Nordic Studies in Pragmatism

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"On Why's, How's, and What's—Why What's Matter"

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1. Inquiry: what's the problem?

A pragmatist prides herself in declaring that the *problem* is the essence of inquiry: It is its beginning but also its end when a proposed solution is successful. In the classic doubt-belief theory of inquiry, Charles S. Peirce addresses the *problem* from a behavioural point in that doubts disturb an organism and sets in motion thoughts so as "to attain a state of belief" (CP 5.374). Peirce distinguishes between real or merely feigned doubts/problems: real doubts instigate constructive action in terms of thoughts-activities, while feigned doubts fail to have such consequences (CP 5.376). Such pragmatist insights are important in considering the urgency of problems, i.e. if these propel a mode of action or else are easily discarded.

Problems vary greatly, and for the purpose of discussion I will suggest that there are what's, how's, and why's problems: what's refer to very basic matter as in "what's going on?"; how's refer to relations or how things or elements hang together as in "how do I drive to reach a certain place quickly?" or "how do A and B relate?"; and why's refer to causes or else purposes as in "why do women shun away from Republican vote?" or else "why do you hang on to that man?" [1] Such problems trigger inquiry both in everyday life and in science. The force of problems depends on the context of action, and has to be viewed *in situ*. However, and again for the purpose of thought/discussion, I will here suggest that the how's and

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[1] In this paper, I follow Kevelson's (1988) use of the question forms "how's" and "why's" as short forms for "how is" and "why is". The addition "what's" for "what is" is my own.

why's largely depend upon the felt urgency of what's. In asking "what's going on?" or else "what is this really about?", the inquiring person seeks a response to a basic existential/ontological question, as she is in doubt as to the configuration of matter, and thus potentially to her own role in pursuing a course of action. Finding an answer, perhaps of a preliminary kind, the inquiring person can stubbornly pursue her first suggestions (vague perceptions); what's are then transformed by the how's of finding relations and finally by the why's in penetrating the purposes or else the causes "behind"; perhaps instigating new thought/action/seeing in a perpetual motion or else stopping from mere exhaustion. At the end of such inquiry, when we perhaps attain a "state of belief", at least for the moment, we can turn around (like Gertrud Stein on her deathbed in Paris as revealed by her lover Alice B. Toklas) asking once more "What is the question?... If there is no question then there is no answer" (Malcolm, 2007, 172).

At the bottom of any belief, in everyday life as in science, there was once a question, although most often forgotten in the present and deeply buried in the thought-habits of generations before us. The urgency of what's questions as relating to profound "matters" (what the real is all about) resides in their power to disturb and to irritate. Such perturbations (to use modern system-language) can set out wholly new action-schemes in exploring what is possible, perhaps also what is reasonable? This text is about the worth of such perturbations/irritations as crucial in critical inquiry.

As a precursor to the thought-actions that I am about to sketch, I will mention two particular texts that have acted as sources of irritation in my own mind for quite some time. The first one is Roberta Kevelson's "How's of why's and why's of how's: Relation of Method and Cause in Inquiry" (Kevelson, 1988), and the second is the recent book by John Levi Martin, *Explanation of Social Action* (2012). I will briefly relate the content of these two texts, as they have caused irritation and consumed thought-energy for quite some time.

2. Kevelson on the dialogical structure of why's and how's

In her erudite but also complex text on the relation between How's and Why's governing the logic of inquiry, Kevelson attempts to uncover a family resemblance between the many fragmented disciplines of the scientific system now in use. Her stimulation derives from Peirce's work on *Specu-*

lative Rhetoric and on *Methodology*, but she drafts her text by also linking it to modern speech act theory, especially in its original legal version as the basic structure of interrogation, sequencing questions and answers. Her resort is also that of modern functionalist linguistics and the study of natural languages. Her aim is no less than to uncover a very basic structure of thought, here conceived of as action. In so doing she aims to unite the separate sciences and their multiple and diverse methods under a common theme, that of General Inquiry. How's and Why's questions are the arches in this endeavour, while she firmly relegates What's question to a much less prominent place in inquiry. This latter step I find problematic in her otherwise very stimulating text, but I will wait with such criticism until I have introduced some of her own arguments.

According to Kevelson, every idea or belief-system, whether in the sciences or in daily life, rests upon an often depleted question. Her aim is thus similar to that of Michel Foucault (although she works in a very different linguistic universe): an "archaeological" search for the depleted, neglected, forgotten questions that underlie our beliefs. She draws upon the following illustrations (Mathesius model) of theme/rheme in the accumulation of information: [2]

1.   a/b = theme/rheme = old/new

2.   ab/c = theme/rheme = old/new

3.   abc/d = theme/rheme = old/new

4. abcd/e = theme/rheme = old/new

Answers and questions change as we go along in accumulating information, or what we with a more pretentious phrase could call the "growth of knowledge", nevertheless the structure of accumulating information by means of questions and answers remains the same all through the process. The point of the model is to show the continuity that underlies the process of inquiry: the basic question remains all through, although often in an embedded or hidden form. Each stage is a sign (re)presentation of the previous one in an attempt via the *rheme* to add a new piece to the existing argument. The *theme* can be read as a theory or as a discourse to

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[2] Vilém Mathesius (1882–1945) was a member of the Prague linguistic circle, whose work on word order and syntax are considered pioneering. He used the term *theme* (or *topic*) to identify "what the sentence is about". *Enunciation* (or *rheme*) adds new or unknown information to ongoing discourse. (`www.newwordencyclopedia.org/Mathesius`).

which the process of inquiry seeks to add new information (*rheme*). Kevelson supplies yet another (everyday) illustration of the question/answer sequencing of inquiry in the following discourses:

1. Who knocked at the door?   John did.   = a/b

2. What does he want?   His gloves.   = ab/c

3. Where are they?   He lost them.   = abc/d

4. When?   Yesterday.   = abcd/e

In order to understand the information in (3), we need to recover all that went before. Having recovered all the questions, we can conclude that "John, who knocked at the door, wanted his gloves which he lost yesterday" (97). We can also agree that all previous fragmented "discourses" (Q/A sequences) only become clear to us as we can see them (re)presented in the final argument. The imaginary of a final argument the end of inquiry is powerful in Peirce's theory of inquiry, although as Kevelson reminds us, Peirce never closed the possibility that a rheme (new information) might again pop up, and propel inquiry to continue: "Do not block the way of inquiry" (CP 1.135).

In recovering the very basic Q/A sequencing underlying inquiry, thus forming a united platform for diverse sciences with their multiple methods, Kevelson proceeds to classify types of questions. She refers to the WH questions as those above: Who, What, Where, When, Where, Which as questions that in principle allow for a *binary* response: Yes or No (truth/falsity). Singling out the special *semantic* structure of How's and Why's as not-binary, she reserves a special role of such questions as *Interpretants*, i.e. they demand the triadic structure that we know from Peirce's three categories: *Firstness, Secondness*, and *Thirdness.* If we take a look at the conclusive statement in the above illustration "John who knocked at the door, wanted his gloves which he lost yesterday", we discover that it is composed of various *dyads*: "John knocked at the door"; "he wanted his gloves"; "he lost them yesterday". It is only when we realize the basic triadic relation linking the various dyads into a meaningful *triad* (a whole of sequencing), we reach a final argument answering a basic why-question. The why-question in this case is not binary, it is not true or false, but supplies us with an underlying *reason* for the series of events we have observed to occur.

It is of course possible to translate the triadic relational structure of why's into dyads of empirical inquiry: Was it true or false that John did

what he did in order to recover his gloves? In a detective story, we are as Umberto Eco has shown free to question "the story" based on an accumulation of abductive inferences as in *The Name of the Rose* (1983). John was perhaps only pretending to find his gloves, while his real purpose was quite different: to visit a potential site of criminal action? Nevertheless, while we are free to transform previous Q/A sequences in a perhaps endless course, and opening up inquiry (themes) once again with new spaces (rhemes), the structure of thought and action as a semiotic process is recursive and figures in all speech acts (if they are to be completed).

In Kevelson's presentation, how-questions have the same triadic structure as why-questions in inquiry, but with a central difference: Such questions do not supply underlying reasons for why something occur, but aim at recovering the various steps taken in a chain of events to reach a set goal (solution to a problem). In our illustration above, John took a series of action to secure what he wanted: to find his gloves. How-questions refer to the discrete points in a continuum of action (sequencing) to secure a warranted outcome. As in classic Greek, where *methodos* stands for "finding the way ahead", how-questions recall methods, i.e. the steps taken to reach a goal. As such, the how's are not binary either: they can be more or less satisfactory, i.e. they presume, like the why's, a triadic structure of linking at least two points to a set goal (xyz).

In Kevelson's presentation, the how's and why's, as the title suggests, are intrinsically related to Peirce's theory of inquiry. All how-questions of how parts are or could be related are in the final instance embedded in why-questions, i.e. the underlying purpose of inquiry. Curiously, in Kevelson's text, how-questions can end in a myriad of possibilities as when we start to inquire into "possible worlds": not just what *is* here and now, but also what possibly could become. From such a perspective of "unbounded freedom" of the how's, why-questions act as sobering up devices in reminding the how's of the undercurrent of purported *reasons* underlying any inquiry. Peirce himself refers to the relation between the how's and the why's as governed by the "economy of research" (CP 5.600).

In a similar manner, why's necessarily call out how's on the ground that without such how's as supplying methodical nods, why's can easily end in pure (thought) speculation, thus weakening the spirit of empirical inquiry proper. In the end, there is no hierarchy between why's and how's as they are closely linked in pragmatist inquiry: Indeed, they presuppose one another. Why's secure the interim and ultimate reason(s) of inquiry, while how's explore and test the methodical steps to be pursued in the course of such inquiry.

3. Why what's also matter

As noted, Kevelson does not consider What's questions to have a similar status in the logic of inquiry. In her view, such questions relate to *dyads*, as do when, who (or what in English goes under the name of wʜ questions). As far as what's questions are concerned, I want to dispute its exclusion from the triadic category *a priori*. Clearly, what's questions may, as also the why's and the how's, assume many modes of questioning, from very simple to much more complex ones. As illustrations of diverse what's questions, let's consider the following well-known example from a sociological textbook (Sachs, 1974):

(1)   The baby cried   theme/theme = a/b
(2)   The mother picked it up   theme/rheme = ab/c

At first glance, we are dealing with two dyadic sentences (of what we can call observational "facts"): a baby is crying, and a woman whom we suppose is the mother picks up (her) child. In both cases, we deal with reports to what's questions: What's going on out there?

In my view, however, there is a distinct difference between the two what's as (2) really is a disguised triad, i.e. it contains an *interpretant* that helps in making sense of the first observation (1). No more information (rhemes) is needed, at least for the time being. In case, our second observation would have been of the following kind: "a woman picks it up", then yet another dyad "sequences" the first observational statement, eventually to be concluded with an *abductive* inference (3) "The woman, who picked up the baby, was its mother". However, the second statement in the above illustration is a contraction, as it already contains an interpretive term "the mother" that helps clarifying what goes on out there. The mother-sign (as a *significant symbol*) purports the observation: it supplies us with a purpose. [3]

In the theme/rheme modelling previously employed, we could say that the new information of rheme (c) resides in the noun of the statement ("the mother"). In the language of Peirce's semiotics, we would say that an "immediate interpretant" is in operation as this is what we "see" is happening. Among competent language users in everyday discourses, such "immediate interpretants" abounds as these help economizing our

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[3] The notion "significant symbol" is from George H. Mead's adaptation of Peirce's semiotic philosophy into modern social psychology (Mead, 1938). Significant symbols arouse similar responses in Ego and Alter, and are thus crucial in coordinating social action.

thoughts-action in making sense of the myriad of observational possibilities that surround us. Such interpretants reduce complexity and helps us to navigate in an otherwise chaotic world. As is well known, Umberto Eco has long employed such interpretive links to construct exciting detective stories. Such links ("it was the mother who picked up the child, or was it?") can in the course of (detective) inquiry also be transformed into "dynamic interpretants" as good starting points in clarifying what goes on. In this latter case, we come close to Kevelson's interpretation of the how's as methodical steps in exploring how the events unfolded: "Was the child picked up with care or in a hurry"? If a child molester rather than the mother were acting at the site, we would perhaps speak of abduction (!) in a criminal sense: the baby was possibly carried away by a stranger, whose status we know nothing of as of yet. A technical inquiry at the site could perhaps reveal *What* actually happened, in better clarifying the relation between the how's and the why's.

My suggestion is that what's questions should be included in the list of complex questions, which are central in the process of inquiry. In Kevelson's revelation of "The How's in Why's, and the Why's in How's", the What's supply the "material ground" (the act of seeing itself) upon which How's and Why's can proceed accordingly. As "immediate interpretant" the what's provide us with a glimpse of the "real"; How's act as "dynamic interpretants" in helping to reveal the details of the matter in the further sequencing of events; Why's are the "final interpretants" that settle the question, until further notice. New information can always unsettle our first determinations, and with Peirce, the *rheme* of a last (final) interpretation can never be completely ruled out.

The triadic structure of the *interpretant* (Mead's *significant symbol*) is not static, but rotate in accordance with the employed aspect of the observer/user. The *immediate interpretant* employed in the what's question refers to what strikes our vision, but the what's are easily transformed into the how's of what's, or else into the why's of what's. When how's are in focus, more determined relations are in operation when starting to inquire into "how it is possible at all to see what we think we see?": the methodical steps of inquiry can take form (*dynamic interpretant*). When why's are in focus, "causes" or "purposes" are *thought* for as sequences of action, now set in motion. The "final cause" in operation in our abductive inference, that it was the mother who picked up the baby, closes (temporarily) our inquiry.In the social world that we inhabit, it is typical and thus expected that mothers attend to their screaming babies. Once inquiry

has determined in due course, that it was indeed the mother who picked up the child, the immediate interpretant turned out also to be a final interpretant. Our common sense intuitions are more often than not also correct, a suggestion, which is in line with Peirce's own view of the (economizing) role of critical common sense in the evolution of the universe (CP 5.600).

My corrective to Kevelson's inspiring text on the "How's of why's and why's of how's: Relation of Method and Cause in Inquiry" resides in the attempt to add yet another *rheme*, i.e. some new information allowing also for What's to enter the Logic of Inquiry, thus informing the very topicality (theme) of discourse. With Peirce, one might even suggest that inquiry starts out with a bothering *What* irritating us, as we do not quite know what is going on; but the end of inquiry might also be a more informed *What*, now in the form of a more ripe hypothesis as to what goes on. In relation to the Why's and the How's, What's appear to us as infinitely open-ended, as a point of reference in which interlocutors in a dialogue help finding a common ground of reference so as to secure further (inter)action. When operating as a triadic template ("the mother picked it up"), what-questions have the same complex triadic structure of relations as do how- and why-questions. Such questions supply us with meaningful responses so that joint action (inquiry) can be pursued.

4. A recent debate as to the matter of explanation in social science and why what's matter

A current debate in sociology actualizes the urgency of taking what's questions seriously. In a recent book, *The Explanation of Social Action* (2012), John Levi Martin mounts an attack on the persistence of why- and how-questions to the detriment of what questions in seeking explanatory patterns in social science. In his view, and for that matter in traditional social science accounts, the term "explanation" has come to be reserved for the why's (and how's) as these relate to causal processes underlying the unfolding of social events, while the what's typically are relegated to the more descriptive stage of inquiry. In the classic *Verstehen/Erklären* controversy, *Verstehen* was linked to interpretation/description with a subjective undertone, while *Erklären* was given a logical, and hence objective epistemic status (Abel 1948).

In methods- and philosophy of science textbooks in the social sciences (including Martin's text), why- and how-questions are seldom, if ever, related to *Method* and *Inquiry* in Kevelson's (and Peirce's) sense, but to tech-

nical details as to what constitute proper explanations in matters of social life. When concluding this section, however, I will again attempt to link to Peirce's semiotic logic in order to reveal its potentiality and richness in the revitalizing of the full range of explanatory reasoning in the social sciences, notably in my own discipline of sociology.

When talks evolve around social science explanation, it is typical to restrict the term explanation to that mode which Aristotle referred to as "efficient explanation": a force (x) that "pushes" an entity (y) to come about so that an explanatory relation holds between (xy). Andrew Abbott, a close colleague of Levy Martin at the University of Chicago, has called attention to the unfortunate consequences of such methodological restriction of the term 'explanation' (2004). In seeking to enrich the many modes of explanation in use both in ordinary life and in various sciences, Abbott revitalizes Aristotle's classification of *causes*: *material* cause; *formal* or *structural* cause; *effective* cause; *final* cause.

Although any particular analyst of social action may have specific preferences in concentrating on only one of these classes, in technical inquiry most often that of "effective cause", the whole spectrum of causes is most often in operation when complex social events are to be explained (and understood). As an example of *material* cause, Abbott uses the following example: "The Republicans lost the election because they lost the women's vote" (2004, 95–97). Women's vote is here considered crucial in winning a US election, and is in this instance regarded as the *material* in the making or unmaking of this special event. As an example of a *formal* or *structural* cause, Abbott refers to Georg Simmel's recognition that a group with three members is inherently unstable, as dyads are easily formed thus weakening the structure of the group. As an *effective* cause, Abbott provides the following example: "a strike caused employer retaliation". In this latter case, we are dealing with a time sequence: A (a strike) forced B (employer retaliation). In the great majority of causal explanation in (social) science, the cause (A) needs to proceed (B) as constituting its effects. *Final* causes refer to the aims of events: The cause of universities is the education of young people, a mode of reasoning which classic social science often linked with *functions*. The *cause* is no longer prior to the event, but ahead. Functionalist reasoning has typically been discarded by empirical social science, while favoured by (speculative) social theorists.

As an illustration of the complex of reasoning/explanation in social science, let's consider the material causation referred to above: "The Republicans lost the election because they lost the Women's vote." Clearly,

we deal with a *triad* in the sense employed previously: (ab/c). The proposed *cause* is perhaps necessary, but it is clearly not sufficient in fully understanding *why* women in large measures chose not to vote Republican. In Kevelson's Q/A sequencing, we are in need of further information: a response to the question of why women chose not to vote Republican. While the triad in the first round is an easily observed event or compound of events externally reachable and improved with statistical reasoning (differential percentage of women), the second round of inquiry requires much more of the actors point of view, i.e. a phenomenological-interpretive understanding of what it is in Republican policies that put women off the track. The observer is now required to step down from her external position and to "participate" at the stage in the unfolding of events she aims to understand. Women may have good grounds not to vote Republican: the *causes* or *reasons* of their behaviour need to be found *in situ*. Now the causes are no longer external to action, but profoundly internal in a (typical) action sequencing (acts): Women stay away from the Republican Party, and *why* is that the case? *What* is there in women's perception of their political environment that "explains" (help in illuminating) the reasons *why* they vote as they do? Why questions are then deeply embedded in what questions, as what's help in configuring the spectrum of options upon which the how's and the why's can be further elaborated. Hence, there is a need to take description of social science events (the what's) quite serious as this stage is foundational for inquiry.

Abbott's and Martin's insistence that a full (and rich) explanation of social science events need employ the whole spectrum of Aristotle's causes is especially important in the light of the eruptive division in modern social science between structure and agency, constraints and choice, because-of vs. in-order-to motives. Such divisions are often lumped as explanation vs. interpretation, and engage very different communities of inquirers: quantitative vs. qualitative analysts. Indeed, both Abbott and Martin consider the long held distinction between description and explanation in need of abolition, and description to be a primary and also final aim of social science explanation. The wider aims of such interventions are to foster more sophisticated and formalized modes of description in order to shun away from its traditionally perceived subjectivity.

From a pragmatist viewpoint, such aims are fully congruent with Peirce's own claims: to induce the act of seeing with greater self-control; learning to see possibilities and options in what we tend to consider as

givens. But attending to pragmatist logic, the claim by Martin and Abbott to replace the how's and the why's with a paramount what's appears as problematic as did Kevelson's omission of that self-same what's. On the contrary, the three modes of asking questions are closely intertwined and mutually engaging if inquiry is to proceed at all in accordance with pragmatist logic.

Description relates to registration of a series of events as what's: What makes an event an event? From whose point of view? And for how long? Such elementary questions, crucially important in inquiry, easily multiply once registration of events as what's going on is taken seriously as the starting point, and the end of Inquiry: to register what indeed happened is most often also to know why and how it happened as "first impressions" in need of critical tests. What's supply the sites upon which further inquiry (the how's and the why's) can proceed. In such a way, what's define the situation and set the stage so that further trajectories (how's and why's) can be pursued.

But as there appears to be a confusion as to the denotation and thus meaning-use of the term "pragmatic" in these more current debates in the social sciences, it is worthwhile to take issue with a well-known triadic representation as to explanatory modes proposed by Abbott his popular textbook *Methods of Discovery, Heuristics for the Social Sciences* (2004, 29).
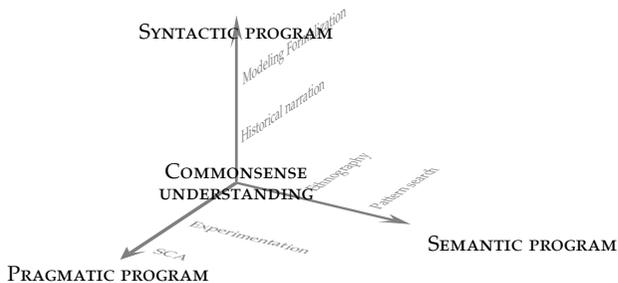
I cannot relate in detail Abbott's rich discussion concerning the three dimensions of explanatory understanding in social science, only spell out the main features of the three-dimensional schema. I want in particular to take note here of Abbott's use of Charles Morris' (1938) classic triadic model of symbolic systems (semantic, syntactic and pragmatic) and how it might affect Abbott's own reasoning, especially with regard to his consideration of the "pragmatic program" (here covering "causal effects" or what is also referred to as SCA, *standard causal analysis*).

In *common sense, everyday, reasoning*, the triadic scheme of distinct explanatory trajectories is not yet exploited in full. Common sense typically draws upon all dimensions without necessarily making hierarchies in what counts as a sufficient account *in making sense* of what's going on. The drift of inquiry whether in science or in law leads to a refinement in the suggested three dimensions, which in Abbott's presentation appear to be mutually exclusive of one another.

Semantic reasoning (as explanation) relate(s) to meaning and its translation both in everyday discourse and in science (such as anthropology). The explanation of witchcraft in primitive society occurs by translating odd events (such as the rain dance) into our everyday language so that we can "understand" such events as quite ordinary. When translated into a set of performing events, often occurring just prior to the rain season, the rain dance is then quite understandable: after all, there is a co-occurrence between the rain dance and the occurrence of rain, in addition it strengthens collective life (Boudon, 1993). When moving from the concrete to the more abstract level, semantic reasoning often involves pattern search, for instance the search for more or less "universal patterns" that reoccur under very different conditions such as pure/impure; high/low; raw/cooked. Such distinctions have rich semantic meaning and can easily travel across temporal and spatial setting.

As examples of *syntactic* mode of reasoning, Abbott points to the narrative reasoning typical of the historical sciences: in unfolding the complex of events that preceded the French Revolution, the historian helps the reader/listener to order, thus also understand, the series of events in relating (meaningful) action sequences. Such sequencing is not equivalent to "causal effects" between independent events in a logical chain, but is rather validated by an internal affinity of meaning. In its more abstract form, syntactic reasoning can refer to game theory and cover such activities as the prisoner's dilemma, a syntactic *imaginary* with wide application in social sciences, especially in economics.

The third program, that of *pragmatic* reasoning, refers in Abbott's text to *standard causal analysis* (SCA), i.e. typical variable analysis with dependent and independent variables: "What explains the decline in birth rate?" The education of women, and hence their access to the job market, is often seen as one such independent factor in helping to explain the decline; other factors deal with the general decline of available jobs and thus the rise of gloomy prospects among both men and women. Abbott employs the notion "pragmatic" with reference to "what to do" and refers to what

he says was its original implementation in the social sciences, namely different kinds of policy research as for instance when choosing between two fertilizers with regard to their respective effects in agriculture. Modern evaluation (evidence-driven) analysis is in this sense strictly "pragmatic"; policy analyst's need to find out "what works" in different settings. Accordingly, SCA as Abbott implies, is quite a useful technique in ordinary policy analyses. In his view, problems arise when SCA is transferred to the academic theoretical field in social science and is burdened with finding independent relations between causes and effects which can be subsumed under "covering laws".

Abbott's criticism of SCA is in line with quite a persistent history within modern sociology to question the adequacy of variable analysis when applied to social life in general, and social action in particular (Blumer, 1969, 127–52; Abbott, 2000, 97–129). [4] Variables such as "education of women" or else "birth rate" do not, in Abbott's words, refer to easily isolated entities in social life but are properties of yet other more complex generative action systems; the educational system, family life, and women's position to govern their own life are all interconnected. When applied outside a strict experimental situation or else in policy analysis (when something has to be done for political purposes), the problems with SCA and variable analysis in general are, in the views of both Abbott and Martin, that these techniques tend to promote a false claim to causality between independent and dependent variables constructed for the purpose of inquiry. A syntactically imposed vocabulary of causal orders is imposed on social action processes most often governed by unruly sets of mutually interacting events and processes (Abbott, 2004, 38–49).

A parallel criticism is mounted by Martin against the predominance of causal why-questions which in his view cultivates "third-person" expla-

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[4] We should recall that in the history of social science (which cannot be recorded here), explanatory reasoning has long favoured why's (and how's) explanation for being more *scientific*. Even Max Weber wavered in that he finally favoured "explanatory understanding" as the proper methodology of social science (Weber, 1949, 49–112). While description as what's was formulated in common sense language, the why's and how's could be formulated in technical science language (such as statistics and/or mathematics). Hence, the rise of a hierarchy. Although repeatedly challenged, the hierarchy nevertheless persists in the majority of methodology texts in the social sciences. Challengers have long been marginalized to the outskirts of mainstream social science. The question at issue in the new debates is, in my view, whether or not the old hierarchy between (technical) explanation and (common sense) understanding now is being cut asunder in that a new concern with "description" is arising, not the least due to the explosive growth of computerized data in a digital age with interconnected supercomputers.

nations (from the analysts point of view) while neglecting "first-person" accounts (actors own accounts of available options). Third-person explanations isolate and abstract factors or else invent relations (such as in psychoanalysis) to please a sense of *scientificity* among observers. Martin is arguing that social science/sociology needs to take common sense definitions of social actors much more seriously as real vehicles of inquiry, and avoid the tendency to abstract and isolate components into artificially constructed technical language idioms (2012, 3–23). What-questions then become of central importance in the attempt to grasp ongoing social processes "from actors' points of view". This is not necessarily to discard the possibility of more abstract propositions as for instance Alexis de Tocqueville's "law" that revolutions tend to eat their own children or for that matter statistical regularities as for instance the claim that unequal access to higher education between social classes tends to accentuate class differences over time. On the contrary, such abstraction, whether in theory or else in aggregated empirical data, are for the most fertile (macro) consequences of complex sets of "situated" social activities on the micro-level.[5] In sum, the criticism mounted in the current debates I have attended to as to what explanations are all about in social science is simply that why-questions (and -explanations) in social life need be anchored in the much more basic what-questions (and -explanations) of real life-events and their sequencing.

I have thought it worthwhile to attend to these current discussions in the social sciences as to what explanatory reasoning is all about, not the least for the reason that the "pragmatic program" in Abbott's presentation is made to coincide with the calculation of "causal effects" in sca. In my view, such a coincidence amounts to an undue limitation of what pragmatist reasoning is all about, as clearly revealed by Kevelson's intervention as to the q/a sequencing at the bottom of all inquiries. As already hinted at, Abbott's presentation of the three explanatory modes operating in the social sciences heavily relies on Charles Morris' original (mis)interpretation of Peirce's logic of inquiry.[6] Morris reduced the pragmatic use of language (as in talk) to mere facts, to "secondness", thus ripping such use of logical self-control and "thirdness". Clearly, the notion of pragmatism (and pragmatic reasoning) invites many different employments, as Peirce

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[5] James Coleman's boat-metaphor as to the dynamic interplay between macro/micro/macro relations is a case in point (Coleman, 1986).

[6] See (Kevelson, 1988, 94); see also John Dewey (1946, 85–95) on Charles Morris' (mis)interpretation of Peirce's semiotic logic.

himself noted repeatedly. In following Morris's recommendations, Abbott, too, limits the meaning of "why", and thus the problem of causality, into a technical-pragmatic complex of causal effects and their interplay. This is in my view an unfortunate limitation of the why's as such questions permeate inquiry on all levels, not least on the level of conduct and purpose of inquiry. It would be unfortunate to free the semantic and the syntactic programs in Abbott's scheme from the impact of such why's as such questions supply the very ground of inquiry in the first place.

The three modes of explanatory reasoning in Abbott's exposition have also come to shape quite different (also antagonistic) communities of inquiry in the social sciences: SCA observers have little, if anything, in common with the meaning-interpretations of cultural anthropologists or with the rich (or else thin) narratives of historical scholars intrigued by the events that led to the Fall of the Roman Empire or for that matter by such events today that lead to the radicalization of young Muslims. Kevelson's concerns in seeking to reveal the long forgotten questions which are at the bottom of all inquiries, also the more specialized ones, spelt out in the first part of my presentation could, if attended to, rectify the many animosities that have plagued and still plague social science practitioners. Hence, my focus on "the what's of the why's and of the how's": the inter-relations of immediate interpretants (seeing) with (logical) reasoning and (dynamic) action respectively.

5. What's up – abductive inferences, perceptual judgements and ditto facts

Abductive inference seems particularly relevant, when, as in the present text, the what's are in question. I have already alluded to how our ordinary language is ripe with such abductive inferences as in the case of "the baby cried—the mother picked it up". A "social" relation is provided between the two subjects (the baby—the mother), as between the two predicates (crying picking up): and the event is fully naturalized (taken-for-granted). In the social philosophy of G. H. Mead, abductive inferences abound in what he refers to as "significant symbols" (Mead, 1938). Significant symbols supply social actors with shared repertoires of action sequences. A flag is much more than a piece of cloth: it calls out shared behaviours among actors; to stand up and sing the national hymn for instance. What is particularly curious in the case of such abductive inferences-in-use is the frequent "fact" (or possibility) that we also can

"see" such (interpretive) events happening: "the mother picked it up".
In the language of Peirce, the abductive inference shades into perceptual
judgement without any sharp line of demarcation between them (CP 5.182).
At this point, it is worthwhile to continue quoting from *The Three Cotary
Propositions* as the third of these deals with the relation between "seeing"
and "reasoning": "In other words, our first premises, the perceptual judg-
ments, are to be regarded as an extreme case of abductive inferences, from
which they differ in being absolutely beyond criticism. The abductive
suggestion comes to us like a flash. It is an act of *insight*, although of
extremely fallible insight." (CP 5.182)

Peirce's comments are about how the act of seeing (what) is infused
with interpretation or even reason. In the case referred to "the mother
picking up the child", a reasonable interpretation in itself as *it makes sense
of* what is happening, we seemingly have a perceptual judgment, and
not an abductive inference proper (although they shade into one another).
The two differ, as Peirce states, in that perceptual judgments are *immediate*:
they are what they are, no matter what, while abductive inferences call
for a more cautious formulation inviting criticism: "the woman picking
up the child was probably the mother...". Another curious comment of
Peirce refers to the contraction of perceptual judgments into immediate
facts: "(T)his process of forming the perceptual judgment, because it is
subconscious and so not amenable to logical criticism, does not have to
make separate acts of inference, but performs its act in one continuous
process" (CP 5.182).

When we go around our daily chores, we do not necessarily notice
what is around us for the simple reason that we expect things to be what
they have been so far: seeing "what's" is part of our routine action chains,
our habits. It seems in line with Peirce's own suggestions that seeing as
action is habitual as long as nothing unusual occurs: we no longer find
the scissor or else the comb at their usual place. If so, our organism
and thought are set in motion: What's up? Where to look? Aha, all of
a sudden, I become aware of "the fact" that I used the gadgets yesterday
in the bathroom, and in an act of insight I turn around: I find what I was
looking for. It is curious to reflect upon such chains of action, when the
routine is broken, and we are unable to find what we are looking for.
When we start to "think", it seems that we are generating pictorial action
chains: what did I do yesterday? In so doing we "see" not just singular
items the comb or the scissor but we see these items in terms of action
sequences, often immediate ones: I was in the bathroom, wasn't I?

Peirce stresses the point repeatedly that when we "see" what's going on, or what could possibly has happened, we see *generals*, and not *particulars*, i.e. we do not see a comb or a scissor isolated from the context of continuous action, but we see "totalities" in terms of action chains. Such assertions are also in line with the classic Gestalt schools of viewing perception: seeing "what" demands a context of action, "what's up"? To see generals in operation out there, if I am allowed to freely interpret Peirce, is also to see purposes, many of which also are immediate flashes of insights. Oh, now I suddenly see what I could not see earlier! Peirce's own reference to his fathers' use of a serpentine which as well could be seen as a stonewall is most relevant; we cannot see both at once, but we can (learn) to shift between the two "facts" which are present for us as immediate percepts (CP 5.183).

Perceptive judgments or else facts are as noted beyond conscious control; they are what they are, no matter what. They come to us like a flash of insight, although extremely fallible. It is the purpose of inquiry to translate such insights into abductive inferences, into hypotheses. In this context, Peirce ventures a line of thought, which I consider both curious and valuable for reasons that I am going to spell out in more detail below.

> A man must be downright crazy to deny that science has made many true discoveries. But every single item of scientific theory which stands established today has been due to Abduction. But how is it that all this truth has ever been lit up by a process in which there is no compulsiveness, nor tendency to compulsiveness? Is it by chance? Consider the multitude of theories that might have been suggested.
>
> CP 5.172

What I find curious in Peirce's pondering here is that what's questions, clearly not all but at least some, are endowed with a special worth: to put us in touch with that diffuse matter that we call "the real". Following up on such a line of thought, one might further surmise that what's questions can be evaluated along a scale where some are *stronger* than others in leading to valuable insights well knowing that there might always be yet other *rhemes* (new information). It might well be that in such a search we never know at the start which among the what's that are more valuable. Nevertheless, the insight that there are some what's that are more worth pursuing than others help us navigate an ocean of possibilities: to put us on the right track. Some insights come to us as more pressing than others, a curious recognition of Peirce in distinguishing among the various inferences. The validity of a deductive inference resides in its logical necessity,

it is not more or less valid, or more or less strong, but either/or. But the fragile validity of an abductive inference has no such built-in necessity: its presence "speaks" to us; it is a felt necessity. As such it arouses the organism and compels us to act. In the further chain of action sequences, our first hints as to the what's will prove whether or not we are on the right track.[7]

Pursuing the centrality of what's the delicate line between perceptual judgments (seeing), abductive inferences (reasoning), and reality-formation also opens up a road to understand more readably Peirce's insistence that the essence of Pragmatism resides in the logic of abduction (CP 5.196).

We owe to the classic pragmatists (Peirce, Dewey, James and Mead) to conceive of scientific inquiry as a privileged continuation of routine social action; the former is set in motion to provoke trials in terms of experimentation (what is this all about) while in daily contact "critical common sense" performs the same role, although with greater caution. To reach a common definition of the situation to respond mutually to what-questions requires ongoing efforts amongst participants to make sure that they are on the same track. Routine social action also inhabits "trials" when we test one anothers sense of understanding: Illusions do break down, generating new action chains, perhaps strengthening old ones. Tracing the role of what's in generating reasonable responses in ongoing interaction chains (finding solutions to pressing problems) might also open up for valuable insights for sociology to pursue leads to evolutionary social biology: why some collectives (groups and/or societies) appear to be more robust than others when viewed over time.

6. What's as decisive trials in the communal life of interpretation

To respond to others' gestures by means of action (talk is also a kind of action) demands interpretive work on behalf of each part in a dialogue (Mead, 1938). When we belong to the same interpretive community and share many action lines, joint action is less problematic than in cases where we belong to different interpretive communities where dif-

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[7] Peirce even ventures lines of thoughts in these and related paragraphs that the insights brought about by great discoveries (seeing what's) in the history of science go beyond the merely human realm of (interpretive) action by opening up for conversations with nature itself and partake in evolutionary processes. "You may say that evolution accounts for the thing. I don't doubt that it is evolution. But as for explaining evolution by chance, there has not been time enough (CP 5.172)

ferent action lines are pursued. We have all been foreigners somewhere and become aware of difficulties when we are not understood; much energy is required. Joint action really demands what one by recourse to ethnomethodology can call "accomplishments" on behalf of actors. When we carry on conversations, we routinely fill out "black holes" by saying "as you know", or else "as everyone knows", "look, man, can't you see?". Interpretive understanding is the result of constant accomplishments on behalf of actors: in case one part in a dialogue comes out saying "I do not know what you are talking about", then the dialogue stops, and repair work is needed. The what-questions are in this sense often very decisive they are, to borrow from Peirce, dangerously close to reality! The long-term goal of his pragmatism was to engender critical instances by means of inquiry so that humankind, in the final instance, could come to rest in "the fixation of belief", reaching a point of interpretive convergence. Even if such a point of convergence will never be reached in in finite time, is serves, nevertheless, as a transcendent vision, the lack of which would make our faith in reason futile.

But such a vision of a final community of interpretation where truth resides in the "fixation of beliefs" has been severely criticised in the last couple of decades as harbouring a scientistic fallacy, possibly also a tyranny of reason. Most influential in this regard is H. G. Gadamer's exposition of hermeneutics in *Truth and Method* (1989). Instead, any interpretive community is always contextualized in time and space; *what* (*how* and *why*) we see is always localized. We approach history through our own lenses with all their prejudices and interests. Historical scholarship can at best aim at "the fusions of horizons" where we at best can learn to see ourselves from the standpoint of the others: self-understanding accompanies the seeing/understanding of the others. Such a hermeneutical vision shuns the idea that historical and social truth could ever be reached via convergence; each time-space epoch needs to elaborate upon its own understanding of, say, the French Revolution. There can be no final interpretation of such a social event, there can only be understandings from given standpoints.

More recent scholarship in the intersection of pragmatism and hermeneutics are influenced by an even more radical reading of the *what's* rendered by Martin Heidegger's philosophy. Indeed, Heidegger's ontological exposition of "being in the world" has significant affinities to recent exposition of pragmatism (Rorty, 1979; 2011). Traditional philosophies take their point of departure in there being "subjects" and "objects" in the world as if these were separated entities, and could be approached in isola-

tion. In hermeneutics and pragmatism, the world is always already there and will be there long after we are gone: we are always situated in a world of ongoing action. The question then arises how we can (and should) act in a world that is always already there. Our obligations towards ourselves and others lie in our awareness that we as social actors are responsible for that common world of ours. Our routine habits of response to simple what questions confirm and solidify what lies ahead. Our obligation is to interpret and act in that world of ours from possibly new angles: to take serious the challenge that lies in simple what-questions. Most of us shun away from such responsibilities, and we go along with others by nodding, smiling and agreeing.

Social acts whether in science or in daily life build upon (pragmatic) accomplishments, that we, as actors, fill in, point to, and ease the interpretive/seeing works of others, thus allowing for cooperation in the long run. The recent twist in the fusion of phenomenology and pragmatism challenge the routine activities upholding the taken for granted world of ours. Ruptures are no longer seen as unruly events challenging the social order, but as moments of creation and possibilities; Asking what-questions are no longer merely nuisance but seen opening up new visions, and perhaps also new entrances into that elusive world of ours. What we see "out there" is no longer just a (dyadic) relation between the subject (us) and the object (it) but is about a (triadic) being in the world in common with others that may think (and act) differently than we do. It is about us-them-it prolonged in time. What's are decisive as such questions, with a term borrowed from Heidegger, "attune" us to the world. Or as Peirce said, which I have tried to convey in this text, the world come to us as "precepts", as given perceptual judgements "beyond doubts". In the process of inquiry such precepts (of facts) shade into abductive inference thus awakening doubts as to "what it is all about". Such doubts can, but need not, lead to new insights. Profound what-questions intersect the outer world with our inner selves (whom we are), thus provoking possible new pathways in our relations with others and the world we share in common. What's can be seen as nuisances, but in critical inquiry, the what's are central in setting the stage for the how's and the why's.

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