader, Laura 1994: Comparative Consciousness. In: R. Borofsky (eds.), *Assessing Cultural Anthropology*. New York: McGraw-Hill, pp. 84–96.
- Naroll, Raoul 1961: Two Solutions to Galton's Problem. *Philosophy of Science* 28:15–39.
- Peoples, James G.; Bailey, Garrick A. 2012: *Humanity: an Introduction to Cultural Anthropology*, 9th edition. Belmont, CA: Wadsworth, Cengage Learning.
- Pryor, Frederic L. 1976: The Diffusion Possibility Method: A More General and Simpler Solution to Galton's Problem. *American Ethnologist* 3:731–749.
- Radhakrishnan, R. 2009: Why Compare? *New Literary History* 40:453–471.
- Romney, Kimball A.; Weller, Susan C.; Batchelder, William H. 1986: Culture as Consensus: A Theory of Culture and Informant Accuracy. *American Anthropologist* 88:313–338.
- Schnegg, Michael (2015): Epistemology: The Nature and Validation of Anthropological Knowledge. In: H. R. Bernard and C. Gravlee (eds.), *Handbook of Methods in Cultural Anthropology*. Walnut Creek, Calif: Alta Mira Press, pp. 21–53.
- Schneider, David M. 1976: The Meaning of Incest. *The Journal of The Polynesian Society* 85:149–169.
- Schneider, David M. 1984: *A Critique of the Study of Kinship*. Ann Arbor: University of Michigan Press.
- Schneider, David M. 2004: What is Kinship All About? In: R. J. Parkin and L. Stone (eds.), *Kinship and Family: an Anthropological Reader*. Oxford: Blackwell, pp. 257–276.
- Schweizer, Thomas 1978: *Methodenprobleme des Interkulturellen Vergleichs. Probleme, Lösungsversuche, exemplarische Anwendung*. Vol. 6. *Kölner Ethnologische Mitteilungen*. Köln, Wien: Böhlau Verlag.
- Schweizer, Thomas. 1999: Wozu interkultureller Vergleich? In: W. Kokot (eds.), *Wozu Ethnologie?* Berlin: Reimer, pp. 91–123.
- Sen, Amartya 2006: *Identity and Violence: The Illusion of Destiny*. New York: Norton Company.
- Sewell, William H. 1992: A Theory of Structure: Duality, Agency, and Transformation. *The American Journal of Sociology* 98:1–29.
- Simmel, Georg 1908: *Soziologie: Untersuchungen über die Formen der Vergesellschaftung*. Leipzig: Duncker & Humblot.
- Friedman, Susan Stanford 2011: Why Not Compare? *PMLA. Journal of the Modern Language Association of America* 126:753–762.
- Strauss, David J.; Orans, M. 1975: Mighty Sifts: A Critical Appraisal of Solutions to Galton's Problem and a Partial Solution. *Current Anthropology* 16:573–594.
- Tylor, Edward B. 1889: On a Method of Investigating the Development of Institutions; Applied to Laws of Marriage and Descent. *The Journal of the Anthropological Institute of Great Britain and Ireland* 18:245–272.
- Weller, Susan C. 2007: Cultural Consensus Theory: Applications and Frequently Asked Questions. *Field Methods* 19:339–368.
- Whiting, Beatrice B.; Whiting, John W. 1975: *Children of Six Cultures: a Psycho-cultural Analysis*. Cambridge, Mass., London: Harvard University Press.
- Whiting, John 2006: *Culture and Human Development: The Selected Papers of John Whiting*. Cambridge: Cambridge University Press.
- Wolf, Eric R. 1982: *Europe and the People Without History*. Berkeley: University of California Press.
- Wolf, Eric R. 1999: *Envisioning Power: Ideologies of Dominance and Crisis*. Berkeley: University of California Press.

Copyright of Zeitschrift für Ethnologie is the property of Dietrich Reimer Verlag GMBH and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.