Quanta and Qualia: What Is the “Object” of Ethnographic Method?

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No doubt the distinction between quantitative and qualitative research has something to do with methodology—with real differences between intellectual operations such as pointing, sampling, counting, measuring, calculating, and abstracting, on the one hand, and intellectual operations such as empathizing, imagining, interpreting, narrating, contextualizing and exemplifying, on the other. Nevertheless, if that was all the distinction amounted to (a difference in intellectual operations) one would be hard pressed to make sense of the persisting tension in social research between quantitative and qualitative approaches. As everyone knows, in science, as in life, two hands (measuring and interpreting, abstracting and exemplifying) are usually better than one. And yet the tension persists. Why?

In this brief introduction to this section on ethnography as method I want to suggest that one way to understand the appeal of ethnography (to those for whom it has appeal) is to view it as a species of qualitative research, and one way to understand the appeal of qualitative research is to appreciate the difference between quanta and qualia as intellectual “objects.” Hence, I want to propose that the separation (and persistence of a tension) between quantitative and qualitative (including ethnographic) research turns less on methodological issues and more on one’s answer to ontological questions about quanta and qualia. What are quanta and qualia, how are they interrelated, and what is their respective (causal) roles (if any) in making the social world go round? In other words, ironic as it may seem, one of the best ways to think about the methodological side of ethnography may be to put our metaphysical cards on the table (our assumptions about the underlying nature of social reality), thereby revealing what we think ethnography is really all about.

An alternative formulation of those ontological questions can be de-
rived from Thomas Nagel’s discussion of the body/mind problem and the 
opposition between objective and subjective points of view. He writes, “There is a tendency to seek an objective account of everything before 
admitting its reality. But often what appears to a more subjective point of 
view cannot be accounted for in this way. So either the objective concep-
tion of the world is incomplete [the ontological premise of qualitative 
research], or the subjective involves illusions that should be rejected [the 
ontological premise of quantitative research]” (1979:196)."

I recognize, of course, that the perceived distinction between quantita-
tive and qualitative research is not always thought of in ontological terms. 
Indeed, the contrast is so stereotypically associated with methodological 
or procedural issues, and is so time worn, that it is easy to lose sight of the 
type of metaphysical difference (“quanta” versus “qualia”) I have in 
mind. One all-too-familiar and beguiling interpretation of the quantita-
tive/qualitative distinction holds that the difference is about whether or 
not one counts and measures the things one studies. [Other interpreta-
tions assimilate the contrast to the distinction between magnitude and kind, or 
to the difference between nominal and interval scales.] That methodologi-
cal interpretation may be commonplace but unfortunately it is not very 
helpful for making sense of the tensions on the current empirical research 
scene. Setting radical, chic, skeptical, “nonsense” arguments to the side, 
amost everyone these days is prepared to acknowledge that to understand 
is to compare and that, in some sense or another, to observe is to count. 
The real and tantalizing clash between quantitative and qualitative ap-
proaches lies elsewhere, and I suspect it has something more to do with the 
onology of science than with intellectual procedures.

I recognize, too, that the received distinction between quantitative and 
qualitative research is not always thought of as a “clash,” and that there 
are prominent scholars who find it difficult to understand why the distinc-
tion should be framed as an opposition or should be controversial at all. 
Indeed, these days increasing numbers of sanguine voices can be heard 
asking, What is the problem? Why not just combine numbers and nar-
ratives, measurements and meanings, calculations and interpretations, 
magnitudes and qualities, and get on with doing better and more complete 
research? Such optimism is not surprising (although, ontologically speak-
ing, it may be a bit delusive). For if one focuses only on the epistemological 
side of science (on method and reasoning), thereby overlooking the ques-
tion of the metaphysical status of the objects of scientific inquiry, the de-
marcation between quantitative and qualitative research must seem either 
cut and dry (obviously not all intellectual operations are the same—num-
bers are not narratives, measurements are not meanings; so what?), or 
threadbare (certainly anyone concerned with the prevalence or distribu-
tion of a meaning, interpretation, or narrative is sooner or later going to 
have to count, and, as Richard Jesser notes in his introduction to the 
section of this book on ethnography as epistemology, in the social sciences 
at least, numerical results are open to interpretation), or invidious (for isn’t 
there an underlying logic of causal inference that applies to all scientific 
research, whether qualitative or quantitative?; see, for example, D’Andr 
ade 1984; King, Keohane, and Verba 1994). Thus, it must seem quite 
natural, in the light of the received methodological or procedural interpret-
tation of the quantitative/qualitative contrast, to conclude that the tension 
between the two approaches has been overblown.

With due respect for such views I want tentatively to suggest that the 
distinction between quantitative and qualitative research is neither super-
fluous, obvious, nor invidious. I want to suggest that the tension between 
the two approaches is real and significant, and that to understand the 
separation, one must begin with an analysis of the difference between qua 
and qualia as intellectual objects.

This is a necessary exercise because the basic difference (and true fric 
tion) between quantitative research and qualitative research (of which et 
thnography is a species) resides primarily in the nature of the objects they 
study and their subject matter, quanta and qualia, respectively. And while 
there may be merit in the claim that there are connections between the 
ontology of a discipline (its intellectual objects) and the epistemology of 
a discipline (its ways of gaining knowledge of, and representing, the ob 
jects of its study; its intellectual “texture”; see Converse 1986; D’Andr 
ade 1986), I actually think the well-publicized tension between quantitative 
and qualitative approaches has a greater ring of truth when formulated as a 
problem in ontology rather than as a problem in method (or epistemology). 
I believe that one way to appreciate the intellectual temper of some of 
the essays in this book it to view the contrast between quantitative and 
qualitative research in this less familiar, or at least less misleading, light.

Ontologically speaking, quantitative research (with its methodological 
emphasis on pointing, sampling, counting, measuring, calculating, and 
abstracting) is premised on the notion that the subjective involves illusions 
that should be rejected. The basic idea is that it is only when all subjectiv 
ity has been subtracted from the world that the really real world remains. 
And what remains is that really real is the world of quanta. Think of qua 
ta as all the things that are what they are (retain their true identity) 
from, as Thomas Nagel puts it, no point of view. Mathematical and logical 
truths (for example, if p is true, then p or q is true) are quanta. So are the 
objects, events, and processes of an idealized physical or biological sci 
ence, such as black holes of neurological nets] Such objects, events, pro 
cesses, and truths are what they are and produce their effects objectively,
regardless of our (subjective) acknowledgement(s) of them. That is what makes them *quanta*. In contrast, qualitative research (with its procedural emphasis on empathy, interpretation, thematization/plot, narration, contextualization, and exemplification/concreteness/substance) is premised on the notion that the objective conception of the real world is partial or incomplete. The basic idea is that one of the very important things left out of the real world by the objective conception are *qualea*. Think of *qualea* as things that can only be understood by reference to what they mean, signify, or imply (not in and of themselves and regardless of point of view but rather) to us (or to me) in this or that time and place and/or by reference to what it is like for us (or for me) to experience them. When it comes to *qualea* it is fair to say (again paraphrasing Thomas Nagel and borrowing his argot) that not everything that is really real is something (retains its true identity) from no point of view, for anything real whose identity has a trace of either history, place, or "us" in it, has its real identity by virtue of some subjective point of view.

The difference between the premise of qualitative research and the premise of quantitative research is ontological or metaphysical. Ernest Nagel (not to be confused with Thomas Nagel) gives clear expression to that metaphysical contrast in his account of the difference between science and common sense. Scientific notions, he suggests, must be "unusually abstract" and distant from "experience." Scientific explanations, he argues, can be constructed only if the familiar qualities and relations of things, in terms of which objects and events are usually identified and differentiated can be shown to depend for their occurrence on the presence of certain other pervasive relational or structural properties that characterize in various ways an extensive class of objects and processes. Accordingly, to achieve generality of explanations for qualitatively diverse things, those structural properties must be formulated without reference to, and in abstraction from, the individualizing qualities and relations of familiar experience. It is for the sake of achieving such generality, that, for example, the temperature of bodies is defined in physics not in terms of directly felt differences in warmth [qualea], but in terms of certain abstractly formulated relations characterizing an extensive class of reversible thermal cycles [quanta]. (1961:11)

If I am right about the basic ontological premises of quantitative versus qualitative research, then it would seem to follow that, ontologically speaking, if you truly are a quantitative researcher, you ought to believe that the only things that are really real, that have determinate causal force, that are proper objects for an explanatory science are those things that exist and have identity (and power) independent of our experience and awareness of them. Such things are *quanta*.

It is not too hard to imagine how this ontology of *quanta* spawns its own epistemology and ideals for measurement. Thomas Nagel (not to be confused with Ernest Nagel) has this to say about scientific measurement:

If there is a way things really are, which explains their diverse appearances to differently constituted and situated observers, then it is most accurately apprehended by methods not specific to particular types of observers. That is why scientific measurement interposes between us and the world instruments whose interactions with the world are of a kind that could be detected by a creature not sharing the human senses. Objectivity requires not only a departure from one's individual viewpoint, but also, so far as possible, departure from a specifically human or even mammalian viewpoint. The idea is that if one can still maintain some view when one relies less and less on what is specific to one's position or form, it will be truer to reality. (1979:209)

It is with this type of ontological issue in mind that I want to suggest that to point or not to point, to count or not to count, to measure or not to measure, to sample or not to sample, are not the kinds of questions that deeply separate quantitative from qualitative approaches. The true difference between the approaches is not over whether to count and measure but rather over what to count and measure, and over what one actually discovers by doing so. The true difference is over the question whether quellea are really real versus really illusory as objects of science. The true difference is over the question of whether the specificity and particularity of our "position or form" (our historically and culturally contingent perspective on things) obscures our perception of reality or (alternatively) actually makes it possible for us to truly see. The true difference is over the question, how much more is there to the understanding of reality than the procedures for studying *quanta* (pointing, counting, measuring, sampling, calculating) can supply?

Qualitative research exists because (again using Thomas Nagel's argot, in paraphrase) not everything really real is something from no point of view. The real things studied by qualitative researchers must always be identified (and ultimately explained) at least in part by reference to the unobservable subjective experiences (for example, sensations or feelings) and the nondeducible meanings that are on-line in the mental life of particular (types of) situated observers (that is to say, by reference to some "native point of view"). This is so because the kinds of properties studied in qualitative research are the properties associated with "consciousness."
Those properties derive from the (perhaps inherently “mysterious”) capacity of “qualitative” beings to symbolize, to form concepts, to be aware, to have experiences, to want, to value, to choose—in other words, to have a mental life (on the notion that consciousness is a mystery, see McGinn 1991). In a sense the aim of ethnography (and of all qualitative research) is to elucidate the way *qualia* are underspecified and/or underdetermined by *quaunts*. The aim is to show how something suprasensible and non-deducible (a value, a meaning, a purpose, a rationale) has been historically or culturally added to the world of *quaunt* to make the real world more complete. In the world of *quaunts*, the world of objectivity, all things can be directly grasped and measured and there is nothing more to a thing beyond what calculation can provide. In a world of *quaunt*, measurement and calculation (and even research design) are fine as far as they can go, but they can go only just so far. That is one reason why the real things studied by qualitative researchers (including our own accounts of those things, which being “accounts” are also *qualia*) must be historicized and contextualized if they are to be understood.

It is important to recognize that, ontologically speaking, there is an asymmetry between quantitative and qualitative research. The ontological premise of quantitative research implies that *quauntia* (feelings, beliefs, goals, desires, meanings, values) are not only illusory (or “epiphenomenal”; perhaps “epinomenal!”) would be the more accurate term for something that is supposed to be unreal) but can play no part in an objective account of the causes of human behavior. If you are faithful to the ontology of *quaunts* you know that the phrase “quantitative researcher” is not simply a synonym for a person who is a counter, a measurer, a sampler, or an experimen-tal designer. True quantitative researchers are not agnostic or indifferent about the kinds of “things” that they count, measure, sample, or experimentally manipulate. If you are truly a quantitative researcher then, you are committed to the view that *quaunt* must replace *qualia* in any “scientific” account of reality.

Conversely, if you engage in the kind of research that is now routine in the social sciences wherein you try to count, measure, sample, or experimentally manipulate *quauntia*—beliefs, desires, feelings, concepts, attitudes symbolically expressed in language—then you are not studying *quaunt* at all. Ontologically speaking, you are a qualitative researcher, even though you try to count, measure, sample, and experimentally manipulate the things you study. And if that is all you ever did (or thought you did) when you studied *quauntia*—count, measure, sample, manipulate “variables”—you would remain vulnerable to the criticism that there is some kind of incommensurability or lack of fit between your intellectual procedures and the objects of your investigation. You would be open to the critique that all the real work in understanding the things you study (quauntia) must be going on informally, before, after, or outside the formal application of any quantitative procedures. You would be asked to be more self-conscious about what is really involved in “grasping” the objects of your study. This is one source of the persisting tension between “scientists” and “interpretivists” in the area of social research.

In contrast, the ontological premise of qualitative research is far less imperialistic. The premise of qualitative research does not imply that *quauntia* must replace *quaunt* in any interpretive account of reality. The premise does not imply that *quaunts* have no part to play in the causal structure of the really real world. The premise of qualitative research also does not imply that counting, sampling, measurement, and experimental design must be totally superseded by other intellectual operations. What it does assert is that the objective conception of the really real is partial and incomplete and must be supplemented with other procedures. Ontologically speaking, all the essays in this section on ethnography as method are investigations of qualitative realities in search of other procedures for better comprehending their intellectual objects.

Notes

1. By an “objective” account Nagel means an account of the nature of a thing as it exists independent of our particular awareness-experience-evaluation of it, as it exists without regard to our situated and hence contingent reaction to it. By a “subjective” point of view Nagel means the way a thing appears or feels to us, to me, from here, right now; he means the way the thing is understood, experienced or reacted to by us, by me, with this or that contingent sensory apparatus, in this or that parochial state of mind.

2. The case of mathematical and logical truths is fascinating because it suggests that there are *quaunts* in the normative as well as the empirical sciences and that even suprasensible things can have a standing in an objective world. It is but a short step to the claim that all abstract forms, “Platonic essences,” or definitional truths—for example, the formal definition of the normative ideal of “justice” as “treat like cases alike and different cases differently”—are *quaunt*, too, for their claims hold true regardless of the contingencies of time, place or point of view.

3. For example, any interpretive account of the *quauntia* of justice would have to presuppose, and thereby take account of, the abstract form or *quaunt* of justice—”treat like cases alike and different cases differently.” Indeed such an interpretive investigation might make use of the *quaunt* of justice to discover the historically or culturally situated *quauntia* of justice. That would be done by documenting and explaining why in such and such place at such and such time for such and such people such and such particular likenesses and such and such particular differences were believed to be relevant in the pursuit of any just cause.
All children grow up to be cultural beings. This characteristic is unique to our species and helps to account for the prolonged period of human immaturity (Bruner 1972). Child development is thus inextricably bound to the process of orienting oneself within systems of meaning, a process known variously as "socialization," "acquisition of culture," "enculturation," and "development-in-cultural-context." The very diversity of terms attests to the variety of social sciences that have a stake in understanding how children become members of cultures (Gaskins, Miller, and Corsaro 1992). This problem is also intimately related to problems of perennial interest to particular disciplines. In anthropology, for example, it has long been recognized that unique insights into the nature of culture can be gained by studying how children acquire culture (for example, Sapir 1934). In psychology, proposals for studying psychological functioning as an outgrowth of cultural life have recurred throughout its history (Cahan and White 1992; Jahoda 1989), dating back to its origins as a scientific discipline and continuing vigorously in the present (Bruner 1990; Shweder 1990; Wertsch 1991).

And yet none of the social sciences has claimed socialization fully as its own. Because of the way in which human action has been partitioned for study, development-in-cultural-context has remained marginal to the intellectual agenda of each. As a result, it has been extraordinarily difficult to devise an adequate conceptualization, one that slights neither culture nor development.

In recent years several powerful theoretical currents—Vygotsky's theory of mediated action (Wertsch 1985, 1991), practice and performance approaches to language and verbal art (Bauman 1986; Hanks 1990; Ochs 1988), practice theories of social life (Bourdieu 1977, 1990)—have revital-