Qualitative Sociology Review
Volume IV, Issue 1 – April 2008

DOI: https://doi.org/10.18778/1733-8077.4.1.11

Lucija Mulej
Scientific Research Centre of the Slovenian Academy of Sciences and Arts, Slovenia

Construction of Scientific Facts – Why is Relativism Essential in Bypassing Incommensurable Gaps in Humanities. Case of Personal Involvement – Biased Scientific Facts

Abstract

This paper addresses the theory of knowledge in relativistic terms of Paul Feyerabend, stressing the importance of personal involvement in the research and theorizing. Since the topic is a constant and widely accepted premise the author is insisting that it has been actually ignored in the sociology and philosophy of science. It is apparent in discursive form, neglected in actual consequences for science in general. Defending the thesis of relativism had remained unacknowledged by the general scientific community. Biographies of mavericks and their struggle and exclusion from scientific community etc. had been constant in the history of science. Is science nowadays able to accept criticism and implement arguments of knowledge beyond the institutionalized standards?

Throughout this article we argue that personal involvement creates biased scientific facts; acknowledging and applying tacit knowledge we move beyond personal involvement and create appropriate interpretations of facts and phenomena under investigation, where we reconsider the construction of facts and personal beliefs, knowing that our fields of expertise are incommensurable.

Keywords

Comparative methods; Interdisciplinary research; Paradigm (gestalt) shift; Relativism; Incommensurability; Psychoanalysis; Interpretative gaps; Epistemology; Logical inconsistency; Logic

Incommensurability – Reality Gaps In The Case Of Human Affairs

The main divide between hard core (natural sciences) and soft (humanistic) science is the mode of thinking that results in a conundrum of outcomes and presumptions. Obviously, two researchers, investigating the same topic, should arrive at different conclusions, taking into consideration the specific paradigm one is subjugated to[i]. The facts that induce us to agree (Boudon 1997) are a foundation of the epistemological framework, in which we perceive and interpret, were explained in various manners: from the Greek philosophers to modern postmodernist classics. The discrepancy of interpretations, given by the subjects of investigation, is a constant, indispensable variable, yielding an affluent reservoir of realities, perceived

by a human mind. A contemporary example of interpretations, grounded in two opposite paradigms, is the dichotomy in sociology of science, the dichotomy between positivism vs. relativism[ii]. Here, the two studies of prostitution are presented as a show case of paradigm-grounding, e.g. Heyl (1977) vs. Pines and Silbert (1983). While the former studies prostitution (positivistic perspective) from the view-point of occupational and client - management skills (Heyl 1977), the latter (relativistic perspective) concentrates on how victims of incest are more likely to become prostitutes. This leads us to the question, which of the two studies is a sufficient analysis of the cause of prostitution? (Marvasti 2004) Certainly, there are multileveled causes, within theoretical frameworks presented as causes of milieus one is committed to. The question of which study is "true" or "real", irrelevant as these two approaches reflect different realities, e.g. two "truths", emerging from two different theoretical perspectives, with two different agendas, represents the show case of incommensurable core presumptions, creating primordial sets of theoretical suppositions and beliefs. As Bachelard says, the formation of scientific mind is a psychoanalytical fact of objective knowledge acquisition (Bachelard 2002).

Also, many arguments are convincing, even though their structure bears no resemblance to that of a line of reasoning which logic would regard as valid. Is validity of argumentation coherent to the logical recognition of facts and interpretations regarded as legitimate and valid? Not necessary. Surely people often have good reasons to believe in dubious or false ideas. As Boudon (and Bachelard) show, explicit line of argument is contaminated by hidden a priori notions: "For this reason, this process seems to be an essential theme in the sociology of knowledge. It suggests in fact that collective belief in weak, dubious or false ideas can sometimes become established simply because the ideas are legitimated by reasoning which there is no reason not to regard as valid" (Boudon 1997:XI). Also Polanyi implies that informed guesses, hunches and imaginings that are part of explanatory acts, are motivated by passions. Since there are many types of a priori statements (epistemological, linguistic, ontological type etc.), we shall focus on epistemological as well as ontological a priori, combined with Polanyi's idea of tacit knowledge, understood as knowledge, comprised of a range of conceptual and sensory information and images, that can be brought in an attempt to make sense of something, despite the fact that this something is senseless.

In this paper, psychoanalytical fact of objective knowledge acquisition is perceived from two standpoints: firstly, from ontological Lebenswelt reality (Husserl), with ready made pictures unquestioned in everyday life (black is black and white is white[iii], a cat is a cat, and a dog is a dog), where the focus of this paper is on second reality, which is constructed reality. Epistemological reality is constructed through the processes of science legitimization and creation of scientific community: social construction of reality has been investigated by sociological classics (Berger & Luckmann 1991) as well as anthropologists, philosophers and historians. Social sciences were legitimized through the methodological standards and regulations of physical science, where the aim is to uncover universal laws, e.g. causes and effects explanations for "human affairs", e.g. behaviour and characteristics that hold true across time and place. On the other side, relativism often reflects notions of constructionism and questions of how human interactions help to create[iv] social reality. Moreover, constructionists believe that as human beings we do not find or discover knowledge as much as we construct it. (Bachelard 2002; Hacking 1999; Dilley et all 1999; Feyerabend 1992)

Constructionism is an umbrella term, covering different specialized fields of paradigms, such as interpretive sociology, political science (symbolic interactionism,

interpretivism etc.) and anthropology in general. Constructionists are more interested in what goes into creating the social world and less in its causes (Marvasti 2004) Differences between these two approaches, sometimes profound, often subtle, derive from the epistemological division between form and substance. Relativism suggests that social "reality" is subjective, situational, culturally varied and ideologically biased, while objectivism (positivism) suggests the opposite. The difference between these two aspects is demonstrated (Table 1; Marvasti 2004:12) in the table below:

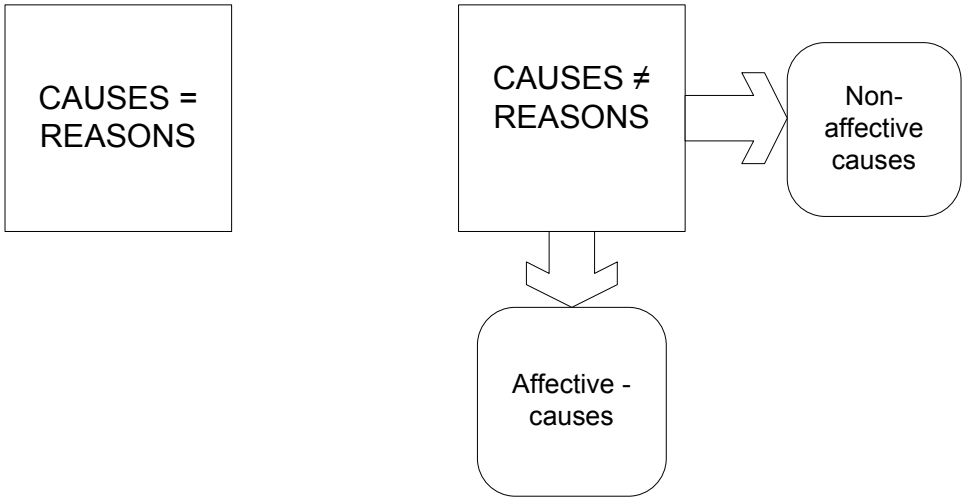
Table 1

	POSITIVISM	CONSTRUCTIONISM	COMMON THEMES
THEORETICAL STANCE ON SOCIAL REALITY	How can we use objective research methods to capture the essence of social reality?	How "reality" is socially constructed?	IMPORTANCE OF EMPIRICAL DATA
GOAL OF RESEARCH	What are universal laws that explain the causes of human behaviour?	How do situational and cultural variations shape "reality"?	PRODUCTION OF KNOWLEDGE
ENDURING QUESTION	How can we improve the standardized and neutral language used to report research findings?	What are the ideological and practical consequences of writing and research?	INTERNAL VARIATIONS AND LOGICAL INCONSISTENCES

With the objectivistic approach we neglect a number of important questions; namely, not just why (motives, social and psychological causes), but how (i.e. technicalities, options in different types of societies) does one become a prostitute for example? Do prostitutes believe that their actions are criminal, and moreover, is prostitution universally regarded as a criminal act (legality vs. legitimacy)? Consequently, we might ask, should wives, who use sex as a way of gaining financial leverage in a marriage, be defined as prostitutes?[v] As we can see, prostitution is a field that penetrates social morality and is a good example of how emotional distance would be difficult to obtain for any researcher and layman. The problem of stigmatization, social labelling and moral standpoint, reflecting a specific time, place or culture, will also create a bias that will colour the approach of any study. It can be said that "moral positions typically do not require empirical support" (Marvasti 2004:4) In fact, a strictly moral agenda requires constant rethinking of what we know. Constant rethinking of what we know is a domain of relativism as well as of constructionism. To scrutinize the problem of construction, interdisciplinary research and constant rethinking of what is known is an essential constituent of every sane science.

One group of thinkers, who refuse to admit that the reason for a belief can ever be the cause of that belief, are called the "strong programme" in sociology of science. One of the psychoanalytical facts of objective knowledge acquisition is a belief, created in a mind of an investigator. Belief as precedent to a conviction or a consequence of cognitive processes, suggests different types of models, e.g. modes of reflecting, feeling, interpreting and thinking, showing that the dynamic between the researcher and the subject investigated is entangled and intertwined. The cause of a "belief" can be either reasonable or affective, as Boudon suggests: "Causes are

factual and in contemporary human sciences we are witnessing the shift in explanation from reasonable causes to causes of another sort" (Boudon 1997:5) as **Figure 1**



Backed by the theory of "primitive mentality" at the colonial times of ethnocentrism and anthropological evolutionism, evolutionist thinkers assigned affective causes to cultures, designated as "primitive". A few decades later, adherents of cultural relativism showed that the rules of thinking are variable across societies. The contemporary approach of challenging things that lie below the surface is constructivist thinking, inherent to many reflexive disciplines such as anthropology, psychoanalysis, some branches of philosophy etc. (Marvasti 2004). Constructivists, instead of being bound by universal human laws would try and envisage the meaning and practical consequences of having sex for gain, describe the morality imbedded in different cultures, different times and space. In other words, they would seek hidden meanings, transparent in the lives and experiences of their subjects. Cultural relativism destroyed the idea of the universality of logic as we practice and demonstrate it – surely, the rules of thinking are variable between societies, as well as modes of thinking are variable between paradigms, where the awareness of incommensurability is highly represented. Constructionists try do de-compose and de-structure meanings, a priori statements and, primarily, hypocrisy, inherent to the institution of the intellect, e.g. science. The facts that in each analytical and methodological approach, there are variations and inconsistencies, yields the urge to continuous rethinking. Smelser (2003) argues the most fruitful approach is neither objectivistic nor relativistic, but should involve a systematic incorporation of contextual analysis[vi]. "It is demonstrated that in order to carry out such contextual analyses effectively, the researcher is impelled toward both an interdisciplinary approach and international collaboration" (Smelser 2003:643). In other words, three major presumptions are summarized (Table 2 and Table 3) in the logic of objectivism and relativism as follows (see Harré and Krausz 1996:6-23)

Table 2: VARIETIES OF OBJECTIVISM

UNIVERSALISM	OBJECTIVISM	FOUNDATIONALISM
Discursive variant: there are beliefs which hold in all contexts, at all times and for all persons	Discursive variant: there are beliefs which hold independently of the point of view, corpus of beliefs or conceptual scheme held to and employed by any particular person or society	Discursive variant: there is a common set of basic statements, not capable of further analyses, which serve in each context for each kind of enquiry for the assessment of all judgements of a relevant kind
Ontological variant: there are entities which exist for all persons	Ontological variant: there are entities which exist independently of the point of view, corpus of beliefs or conceptual scheme held to or employed by any particular person or society	Ontological variant: there is a common ontology or set of basic existents, incapable of further analysis, out of which all other existents are constructed

Table 3: VARIETIES OF RELATIVISM

BY TOPIC
SEMANTIC RELATIVISM: relativity of meaning to language; a word cannot be translated into another language without loss of meaning, and some words cannot be translated at all
ONTOLOGICAL RELATIVISM: relativity of existence to conceptual systems: for example electric fluids existed for Franklin but not for us; witches existed for Azande and not for us
MORAL RELATIVISM: relativity of moral worth to societies and epochs; sex before marriage was once held to be wrong but is not considered as such in the contemporary world

Bypassing the Gap – Logical Inconsistency (Why One Should/ Should Not Follow the Rules of Scientific Re-Thinking)

If we take a closer look at the idea of interdisciplinary approach, we can see it as a modern expression, addressing the themes such as post-modernity and its' almost Dadaist slogan "anything goes". Varieties of relativism are not addressing that kind of chaos created by the ideology of anything goes[vii]. In my opinion "anything goes" is more tuned to a deconstructed and creative type of reality *non bis in idem.*

Kuhn argues that within every scientific tradition called paradigm, there is a period of normal science, where progress is linear, logical and accumulative. This is the epoch of any specific scientific paradigm, the time of peace, mutual agreement and common shared values. It is the time of puzzle-solving[viii], ad-hoc adjustments and alternative-modelling of theories in an atmosphere, giving and sharing ideas within an unquestioned paradigm. At a certain point, in any given paradigm, there is a period where problems become unsolvable, data become unreliable and variances of

meanings, produced by our scientific tools, become incompatible. *A posteriori* hypotheses are constantly brought in and tend to outnumber the initial hypotheses being investigated. At this point, revolutionary science emerges where previously linear transcends into nonlinear, illogical and un-accumulative. If a paradigm is full of gaps one must find theoretical groundings in other branches of inquiry, e.g. taxonomies. Does constructing taxonomies not imply that we look at types of behaviour within types of contexts, and that the existence of this type can be investigated empirically for the frequency of occurrence? If so, then, this way of looking at the investigation activity, resembles positivism or at least its nomothetic ideal, law-like statements?.

This is not the case of constructivism. Incommensurability suggests we are facing a communication gap wherever we turn, even if we adopt an alternative taxonomy. For example, incommensurability in hard core science became obvious as a result of the introduction of the theory of relativity and echoed in sociology of science as the dichotomy positivism vs. relativism. In physics, the idea of Niels Bohr, suggesting *complementary of theories,* (quantum vs. wave theory) is an example. The main problem in "hard-science" is that comparisons are possible within their own field, but comparisons across disciplines are plagued by incommensurability, where data being compared are not comparable; hard science tends to omit the idea of social and cultural indicators, being brought into the equation (an exception being the so called 'personal equation in astronomy'). Indicators of this type seem unrealistic because the comparative contexts in which they are embedded are so different and taxonomically specific. This leads to a paradox in that equivalence of indices is best achieved by seeking different indicators for the same phenomenon in different settings, that is logical inconsistency, theoretically established by Feyerabend in his work *Against method* (1975).

This model of explanation shows incommensurability as a fact of comprehension gaps: logical gaps, linguistic gaps, epistemological gaps, ontological gaps, cosmological gaps and gaps between natural sciences and social sciences. Since the term logical inconsistency is interrelated with Feyerabends' theoretical anarchistic theory, embedded in the principle of proliferation, where positivism stems from Putnam's tenacity principle, which is based on the idea of theories being discarded and replaced when proven wrong, the proliferation principle advocates plurality of well supported arguments and methods that are not necessarily logical or linear. Feyerabend defends aesthetic criteria and intuitively generated assumptions that can through time gain general acceptance (for example Galileo in *Against method*). Our thesis is that acknowledgement of logical inconsistency, used to bypass the gaps between the rational and the irrational, implies the adoption of an attitude, which tries to deconstruct and decompose assumptions and personal biased opinions, scrutinizing every research, one is subjugated to. Surely, human potential in general as a major divide of incommensurability as a variable in research and theorizing, has been continuously neglected throughout the establishment of scientific venerable traditions. The fact is that people hold tightly to opinions and understandings and can barely change them, whether we are talking in the language of logical, linguistic, epistemological, ontological and cosmological gaps as well as gaps between natural sciences and social sciences.

Jacobs (2003) illustrates this point by using the argument put forward in Polanyi's investigation of Evans-Pritchard's *Witchcraft, Oracles and Magic among the Azande (1976).* As we have illustrated, Kuhn's shift from normal to revolutionary science happens with the end of the myth of science as logical, linear and accumulative; in his later writings (1977 and 1983) he tried to explain this transition

within terms of revised incommensurability which bears resemblance to Polanyi's work *Personal Knowledge* (1958)[ix]. Polanyi argues that different methodological rules determine each kind of research (not solely the cases of discovery), where human potential (we can know more than we can tell) is a major divide. But having understood the limitations of methods and theories, incorporated within the language of a given paradigm, one is facing taxonomically and idiosyncratically specified and inconsistent agendas (this also holds for what is being studied, for example the language of Papuans on Borneo. Not only tools (paradigms) but also the objects being studied can be seen as facing taxonomically and idiosyncratically specified and inconsistent agendas). Central to Michael Polanyi's thinking was the belief that creative acts (especially acts of discovery) derive from strong personal feelings and commitments, where he sought to bring into creative tension a concern with reasoned and critical forms of knowing, like for example tacit knowledge.

Furthermore, this logical gap signifies a point in time where cognitive change in science is disruptive and non-accumulative. Cognitive change in Kuhnian terms is the switch from normal to revolutionary science; cognitive change in ethnography is the divide between phonemic and phonetic, "emic" (researchers' culture) and "etic" (culture of research). The switch or rather the change of perspectives in the anthropological sense refereed to the ability to reflect on and constantly rethink of what we know and at the same time, to observe and participate. 'To use the metaphor of a painted portrait, contemporary ethnographers are very sensitive to how their use of colour and light will create a particular impression of their subject matter. Of course, many questions come up regarding this context. To expand the metaphor and imagine that you commission three artists to paint your portrait and each returns a different image. One seems to be realistic, another emphasizes your idiosyncratic qualities in an abstract style, and the third returns a satirized caricature that challenges your sense of identity. In judging these works, it is difficult to answer the question: which is the best reflection of who you really are? (Marvasti 2004:37). We can conclude that ethnographic portrayals of other cultures and their people raise similar questions.

There is a path that balances objectivistic requirements with constructionist awareness, where ethnography is as much about the practice of writing as the activity where observing and participating co-creates and constructs social life. Seeds of logical inconsistency can be found in Struan's (2003) interpretation of Polanyi's writings; Polanyi discusses differences within science, naturalism and various rival interpretations of nature (Polanyi 1996; Struan 2003:61). Rival interpretations of nature are embedded in *topoi* where belief is acquired by the process of language acquisition and cultural transmission. Historically, a term neglected and opposed by philosophy, tacit knowledge is indeed a sphere of logical inconsistency, based in intuition and irrational (non-rational?) thought. The act of choice between two incomparable taxonomic structured realities is demonstrated in the writings of Evans-Pritchard *Azande*. For example, witchcraft has its own logic and rules of thought, grounded in logic and coherence of its unique idiom (Evans-Pritchard 1976). Their beliefs function within the confines of their own idiom but face difficulties outside their taxonomically structured perception of reality - they have no other idiom to express their thoughts. The idiom, in which their beliefs are embedded, holds all relevant facts of witchcraft, oracles and magic. So from this point of view, the naturalistic beliefs embedded in rationality of any given idiom will form the foundation of that idiom's scientific thinking (Struan 2003:66). We can conclude that taxonomies of magic and science hold incommensurable modes[x] of thinking and we also know that we can apply a quite opposite logic - generate concepts during

research and data analysis and create new theories through combination of these concepts[xi]. But still, this kind of methods and argumentations try to hide the basic notice, put forward by many theoreticians, like Prus, Atkinson, Hammersley, Garfinkel, Wittgenstein, Davidson etc. Levy-Bruhl[xii] did not suggest that we should put our logic and that of "primitive people" on the same plane. Evolutionists argued that the highest stage of evolution (Western civilization) was characterized by reconciliation between human thought and the real world – primitive logic was therefore condemned as a residue. In contemporary science local paradigms (for example in the paradigm sociology local paradigm is positivism) that challenge generally accepted arguments, doctrines and unspoken rules of scientific enterprise, usually end up as residues, needing extra work and professional initiation.

Answers to the Fact of Incommensurability: Kuhn's Case

What criteria are used in deciding between rivalling interpretations of "reality"? The principle of proliferation, which is reflected in the writings of Polanyi is that chosen premises are more a matter of intuition and consciousness rather than an instrument of argumentation; conversion is the psychological concomitant of logical discontinuity (logical inconsistency). Within the idiom of anthropological idiosyncratic structure, the midway is substituted with the term "ethnographer's magic" (Malinowski 1979), hitherto understood as a principle of proliferation and means of logical inconsistency.

We always need to be aware of the fact that what is idiomatic in one culture, language, morality, can be idiotic in another; in ideal communicative situations where literal translations are assumed to be possible, the gap is estimated as to be zero. But the difference between denotation and connotation, language and translation, is an obstacle (Bryder 2003). As we will see, the term incommensurability, meaning the absence of "common measure" shows that in the case of paradigm P1 and paradigm P2 we are facing the absence ("no common measure") of P3 taxonomy, comparable and shared within taxonomies P1 and P2.

Kuhn develops a different aspect of incommensurability; firstly, in his earlier writings (1962), he uses an analogy with Gestalt shifts (switches) to illustrate that scientists see things in an entirely different way after a revolution (a shift from one paradigm to another), as if they were wearing glasses with inverting lenses (Kuhn 1962: 122), where "no ordinary sense of the term interpretation fits these flashes of intuition through which a new paradigm is born. Though such intuitions depend upon the experience, both anomalous and congruent, gained with the old paradigm, they are nor logically or piecemeal linked to particular items of that experience as an interpretation would be" (Kuhn 1962:123). Similarly, sociocentrism sates that in a case of beliefs that seem strange to us – such as magical beliefs - we almost by definition do not see the reason for it. As Boundon explains, "other more subtle factors go to explain very ancient philosophical tradition, which conceives of knowledge as a sort of reflection of reality in the mind. As soon as one takes this image seriously, one is easily led to explain asymmetrically adherence to a true idea and adherence to a dubious idea – adherence to a true idea will be explained by its objective validity" (Boudon 1997:11). In theorizing and argumentation, the component of rhetoric, persuasion, communication and communicational influence should not diminish. The incommensurability thesis in the stated examples implies that scientists will experience difficulties in evaluating rival paradigms because there are no shared standards and shared concepts among them. (Chen 1997) To avoid irrational criticism of being relativistic without scientific arguments, Kuhn later (1983[xiii])

modified his position. He developed a metaphor based in language: during a scientific revolution, scientists experience translation difficulties (between P1 and P2) when discussing concepts from different paradigm taxonomy, P1 and P2. This change in paradigms, and/or change in ideas, leads to incommensurability. As a result, incommensurability becomes a sort of un-translatability, where understanding is only achieved by comprehension of both paradigms (bilingualism) where translatability is maximized. To minimize the complexity of taxonomic structures, he later introduces a local notion of incommensurability (Barker 2001:436), claiming that most terms common to two theories function the same way in both and that their translation is simply homophonic, where theory of "kind terms" or core terms is advocated. Kind terms, according to Kuhn, are natural kinds, artificial kinds and social kinds (Kuhn 1991:4), classified as universal similarities, comparable with the cognitive apparatus of human thinking and computer functioning. But, what was once a single conceptual structure (Gestalt paradigm shift) now exists in more versions (introduction of kind terms): the hierarchy before modification of its lowest level, and the hierarchy within the modifications of similar and different classes (language, bilinear oppositions) finally correspond to changes within the objects. As a result, incommensurability in Kuhnian's terms becomes a sort of un-translatability where understanding is only achievable through comprehension of both paradigms (bilingualism) where two lexical taxonomies differ and kind terms remain comprehended as generally the same otherwise one would face complete communication-breakdown. What confirms our thesis that acknowledgement of logical inconsistency, used to bypass the gaps between rational and irrational, implies the adoption of an attitude, which tries to deconstruct and decompose assumptions and personal biased opinions, scrutinizing every research, one is subjugated to, is the articulation of incommensurability as:

- gestalt switch as a consequence of incommensurable taxonomies where commensurability is evolving
- local notion of incommensurability
- bilingualism as a consequence of the gap being continuously filled
- translatability as a consequence of idiomatic variability

Common to these conclusions is Aristotle's statement, that there are many kinds of subjects which cannot, by their very nature, be tackled in a demonstrative mode. They are just approaches using modes of reasoning, which are never without passion of persuasive force. Arguments can provide reasons which are perhaps without objective foundation, but in fact can exert a real causal influence on the beliefs of the speaker or the speaker's audience.

Epilogue: no true causes for beliefs

As we are faced with incongruent descriptions, language theory leadenness and the lack of self-reflection in science in general, sufficiency of common and shared observational language would seem to unblock comparison between theories and observations, using different concepts. Is comparative ethnography, for example, productive, when taking into account that the comparison between observational and theoretical premises is difficult? The question is what do we compare?

Feyerabend would suggest data is infected by our speculation, prejudice, ambition and so forth. But the subject of human science is constituted by human affairs, and the methodology should try to seek tools for strengthening researcher's

autoreflexivity[xiv]. Autoreflexivity (autoetnography) is an essential part of every research[xv]. (The psychoanalyst Theodor Reik once wrote a book called *Listening with the Third Ear.* It is a kind of manual for self-reflection to be accomplished by people who interview and who must adhere to the principle that one never interviews a person, but a person who is being interviewed[xvi]).

Tacit knowledge can be summarized by the following sentence: 'We know more than we can tell'. The idea that knowledge is propositionally oriented is underscoring the inner relationship between knowledge and language, epitomized primarily in ancient Greek's Socrates proposition "that what we know we must surely be able to tell" (Plato 1961:133) is the direct opposite of tacit knowledge. Tacit knowledge as something that cannot be articulated verbally but still can be articulated by other means (motion, paralinguistic forms of communication etc.) shows the hidden meanings we are faced with in every research. Tacit knowledge has been interpreted in many different ways (gestalt analogy, epistemic regionalism, strong thesis of tacit knowledge), where the core message is undoubtedly one: there is more to theory of knowledge than an eye can meet. Even though many theoreticians search the theory of knowledge, the subject is still fresh and alive. The problem is not in the amount of monographs investigating the question of knowledge; the problem is the ignorance of incommensurable facts, being given to the professionals.

Within the comparative principle where samplings of interpretation meet, the interpretation gap (incommensurability) should be minimized, but I believe it is not. Entropy, defined as chaos (high entropy) or order (low entropy) caused by this sort of manipulation, is questionable. A comparative approach of different interpretations might have produced a coherent argument of "what was going on in Samoa", but this sort of coherence could well miss the substance of "what is going on". With comparison we achieve universality but also a weakened partiality of interpretation. But comparison is still a form, a system (form, instrumental) opposed to Lebenswelt (substance, communicative reality), where Lebenswelt is colonized by the system. (Habermas 1979 and 1995) The two studies in Samoa might come to a common consensus about the certain point, but the system entropy (a specific methodological tool) could cause the lack of the substance of "what was really going on".

The image, science portrays when neglecting auto ethnography (psychoanalysis), is an image of prejudice-free discipline, searching for stories that have never been told, a systematic tool, needed to be taken into account when a young researcher forms his/her academic/scientific profile (this is to an extent also the case with postmodernist writers, who are too concerned about the self-presentation and pure subjectivity related to personal autobiography). Within that kind of methodological apparatus we are facing a severe intellectual dogmatism, where just a few researchers question their topoi in the strict sense of the word. Another dilemma is benevolence of field-work process (Stocking 1983: Observers observed; Van Mannen 1988: Tales of the field) or report on how the field was influenced by researchers' presence, ideas and influence where one should emphasize ethical and moral dilemmas when "going native"?

Scientific community has been often able to capitalize on well known facts among social scientists, that several concepts indispensable for their disciplines are inherently vague, by substituting methodology for mysticism, theory for wild guess and empirical facts for wishful thinking and conjectures (Bryder 1998), the future research should avoid false reasoning and establish causal induction, acknowledging that sociology of science must analyze scientific ideas through many coexisting models, not just referring the assumption about who has been directly or indirectly influenced by whom / since human mind can address coherent ideas via incoherent

theoretical schools or intellectual upbringings. Constructionism, or, precisely, relativism has been used in Kantian terms as the theory of knowledge of indispensable nature of a priori in any knowledge process. Relativism in general terms has become a kind of alternative to scepticism, where knowledge has a vague regulative function, since it depends on the viewpoint where one is situated. The relativism in sociology and philosophy of science, called sceptical relativism, dealing with scientific facts and constructions of science in general, is undeniable.

The idea of what science is - the consensus adoption, relevant to the scientific community and optimal to policy makers - interpreted as a portrayal of knowledge is being constantly negotiated. The rise of natural science is obvious, since the world no longer needs an ideology; the world needs outputs of any kind. The question how to bypass incommensurable gaps is a question of personal involvement and biased opinions, where the majority of researchers is aware of the issue but is ignoring the gaps. Since we all know that "rationality" and "science" are constructs, even tough we live in a scientific century, centred on the potentials of human power in logic and reasoning, the definition of science is in some respects more problematic today than at the time of its early institutionalization and what really counts is the quantity of articles, quantity of conferences, where the core problem of incommensurability remains unsealed: auto reflexivity is beyond self marketing, dedicated to the analysis of what can be a "real" and sufficient image of reality we construct every moment we enter the world as we comprehend it.

Endnotes

i The classic example in anthropology is the interpretation gap between field workers Mead and Freeman and their conclusions about sexual freedom of young adolescents in Samoa (Geertz 1993:347; Schwartz 1983: 928; Mead 1961; Freeman 1983)

ii Dichotomies in sociology are determinism vs. voluntarism, structure vs. action, positivism vs. interpretivism etc., where classics such as Comte, Durkheim, Marx, Parsons vs. Weber, Garfinkel, Husserl, Schutz can be found.

iii The idea of common sense reality is not universal, but particular to every culture, or society. Example: the colour white is perceived by Inuit's in more than 20 different ways.

iv Positivism perceives reality from an objective point of view. Positivism is perceived as objective and free of senses, but in neglecting the reality of emotions, we neglect the true substance of social sciences, *the human perspective*. In the real world, emotions and senses are an integral part of our concepts of reality. In some of the traditional studies of political culture, emotions were taken into account, together with cognitions and calculations of chances. This is for example the case in the works of Sidney Verba and Gabriel Almond, who were influenced by Malinowski and Clyde Kluckhohn (see Almond and Verba 1989)

v The philosopher Bertrand Russell once asked a lady with whom he had diner, if she was willing to go to bed with him if he paid her 1 million pounds. She said that she would consider it. He then went on, "would you do it for two pounds?" She became annoyed and then said, "Do you mean to imply that I am a prostitute?" To which Bertrand Russell said, "We have already established that. Now we are negotiating the price".

vi Contextualism has been theoretically as well as practically introduced by Bronislaw Malinowski in 1915. Contextualism is conceived as context-relative and sensitive in epistemology of science. The main tenet of contextualist epistemology is the orientation when attributing knowledge, what matters, are multileveled contexts we exist in at the moment which create the notion of knowledge.

vii "Anything goes" in common terms suggests that anything is possible (Welsh 1993). The term used in Feyerabend's work *Against Method (1975),* shows that hidden meanings are unfolded through the proliferation principle, where additional statements and clauses are taken into inductive and deductive argumentation, whereas the model of contra-induction is introduced.

viii The term highlights several prominent themes where established knowledge is testable (see Kuhn 1962:37)

ix Certainly, theories and practices do not begin and end within one discipline; scholars share and are influenced by their colleagues' ideas and that is why it is sometimes difficult to determine when one school of thought begins and another ends.

x Magical beliefs are explained by the fact that primitive people conform to a system of thought different from our own.

xi Which is called Grounded Theory Methodology (Strauss and Glaser 1967)

xii Early twenty-first-century discussions that attempt to characterize the forms, or modes of thought in different cultures, as well as their reliance on magic, often retrace debates around the work of Lucien Levy-Bruhl (1857–1939). His ideas have implications for a series of complex questions concerning the way culture can shape thought, providing an individual with either limitations or extended possibilities. Levi-Bruhl proposed that there was a major distinction between the thought of European and preliterate people, which he termed primitive "mentality". He stressed that the difference was due to the content of the ideas and causal understandings in culture, and was not the product of different mental capacity. He termed the modes of thought that characterized each as scientific and pre-scientific (or pre-logical), respectively. He proposed that "primitive" societies tended to use mystical or supernatural explanations for unexpected occurrences. He contended that this form of thought does not permit a kind of logic that challenges or tests it. The thought process has an internal consistency and rationality, but does not follow the rules of scientific thinking and does not differentiate between what Levi-Bruhl called the natural and supernatural.

xiii In *Commensurability, comparability and Communicability* in P. Asquith and T. Nikles, eds.) PSA 1982, Vol. II, Philosophy and Science Association. East Lansing, pp. 669-688.

xiv Autoethnography is a type of self-ethnography that uses experiences of the researcher as a source of data process through which one presents himself and is perceived by others. Gender, race, ethnicity etc. are immediately noticed by others in social interaction and, depending on the culture of the setting, are viewed as important markers of one's identity (Marvasti 2004:50)

xv According to anthropologist Benedikte M. Kristensen the roles, ascribed to participant-observation enrolment, are transparent: "The clown position gave me insights, but it was also an obstacle, since it defined me as a child, who was not permitted to discuss serious questions of cosmology" (Kristensen 2004). With further field adaptation, she was seen as presumably having inherent qualities of shamanistic spirit, since she was regarded as an oracle.

xvi Brown (1984: 2) has etymologically traced the concept of empathy in the evolution of the split between natural and humanistic scientific cultures. According to Brown one characteristic (though not invariable) of the Counter-Enlightenment is the belief of thinkers that the "meaning" of a social situation can only be discovered by imaginative sympathy on the part of the interrogator, by his entering into, or feeling into, the projects, emotions, and thoughts of the participants. This special ability was given many names during the nineteenth century: empathetic understandings, sympathy, Einfühlung, are only three of them. The ability was always contrasted with ordinary analytic reason of the kind employed in logic, science, and technology. Thus there were to be at least two major areas of human knowledge, *Naturwissenschaft* and *Geisteswissenschaft*, and two different abilities or procedures or methods of enquiry which were appropriate to their respective areas of knowledge.

References

AAA (1998) Code of Ethics of the American Anthropological Association. Retrieved July 2007 (http://www.aaanet.org/committees/ethics/ethcode.htm)

Agassi, Joseph (2003) "Comparability and incommensurability." *Social Epistemology* 17(2&3): 93-94

Almond, Gabriel and Sidney Verba (1989) *The Civic Culture: Political Attitudes and Democracy in Five Nations*. Newbury Park: Sage.

Bachelard, Gaston (2002) *The Formation Of The Scientific Mind: A Contribution To Psychoanalysis Of Objective Knowledge*. Manchester: Clinamen.

Barker Peter (2001) "Kuhn, Incommensurability, and Cognitive Science." *Perspectives on Science* 9(4): 433-462

Beck, Ulrich (1992) *Risk Society: Towards a New Modernity*. London: Sage.

Beck, Ulrich, Anthony Giddens and Scott Lash (1994) *Reflexive modernization*. Oxford: Blackwell Publishers.

Bell, Daniel (1990) "Resolving the Contradicitions of Modernity and Modernism." *Society* 27(185): 43-75.

Berger, Peter and Thomas Luckmann (1999) *Modernity, Pluralism and the Crisis of Meaning*. Bertelsmann Foundation Publisher.

------. (1991) *The Social Construction Of Reality: A Treatise In The Sociology Of Knowledge*. London: Penguin Books.

Boudon, Raymond (1997) *The Art of Self-Persuasion*. Cambridge: Polity Press.

Brown I. Harold (2005) "Incommensurability Reconsidered." *Studies in History and Philosophy of Science* 36(1): 149-169

Bryder, Tom (2005) *Stereotypes, Ethic Prejudice and Catharsis In Political Jokes And Graffiti*. Unpublished manuscript.

------. (2005a) "Political Hypes: New trends in the psychology of political advertising and propaganda." Paper presented at 3rd ECPR Conference "Political Psychology", Budapest, September 8-10.

------. (2003) “The Political Psychology of Conditional Jokes.” Paper presented at the Annual Scientific Meeting, International Society of Political Psychology, Boston Plaza, July 5-10.

------. (1998) *The Human Face of Politics*. Copenhagen: The Political Studies Press.

Chen Xiang (1997) “Thomas Kuhn's Latest Notion of Incommensurability.” *Journal for General Philosophy of Science* 28(2): 257-273.

Dilley, Roy, Ladislav Holy, Sandor Hervey, Elzbieta Tabakowska, Johannes Fabian, Mark Hobart, Brian Morris (1999) *The problem of context*. New York: Berghahn Books.

Encyclopedia of Social Measurement (2005) Volulme 3. Boston: Elsevier Inc.

Evans-Pritchard, Edward (1976[1973]) *Witchcraft, Oracles and Magic among the Azande.* Oxford: Claredndon Press.

Feyerabend Paul (1992) *Three dialogues on knowledge.* Oxford: Blackwell.

------. (1975) *Against Method*. London: NLB.

Freeman, Derek (1983) *Margaret Mead and Samoa: The Making and Unmaking of an Anthropological Myth*. Cambridge: Harvard University Press.

Geertz, Clifford (1993) *The Interpretations of Culture*. London: Fontana Press.

Habermas, Jűrgen (1995) *The Theory of Communicative Action*. Cambridge: Polity Press.

------. (1979) *Communication and the Evolution of Society*. Boston: Beacon Press.

Harré Rom and Krausz Michael (1996) *Varieties of Relativism*. Massachusetts: Blackwell Publishers.

Heyl, Barbara (1977) “The Madam as Teacher: The Training of House Prostitutes.” *Social Problems* 24: 545-555.

Hung Edwin H.C. (2001) “Kuhnian paradigms as representational spaces: new perspectives on the problems of incommensurability, scientific explanation, and physical necessity.” *International Studies in The Philosophy of Science* 15(3): 275-292.

Irzik Gürol and Teo Grünberg (1998) “Whorfian Variations on Kantian Themes: Kuhn's Linguistic Turn*.” Studies in History and Philosophy of Science* 29(2): 207-221.

Jacobs, Struan (2003) “Two sources of Michael Polanyi s prototypal notion of incommensurability: Evans-Pritchard on Azande witchcraft and St Augustine on conversion.” *History of The Human Sciences* 16(2): 57-76

Kristensen, M. Benedikte (2004) “The Living Landscape of Knowledge: An analysis of shamanism among Duha Tuvinians of Nothern Mongolia.” Online article. Retrieved March 2008(http://www.Anthrobase.com/Tyt/K/Kristensen_B_02.htm)

Kuhn Thomas (1962) *The Structure of Scientific Revolutions*. Chicago: The University of Chicago Press.

Lakatos, Imre and Alan Musgrave, editors (1970) *Criticism and The Growth of Knowledge*. London: Cambridge.

Malinowski, Bronislaw (1922) *Argonavti zapadnog Pacifika*. Beograd: BIGZ.

Marvasti, B. Amir (2004) *Qualitative Research in Sociology*. London: Sage.

Mead, Margaret (1961 [1928]) *Coming of Age in Samoa*. New York: Morrow Quill Paperbacks.

Polanyi, Michael and Harry Prosch (1975) *Meaning*. Chicago: University of Chicago Press.

Polanyi, Michael (1998) *Personal Knowledge: Towards a Pos-critical Philosophy*. Chicago: University of Chicago Press.

Povinelli A. Elizabeth (2001) "Radical Worlds: The Anthropology of Incommensurability and inconceivability." *Annual Review of Anthropology* 30: 319-334.

Sapir, Edward (1994) *The Psychology of Culture*. Berlin-New York: Mouton de Gruyter.

Schwartz, Theodore (1983) "Anthropology: A Quaint Science." *American Anthropologists* 85(4): 919-929.

Silbert, M.H. and Pines, A.M. (1984) "Pornography and sexual abuse of women." *Sex Roles* 10: 857 - 868.

------. (1983) "Early sexual exploitation as an influence in prostitution." *Social Work*, 28:285-289.

------. (1982) "Victimization of street prostitutes." *Victimology* 7(1-4): 122-133.

------. (1981) "Sexual child abuse as an antecedent to prostitution." *Child Abuse and Neglect* 5: 407-411.

Smelser, Neil (2003) "On Comparative Analysis, Interdisciplinarity and Internationalization in Sociology." *International Sociology* 18(4): 643-657.

Sankey Howard (1991) "Incommensurability, translation and understanding." *Philosophical Quarterly* 41(165): 414-127.

Tedlock, Barbara (2000) "Ethnography and ethnographic representation." Pp. 455-486 in *Handbook of qualitative research*, edited by N. Denzin and Y. Lincoln. 2nd Edition. Thousand Oaks, CA: Sage.

Toulmin, Stephen (1958) *The uses of argument.* New York and Cambridge: Cambridge University Press.

Welsch, Wolfgang (1993) "Postmoderna." Pp. 20 - 55 in *Postmoderna ili borba za budućnost*, edited by Peter Kemper. Zagreb: August Cesarec.

Citation

Mulej, Lucija (2008) "Construction of Scientific Facts – Why Is Relativism Essential in Bypassing Incommensurable Gaps in Humanities. Case of Personal Involvement – Biased Scientific Facts." *Qualitative Sociology Review*, Vol. IV Issue 1. Retrieved Month, Year (http://www.qualitativesociologyreview.org/ENG/archive_eng.php)