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Title: **An Empirical Assessment of Weber's "Objectivity of Social Science Knowledge"**

Author: Anthony Oberschall, University of North Carolina, Chapel Hill
tonob@email.unc.edu

My first encounter with Max Weber occurred after I entered graduate school at Columbia in 1958. My mother, who had a master's degree in medieval history from the University of Geneva, gave me the two volume *Wirtschaft und Gesellschaft* (1956) as a Christmas present. I promptly read them from cover to cover, and made notes in the margin which I can still read, and which I periodically revisit when I look up *WuG* texts. Reading Weber got me thinking on many political and cultural topics. I myself had a good education in the classics (Latin and Greek) and in European history, though nothing like Weber's. Still, I understood and valued his use of the comparative method and his detailed references to ancient and medieval European history. Since I started my academic career some seventy decades after Weber, at a time when the entire world was open to U.S. social scientists, I chose to seize the opportunity for field work in foreign lands, rather than only library research , which was Weber's only choice. My chapter explains how these overseas experiences bear on my assessment of Weber's methodology for the social sciences, and why I believe his contribution has been lasting.

Weber's methodology

Objectivity of social science knowledge has vocal critics. On the conservative right it is claimed that Western values like tolerance and free inquiry are unique to Western civilization, as are analytic and probing rationality. Those steeped in non-Western cultures acquire different values and learn a different mode of rationality, and lack the capacity for understanding Western culture. On the political left, muticulturalists, post-modernists and deconstructionists claim that values and knowledge are a product of a strategic contention for power between rivals . Facts, truth, discourse, and interpretation are valid only for particular local consensus coalitions. An objective method and standard for truth value in social science, such as Weber sought to establish, is a misguided intellectual enterprise. Boudon (1995) critiques such viewpoints from a philosophic standpoint. I offer an empirical assessment of these claims and of Weber's method for achieving objective knowledge in the cultural sciences. My conclusion will be that Weber's methodological writings are a robust and valid argument for truth value in the social sciences, which, still today, is a compelling answer to the deniers of objectivity.

Weber's methodological essays were written for historians and social scientists, not for philosophers. Weber was an outstanding, practicing comparative historian and social scientist. His reach spanned all the cultural sciences; today we would term that multidisciplinary. His theoretical inclination was tempered by commitment to empirical work. In *Wirtschaft und Gesellschaft* (*WuG*), the sections devoted to basic concepts and categories of social science are filled with historical and contemporary illustrations. For

instance, the section on group relations/solidarity based on language, culture, and ethnicity [ethnische Gemeinschaftsbeziehungen] discusses how the following people and groups view their identities, loyalty and state affiliation: Swiss, Belgians, Alsatians, Baltic Germans, Prussians, Poles in Upper Silesia, Serbs and Croats, French Canadians, Afro-Americans, with some mention of Luxembourg and Lichtenstein. That is vintage Weber. He participated in several social surveys, engaged in field work in a textile factory for a whole summer in preparation for a Verein fur Sozialpolitik collaborative research on industrial labor, and sought, unsucessfully to be sure, to found an institute for social research (Oberschall, 1965) In this connection, he told the students in his well-known address "Science as a Vocation"(Gerth and Mills 1958, p.135): "no sociologist…should think himself, too good, even in his old age, to make tens of thousands of quite trivial computations in his head, and perhaps for months at a time."

Weber's methodology dealt not with the techniques of research such as sampling and statistical analysis but with establishing the truth value of explanations of human actions and institutions using "*verstehen*" (translated in English as "understanding"). *Verstehen* is man's attempt and capacity for making sense of his own and other humans' actions (choices, beliefs, values, moral prescriptions, motivations, goals, intentions, dispositions, emotions) by introspection and social monitoring i.e. observing the reaction of other humans to one's own and their own actions. This mode of establishing truth value is referred to as "interpretative," and Weber referred to interpretative social science as "*verstehende Soziologie*."(1)

Verstehen

The centrality of *verstehen* in Weber's methodology justifies his frequently misunderstood methodological individualism (Weber, 1956, *Essays* p.110): "verstehen is at bottom the reason that "*verstehende Soziologie*" [interpretative sociology] views the concept of individual action as its fundamental building bloc, as its atom… concepts like state, association, feudalism and similar concepts are categories for specific individual interactions and…have to be reduced [analytically] to the actions of individual persons in these institutions." He warns about (*WuG*, vol.1 p.9) "the great misunderstanding that an "individualistic" method implies valuing "individualism" over social values, and the mistaken notion that the inevitably rationalist character of concept formation implies that rational motives predominate in human action." (2)

An interpretative method can be challenged on "objectivity" since it is based on mental operations and personal knowledge that are "subjective," thus variable from person to person.(3) Yet Weber set high standards for social science truth value: "scientific truth can only be that which is valid for all (Weber 1956, p.227 hereafter *Essays*)." Just because cultural knowledge [Kulturwissenschaftliche Erkenntnis] is linked to subjective assumptions, it does not follow that the researches and findings in the cultural sciences "are valid for one but not for the other." He claimed intersubjectivity for his methodology, or as he put it "One does not have to be Caesar for understanding Caesar, or else all history writing is meaningless" (*Essays*, 98). He claimed transcultural truth value when he repeatedly writes that a valid social science should be recognized as true "even by the

Chinese" (*Essays*, p.194), Weber's personification of conventional and rigid way of thinking different from European modes of inquiry.

Weber concedes that establishing truth value is more difficult in the cultural sciences than in the natural sciences. Both establish empirical regularities whose "lawfulness" has to be explained with a causal mechanism. Since human action is not impersonal like nature, only social science introduces cognitive and dispositional mechanisms into causation, and these mental phenomena [geistige Vorgange] have to explained introspectively [nacherlebend zu verstehen]..

How does a *verstehen* methodology for "mental phenomena" achieve intersubjective and transcultural truth value? In the physical sciences, there are clear definitions of basic concepts and uniformity in measurement, an experimental method for establishing causation, replication to remove subjectivity (personal attributes of the scientists, differences in skill, fame seeking, and other subjective variables). These operations make science public and valid. Weber describes them to students in "Science as a Vocation" (Gerth and Mills 1958, pp.141-143). It makes cumulation of knowledge possible. Measurement can be made more precise; the causal mechanism can be refined using the comparative method to explain more variation in the observations and experimental findings; replication is made under a wider range of initial conditions.

The ideal type

In *WuG* and *Essays* Weber creates a similar logic of inquiry for the cultural sciences. He starts with a set of precise concepts, categories, and classifications, e.g. types of authority, starting with and then building on the elementary concept of "human action." Concept formation ranges from the genetic type of the German historical school for unique events and institutions (e.g. European capitalism), to the generic type of the Austrian school for repetitive actions (e.g. economic exchange in markets). Weber takes a further step with the concept of "ideal type", a key term in his methodology "which refers to the construction of certain elements of reality into a logically precise conception" (Gerth and Mills, 1958, p. 59). It is an abstraction from the bewildering variety of concrete instances, neither hypothesis, nor description, nor statistical average, but rather a unified mental construct [einheitliches Gedankenbild, also, gedankliche Gestalt] that links several elementary concepts into a cultural representation of action, institution and process (*Essays*, pp.234-236). For instance, if the elementary concept "exchange" is combined with money economy, free competition, and means-ends rationality for choice, one obtains the theory of choice in the Austrian school of political economy as an ideal type.

Weber's concept formation is value free. Market exchange is an ideal type and makes no claim to moral superiority over other forms of economic exchange. Nor is there a rational bias in concept formation. The principles of market exchange are derived from assuming diminishing marginal utility and rationality of buyers and sellers. Yet individual dispositions and capacities need not adhere to these assumptions. Those who consistently ignore the laws of supply and demand in market exchange will be driven out

of business, and those who conform to market pricing by imitation of competitors or by intuition rather than rational calculation will compete successfully.

Applying an ideal type is only the start of an explanation. In ancient Rome , Weber notes, economic exchange had the same properties as in the contemporary world, e.g. price determined by supply and demand and not the personal attributes of buyers and sellers, yet some things that were bought and sold, like slaves and taxfarming, are no longer so, whereas intellectual property rights did not exist though they are marketable today. The cultural scientist seeks to explain how from modest beginnings market exchange grew into capitalism and why and how marketable commodities are not the same. That necessitates the concrete historical knowledge produced by the historical school. But one has to have a clear understanding for what exchange and its associated concepts like market exchange are, as the Austrian school views them. Combining the two in the ideal type solves the concept formation issue in the cultural sciences, and lays the groundwork for explanation.

How are ideal types used in causal explanation of cultural change? A typical Weberian causal sequence finds that a cultural configuration (an ideal type) is changed into another one with greater opportunities for social change (a second ideal type) under the impact of a religious belief system (a third ideal type). In an example Weber writes that kinship, tribal, and village neighbors tend to conform to an in-group morality of generalized reciprocity but transact with outsiders using instrumental, short term, self-interest calculations. How is the narrow circle for in-group morality breached to encompass larger populations recruited from out-groups? Prophecies of salvation in religious movements attract adherents to a charismatic leader from diverse groups and backgrounds, and to his adherents he preaches a religious ethic of brotherliness modeled on in-group morality. In this religious community, the affluent are obligated to give alms to the poor, provide loans free of the threat of enslavement for debts, support the needy with charitable foundations, and the like: “the religiosity of the congregation transferred this ancient economic ethic of neighborliness to the relations among the brethren of the faith.” (Gerth and Mills 1958, p.329) Thus private motivations for religious salvation among adherents are channeled by a religious entrepreneur to mold an expanded community of the faithful. Its cultural consequences, unintended by the converts, is a moral code of reciprocity and impersonal trust binding larger populations of non-kin and non-neighbors. A similar process in a secular era is initiated by political leaders and intellectuals on behalf of political movements and state building. Following Weber, much social science has gone into elaborating processes of group formation and collective action based on the social construction of categories, boundaries, identities and solidarities.

The cultural scientist’s work is still not finished. A process formulated as an ideal type has to be tested against real world data and alternative explanations. Truth value is not based on guesses, uninformed opinion, and idiosyncratic attributes, but on knowledge. Although it is true that we don’t have to be Caesar to understand Caesar, we have to know a great deal about Roman history, military organization, the state, the ruling elite (the Senate), etc. before we can understand him.

Discovery and Proof

Contemporary methodology makes a useful distinction between the logic of discovery, when subjective dimensions of social inquiry are prominent, and the logic of proof when objective criteria for truth value transcend the subjective dimension. In discovery, the values of the social scientist direct his choice of topic, his skills influence his choice of subject matter, and his personal experiences inspire his hypotheses. During proof, however, the truth value of observations and hypotheses, the logic of the argument, and the validity of inferences are opened to the scrutiny of the "invisible college" of scholars, as in the natural sciences they are tested by replication. For Weber, "verstehen" bridged the gap between the logic of discovery and of proof .The social scientist formulates hypotheses and explanations subjectively, and then evaluates their truth value with "verstehen". Since Weber, there have been important advances on studying attitudes, beliefs, intentions and dispositions with objective methods, such as survey research. Their use narrows, but does not eliminate the scope of "verstehen" in social science. It is interesting that when Weber developed plans for a large study of German industrial workers, he did not think it was possible to measure attitudes, beliefs and motivations in face to face interviews with a standardized questionnaire, or in a self-administered questionnaire. When a self educated worker, Adolf Levenstein, actually did exactly that for several thousand workers and was willing to share his findings, Weber was quite enthusiastic about the results and advised Levenstein on how to analyze the results (Oberschall, 1965).

Thus Weber has four requirements of method for claiming objectivity in the cultural sciences and achieving truth value: 1. value free concept formation based on methodological individualism and a precise vocabulary 2. ideal types 3. *verstehen* based on introspection informed and disciplined by mastery of the subject matter 4. systematic ruling out alternative hypotheses and explanations. Is that a strong enough claim to assure intersubjective and transcultural knowledge?

My contribution to the question is to assess Weber's method and its claims to truth value in an empirical manner, and not with philosophic argument. I will do in three ways. First, there are empirical studies on the transcultural reach of Weber's ideal types. Second, my transcultural professional experiences and observations from living and lecturing and researching in East and Central Africa (2 ½ years), China (1 year), Hungary (1 year), France (1 year), and shorter spells in other places provided me with insights about *verstehen* and objectivity. Third, I have studied the first encounters between European explorers and indigeneous people, especially in the 18th century voyages of discovery in the South Pacific, and they tell an interesting story about transcultural understanding and objectivity in the cultural sciences.

An empirical assessment of the transcultural reach of ideal types

Weber stated that the ideal type market exchange modeled by economists applied to Roman market exchange, which he had studied. There are empirical studies of market

exchange in non-Western countries. The neo-classical economist Gary Becker in 1960 told me about a student of his who had tested key assumptions of market exchange in Malawi and Eastern Zambia, then called Nyasaland and Northern Rhodesia (Dean 1962). Dean had conducted a series of randomized experiment based on hundreds of economic transactions in market places on whether or not prices varied with the attributes of buyers and sellers, such as age, gender, tribe/language. These African marketplaces turned out to be similar to markets elsewhere: supply and demand determined price, not the attributes of the transactors.

Twelve years later I was in some of the same marketplaces researching small African businesses which had sprung up in the intervening decade following independence. I found that success had no correlation with tribe/language, gender and other ascribed characteristics (Beveridge and Oberschall 1979). The strongest correlation was with innovation, precisely what the economist Schumpeter had emphasized in his analysis of capitalism. Schumpeter described innovative entrepreneurs in nineteenth century small town Austria, and I found parallel instances in small town twentieth century Zambia. Market exchange as defined by Weber in his ideal type had demonstrated its truth value as far as I was concerned.

In the 1980s and 1990s I studied the change from collective farms to privatized agriculture in China and in Hungary, and read the research on these countries and others undergoing similar change (Oberschall and Hanto 2002). On the whole, all researchers found similar problems in collective farming: lack of incentives and free riding, under utilization of labor, politically motivated capital investment and pricing policies, were the causes of failure, as predicted by neo-classical and transaction cost economics. There were huge variations in the ratio of land per household, crops grown and farm animals raised, irrigation, farm machinery, marketing opportunities, literacy, standard of life, peasant traditions, etc. from country to country (and regions within the same country). Nevertheless abstract models with a few pivotal variables describing economic organization, what Weber referred to as ideal types, were suitable for an understanding of failures and occasional successes . In Hungary I interviewed collective farm managers on their insider assessment of success and failure, and by and large their analysis matched that of the academic experts. In fact, they had over the years introduced market incentives and rational pricing to the limit of what was politically allowed, but the blending of socialist and capitalist economic organization became victim of contradictions. The ideal type had both transcultural truth value and intersubjective validity in as much researchers and farm managers fully understood one another, despite the act that some managers were personally and ideologically committed to socialism whereas others could not wait for its demise. The usefulness of Weber's ideal types was confirmed during my field work.

My experiences with transcultural understanding

To Weber's Chinese test for an objective social science, i.e. even the Chinese have to understand it and accept it as valid, I can literally answer "Yes, they do." During my Fulbright year in 1985 at the Foreign Studies University in Beijing I taught some thirty

Chinese graduate students the contemporary version of Weber's theory of action (called rational choice and the new institutional economics). They thrived on it. All had been taught a Marxist/Leninist/Maoist mode of social science, which by the 1980's was simply a ritualistic formula that had to memorized for passing entrance examinations (there was one correct answer to every question) and could thereafter be ignored and was. The reason I did not assign from Weber's own writings is simple. Although his formulation of many fundamental intellectual questions and his methodology of inquiry are sound and useful, his information base of late nineteenth century scholarship has been improved upon, and some of his causal explanations have since been found incomplete and unsatisfactory. Thus on the issue of the uniqueness of Western rationalism, one would assign Eric Jones, David Landes and Douglass North rather than the Protestant ethic and the General Economic History; on Chinese Confucianism and socioeconomic change one would assign Ezra Vogel; on the political economy of capitalism, Oliver Williamson; on the theory of action, Mancur Olson and James Coleman, etc. to name but a few obvious choices. Many prominent topics in today's world, such as democracy, human rights, nationalism and multinational states, revolution and insurgencies, Weber touched upon only briefly. But there is nothing unusual or surprising about it. Weber himself expected social change and scholarship to supersede his work.

For my Chinese students, Weberian social science filled the vacuum for making sense of the social and cultural world . They wrote little essays applying newly learned models to familiar experiences, e.g. why no one took the initiative to break up a dangerous icy patch just outside the university back gate through which hundreds passed and slipped throughout January and which Olson's free rider dilemma fitted perfectly. Similarly the Congolese students in Lumumbashi in 1982 and the Hungarians in Budapest in 1990 applied these models to such topics as corruption in authoritarian regimes, with which they were familiar.

Do "outsider" accounts of indigeneous people, like Tocqueville's of the Americans, possess truth value to the subjects themselves? In my experience they do. When I did fieldwork in Luapula province in 1971 I made a courtesy call to the paramount Lunda chief to ask his permission for research among his people (which I did not actually need but was a sign of respect) and I asked him about a British anthropologist's (Cunnison 1959) account of the Lunda written about a decade earlier. The chief said he remembered Cunnison, got a copy of Cunnison's book out of his library, volunteered that Cunnison had "understood" them well, and that the book was valuable because the Lunda way of life was changing and that people tended to forget the customs of earlier generations.(4)

My most foreign experience was living and working in communist China, and thus also the greatest challenge for understanding how their system worked and the mind set and behavior of people. I developed four hypothetical models – if you wish, four Weberian ideal types – for making sense of China and the Chinese: 1. Is what we observe linked to the legacy of three thousand years of a distinct Chinese culture? 2. Is it because China is a communist system sharing much in common with Soviet and other communist countries? 3. Is it because China is a densely populated, underdeveloped country with demand exceeding supply for just about every good and service? 4. Is it because so many urban

Chinese are recent or first generation migrants from a predominantly peasant society that shares much in common with other peasant societies? The four models served me well. I kept checking my understanding of China with my Chinese students and the specialists' writings, and revised and enriched my understanding of China. It was an application of the Weberian interpretive method for valid cross cultural knowledge.

During my year in China, Ssince I was not a China expert and did not speak Chinese, nor read Chinese characters, communication beyond my English speaking students and American studies colleagues was at times roundabout but not insurmountable for meaningful understanding. When I gave a talk to in Xian about U.S. culture and society, at one point I could tell the audience became puzzled. I had a brief tete-a-tete with my interpreter. It turned out that "individualism" has no Chinese equivalent , and he used the Chinese word for selfishness, thus their astonishment that what I positively valued came across as a negative to them. But I explained the difference between selfishness and individualism from my vantage point, and from the questions at the end I could tell that some at least had understood my meanings. Another concept , "privacy," which the Chinese translated as "secretiveness," had to be explicated by analysis and example on an other occasion when I talked about a civic culture. By such explication meanings can be conveyed across cultures.

First Encounters between Europeans and Pacific Islanders in the Eighteenth Century

My research on cooperation and conflict in the state of nature started for the purpose of gaining insight and testing some hypotheses from the "evolution of cooperation" theory (Axelrod 1984). The theory models transactions in the absence of authority to enforce agreements and rules as a Prisoner's Dilemma and studies the conditions and strategies under which cooperation and conflict emerge. (5). I decided to find the closest historical approximation to the "state of nature" postulates of the theory, and chose European- non European encounters that were not motivated by conquest (which is a zero-sum game, not a PD).

Such encounters occurred frequently during the 16th to 18th centuries when Europeans undertook voyages of exploration and discovery, by sea and by land, in Asia, Africa and the Americas (Oberschall 2001). The record of these encounters is preserved in journals, naval logs, and diaries, the best of whom provide a day by day running account of events and transactions, e.g. canoes came to meet the ship anchored in the bay and the natives traded coconuts and other foodstuffs for bells, trinkets and nails.(6)

To give you a better idea of these encounters and the information recorded, I will summarize Captain Bougainville's (B) encounters with the Tahitians two weeks in April 1768 during the first French circumnavigation of the earth. B. arrived in Tahiti with two ships and 400 men after crossing the Pacific from South America, and in dire need of fresh food, water, timber and ship repair and putting sick crew on shore. He was the second European naval expedition to do so; a year earlier Capt. Wallis of the Royal Navy

had spent three weeks there; the following year Capt. Cook arrived on the first of three voyages for the purpose of making astronomical measurements during an eclipse.
As Wallis and all later Europeans found out, the Tahitians were on the whole friendly to strangers and eager to trade for iron objects, especially ship's nails, for which they offered food and sex, to the delight of the sailors. They also thieved and pilfered, which strained good relations and led to conflicts. B. wrote in his journal that "apart form theft, everything was friendly." I coded 21 transaction sequences over the two week period, mostly cooperation like trade, gift exchange, banqueting. When B. starts to build a fort and sick bay on shore, an apprehensive Tahitian chief successfully negotiates with B. an eighteen day length of stay using sign language, pointing to the sun, counting stones, pointing to the ship and out to the ocean. During a banquet, B.'s handgun is stolen by a clever thief, which he notices only after he is back on ship. B lets his host know and demands the handgun back; the next day the chief returns it together with gifts, which B. interprets as an act of justice. By that he means that the Tahitian chief acknowledged the moral wrong of the theft by one of his subjects and beyond restitution of the weapon, a further act of good will is appropriate for restoring cooperation. Although there is some pilfering at the fort and on shipboard, B. overlooks rather than retaliates, and instead posts more guards as a deterrent. Nevertheless one night a French guard shoots a native thief dead, and many Tahitians flee the seaside for the hills. At this time there is a storm and B. is busy keeping the ships from smashing against the reef. He finds out to his chagrin that three Tahitians were wounded and one more probably killed at the fort by the guards during the storm, and notices that more islanders are avoiding the French. B. believes the guards exceeded their orders and that the Tahitians may be preparing for war. He decides to do an "act of justice" for restoring cooperation. He puts four sailors into chains in a public display of punishment observed by the chiefs (four, because there had been injuries to four islanders) and distributes gifts to the chiefs. It works. Trade and cooperation are resumed until his departure three days later.

Europeans, not just Bougainville and his men, and the Tahitians managed to cooperate by and large, absent a shared language and despite some misconceptions of one another. The findings from the content analysis of the records of these encounters leaves no doubt that Europeans and indigenous people shared many understandings. Laying down weapons on the ground, in contrast to brandishing them menacingly, was signaling friendship. Waving a palm frond meant peaceful intent. Holding up coconuts and other foodstuffs, or cloth, ship nails, axes etc. meant trade. Fresh water and fish in the bay were free goods, but to cut a tree near a village the Europeans asked permission and paid compensation. Acts of war were different from individual aggression and crime. Justice required proportionality of punishment to offense, even though the mode of punishment differed. Both sides understood hierarchy and rank signaled with clothing and adornment, and the deference of inferiors to superiors. Both understood supernatural beliefs and ritual and identified who were religious leaders. The Europeans understood the concept of taboo (e.g. when places or relationships were forbidden) and the Islanders understood the Europeans designating boundaries with sticks and stones around their encampment and Capt. Cook drawing a line in the sand on the beach. Shared ritual and ceremonies for cementing solidarity were well understood and enjoyed by both: banquets, group dancing, soldiers marching in formation and presenting arms, joint wrestling matches, fireworks

from naval cannons, music all around. Although the Europeans were not used to the permissive sexual mores of the unmarried Polynesian women, and delighted when they discovered it, they did not confuse the sex for nails trade with promiscuous free for all, or with prostitution; the tendency was for couples to form stable pairs (the girls were called sweethearts), and it was not uncommon for sailors to jump ship to stay on the island with their sweetheart. A shared understanding facilitated trade: it was voluntary, both parties were equal (each could make an offer, each refuse), it was a permanent transfer of possession, it was reciprocal (one gives, the other takes, and vice versa), price was set by bargaining, and some goods and services were not traded (Europeans didn't trade their weapons, married women didn't engage in the sex trade). Both sides understood that price responded to changing supply and demand. Hogs and sex fetched a higher price in ship nails as the islanders acquired more nails. Captain Cook sent food buying parties in small vessels to nearby islands and bays when he noticed that the supply was drying up at his anchorage and prices were rising.

Misunderstandings and conflict did take place. Most started with theft, especially of objects that were important for European survival like major ship repair and timber working tools, boats, and weapons, rather than the more common pilfering of hats, eating utensils, small tools, and the contents of pockets. The most common response of Europeans was to demand restitution from the chief who seemed to be in charge of the local people. .Failing that, they would seize boats and even take hostages in the expectation of restitution.

Was this a transcultural misunderstanding between Europeans and the islanders? In my view the deadly quarrel was inherent in the paradox of collective punishment when agency and responsibility are not clearly defined. When governments face anonymous insurgents and terrorists and the indigenous leaders can not or will not control and punish the offenders (French in Algeria, British in Northern Ireland, Israelis in the West Bank), they hold the entire collectivity responsible and resort to collective punishment. And frequently the strategy fails in apprehending the offenders and deterring further offenses, and leads instead to escalation of aggression. The paradox is inherent in collective punishment as a mode of conflict management, and is not contingent on a European/ non-European (or some other transcultural) distinction.The "first encounters" study demonstrated to me empirically the transcultural validity of *verstehen.* Not only did Europeans and Islanders communicate meanings successfully, but a social scientist 250 years later made sense of why and how they shared meanings.

Transcultural understanding: how isbeyond "verstehen" achieved?

In Karamoja, Northern Uganda, I happened to attend skits put on by boarding school students in 1966. I did not understand a word of what was said, but the story was plain enough. The two younger wives of an older husband were making fools of him behind his back while maintaining a façade of submission and compliance. It was very funny. I immediately thought of Moliere and Mozart's comedy of manners on gender relations, and on servants outsmarting their masters and mistresses, the domestic setting, the social criticism. In China in 1986 I was visiting a primary school and looked at children's

drawings fastened on a wall. One caught my attention: Mao, the Great Helmsman, standing on the top deck, steering a ship filled with passengers below on a stormy sea. The ship was the Communist Party and the passengers were the Chinese people. I recalled a drawing I had made as a seven year old in catechism class of the "Pope, the Great Helmsman," steering on the top deck a ship called the Church filled with passengers called Faithful Catholics through turbulent seas filled with sharks marked "deadly sins," just like Mao navigating his people across the perils of capitalism to the safe shore of socialism. Both stories and metaphors had the same symbolic structure. If one was familiar with either, one would recognize and understand the other. Transcultural understanding is conveyed with stories, metaphors and analogies, mapping the unfamiliar onto the familiar.

How was mutual understanding possible in theseearly encounters? Culture refers to a socially constructed, cognitive, normative and affective meaning system which creates an objective, shared reality for a people such that "they inhabit the world they imagine" (D'Andrade 1954 p.115). Culture is an information system encoded in human minds and their extensions: language, books, ritual, architecture, cooking recipes, flower gardens, conventions, norms, collective representations, beliefs, mathematical theorems, computer programs, sports, the Geneva Conventions. Its cognitive dimension consists of classifications like gender and descent, and conceptions about causality and time, what Durkheim referred to as collective representations. Alport(1958, p.19) wrote that "the human mind must think with the aid of categories. ..We cannot possibly avoid this process. Orderly living depends on it." Culture's moral dimensions are convictions about right and wrong, honorable and cowardly, and what is just and unjust, and these guide moral choices and value judgments. On the moral dimension, Fortes (1983, p.6) wrote as follows "The capacity and the need to have, to make, and to follow and to enforce rules are of cardinal importance for human social existence…for without rules there can be neither society nor culture." The emotional dimension of culture orients our likes and dislikes, attraction and fear, gratitude, pity and other affects.

Any information system is composed of symbolic elements that are selected, sorted, redirected, joined, processed and encoded according to a structure. Simon (1969) has demonstrated that perception, cognition and communication are not possible without structure. Without structure information is a random, meaningless sequence and jumble of sense perceptions , what Weber (Essays p.212) referred to as the "endless variety of sequential and coincidental, past and present, internal [mental]and external events". An ancient Chinese story says that "Before the beginning there was chaos. Without order men knew no peace and were no better than beasts. At last the Yellow Emperor ascended the throne and restored civility…always more feared than tigers or floods or spirits were the times of chaos, when kings were not kings, nor subjects, subjects; fathers were not fathers, nor wives, wives; brothers were not brothers, and friends were not friends…"(Lord 1981, p.1) Without structure, there is only chaos, anarchy, incomprehension.

Simon (1969), Dumont (1977), Leach (1976) and others have shown that the structure of information systems consists of hierarchy, symmetry, opposition, balance, repetition, and the like. In combination simple structures become complex structures. A Karamajong skit and a Moliere's comedy had the same structure, as did the domestic experience of the audience. The children's drawing of Mao and of the Pope, both Great Helsmen, have the same structure, "the ship of state," a symbol for societal authority. Duality is the simplest structure. In duality, opposites are complementary: right and left, male and female, good and evil, lord and peasant, "us" and "them," cause and effect, reward and punishment, sacred and secular. More complex structures are built from elementary relationships: virtue and vice may be joined to reward and punishment, and one has the germ for a cosmology.

The complementarity of right and left hand is analogous to that of male and female. No physical or social body can operate properly without both, but one has to be in charge of coordinating lest, as the saying goes, "the right hand does not know what the left hand is doing". Hierarchy added to duality solves the problem. The mind rules both hands, and the intellect tames the body's passions, just like Mao and the Pope maintain order with command. Cognitive structures are aligned to moral prescription with metaphor. A complex social unit such as a religious organization, is symbolized with military metaphors that convey order, power, success, and thus the Church Triumphant is conveyed through onward Christian soldiers, rock of ages, a mighty fortress is our God, Christ the Lord, the heavenly host. Douglas (1986) describes how the uncertain, unfamiliar and arbitrary, i.e. that which does not fit into structure, is mapped to the familiar and conventional by means of analogy and metaphor, and thus acquires meaning. Random events not comprehensible in terms of conventional notions of causality are given structure by socially constructed beliefs about luck and good fortune, witchcraft, divine intervention, and more recently the law of large numbers in the theory of probability, and are thus explained and become meaningful.

The acquisition of goods has structure. Bilateral exchange is symmetrical (both parties are equal, they can initiate, and refuse, a transaction), and reciprocal (consent by both). Add many buyers, and you get an auction. Add many sellers, and you get a market. Add repetition, and you get a market place. But if you have hierarchy and remove consent, goods acquisition becomes "robbery" and warfare. Transcultural understanding in eighteenth century encounters results from mapping other people's culture (authority, rank, property, exchange, justice) on structures familiar from one's own culture, i.e. hierarchy, opposition, duality, etc. However much variation exists in the details, both Europeans and Islanders are familiar with property, goods acquisition by exchange, theft and robbery as a coercive mode of property acquisition, the right to defend property against theft, the victim's right to demand justice against an offender. There may be disputes over the identity of the thief, the severity of the offense, the mode of punishment, but there is mutual understanding and agreement about what is legitimate and what is consensual goods acquisition and what is theft and robbery.

The structure of the human mind, an information systems of great complexity and subtlety, was called by the Greeks and Romans "rational faculty." The mental operation

that Weber designated *verstehen* consists of imposing such structure on cultural phenomena, and that is also what the historical actors themselves do. In the great debates among sixteenth century Spaniards on what degree of humanity to assign to Native Americans, those arguing for their full humanity pointed to similarity with human institutions and culture elsewhere: "there is a certain method in their affairs, for they have polities which are orderly arranged and they have definite marriage and magistrates and overlords, laws and workshops, and a system of exchange, all of which call for the use of reason; they also have a kind of religion." (Elliott, 1970 p.45). Based on these similarities, the Puritans and Quakers framed the Native Americans into their familiar classification for varieties of humankind derived from the Bible: they were descendants of one of the ten tribes of Israel that had been taken captive by the Assyrians (Bitterli, 1989, p.170). The Spanish philosophers and English colonists turned the question of transcultural understanding on its head: since we Europeans comprehend the natives, they must be human beings like us. If we didn't comprehend them, they would be inferior to us. The post-modernist reasons differently. We are both human beings and we both possess reason. We do not agree with one another on values and truth, therefore there cannot be an objective standard for values and truth and cultural understanding.

Are these structures universal? Not likely. We create categories for those who do not conform, be they called psychotic, autistic, mentally retarded, or "savages." In the encounters I studied, the Europeans occasionally ran into people with but a rudimentary technology and material level of living (as on the north coast of Australia and on Easter island) who did not seem to understand economic exchange, simply grabbing what the Europeans offered and not reciprocating. Mostly they fled and hid when strangers were sighted. In terms of the total range and volume of European encounters, they are but a small fraction of the record. Weber himself did not claim universal applicability for his method (he mentions young children who are incompletely socialized and psychotics who are deficiently socialized), but that does not detract from the Weberian method of establishing intersubjective and transcultural truth value in the cultural sciences.

Conclusion: what now remains of Weber's methodology?

Methodolgy consists of an assemblage of techniques, nowadays heavily weighted to the analysis of large quantitative data sets, and the logic of inquiry that Weber presented in his now hundred year old essay. The logic of inquiry concerns the truth value, or objectivity, of knowledge, and what Weber formulated with his four principles (value free concept formation combining genetic and generic concepts, ideal types, "verstehen", and the comparative method for testing inferences) is sound and justifies a universal social science. The denial by both the conservative skeptics and the post-modernists and deconstructionists of the Weberian conception and method in the cultural science is an empirical issue, not a logical one. In my experience, and those of many others, and in my historical and comparative researches, and those of many others including Weber, intersubjective and transcultural understanding is the rule rather than the exception. It results from hard work, study, research, discipline. It cannot be left to opinion, intuition and dilettantism. Truth value of facts and causation can be established on a valid,

shared, non-arbitrary standard for social inquiry. As in the natural sciences, new facts will be uncovered and some accepted facts will be shown to be mistaken. Some causal mechanisms will be exposed as spurious and new mechanisms discovered. Completely new intellectual puzzles and question about culture will be asked. Knowledge and understanding change, but not in an arbitrary manner. And they will keep changing because culture and institutions change, necessitating additional knowledge and understanding.

Endnotes

(1) *Verstehen* was widely practiced by the English philosophers and the Scottish Enlightenment thinkers who anchored it in the faculty of sympathy (we would now use the word "empathy") between humans, and who explicated it with the image of a mirror or looking glass. Hobbes in *Leviathan* (Part 1) writes that "whoever looketh into himself, and considereth what he doth, when he does think, opine, reason, hope fear, etc., and upon what grounds; he shall thereby read and know what are the thoughts and passions of all other men upon the like occasions," and Hume writes in *An Inquiry Concerning Human Understanding* that "the minds of men are mirrors to one another.."

(2) Individualism and rationality in concept formation and modeling explains emotional and irrational collective actions, like destructive crowd behavior and speculative crazes in the stock market (Oberschall ,1993, chapter 1). As Schelling (1978) has shown, the aggregate properties of collectivities derived from methodological individualism are not simply individual behavior magnified (e.g. war results from many aggressive individuals). To the contrary, the method can show why war occurs despite the fact that most people want peace. Rationality is defined from the point of view of the actor, not of the outside observer. Given their conception of human agency in the causality of natural events, it is not "irrational" for natives to perform rain rituals to hasten the onset of rain at the start of the rainy season. What would be irrational is for the ritual to be performed in the middle of the dry season when it never rains.

(3) Leach (1976, p.6) writes that "…the central puzzle is to determine how 'meaning' which is conveyed to the listener is the same as that which was intended by the originator."

(4) This was not a unique experience. In Lusaka I studied a Shona religious sect whose leader owned a copy of a book written by a nineteenth century missionary on the Shona and which the sect elders consulted on their traditions.

.(5) For instance, how did British and German soldiers facing each other across trenches in World War One manage to tacitly agree on local cease fires and maintain them for weeks against the explicit orders of their higher command? Much of the theory was elaborated using computer simulation and experiments with undergraduate subjects.

(6) Each transaction was characterized as cooperation C or non-cooperation D or avoidance A. Under C were sub-categories like trade, gift-giving, hosting ceremonies,

and other such actions; under D are theft, physical aggression, and war. I distinguished verbal from non-verbal symbolic signaling which were meant to influence actions, such as warnings, threats, peace gestures, and which side initiated a transaction sequence. I also distinguished individual action from agency action, such as an interpersonal dispute between a European and a non-European over a private matter from the actions of a guard protecting ship property as an agent of his superiors.

There is a huge literature on encounters in the age of discovery. It differs from my approach in as much I analyze entire transaction chains according to the properties of transactions in strategic interaction, whereas many historians and anthropologists select particular incidents that they believe are typical of the European mentality, i.e. what they reveal about European culture rather than the dynamic of transacting in the state of nature.

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