

Introduction: The Lebenswelt origins of the sciences

Harold Garfinkel · Kenneth Liberman

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Ethnomethodology's initiatives originated with Husserl's program; however, it has developed its own rival program for investigating the lebenswelt origin of the sciences, a program that is one of ethnomethodology's central research areas. These lebenswelt origins are also properly a central subject for sociological studies of social order, including peer reviewed social studies of science. Unfortunately, while these "origins" are mentioned and described by Husserl, they witnessably escape Husserl's formal descriptions of his program and are left to live undisclosed and unmentioned behind the disciplinary particulars of the various sciences.

Husserl's Gottingen lectures already exhibit the policies of Husserl's program. And still in *The Crisis of the European Sciences and Transcendental Phenomenology*, Husserl's program is discussed as the lebenswelt origin of the sciences. Ethnomethodology's Hybrid Studies of work and science specify Husserl's program, offering a more detailed description of the lebenswelt

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H. Garfinkel (✉)
Department of Sociology, University of California, Los Angeles, CA 90024, USA
e-mail: garfinkel@soc.ucla.edu

K. Liberman
Department of Sociology, University of Oregon, Eugene, OR 97403, USA
e-mail: liberman@uoregon.edu

origin of the sciences. While Husserl provided the direction for our ethno-methodological investigations, the lived work of various sciences—in their coherent, work-site specific organizational Things-in-distinctive-details, case by case for the particular sciences—are obscured by Husserl’s use of formal generalities in both *The Gottingen Lectures* and *The Crisis*. Regrettably, and as a certainty, both of Husserl’s treatises lose the phenomenon they were written carefully to describe. That is, they lose the phenomenon of the actual work-sites of any science. And there they also lose the *instructed actions* of the scientists, i.e. their actual world-generating collaborations. They lose the phenomenon by losing *just-how* their instructed actions are administered to reveal for the scientists their work, as well as the objects they are studying.

In Husserl’s program, the lebenswelt origins, being only formally exhibited by the lectures, do not actually describe any lebenswelt practices. They do not *exhibit* lebenswelt practices with lived-in-the-course instructed actions. They merely allude to lebenswelt practices. The real achievement of Husserl’s program, then, is that the actual lived work of sciences are alluded to as lived practices. And that is no small achievement.

The Gottingen Lectures and *The Crisis* assert the promises of Husserl’s monumental program. Their incongruous anomaly is that their promise was neither noticed nor recognized by bench practitioners of any science. The program of *The Crisis* was never taken up by scientists, nor was it welcomed as filling a “gap” in the coherence of a particular science, in and as of its discovered topics and practices.¹

Nevertheless, despite the fact that scientists rarely welcomed Husserl’s inquiries, in epistemological philosophy the program remains venerated as Husserl’s achievement. Yet even there Husserl’s program has not been taken up in a radical way, as the familiar haecceities² of an actual science. It has only been used to illustrate cases for epistemological arguments *about* the sciences. Hence, the task of taking up Husserl’s program seriously remains.

This is not to say that no ground has been gained. Very little in *The Gottingen Lectures* redescribes the lived work of any actual science. On the contrary, the lectures forcefully point to the *absence* of haecceities in any and every particular science. These absent details can involve the shop talk, local gestural organization, the local endogenous practices of social order production and accountability, and their coherent substantive material, which might include board notes, personal notebooks, diaries, diagrams, scribblings, books,

¹ The phrase “in and as of” intends to retain the *actual* state of affairs of a social practice. Instead of conceiving of a metaphysical object, “science,” which “has” certain practices, a science *consists* of its practices. It does not exist apart from them; in fact, the task of any inquiry into the lebenswelt origins of sciences takes its departure from this recognition. A science is nothing more than, and nothing less than, the activities of its practitioners. The phrase promises to retain the important insight, which is consistent with Husserl’s own phenomenological discoveries, that a science does not merely exist in its practices, it exists *as* its practices. The perspective is vital to an anti-essentialist inquiry, and the phrase is employed frequently in ethnomethodology (cf. Garfinkel, 2002, p. 92, 99, 138, 207, 211, 246, 247; Garfinkel and Wieder, 1992, p. 175).

² The term “haecceity” refers to the character of being here and now, the “just-thisness” of any activity. It is related to the *hic* of “*hic et nunc*”.

manuals, sketches, post-its, photographs, graphics, door names and warnings, wall notices, texts, gestures read as instructed actions, shop organization, equipment arrangements, architecture and all varieties of bench-work. Also absent are *the shop floor problems*.³

All these are the mundane Things of the lebenswelt.

In contrast to the absent haecceities of the shop floor problems in Husserl's program—and contrary to their *absence* as a requirement of evidently good work in a discovering science—is their *emphasis* in the bibliography of ethnomethodological studies of work and sciences.

It might be said that Husserl's deep phenomenology of his *Crisis* put ethnomethodology on its feet, and is considered by ethnomethodology to be ethnomethodology's educated proxy. But that would be wrong. There is much more to the relationship than that. The two—Husserl's statements on the lebenswelt and ethnomethodology's investigations of work and sciences—are more realistically related. For decades, ethnomethodology has taken up the question, "What would it take to turn Husserl's transcendental phenomenological documented conjecture, which Husserl knew as the lebenswelt origins of the sciences, into a demonstrable phenomenon?" What would such a literature be concerned with? What might it look like? What would it provide for? Let us begin to answer these questions.

Unlike the usual style of a book review that is fair to the two sides of a dispute that it describes, the following argument respectfully thinks to make hash of Husserl's side while entirely favoring the side of ethnomethodology. For instance, we are interested in the Gottingen lectures to the extent that they exhibit as identifying policies Husserl's program of lived work in the sciences. *All* sciences, natural and social, are eligible for case-specific examination. On the eligibility count of *all* sciences there can be no mistake. As Husserl correctly knew and taught, his program is an unprecedented achievement in philosophy, in epistemology particularly, and in the philosophy of science and social studies of science. Nevertheless, Husserl's program was never taken up by any actual science. Nor was his program ever demonstrated as the actual lived day's shop talk and bench-work of any actual scientist in any actual discipline that consisted in and as any actual science-specific work-site haecceities of just *that* science, and here the "that" could be astronomy, mathematics, microbiology, structural engineering, laparoscopic surgery, computing science, all of which have been studied ethnomethodologically, each in and as its distinctive, ordinary, witnessable, collaboratively staffed business at hand.

³ "Shop floor problems" is a reference to the aircraft manufacturer McDonnell Douglas' capacity to make airplanes, a capacity that is dependent upon the local and mundane ways that workers on the shop floor get their work accomplished, ways that eluded McDonnell Douglas' front office staff, whose theorizing about aircraft production blinded them to the real ways their firm was building airplanes. The gap in their knowledge became apparent only after a series of deficit induced layoffs during which so many workers were furloughed they could no longer retrieve the local routines in play for accomplishing the manufacturing.

The sciences have had nothing seriously to do with Husserl's plans for them. However Husserl's program did serve ethnomethodology's authors as indispensable precursors to ethnomethodology's Tutorial Problems and Hybrid Studies of work and science. These studies are now available as successors and rivals to Husserl's program. The lebenswelt origins of the sciences was first identified by Husserl and his company of scholars. Their scholarship made available the lived work of the sciences. Their program is a paradigmatic exhibit of *formal analytic methods* in specifying and describing the lived work as Things of the sciences in their social organizational details. We ethnomethodologists wish to explicate Husserl's program and to use Husserl's venerable provisions for the lived origins of sciences-*in-their-details*, which for us has become ethnomethodology's emphasis on details, *on organizational things in their details*, that is, on what the coherences of details in scientific work is, actually and not imaginably.

Husserl's *Crisis* and the forgotten genealogy of science that it recounts specify *the epistemological issue* that also occupied the Gottingen lectures as their central subject. This vital issue is: making contact with a transcendent object. Just-how is such contact actually made, by scientists? And just-how, on occasion and in any actual case, is actual contact with a transcendent *not* made? How do scientists make that contact? And with what details is that contact maintained? This issue is a central subject for ethnomethodological inquiry. The subject is known both to Husserl and to ethnomethodology as the lebenswelt origins of the sciences.

For Husserl the issue is already identified and settled. But the issue is settled with the critically important achievement of transcendental phenomenological philosophy, and is exhibited with a coherent administration of Husserl's epistemological policies of logic and praxis. These policies describe the lived work of the particular sciences exhibited in details of *formal generalities* of epistemological philosophy. (See Garfinkel and Wieder, 1992) These are procedurally coherent details of formal generalities, and this generalization is a practice that has *its own* lived details. And it is a practice that any Husserlian phenomenologist with expertise can accomplish. These formal analytic methods of epistemological philosophy specify as "the characterization problem" *how a thing comes to be known*, but this can be made accountable in its discipline-specific, coherent appearances as the organizational Thing *it is*.

The methods of ethnomethodological studies of work and science also settle the issue, but these methods are contrary to Husserl's methods. In contrast to Husserl's methods that settle the issue, ethnomethodological studies of work and science respecify the lebenswelt origins of the sciences as these are made accountable in instructable discipline-specific details. Their redescription is an *exhibition* of the lebenswelt origins of the sciences as the lived practices of scientists. Everything in the shop floor problem that is of practical consequence when the two programs are compared is meant to answer the question "*just what* are the details all about?" Everything in the comparison turns on what details could possibly be.

Ethnomethodology starts with and dwells upon immediate appearances. That is to say, our issue is that of making adequate and evident provision for researchable, congregationally produced and concertedly accountable structures of mutually instructable actions of an ordinary society of scientists. Just how are *structures of social action as witnessable properties of endogenous populations* actually and accountably produced? That is, produced as instructed actions, in any actual case. Our interest is directed to locating a particular discipline's domain-specific details of lived work. These domain-specific details are available only in the open, unrestricted horizons (and this "horizon" is the horizon we learned from Husserl), and infinite tasks, that compose the domain of a particular science. Scientists make their work-place-specific formal methods work. And they make them work in their details. That work, with those details, is what ethnomethodological studies of the lebenswelt of scientists are concerned to describe.

Lebenswelt origins of the sciences: Working out Durkheim's aphorism¹

Book Two: Workplace and documentary diversity of ethnomethodological studies of work and sciences by ethnomethodology's authors: What did we do? What did we learn?²

Harold Garfinkel

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An acknowledgement

Over the years Husserl's texts offered to my readings in sociology many sources of alternative subjects—transformations and elaborations of sociology's conventional topics in the problem of social order. The subjects were original to sociology. The subjects were original to sociology's occupation with specifying with precision, descriptive adequacy, and evidence social order in and as of Durkheim's organizational Things in their details of ordinary society as sociology's unique, identifying subject.

The subjects are Durkheim's Things in organizational details of ordinary society. My task in this book is to show that these subjects are Durkheim's neglected accountable Things. In being congregational practices, Durkheim's Things are in their everywhere enacted embodied production, unavoidable, coherent organizational details of ordinary society.

¹(Editor's Note. This title is that of the first book which was published in 2002. This note identifies the disc to which Garfinkel had transferred the manuscript.) Copyright 11/01/03. aneei 11.21.03.doc.apr605.doc-microsoft word.doc—microsoft word Disc 91 Venerable Husserl Manuscript by Terri Barna for Chapter One of Book One Lebenswelt Origins of Sciences.doc.

²This Version was worked on as of 3/18/04 to 5/11/04 and then started again to finish for the Schutz Memorial Lecture, October 29, 2004. It was 11.21.03.doc as of 10/14//04. It was as of Nov 15, 04. As of 10/14/04 it is corrected to page (40). It is now and was prior to this version as of January 8, 2005. And February 19, 2005 to March 8, 2005. It is currently as of April 6, 2005. Page numbers are from original manuscript.

These subjects were inspired by Husserl's texts. Therein they directed my reading to authors of other literatures than those of sociology's canonic authors. Because they were authors in disciplines with their own established literatures, esoteric topics coherently elaborated the diversity for sociology of sociology's inquiries. Hands-on experience with ethnomethodological studies furnished from Husserl's program of *Lebenswelt Origins of the Sciences* new initiatives in sociology's unavoidable problem of social order as indispensable probative background subjects in Ethnomethodology for the enrichment of professional sociology.

What did we do? What did we learn?

These subjects are characterized in the Documents that compose Part 2 of this Book's 4 Parts .

DOCUMENT #1 describes The relevance of Tutorial Problems to ethnomethodological studies of work and sciences. (p. 13 then 21)

DOCUMENT #2 identifies phenomenal field properties of Durkheim's organizational-Things-in-their-details. These are learned and taught as instructed actions with Tutorial Problems (p. 43 then 52).

Husserl's programme is described in DOCUMENT #3. It offers endless venerated sources for the probative respecification and redescription of professional sociology's distinctive studies of lived work and sciences which are identified as a central problem of social order in ordinary society. By reading Husserl's lectures in depths of their relevance of formal methods of practical reason and practical action to the priority for sociology of its concerns with occupations staffed with populational patterns of social order, with organizationally accountable scientific descriptions of work-site practices, with the productions of transcendental coherence of organizational objects in local work-place and technological identifying details. the question could be repeatedly asked: What is the relationship between Husserl's Propositional Program and Ethnomethodology's Studies of Lived Work and Sciences? How is the relationship between Husserl's Programme to Specify the *Lebenswelt Origins of the Sciences* and Ethnomethodology's Studies of Work and Science to be understood? (p. 62 then 71)

DOCUMENT #4 is a Motivated Book Review of Edmund Husserl, *The Idea of Phenomenology* by Andy Crabtree and Harold Garfinkel. The review singled out Husserl's propositional policies of transcendental phenomenological philosophy that composed as a coherent scheme of social analysis a scheme of successive decisions with which to make deliberately indispensable but respectful unfavorable comparisons of Husserl's program of studies of lived work in the sciences with Ethnomethodology's program. Husserl's book, known as *The Gottingen Lectures*, was translated by Lee Hardy, Kluwer Academic Publishers, Netherlands, 1999, (p.75 then 84)

DOCUMENT #5 is read along with #4 to promote the benefit to Sociology of its distinctiveness, identification, grasp, and specification of the problem of social order that Durkheim's objective reality of social facts is ethnomethodology's discovered topic, (p. 90 then 99)

Ethnomethodology's discovered topic.³ It is less well known about Ethnomethodology's discovered topic, that discovered topic's first priority of relevance, that Durkheim's neglected objective reality of social facts everywhere accompanies formal analytic studies and their literatures of the worldwide social science movement as exhibits of stock in trade of evidently good work in formal analysis. Formal analytic studies are celebrated by the social science movement as its most demanded, professionally esteemed achievement of science in social science.

Durkheim's neglected objectivity of social facts, being according to Durkheim, sociology's fundamental phenomenon—being neglected, lost, and misunderstood to sociology for 200 years, is not only a neglected property of formal analytic studies. It is an essentially identifying more to the objectivity of social facts, than being characteristically described by sociology, sociology so ordinarily provides.

(It is both) (It is not only) (Moreover) (Instead) (Whereas) Durkheim's neglected objectivity of social facts is Ethnomethodology's standing subject and its ongoingly discovered topic (both being) to the benefit of professional sociology.

By this I mean:

Durkheim's neglected objective reality of social facts is also an alternate Lebenswelt Pair of instructably observable actions that are variously described on occasion as dyadic ironic pairs of rules and their implementation; OR as games with rules; OR as coherent in-course meteorological haecceities; OR with coherent haecceities of phenomenal field properties; OR explicated with its properties uniquely and distinctively observed while wearing spectacles with inverting lenses; OR as coherent phenomenal field properties. (p. 90 then 99)

DOCUMENT #6 Ethnomethodology: Hybrid Studies of Work and Sciences (p. 103 then 129)

DOCUMENT #7 ETHNOMETHODOLOGY: THE MISSING WHAT (p. 123 then 149)

(To summarize)

Ethnomethodology requires more of ethnographies as identifying, descriptively adequate and evident studies of social order in ordinary society. Ethnomethodology requires more than is provided by the most esteemed ethnographies in peer reviewed Literatures of the worldwide social science movement.

DOCUMENT #8 Beyond ethnomethodological precursors to the lebenswelt origins of sciences (p. 125 then 151)

An outline for a course of lectures occasioned by the invitation to deliver the Schutz Memorial Lecture on October 29, 2004

DOCUMENT #9 "WHAT IS ETHNOMETHODOLOGY?"

³ (Insert the list of properties that discovered topics describes with its indicating terms and phrases, and its vernacular particulars even though they are familiar abbreviations and are not careful* descriptions that permit respecification as instructed actions.)

Several studies of work and science by Ethnomethodology's authors are noteworthy solutions to long-standing, intractable problems in established discipline-specific literatures of work and science. Pedagogically, each of these ethnomethodological studies describes just what is to be taught and what is to be learned that exhibits substantive, material solutions to intractable problems in and as of the discipline-specific work or science that is adequately and evidently described as a lived course of instructed actions. Eric Livingston's published dissertation is such a study. Titled *The Ethnomethodological Foundations of Mathematics* his book describes the lived work of proving Godel's theorem. In the course of the book he answers four long-standing, intractable questions in the history of mathematics and mathematical sciences: What is mathematics? What is a mathematical object? What explains mathematical rigor? What is the lived work of mathematical theorem proving?

The Lebenswelt origins of the sciences

Part 2 of 4: What could *details* possibly be?

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- [2] Notes to Recommend Kenneth Liberman's Book, *Dialectical Practice in Tibetan Philosophical Culture*, as a Study of The Shop Floor Problem in Ethnomethodology's Renewal of Sociology's Distinctive Study of Social Order.
- [3] A Study by Ethnomethodology's Authors that is Directed to Respecifying the Natural Sciences as Discovering Sciences of Practical Action, Harold Garfinkel, Eric Livingston, Michael Lynch, Albert Robillard, and D. Lawrence Wieder.
- [4] The Indispensable Use of Mirrors and Inverting Lenses to Exhibit, Collect, Observe, Watch, Specify, Identify, and Analyze a Domain of Embodied Coherent Meteorological Properties of Ordinary Jobs Around the Home and Office, On the Streets, In Classroom Demonstrations, and Any of the Rest.
- [5] Working Artefacts: Ethnomethods of the Prototype by Lucy Suchman, Randy Trigg, and Jeannette Blomberg.
- [6] Maps and Journeys: An Ethnomethodological Investigation, by Eric Laurier and Barry Brown.
- [7] An Ethnomethodological Study of Galileo's Inclined Plane Demonstration of the Law of Free Falling Bodies, Harold Garfinkel with the indispensable advice and technical assistance of (LIST THE OTHERS).

- [8] A Pair of Pedagogic Ethnomethodological Studies of Endoscopic Laparoscopy:
- (a) Timothy Koschman, LeBaron, C., Goodwin, C., & Feltovich, P. (2001, August). Dissecting common ground: Examining an instance of reference repair. Twenty Third Annual Conference of the Cognitive Science Society (pp. 516–521). Mahwah, NJ: Lawrence Erlbaum Associates. Retrieved April 22, 2002 from the World Wide Web: <http://www.hrc.ec.ac.uk/cogsci2001/pdf-files/0516.pdf>
- (b) Lorenza Mondada, Working with video: how surgeons produce video records of their actions. *Visual Studies*, Vol. 18, No.1, April 2003, pp. 58–73
- [9] Andy Crabtree, Taking Technomethodology Seriously: Hybrid Change in the Ethnomethodology-Design Relationship (This is a preprint of an article to be published in the European journals.com/ejis/index.html). Not for redistribution.
- [10] A Book List of Studies in Ethnomethodology Working Out Durkheim's Aphorism⁴

A guide to understanding the preceding two tables of contents to parts 1 of 4 & 2 of 4 of this book as ethnomethodology's particular concerns with details

The ethnomethodological studies of work and science listed in the preceding two Tables of Contents of Parts 1 of 4 and 2 of 4 exhibit an ethnomethodologically motivated selection of Durkheim's organizational Things. Particular attention is paid to describing these organizational Things in their variety of empirical, real world contingencies.

Durkheim's organizational Things, each in the distinctive contingencies of its identifying details, are described using as a guide to descriptive adequacy and evidence Aron Gurwitsch's phenomenologically respecified gestalt demonstrations in their generality of contexturally coherent details.

Three "structures" serve the tasks in this Book of describing Durkheimian Organizational Things in Their Details:

- (i) The Meteorological Coherence of Things-in-Their-Details
- (ii) The Autochthonous Coherence in Phenomenal Field Properties of Things-in-Their-Details. (Called PHI)
- (iii) Such descriptive terms as "Details", "Data", "Quiddities", "Explication", "Notes", "Annotations" and the rest are discarded and replaced with "Haeceities".

The ethnomethodological studies of work and science in the preceding two Tables of Contents exhibit a selection of Durkheim's organizational Things.

⁴ Edit this note and add it to the author's introduction.

These are described with particular emphasis on their variety of empirical real world contingencies *in meteorologically coherent haecceities*.

Speaking analytically, these cases of Durkheimian Things are congregationally produced and congregationally witnessable, locally and accountably. They are unavoidably so. They are without remedy. Description is done while deliberately eschewing formal analytic methods of generic representational theorizing to mediate between the instructably demonstrable analyzability of actual things and their concreteness in their identifying details.

Instead the disjunctive methods of ethnomethodology display the description, in all its contingently performative respects of logic and practice, its intelligibility, its coherence, its completeness, its sufficiency, its adequacy, its evidence, and its generality, each of these properties of description is exhibited distinctively and uniquely in and as of its details.

In disjunctive contrast with ethnomethodology's methods, the methods in established peer reviewed Literatures of the social science movement require that substantive, material descriptive adequacy and evidence be exhibited in and as the details of formal analytic methods. These procedural displays are known in professional vernaculars as "models" and "paradigms" of the technical work of describing the objects of action to which they refer by displaying them in praxeologically valid details of the generic methods that represent them.

The methods of ethnomethodological studies of work and sciences are incommensurable with methods of formal analysis. In any actual case ethnomethodological methods can be compared with methods of formal analysis but the policies and practices of ethnomethods cannot be reconciled with generic representational theoretic practices and policies of formal analytic methods. The two programs are disjunctively analytic and incommensurable.

While consistently adhering to incommensurable policies, ethnomethodological studies carry out description over the endogenous congregational, witnessable, phenomenal course of their production in and as of local, distinctive, accountable accomplishments of phenomena of social order of immortal, ordinary society.

Through and through, from start to finish, without pause or time out, and, *sine qua non*, without introducing or importing *a priori* imitative descriptive characterizations into the course of description (with which) (in terms of which) to exhibit the coherence of organizational Things in their details, these professional sociologically accountable Gurwitschian gestalt coherence phenomena in their details are sociology's instructable achievements of its distinctive studies of social order.

Document #1: The relevance of tutorial problems to ethnomethodological studies of work and sciences

Recent references by Ethnomethodology's authors to topics in my manuscripts of 1981: "A Catalog of Ethnomethodological Studies", and 1984

“Ethnomethodological Studies of Sciences of Practical Action”, cited subjects in ethnomethodology as if they were fixed and done, once and for all, as EM’s canon of discipline specific topics. These mentions of old subjects encouraged me to examine the 1984 manuscript, “Ethnomethodological Studies of Sciences of Practical Action”, singling out what’s new since the 1984 manuscript was written.

What is the news? What news does ethnomethodology bring? What news is in it for sociology?

The news that Ethnomethodology brings is foretold with Durkheim’s Things with its strange names for new subjects.

- (1) Phenomenal field properties of Durkheim’s ignored organizational Things-in-their-details. Notice that Things-in-their-details is hyphenated. The phrase is written as one word, and details are emphasized by being underlined.
- (2) The corpus status of the studies by Ethnomethodology’s Authors furnishes exhibits of ethnomethodology’s distinctive empirically warranted phenomena of social order. In the instant case their corpus status is endogenously produced just as it is congregationally displayed, witnessed and witnessable. Their warrant is procedurally situated in and as of coherent accountable exhibition of uniquely adequate, instructably evident organizational Things-in-their-details.
- (3) Formatted queues, given the ubiquitous range of their properties that are uniquely relevant to Ethno studies of social order, are to sociology what fruit flies are to genetics: a topically rich frequently used pedagogic case. In some service lines persons arrange themselves to exhibit the line that appears as the real existence of an order of service. Call the line that appears a formatted queue. Phenomenal field properties of formatted queues are perspicuous research sites in which beginning students along with early authors of ethnomethodological studies learn to witness and recognize an open unrestricted list of formal properties of Durkheimian Things. These orderlinesses are produced and exhibited by all parties to the line that appears. The orderlinesses are easily observed but are best observed in tours. Phenomenal field properties of orderlinesses are ignored subjects in formal analytic literatures. These orderlinesses that are identifying of formatted queues are composed of astronomically prevalent practices. They are done with vulgar endogenous competence of embodied congregationally produced and locally accountable coherent orderlinesses that escape entirely from established formal methods of social scientific accountability and are unanimously ignored in the mainline professionally current situation of inquiry.
- (4) Endogenous structures of Things-in-Their-Details -structures such as immortality, objectivity, transiency, and transcendentality—Durkheim’s Things,—these are recurrently, repeatedly, immediately, visible, recognized, and identified; AND they are alternately described and exhibited

as instructed actions, and distinctively so in Ethnomethodological Studies of Work and Sciences.

- (5) Ethnomethodology's Authors gradually learned to require certain properties of a study as the study's distinctive properties and distinctive features. What properties and distinctive features did Ethnomethodology's Authors learn to require of a study of Durkheim's neglected Things-in-Their-Details (in order to) (with which to) research and teach as their professional pedagogy their study AS SOCIOLOGY'S DISTINCTIVE STUDY OF SOCIAL ORDER in a Bibliography of Hybrid Ethnomethodological Studies of Work and Science?

Just what did they learn? Just what did they come to require?

To answer I'll tell you Manny Schegloff's reply to me several years ago when I told him what I proposed to say in my part of our twin bill at the then upcoming annual ASA meetings in 2002 in Santa Ana.

Manny and I were scheduled to celebrate the inaugural meeting of the Section-in-Formation called Ethnomethodology and Conversation Analysis. I told Manny that for my part I would praise Durkheim and Husserl as Sociology's heroic authors. I would take the occasion to identify Sociology's TWO venerable authors. I would praise Durkheim and Husserl for having established sociology's distinctive study of social order. Each author worked to identify and fill a gap in the peer reviewed foundational literature of sociology's distinctive phenomena of social order.

Manny replied: "Durkheim, yes. But what's Husserl for?"

No. Both authors. Each author distinctively, identified the unavoidable relevance of Things-of-ordinary-society in their details. Durkheim as a certainty for the objective reality of social facts in their details. Sociology's distinctive studies of social order certainly consists of Durkheim's neglected Things-in-their-details. And Husserl for the lebenswelt origins of the sciences, all sciences; Husserl for (redescribing) (respecifying) the lived work of proving Things-of-the-discovering-sciences in, as, about, as of Aron Gurwitsch's gestalt contextures of coherent meteorological workplace details of the shop floor in their stunning assembly line phenomenal field properties of generality, identity, uniformity, repetition, constancy, sameness, comparability—practical achievements of logical properties of social action—these along with any and all the rest of their properties of observable articulate logic that composed followable, practical achievements and instructable procedures.

Practical logic? Practical reason? Yes. Ethnomethodology and Conversation Analysis are now certified by the American Sociological Association as Sociology's professional subjects. Sociology will now have technical say to contribute to disciplinary Literatures of these grand subjects. A professional way into this discovered topic as a research program has already been demonstrated by Mike Lynch. His treatise *Scientific Practice and Ordinary Action* (1993) collects these phenomena of social order in a research program of [epistopics] for distinctively and uniquely sociological studies of science.

My 1981 manuscript was retitled “Venerable Husserl: The Lebenswelt Origins of the Sciences. Husserl’s Documented Conjecture”. The retitled manuscript reflected my discussions with Andy Crabtree about his dissertation, technically and appropriately titled “Wild Sociology” to acknowledge his intellectual debts to phenomenology’s authors. In anticipation of a co-edited book, Andy drafted an email note of 3/5/03, “Husserl and the Forgotten Genealogy of the Natural Sciences.” That launched our co-edited enterprise.

With Andy’s note to point the way I rewrote my manuscripts as an extended commentary by casting them as a book review that alludes to passages in Lee Hardy’s translation of Husserl’s Gottingen lectures, *The Idea of Phenomenology*, as though the passages were Husserl’s atemporally relevant policies that were deliberately written by Husserl as his programme’s successive steps. These passages-as-Husserl’s-policies specify Husserl’s programme by displaying it as his final version of *The Crisis of European Sciences and Transcendental Phenomenology*. Husserl spoke with pride of his articulate achievement of this subject. Husserl knew the subject to be unprecedented in epistemological philosophy. He called the subject the lebenswelt origins of the sciences.

My extended commentary was written in 2 Parts as a pretended book review of Husserl’s *Gottingen Lectures*. Part 1 of the book review describes selected background subjects to teaching and researching Ethnomethodological studies of work and sciences. Part 2 describes The Shop Floor Problem in the Renewal of Sociology’s Distinctive Study of Social Order. The 2 Parts make up The Lebenswelt Origins of the Sciences which is BOOK TWO in the Series of Ethnomethodological Studies called “Working Out Durkheim’s Aphorism”.

Their contents are listed in the TWO TABLES OF CONTENTS that begin this book.

To write my extended commentary I deliberately misread Husserl’s Programme by comparing it with Ethnomethodology’s Tutorial Problems and Ethnomethodology’s Studies of Work and Sciences.

I was pleased to find that Husserl’s programme, written so lucidly in English by Lee Hardy, translator of the *Gottingen Lectures*, was characterized by Hardy as Husserl’s “technically unencumbered” coherence of *The Crisis*.

Early in the course of rewriting my 1981 and 1984 manuscripts “Ethnomethodological Studies of the Sciences of Practical Action” as this book review my purpose became clear to promote ethnomethodology’s interests by comparing Lee Hardy’s translation of Husserl’s *The Idea of Phenomenology* with Ethnomethodology’s Studies of Work and Science. I deliberately misread Husserl’s policies by frequently giving them an alternate ethnomethodological meaning. For example, when Husserl asserted about studies of objective knowledge that a new method was called for, Husserl was praising as this new method his own achievement of transcendental phenomenological philosophy with its notable use *sine qua non* of the transcendental ego. At first I read past Husserl’s mention of a new method to understand instead that Husserl could have been talking about ethnomethodology’s authors, us, our tutorial

problems were a new method. NOT that he was talking about our tutorial problems; he could have been talking about us. Or, with pleased surprise I understood that Hardy's translation permitted the *Gottingen Lectures* to talk with a gestalt switch of alternate meanings about ethnomethodology's tutorial problems and EM's studies of work and science and of course without Hardy, the translator, having to defend himself against the charge that he ever approved such subversion or ever thought he was doing that. Or, when Husserl asserted that a new philosophy was needed, yes, sure, why not? Ethnomethodology has been maligned in many clever ways; it might as well be maligned further by calling it a new philosophy.

At first my misreadings were occasional. Hit and run. Texts displayed entertaining puzzles that plainly said one thing but meant something else. My misreadings were challenging but incorrect. No matter. The diversity of my misreadings were tryouts, being merely encouraged by the fact that I was getting away with them without having to answer for their correctness.

But in no time my casual misreadings pestered me to move my chair to a better light and pay attention. Misreadings became serious. Ethnomethodology's texts offered systematically alternate understandings to the lived work of the sciences than were described by *The Gottingen Lectures* and *The Crisis*. Instead of interpretations that differed casually *The Gottingen Lectures* and *The Crisis* spoke explicitly of incommensureably alternate organizational Things of sciences in details of ethnomethodology's published studies as these were known to me that were done by ethnomethodology's authors. For example, in a compelling case Mike Lynch corrected Husserl on the lebenswelt origins of Euclidean geometry.

Mike's redescription lit up a new landscape of technologically particular work-place practices by medieval artists and engineers. These replaced Husserl's sedimented results that were asserted by Husserl as historical facts. Husserl imagined them to have been the developing achievement for successions of anonymous populations of artisans and engineers whose actual practices of repeatedly redrawing empirical points, lines, places, and shapes of property surveys and commercial landscapes gained them Euclidean Things with generic properties of practical ideals.

Distinctive properties of Ethnomethodology's tutorial problems became Ethno's foreground topics. For example, authors of ethnomethodological studies speak of "Hands-on experience with tutorial problems" to emphasize the merits for social studies of science of teaching Ethnomethodology with tutorial problems. "Hands-on experience" describes exercises designed at UCLA by Ethno's students. Undergraduate and graduate students, by being enrolled in courses and seminars were therein as well, research assistants. Classroom demonstrations, seminar exercises, and outside problems, being course assignments, were also designed, invented, carried out, on the streets, in stores, in their families, and at home. Their results were reported in class, performed, observed, discussed, criticized, and revised in class by EM's students.

Superb seminar notes were prepared by Ken Liberman for our seminar, Sociology 218AB, 1986. These notes describe tutorial problems, seminar lectures, assignments, demonstrations, and discussions.

Using mutually instructive practices students were collaboratively engaged with having to teach what as research assistants they were learning.

What students were learning and teaching had names like “Bracketing”; “The characterization problem” (Eric Livingston); “Breaching” (Andy Crabtree); “Indexicality”, “Reflexivity”, “Essential reflexivity”; The four policies of camcorder filming and audiovideo analysis recommended in the manifesto by Timothy Koschmann and Alan Zemel. (Distinguish “collegial cells” and “rehearsal cells” of musical instrumentalists) accountably done and made witnessed and made witnessable tasks of learning and teaching. The vernacular relativity of the work aphorism, “In any actual case, make it look like what it is.”

Call these “Tutorial problems”. Tutorial problems exhibited a variety of “reflexive accents”. Spectacular results are demonstrated achievements in published studies by Tim Koschman, Lorenza Mondada, Ken Liberman, Doug MacBeth, Eric Laurier and Barry Brown; Lucy Suchman and colleagues; Julian Orr; Doug Maynard, David Sudnow, Larry Wieder.

Distinctive surgical endoscopic procedures in laparotomy that were medically correct in organizational details of medical curriculum to an attending audience of physicians. These were descriptively exhibited by Lorenza Mondada and her colleagues.

Credit their film *La Chaim*, by Richard Fauman and Doug MacBeth, for filmic provisions of horizontal relevances in filming and editing their film. Also, credit MacBeth for his CD-ROM, and article “Glances and Trances...” Highlight his description of the lived work of filming that simultaneously provides for editing cuts, and even by comparison for editing cuts of footage for anthropological documentary filming.

Exemplary studies are described by EM authors: Sudnow; Wieder; Bittner; Bellman; Burns & Pack; Pack & Robillard; Fauman; Fauman and MacBeth. Striking “horizontal results” are reported by Colin Young, “An English Village”.

Tutorial problems⁵ introduce into the instructable endogenous, embodied actual practices of teaching and learning, lived arts and sciences of practical action and practical reason. That experience is systematically contrary to the established premier, peer reviewed methods of formal analysis of the worldwide social science movement.

Among many of ethnomethodology’s extraordinary cases of tutorial problem are the proof accounts of Euclidean geometry that are described but only appreciatively by Husserl’s program as lebenswelt origins of the sciences. “Appreciative description” of proof accounts such as those of Euclid’s

⁵ Rewrite the claims of the following paragraph to assure their adequacy when regarded “in all aspects of the phenomenon.” After the claims are clear, freed of the initial fear that they are preposterous, elaborate them.

geometry that are common among mathematicians are respecified and re-described starting with Livingston's contrary description of the lived work of proving Heath's visual proof of the Pythagorean Theorem. Their ABSENCE in mathematical treatises and textbooks that describe visual proof accounts of the Pythagorean theorem but say nothing of the lived work of lebenswelt pairs. Their ABSENCE exists ubiquitously, in mathematical treatises everywhere, and of every sort. Their ABSENCE is specified by Livingston's descriptions of the lived work of proving in proof accounts of various mathematical theorems. His studies demonstrate a gap in the literature of the lived work of mathematical theorem proving. The gap "in the Literature" exhibits the ABSENT lived work of the lebenswelt pair. The ABSENT lived work of the lebenswelt pairs is demonstrable in all established treatises of mathematics.⁶

Perspicuous Cases of Tutorial Problems:

1. Carrying out in situ way-finding journeys with essentially procedural occasion maps.
2. Making video recordings of how parties to a queue found and occupied places. By concerting incessant (details?) haecceities of body positions to exhibit the line that appears as the endogenous real existence of an order of service.
3. By wearing inverting lenses SHOW PHOTOGRAPHS we introduced incoherent figurational (details) haecceities into accountably ordinary = (Things*-in-their-Details)=, such as:
 - {i} Locating a place on the blackboard to begin writing one's name,
 - {ii} Variously orienting a book to replace it on the shelf in the empty place from which the particular book had been removed.
 - {iii} Listening to and listening for the normal sound of one's voice when reading aloud a phonetically disarranged text under the condition of auditory side tone delay. (Wooo dench hairst and agains thew all) An audience to the speaker's disrupted voicings recognizes immediately what the speaker is saying whereas the speaker fails to recognize it despite repeated tries and finally must be told and shown the page with its parsed text.
 - {iv} Scrubbing the kitchen sink. (Quote Fred Prichard's term paper, "Why Study the Body?")
 - {v} Livingston and MacBeth describe the chess game they are playing while they are each wearing inverting lenses.
 - {vi} (Coding Elliot Mishler's definition of a conversational turn at talk from an audio cassette made in a noisy environment.)

⁶ Quote Dusan Bjelic and Mike Lynch for clear probative descriptions of the two parts of a lebenswelt pair that constitutes the lived work of mathematical theorem proving in each, all, and every particular case, in and as of mathematical theorem proving's embodied action.

The (pedagogic) (The alternately, simultaneously relevant, descriptive-and-instructional (point, aim, purpose, goals) of these tutorial problems is for students [to teach each other] [how to teach] and [how to learn to see] how, via an unrestricted open multitude of members' indexical practices, formal methods of social analysis, formally described Things are made to work-in-their-details as locally organized, locally accountable Things as these are endlessly provided in popular vernacular accounts of (Formatted queues).

ADD MULTITUDES OF MAGAZINE AND JOURNAL PAGES TO THESE ACCOUNTS, WRITTEN BY ENDLESS AUTHORS WHOSE REAL QUEUES THAT THEY DESCRIBE IN VAST NUMBERS are made to work in coherent meteorological details of Durkheim's ordinary Things of immortal ordinary society.

What could details possibly be?

- Details are meteorologically coherent haecceities of the line that appears.
- Details are coherent autochthonous haecceities in and as of order properties of the line that appears.

Cite TIM KOSCHMANN on ethnomethodology's policies of learning practices. These are discussed below on pages...⁷

Quote Lorenza Mondada's study of endoscopic surgery (in *Visual Studies*, vol 18, #1, April 2003, pp 58–73) as the second Hybrid Ethnomethodological Study in a pair of spectacular studies of Durkheim's and Husserl's instructable organizational Things in the details of their generality, identity, sameness, likeness, coherence, consistency, colligation, "implicature", along with any and all the rest of their logical properties. Abbreviated with the notation, =()=.

Note: Ticked brackets =()= have several different meanings: (1) Durkheim's locally produced, naturally accountable Organizational Thing-in-its-Details; (2) Object; (3) Production; (4) The object enclosed between the brackets, understood as the object in-and-as-of-the-ongoing course in details of its production.

I mentioned in an email to Tim, that Kawatako and Ueno, published in the same issue of *Visual Studies* as Lorenza Mondada's study, a possible third member of the Koschmann/Mondada pair. After reading K&U last night I take it back. I had read their abstract and this got me excited. But I'm ignorant of microbiology so I didn't understand a word of the experiment they so carefully and illuminatingly describe. That settled what nevertheless remained beautiful in the witnessed generality of the indexical "It" even if my ignorance stopped me so that I wasn't knowledgeable enough to actually see for myself even as much as the first apparent fragment of the indexical "It". Nevertheless I knew from the pulsar paper that the phenomenon they were after was the generality of the pulsar that was referenced with the indexical "It".

⁷ Insert pages from Tim Koschmann's "criticism" of "grounding" in contribution theory of "communicative interaction" in theory of computer supported cooperative work.

INSERT ILLUSTRATING “ENDOGENOUS STRUCTURES” OF FOUR STRUCTURES IN FORMATTED QUEUES FROM MY TALK TO LUCY SUCHMAN’S FEST, JUNE 3, 1996:

=(Immortality)=⁸
 =(Objectivity)=
 =(Transiency)=
 =(Transcendentality)=

- (i) Making witnessable their local, accountable coherence in, as, about, as of, INSIDE-WITH⁹ meteological details.
- (II) MAKING WITNESSABLE THEIR LOCAL, ACCOUNTABLE COHERENCE IN, AS, ABOUT, AS OF, INSIDE-WITH AUTOCHTHONOUS ORDER PROPERTIES OF ORGANIZATIONAL-THINGS-IN-THEIR- DETAILS.

INSERT PICTURES, PHOTOS,

[] Traveling waves in freeway traffic jams.

[] In re: “Jams, waves, & clusters”: With each of these “productions”—locally produced, local accountable Things—specifically, losing the phenomenon of meteological haecceities,—consisting of driving in traffic together. In, as, as of, about each haecceity specifically, meteological haecceities are LOST. Their observed coherence is replaced and displayed instead in details of arithmetic as the properties of models from physics.

AND THEREIN WE HAVE THE NEXT SUBJECT

[]

LOSING THE PHENOMENON

[Losing the phenomenon] [The escape from accountability of] the contextural coherence of meteological details by describing meteological details (by) (but doing so by) (with the exclusive use of) using as exclusive resources to render meteological haecceities (1) with) (as) the properties of arithmetic; OR (2) alternately, with Boolean operators.

[] The contextural coherences of meteological details are [lost] [escape from accountability] by (analyzing) (replacing) (treating) figural haecceities as signed objects—i.e. as indicators, indexes, marks, elements, aggregations of signs, symbols

[] The same (loss of accountability), the same (escape from accountability) holds for autochthonous order properties of organizational-things-in-their-details.

[] “18” proxy accounts of phenomenal field properties of Durkheim’s Things, =()=:

⁸ “Immortality” is explained in Garfinkel (2002 footnote 1, p. 92).

⁹ Cite Lois Meyer’s thesis.

- (A) David Lewis' drawings and descriptions of the phenomenal field properties of indigenous navigation in the Caroline Islands.
- [1] These drawings and descriptions by Lewis specify with exhibits of (are constitutive of) the lived work by native crews of low freeboard, blue water sailing ships "using ancient land finding", and "using star course methods of navigation" in the Caroline Islands of the Pacific.
- [2] Replace THESE "Ethnographic detailing devices" with haecceities of endogenous coherent "ancient arts of land finding". Define "ethnographic detailing devices" and credit Melinda Baccus with descriptions of "ethnographic detailing devices" "contrivances", (vernacular) (idiomatic) (popular) (etymological illusions of descriptive Literature) "social constructions" as technical professional vernacular formal analytic ethnographic detailing social science devices.

REVIEW *Handbook for Ethnomethodology*, Rouncefield and Tolmie, Appendix, by Andy Crabtree and Roux, his co-author, for a "host of scientists' methods" that consist of importing formal analytic ethnographic detailing devices into the endogenous coherent details of production and accountability. By explicit design and with careful definitions lines drawn from who to who and who to what describe household communications that permit them to compare what they are doing with the Chicago School and its territorial boundaries to mark ecological territories of cities.

"Data" according to technical professional vernacular are (identical to) (synonymous with) (written =) (glossed as) Notes; Tables; Sketches; Pictures; Drawings, Photos; Art; Objects... These are replaced by Ethnomethodology with phenomenal field properties of real world Things in and as of endogenous meteorological coherences in real world origins and are redescribed as contexturally coherent haecceities.

- [3] In his exceptional Introductory Treatise, *Making Sense of Ethnomethodology*, Livingston provides a masterful description of formatted queues. His description identifies the congregational work of producing the line that appears in coherent details of identifying orderlinesses. Certainly witnessable in TOURS these haecceities are evidently unavoidable, without remedy, without gaps, without time out, not recoverable from their (representatives) or their (representations) or by interpreting indicators. Most importantly, haecceities pose the consequentiality for instructable achieved exhibits of descriptive adequacy, evidence, precision, rigor in, as, as of, about, inside, inside with the line that appears, endogenous to the line, to just this line, in details of its generality, comparability, recurrence, and other assembly line properties. And these as endogenous coherent Things in organizational haecceities are displayed and made instructably observable without introducing "imitative descriptive char-

acterizations” such as mock-ups, dramatic roles, vaudeville “imitations,” tricks and effects in magic performances.

Call this achievement by Livingston of adequate analytic ethnographic description in formatted queues of the line that appears, Livingston’s identification of and solution to The Characterization Problem. The ethnographic text, along with his exemplary exhibitiv display of it as a “first case in an explicating series”, are tied.¹⁰

[4] INSERT TUTORIAL PROBLEMS FROM BOOK TWO OF THE BOOK LIST

REWRITE The relevance of Ethnomethodology’s tutorial problems as embodied alternate readings of Husserl’s *Göttingen Lectures* and *Crisis* were variously[reflexively exhibited] [described explicitly] [reflexively described] [elucidated] and displayed in the well recognized relationship of immediate alternativity of description and instructed action, written “() <- - -> []”.

Therein they were related according to their properties when they were compared by Livingston in his publications (e.g. collected in his article, “Cultures of Proving”) as descriptions done with descriptive pairs such as Descriptions/Instructed actions, Sufficient Vernacular Pairs; Lebenswelt Pairs; Ironic Descriptive Couples, and Privileged-Games-With-Rules.

Document #2: Phenomenal field properties of Durkheim’s organizational things-in-their-details are learned and taught as instructed actions with tutorial problems

What is [Mutually] Learned and [Mutually] Taught as Instructed Actions With Tutorial Problems? What Are Learning Practices for Which Tutorial Problems are Glosses?

In any actual case, a panel of six phenomenal field properties of =()= are found in alternate readings of Husserl’s program. They are also called “PHI”. They are also called “Phenomenal field properties of tick bracketed phenomena of order”. Phenomenal field properties of Durkheim’s Things, =()=, are unavoidable, without remedy, without alternatives, substitutes, gaps, or time out.

In Husserl’s program phenomenal field properties—these specifically—PHI—were ignored.

Husserl’s program specifically ignored the contextural coherences of meteorological details. Husserl’s program similarly ignored the contextural coherences of autochthonous order properties of Things.

Inquiry’s tasks of finding locally produced and locally accountable phenomenal field properties of tick-bracketed phenomena of order—i.e. of =()=, phenomenal field properties of tick-bracketed phenomena of order, and

¹⁰ Add and insert explicating text from book six of the book list.

making them witnessable in details with explicit descriptions-that-are-alternately-instructed-actions demanded something more and vital from Husserl's treatises than could be specified when *The Gottingen Lectures* and *The Crisis* were read as explicit formal methodical procedures

Something more and vital was noticeably ABSENT from the (pages) (texts) of both *The Gottingen Lectures* and *The Crisis*. Although something more and vital in and as of each treatise, was ABSENT from the words on the pages of the text, it was nevertheless known to readers and was demanded by readers in the ways that mainline authors, such as Michael Polanyi, describe and were praised by peers for having witnessed exhibits of "tacit knowledge", "tacit action", "the priceless gift of intuition", "the relevance of background expectancies", and "inarticulate skills".

As far as Ethnomethodology is concerned Stanley Fish is (their) (a) premier authority. With immediately recognized cases that he obtains from legal arguments, literature, literary criticism, poetry, and newspaper sports reportage Stanley Fish settles any doubts on their properties of ubiquitous and recognized ABSENCE when he so recognizably describes, from his own experience on the faculty at Duke University teaching Law and English Literature with classroom and seminar exhibits and exercises, "normal circumstances", "literal language", "direct speech acts", "the Ordinary", "the Everyday", "the Obvious", "What Goes Without Saying", and with hilarious adequacy and evidently, the exhibited ways that the absence of any mention of Jesus in Milton's *Paradise Lost* is readable evidence that Jesus is referred to with every word.

Something more and vital that alternate readings provided could not be reconciled with the misread alternates of *The Gottingen Lectures* or *The Crisis*. Studies by Ethnomethodology's Authors warranted the book review of Husserl's programme in that in their (constituent) constitutive details Husserl's *Gottingen Lectures* and Husserl's *Crisis* did better than represent Husserl's programme in their policies; they exhibited Husserl's programme in their policies.

Husserl's programme was exhibited in details of classical policies, displaying them as work-site practices-done-as-a-rule of good work and good reasoning, done as a rule of a science really, NOT supposedly; done as a rule of science correctly.

Husserl's classical policies identify the lebenswelt origins of a science. NOT by definition; NOT with illustrations; NOT with testimonials of canonic authors; NOT with signs, signals, indicators, marks, or symbols; NOT with proxies, stand-ins, representations, and certainly NOT with elected paradigm cases. But with origins that are directly and without mediation witnessed exhibits of coherent instructable practices and policies. Classical policies constitute organizational Things of a science, of a particular science, of just THIS particular science, in work-place details.

The gates to Husserl's massive programme swing on hinges of Classical policies.

What are CLASSICAL POLICIES? And why single them out for attention?

Classical policies are discovered topics in ethnomethodological studies of the sciences. I shall describe two cases.

[]

Classical policies were identified and described by Eric Livingston as identifying orderlinesses of mathematics and the mathematical sciences—e.g. physics, astrophysics—in Livingston’s ethnomethodological studies of the lived work by mathematicians of mathematical theorem proving.

That mathematical sciences are paradigmatic among the sciences counts with original effect as sociology’s distinctive study of science and social order. This is demonstrated on pages () to (). There Livingston’s sociological studies of mathematics are used to motivate and examine (explicate) that domain on behalf of the two disciplines, sociology and mathematics as a single, unified, coherent factual domain.¹¹

Several ethnomethodological studies of the sciences offer examples. (1) A Guide to the Ethnomethodological Study of Galileo’s Inclined Plane Demonstration of the Law of Free Falling Bodies.

(2) A Grant Request Written by Harold Garfinkel to the UCLA Committee on Research.

(3) Dusan Bjelic’s Chapter 4 in Galileo’s Pendulum.¹²

[]

From the outset of the book review of Husserl’s *Gottingen Lectures* and *The Crisis*, and coherently thereafter, Husserl’s treatises exhibited ethnomethodology’s alternate meanings to Husserl’s meanings. This was so in the ways that ethnomethodology’s studies of the lebenswelt origins of the sciences used methods that were contrary to the methods of Husserl’s programme.

The two programmes—Husserl’s programme to profess lebenswelt studies of the sciences, and Ethnomethodological Studies of Work and Science—each provided for criterial phenomena in the sciences. Each provided for phenomena that over the course of their local production and their local accountability made the sciences what they are, what they are taken to be under unavoidable contingencies of the characterization problem. (see Livingston, 1986)

I take it ethnomethodologically, that the two pedagogies, each called the lebenswelt origins of the sciences, each distinctively (addresses) instructs the same material phenomena (in) with the distinctive instructions that distinguish one programme from the other. The same gloss—“The lebenswelt origins of the sciences”—speaks of the same lived work-place practices of a science in

¹¹ Insert Livingston’s paper on Mathematics’ Domain Details.

¹² Add about 5 others from HG’s email covers about 4/13/05 to Anne Rawls and George Psathas.

local accountable productions of instructable recurrent Things of a particular science in witnessable work-place-specific coherent organizational details.

Further, both ethnomethodology's program and Husserl's program address all the sciences. Both programmes also address all the arts, humanities, professions, professional technologies, and trades. Moreover, all jobs, tricks, copies, work, devices, orders, organizations, and occupations are addressed (included) by both programs. Both programs address the cornucopia of all entries in the Dictionary of Occupational Titles (DOT) of the United States Department of Labor. DOT entries particularly, are premier candidates for professional sociology's (methodogenic) (respecification) redescription as adequately and evidently generic formal analytically accountable phenomena of social order of immortal, ordinary society.

However, although they talk of the same phenomena the two programmes are not interchangeable in lived details of accountable work-place practices. Ethnomethodology's program describes lived work in the sciences carried out by abstaining from the use of either Husserl's *Gottingen Lectures* or the methodological precepts of *The Crisis* to achieve, to research, to learn, or to teach coherent social orders in discipline-specific, work-site-and-technology-specific, descriptions in work place adequate and evident details. Husserl's methods are contrary to EM's policy of carrying out the characterization problem while consistently exercising ethnomethodological indifference to Husserl's methods of formal analysis.

Despite many references to the sciences by both programmes, references that can always be compared, in no actual case are the two programmes interchangeable nor can the two programs be interchanged in their respective work-place-specific, disciplinary science-specific practices with which lived origins of the instant sciences are actually identified and exhibited as lived practices of shop talk and benchwork.

More than that, ethnomethodology's studies of work and science were carried out by exercising EM's policy of ethnomethodological indifference to *The Gottingen Lectures* as well as to the methodological precepts of *The Crisis* to (respecify) redescribe in experiential details the origins of lived work of the sciences.

Strong differences between the two disciplines are [collected and come into focus, being brought to a head and] settled as an issue in Husserl's program by its identifying practice that actual origins in actual disciplines were consistently and uniformly [redescribed, and therein] exhibited orderlinesses in details of formal analytic generalities. With this policy *The Crisis* and *The Gottingen Lectures* obscured and lost the origins of the sciences in (their) lived details of the shop floor problem.

In a later comparison of Husserl's classical methods of formal analysis with methods of ethnomethodology's program the "Lived Details" of Husserl's programme escape from Husserl's classical methods of formal analysis and are replaced with "haecceities" of EM's endogenous contextural coherences of "Haecceities." (These comparisons are described at length on pages of Document #.)

Livingston describes this loss in several books and publications. In *The Ethnomethodological Foundations of Mathematics* Livingston describes this loss.¹³ He demonstrates this loss over its course in coherent details of the characterization problem of the lived work of mathematical theorem proving. He demonstrates that over its course the lived work by mathematicians of mathematical theorem proving is essentially embodied work, being unavoidable, without remedy, and without alternatives.¹⁴

Livingston also shows that (1) it is essentially unavoidable, without remedy, and without alternatives that mathematical theorem provers know, recognize, depend upon, and demand these details; AND (2) that mathematical theorem provers with classical policies of proving carefully ignore these details, (3) which they do by administering formal descriptions of the phenomena (4) that exhibit in coherent details the lived work of proving the particular theorem that proving's embodied work describes.

The lived work of mathematical theorem proving with the use of classical policies of theorem proving loses the phenomenon of proving by IGNORING just how that work consists of both its meteorologically coherent phenomenal field properties as well as its autochthonously coherent phenomenal field properties. AND YET the lived work of mathematical theorem proving is constituted by the coherences of these ignored phenomenal field properties.

That work can be described alternately like this: IGNORING is done by mathematical theorem provers ABSENTING the details of the shop floor problem. It being unavoidable, without remedy, and without alternatives that mathematicians in the course of lived work in meteorological coherences of proving, produce evident appearances of good work.

According to mathematician's own popular technical vernacular accounts, mathematicians are *engrossed or absorbed* in the lived work of discovering and proving mathematical theorems. Ethnomethodologically, mathematicians being involved with producing accountable appearances of good work that is evident in coherent haecceities of theorem proving without incongruities, and accordingly EMPHASIZE the formal properties of the lived work in details of the work of a proof. They (show) (exhibit) (display) adequately and evidently, entirely, fully in embodied particulars the formal properties of the work of a proof. Simultaneously they ABSENT the details of the shop floor problem. Details of the shop floor problem are described with (the panel called) Six Slogans Collect Phenomenal Field Properties of the Shop Floor Problem. In those ABSENT particulars they exhibit (the presumptive proof). (The absurdities of the proof) are (displayed) (seen) (exhibited) (witnessed) (observed) in and as of those ABSENT particulars.

Livingston (observes) (points out) that the descriptively careful, simultaneously (and as their combination) (to combine) (exhibit) (display) an

¹³ [We shall use his article, *Cultures of Proving*, as a convenient representative of his publications in which that argument is carried out.]

¹⁴ Insert the tutorial consequences of carrying out the specifically ordinary jobs (actions) around the house, in the office, in the streets, at work sites, in games-with-rules, while wearing inverting lenses.

EMPHASIS upon formal properties with the ABSENCE of phenomenal field properties of the lived work of mathematical theorem proving—a display that is composed of—display that composes these exorcised orderlinesses—identifies the classical science of mathematics.

Livingston (points out) (observes) that the careful* combination of that ABSENCE and EMPHASIS is not exclusively the achievement of mathematics. Comparable careful* pairs of EMPHASIS and ABSENCE identify classical sciences in other natural sciences. For example, classical physics; classical chemistry; and classical microbiology. These are described in studies by ethnomethodology's authors. (See page 121 then 124–8.)

Livingston's descriptions of the lived work by mathematicians of mathematical theorem proving are exhibits of phenomenal field properties of mathematicians' work-sites.^{15,16}

Material cases from Ethnomethodological Studies of Work and Science specify these properties. With these properties ethnomethodological studies establish the witnessable origins of mathematics' objects in details of their production and accountability.¹⁷

“Coherent haecceities”

“Coherent meteorological haecceities”

“Coherent autochthonous details”

“Haecceities”

“Workplace, shop floor properties”

These properties—just these, particularly, only and entirely, in any actual case,—were clouded, were obscurely described, were lost, escaped from Husserl's programme.

Husserl's fidelity to generically formal analytic methods with which to (exhibit) (describe) (make newly observable) the lived work of the sciences lost the very phenomena his methods of transcendental phenomenological philosophy were designed to reveal.

The lebenswelt origins were nowhere described in the case of an actual science in, as, about, as of, inside with its work-place-specific Things in organizational details stronger than properties of formal methods and reasoned conjectures.

Contrasts of Husserl's program with Ethnomethodology's program are described in BOOKS FIVE, SIX, and SEVEN of EM's BOOK LIST.

¹⁵ Insert material from book six. Add to this the texts from p. 27 left column of *Visual Studies* Vol 18, No.1, April 2003. Credit Lorenza Mondada; Tim Koschmann; Doug MacBeth; and their colleagues.

¹⁶ (What is the case with Section Chapters 1 to 11 in *Ethnomethodology at Work*, by Rouncefield and Tolmie, mss submitted to Ashgate Publishing Ltd, June 26, 2004.)

¹⁷ Replace details with haecceities.

Document # 3: The rivalry between Husserl's programme and ethnomethodology's studies of work and sciences

It became the point to my rewriting and elaborating my 1984 manuscript, Ethnomethodological Studies of Sciences of Practical Action to collect and focus the rivalry between Husserl's programme and ethnomethodology's studies of work and sciences. This state of affairs was focused with extended commentary cast as a book review of Hardy's translation of *The Gottingen Lectures*. The clarity of Hardy's description of Husserl's programme assured the book review its principal purpose: to compare unfavorably Husserl's programme with Ethnomethodology's rival programme. The witnessable rivalry with Ethnomethodology's methods served to introduce this book, BOOK TWO in the series called Working Out Durkheim's Aphorism. That rivalry improved BOOK TWO with notable benefits.

- [1] The rivalry furnished BOOK TWO its sense as a prospectus. By its sense as a prospectus I mean BOOK TWO'S sense as an instructive enterprise was of paramount relevance. BOOK TWO is alternately readable as either a description or as an endogenous course of coherent instructed action.
- [2] It is essentially so.
- [3] The prospectus also emphasizes that ethnomethodology's initiatives originated with Husserl's programme.
- [4] It also positions alternately described lebenswelt origins of the sciences as Ethnomethodology's central subject.
- [5] These origins situate EM's lebenswelt origins as a central subject in sociology's distinctive study of social order and therein in peer reviewed social studies of science.
- [6] These origins specifically, and in disciplinary particulars, witnessably escape Husserl's formal descriptions of his program.

The point to My Introduction to this Book with its emphasis on Tutorial Problems and the point to the nine Documents of this Part 1, is to argue the rivalry of the two programs in their studies of the lebenswelt origins of the sciences.

Documents [1], [4], [5], [6], and [7] in that order provide an abbreviated version of the entire argument abbreviated in its principal steps.

My Introduction to Book Two, The Lebenswelt Origins of the Sciences consists of nine Documents. The Documents with contrasting claims to Husserl's programme argue a comparison of two separate and independent programs. Each program is concerned to identify the Lebenswelt Origins of the Sciences. These programs are Husserl's Program and Ethnomethodology's Program. The nine Documents can be read coherently as a unified document and should be read like that.

Document #1, called Author's Introduction, the instant document, this document, describes required real world hands-on experience with Ethnomethodological Tutorial Problems and treatises of Ethnomethodological

Studies of Work and Science. These are Ethnomethodology's grounds in work-place studies of the sciences for describing *The Gottingen Lectures* according to a book review designed to exhibit Ethnomethodology's rival policies of the lebenswelt origins of the sciences. *The Gottingen Lectures* exhibit the policies of Husserl's program. Husserl's program is widely known in its fundamental treatise, *The Crisis of European Sciences and Transcendental Phenomenology*, as the lebenswelt origins of the sciences.

Document # 4 is A Motivated Book Review of Husserl's *Gottingen Lectures*. It exhibits with directed steps an argument on behalf of Ethnomethodology's studies.

DOCUMENT #6 Ethnomethodology: Hybrid Studies of Work and Science (respecifies) (re-describes) Husserl's program.

Both programs identify the lebenswelt origins of the sciences.

Their principal difference *sine qua non* and the argument that is composed by the nine Documents of Part 1 of this Book, as well as the standing material subject of Parts 1 and 2 of this book, BOOK TWO, is that *The Gottingen Lectures*, understood as descriptions of the lived work of various sciences in their exhibited coherent work-site-specific organizational Things-in-distinctive-details, case by case of a particular science, an instant science, are obscured by Husserl's use of formal generalities in both *The Gottingen Lectures* and *The Crisis*. Thereby, and as a certainty, both of Husserl's treatises, lose the phenomenon that they were carefully written to describe. They lose the phenomenon as actual work-sites of a science. And there they lose the phenomenon as instructed actions. They lose the phenomenon in just the identical way, in just How instructed actions are administered to reveal.

In Husserl's programme the Lebenswelt origins being only formally exhibited by the lectures do not actually describe lebenswelt practices. They do not with lived in-course instructed actions exhibit lebenswelt practices. They allude to lebenswelt practices. The achievement of Husserl's program is that actual lived work of sciences are alluded to as lived practices.

The Gottingen Lectures assert on behalf of *The Crisis* what Husserl's monumental programme promised to deliver. Their incongruous anomaly is that their promise was never recognized by bench practitioners of the sciences. The programme of *The Crisis* was never taken up as endogenously needed enlightenment by an actual science. The program of *The Crisis* was never taken up to fill a gap in an otherwise missing coherence of a particular science in and as of its discovered topics. Nevertheless in epistemological philosophy the programme remains venerated as Husserl's achievement.

Husserl's programme has not been taken up as familiar haecceities of an actual science. It has been used to illustrate cases for epistemological arguments in the sciences by practitioners of an actual science.¹⁸

¹⁸ (Cite Gian Carlo Rota for combinatorial mathematics, and Patrick A. Heelan (for quantum physics??) To get this right discuss the claim with Lou Narens; Gerald Holton; Martin Krieger; Sylvan Schieber; Bruno Latour; Mike Lynch; George Psathas...).

But it was not taken up seriously. ELABORATE i.e. explain “seriously.”

This is not to say that no ground was gained. Although very little in *The Gottingen Lectures* re-describes the lived work of any actual sciences, their precious achievement is that *The Gottingen Lectures* mark and display the ABSENCE of haecceities in any and every particular science the lived work of which it is taken that the lectures describe. The lectures display the ABSENT haecceities of Just THAT science, the haecceities—all, only, and entirely—in and as of an instant science, its familiar day’s locally produced, locally accountable details of the shop floor problem. These details are ABSENT of properties of shop talk, of local gestural organization, of local endogenous practices of production and accountability in the coherent substantive material (meteorological details) (meteorological haecceities) of alternately descriptive/instructive board notes, personal notebooks, diaries, diagrams, scribbles, books, manuals, sketches, post-its, photographs, graphics, door names and warnings, wall notices, texts, gestures read as instructed actions, shop organization, equipment arrangements, architecture, and bench work.¹⁹

In contrast to the ABSENT haecceities of the Shop Floor Problem in Husserl’s programme, and contrary to their EVIDENT ABSENCE as evidently good work in a discovering science, is their EMPHASIS in the Bibliography of Ethnomethodological Studies of Work and Science. Their EMPHASIS is specifically described in [DOCUMENTS #s] DOCUMENTS # describe ethnomethodology’s programme.

Summary

The previous pages of My Introduction and the remaining pages of the nine Documents, compose my Introduction to BOOK TWO. Their different concerns may be read as an argument in two Parts.

Part 1 concerns Husserl’s program. Part 2 describes ethnomethodology’s program. Both Parts can be read and compared as aspects of a single program. Caution is advised in reading the two Parts as one unified document. Such a reading may court the illusion that ethnomethodology’s programme, over the course of its development, was deliberately done with the intention that one day Husserl’s deep phenomenology of his *Crisis* and *Gottingen Lectures* would in Husserl’s final statement, when read in retrospect, put ethnomethodology on its feet by alluding to Husserl’s phenomenological program as ethnomethodology’s educated proxy.

That would be wrong. The two Parts are more realistically related than is provided by the presumed relation of an educated double. Part 1 is an Ethnomethodologically motivated book review of Husserl’s *Gottingen*

¹⁹ From book six. Insert “The panel” of phenomenal field properties of things. Insert Phi. Insert disc 97 The renewal of sociology’s distinctive study of social order 11/30/02. Insert “The characterization problem.” Credit Eric Livingston as the first author in social studies of science to describe the characterization problem which he does in his Ph.D. thesis in details of the lived work of proving Godel’s theorem.

Lectures. It concludes with the question: What would it take to turn Husserl's transcendental phenomenological documented conjecture which Husserl knew as the lebenswelt origins of the sciences into a demonstrable and demonstrated phenomenon? What would such a literature be concerned with? What might it look like? What would it provide for?

Part 2 answers these questions.

They²⁰ also escaped as details of protoethnomethodological descriptions. Many sources cite studies about ethnomethodology. These collections distinguish the studies they cite as protoethnomethodological studies. Studies are variations on the theme of internal diversity. They are roughly grouped with vernacular historical descriptors.

These are:

Mike Lynch's book,

The Sage 4 Volume Series edited by Wesley Sharrock and Michael Lynch, "The Diversity of Ethnomethodology" by Douglas Maynard and Steven

Clayman,

(Early protoethnomethodological) (post-Schutz) (post-Merleau-Ponty), (postanalytic sociology), (contemporary protoethnomethodological), (beyond protoethnomethodological studies), . .

Other sources of protoethnomethodological studies:

Early ethnomethodological studies

Simon and Newell's Human/Computer Interaction

Clayman and Maynard

Journalistic ethnography;

Andy Crabtree's practical guide to ethnography in designing collaborative systems;

Ethnography field examinations, bibliographies, and faculty supervision: Emerson, Pollner, Katz, Clayman, Heritage, and Schegloff in the Department of Sociology at UCLA.²¹

Document #4: A motivated book review of Edmund Husserl, the idea of phenomenology, translated by Lee Hardy (the Gottingen lectures)

This Document elaborates my unpublished manuscripts of 1981 and 1984²² with extended commentary. In that commentary Husserl's *Gottingen Lectures* are redescribed as though they were being read as a book review for Husserl's *Gottingen Lectures*. Thereby, with due attention to their coherence of topical references and sense in the sciences, Husserl's *Gottingen Lectures* were

²⁰ Move the following material to document #7 "Beyond protoethnomethodological studies to lebenswelt origins of the sciences."

²¹ Finish this material and move it to Document #7 Protoethnomethodological studies to lebenswelt studies of the sciences.

²² (FN See Document #1 Author's Introduction).

construed in their provisions for the lebenswelt origins of the sciences as an atemporal succession of Husserl's deliberate policies that specified the lebenswelt origins of the sciences as the identifying achievement with the methods of transcendental phenomenological philosophy of an accomplished program of research results.

This book review is entirely presumptive. It is an artefact that has been constructed to permit comparisons of Husserl's provisions for the lebenswelt origins of the sciences with those of Ethnomethodology's Tutorial Problems and Studies of Work and Science.

[1]

Unlike the usual style of a book review that is fair to the sides of a dispute that it describes, the following book review is an argument that respectfully thinks to make hash of Husserl's side while favoring entirely the side for Ethnomethodology. This book review so describes Husserl's *Göttingen Lectures* as to exhibit as identifying policies Husserl's programme of lived work in the sciences. All sciences, natural and social, are eligible for case-specific examination. On the eligibility count of all sciences there can be no mistake. As Husserl correctly knew and taught, his programme is an unprecedented achievement in philosophy, in epistemological philosophy, in philosophy of science, and in social studies of science.

The book review allows everything magesterial about Husserl's programme. Nevertheless Husserl's programme was never taken up by an actual science. Nor was his programme ever demonstrated as the actual lived day's shop talk and bench work of any actual scientist in any actual discipline that consisted in and as of any actual science-specific work-site haecceities of just THAT science—astronomy, mathematics, microbiology, structural engineering, surgical laparoscopy, computing science—with its distinctive, ordinary, witnessable, collaboratively staffed business at hand.²³

The sciences have had nothing seriously²⁴ to do with Husserl's plans for them. However Husserl's programme did serve ethnomethodology's authors as indispensable precursors to Ethnomethodology's Tutorial Problems and Hybrid Ethnomethodological Studies of Work and Science. These studies are now available as rivals and successors to Husserl's programme.^{25,26}

It is the central subject of this book review that Husserl's programme is a paradigm exhibit of formal analytic methods in specifying and exhibiting the lived work as Things of the sciences in social organizational details. In addressing that subject the book review has several purposes

²³ (FN. Identify these examples as sciences that have been studied by ethnomethodologists.)

²⁴ Explain seriously.

²⁵ (FN: Cite Appendix A. *Bibliography of Ethnomethodological Studies of Work and Science*).

²⁶ Insert and introduce. "The List" of reputable formal analytic methods accounts found in various peer reviewed Literatures of the worldwide social science movement.

(1) On behalf of ethnomethodology's authors this book review replies to the honor of your invitation by describing the studies by ethnomethodology authors that answer the question, "What IS ethnomethodology?" Their work defines that question and answers it. Therein the book review has its second purpose which is to explicate Husserl's programme; and with Husserl's venerable provisions for the lived origins of the sciences-in-their-details, and with Ethnomethodology's emphasis on details, on Organizational Things in Their Details, on what the coherences of details in work and details IS, on what the coherences in the sciences could possibly be, and therein to exhibit sociology's distinctive study of social order.

The²⁷ lebenswelt origins of the sciences was first identified by Husserl and his company of scholars. Their scholarship made available the lived work of the sciences, the arts, and humanities. The successive steps of the book review and the point of its argument is to define and answer the question, "What IS ethnomethodology?"

[2]

Husserl's monumental treatise, *The Crisis of European Sciences and Transcendental Phenomenology*, and the forgotten genealogy of science results specify THE EPISTEMOLOGICAL ISSUE that occupies *The Gottingen Lectures* as their central subject. *The Gottingen Lectures* detail Husserl's conviction that his programme is that subject's central achievement. The Issue is: Making contact with a transcendent: Just How is contact actually made? Just How in any actual case is contact with a transcendent actually NOT supposedly made?

This Issue is the central subject of the book review. The book review compares rival claims of Husserl's programme with the program of ethnomethodological studies of work and science. The subject is known both to Husserl and to ethnomethodology as The Lebenswelt Origins of the Sciences.

Gottingen Lectures. In these lectures THE ISSUE is settled with the critically important achievement of transcendental phenomenological philosophy Therein THE ISSUE is exhibited with a coherent administration of Husserl's epistemological policies of logic and praxis.

His policies of logic and praxis describe the lived work of the particular sciences exhibited in details of formal generalities of epistemological philosophy.²⁸ These are procedurally coherent details of formal generalities. Formal analytic methods of epistemological philosophy specify as the characterization problem How a Thing Comes To Be Known Is Seen is made accountable in its discipline specific coherent appearances as the organizational Thing it IS.

²⁷ Rewrite this paragraph.

²⁸ Compare and elaborate the consequences of this property with the results of the summoning phone demonstration described with the summary notation $=() \rightarrow ()$ in Grfinkel and Wieder (1992: 175–206).

The methods of ethnomethodological studies of work and science also settle THE ISSUE but they are contrary to Husserl's methods. In contrast to Husserl's methods that settle THE ISSUE, Ethnomethodological methods carry out their descriptions while exercising an indifference to Husserl's policies. EM studies of work and science (respecify) (redescribe) the lebenswelt origins of the sciences as these are made accountable in instructable discipline-specific details of Husserl's epistemological policies of logic and praxis. Their redescription exhibits the lebenswelt origins of the sciences in details of two bodies of ethnomethodological investigations: (1) in details of Tutorial Problems; and (2) in details of Hybrid Ethnomethodological Studies of Work and Science.

Everything in the shop floor problem that is of practical consequence when the two programmes are compared (wants to answer) is meant to answer to the questions, "What are details?" "Just what are details all about?" Everything in the comparisons turns on what details could possibly be.

Disciplinary tasks that settle²⁹ THE ISSUE are redescribed and renewed by ethnomethodology starting with and dwelling on immediate appearances, insisting that attention be paid to Mike Moerman's warning to social analysts that their peer reviewed literatures, with their characteristic formal analytic subjects, described etymological illusions of lived work (life) in professional vernaculars.

Disciplinary tasks are specified in peer reviewed literatures, for social analysts who staff the world-wide social science movement that identify and settle THE ISSUE. The ISSUE is that of making adequate and evident provisions for researchable congregational produced and concertedly accountable structures of mutually instructable actions of ordinary society. Just how are structures of social action as witnessable properties of endogenous populations actually and accountably produced? Just how as instructed actions in any actual case?

But only in that a peer reviewed Literature locates a discipline's domain-specific details of lived work of the particular discipline; and in that case only in that the particular discipline is a particular science, and therefore only as the particular science's distinctive domain-specific details; and these only in the open unrestricted horizons and infinite tasks that compose the domain of the particular science, the instant science as its distinctive work is displayed in work-place-specific formal methods and with these a host of scientists' practices make them work in their details. The distinctive work of a discipline will be referred to as the discipline's domain-specific details.³⁰ (With what consequences remains to be discussed later.) The question of what is to be meant by a science, sciences, and what scientists know is not yet clearly discussed. Endless disciplines including those with store front advertisements are

²⁹ Cite and elaborate the meaning of "settle the dispute" with Gerald Horton's classic description of the Millikan-Ehrenhaft dispute.

³⁰ CITE Eric Livingston (1986). Credit him with the discovery and specification of domain-specific details as an identifying orderliness of the lived work by mathematicians and of discovering and proving mathematical theorems in mathematics' disciplinary-specific details.

popularly or otherwise known as a science.³¹ Frake's gloss is a much consulted predecessor to Ethnomethodology's gloss along with Sacks' gloss and Rose's gloss. Koschmann's gloss is strongest of all.

Tasks that settle THE ISSUE are redescribed and renewed but only in a discipline's domain-specific details and then only if that discipline is a science. But certainly NOT if that discipline is not a science but is instead, say, a science exhibited (with) (in) imitative descriptive characterization of a science;³² or, say in their essentially unavoidable escape from contingencies of domain-specific details as these contingent details are found in (objects) (Things) (systems) (structures) such as highway traffic engineers have described such as =(the lived work of freeway driving whereby drivers so concert their driving as to exhibit the recurrent traveling wave of a traffic jam)=;³³ or as Stacy Burns, with a law degree from Yale Law School describes in her Ph.D. thesis from the Sociology Department at UCLA , as =(the lived work by lawyers of judicial arbitration of large money disputes)=;³⁴ or that Eric Livingston and I described in *Visual Studies* as =(the lived work of all parties to a service line (formatted queue) unceasingly busied concerting their place work and while appearing like birds on a telephone line to be doing nothing, carefully exhibit the line that appears as the real and not imagined existence of an order of service)=.³⁵ Or as Ken Liberman described in his book on the lived work by pairs of Tibetan monks =(debating ancient medieval Buddhists texts)=.^{36,37}

Document #5: Durkheim's objective reality of social facts is ethnomethodology's central subject and perennial discovered topic

The rivalry between Husserl's studies of the lebenswelt origins of sciences and Ethnomethodology's comparable studies brings both programs into focus with comparisons that consist of disjunctively alternate, incommensurable descriptions.

Their descriptions exhibit each program with distinctive lived details of sciences. Husserl's epistemological policies and methods describe what, for

³¹ Discuss: Frake's ethnoscience gloss.

³² Explain with provisions in EM studies for the characterization problem.

³³ Cite authors of traveling wave phenomena in freeway traffic flow.

³⁴ Cite Stacy Burns Ph.D. thesis, UCLA, Department of Sociology.

³⁵ For further discussion see Garfinkel and Livingston (2003) Chapter 2 "Phenomenal Field Properties of the Order of Service in formatted Queues and Their Neglected Standing in the Current Situation of Inquiry."

³⁶ Cite Ken Liberman, (2004).

³⁷ Extend this collection of placeholders with ethno hybrid studies of work and science. Cite and show episodes from each of the two deeply technical studies of endoscopic surgery, by Tim Koschman and by Lorenza Mondada. Show classroom scenes from Doug Macbeth's studies of science teaching and learning. Write the subject of distinctions between natural and social sciences that is introduced by these placeholders.

both programs, is The Central Issue in their respective studies: namely, somehow contact is made with a transcendent by exhibiting the lived work of sciences as work-place empirical contingencies of formal analytic methods of logic and praxis. In this article we ask The Central Question of each program: Just how is that lived work done with formal analytic methods of sciences, methods that exhibit the work in identifying details of practical action and practical reason. Identifying details of practical action and practical reason are distinctive of each particular science. They are singular and unique to the particular science they describe. Therein: they display the particular science in its generality; they are witnessed and teachable; and they are congregationally observable and instructably so.

It is no longer adequate to argue that general phenomena of good work in science are unavoidably concerned with descriptive adequacy and evidence and therein issues in practices of good work in science are required to satisfy universal norms of rigor and precision. Instead the question is asked: What is actually the case with practices in, as, as of, about, inside, inside with a science? this particular science? or with work-place-specific sciences?

It is Ethnomethodology's take that certainly sciences are carried out only and in their entirety in the coherent contingent practices of just this particular science.

Edmund Husserl's phenomenological programme describes lebenswelt origins to The Central Question. His phenomenological program answers at length to The Central Question. Ethnomethodology's social studies of science have their origins and early initiatives in Husserl's phenomenological program. Ethnomethodology's early preoccupation is with workplace production in particulars that accord with formal analytic methods and the articulately produced coherence of organizational Things in their details of ordinary actions.

Andy Crabtree's email note to me of 3/10/03 is a book review of Lee Hardy's translation of Husserl's *Gottingen Lectures, The Idea of Phenomenology*, Andy's email note reminds Ethnomethodology's Authors that Husserl's programme builds upon a distinction between 'positive' knowledge (also called scientific knowledge), and philosophical knowledge. Husserl's axiomatic assertion is that scientific knowledge originates from the 'natural attitude'. Therein objects are 'given' in various ways to direct experience as objects-existing-in-a-world-out-there, prior to and independent of all methods that describe them or refer to them, and independent of the particular observer.

Husserl describes this objective world of Things as a world of Independent Galilean Objects. The world of Independent Galilean Objects achieves probative clarity. In every actual case the alternate can be entertained that descriptions can be respecified as instructed actions. Lived work consists of careful, consistently, systematically carrying through discipline-specific, workplace-specific, technologically-specific descriptions of objects while specifically ignoring and absenting all relevances of congregationally organized, endogenously coherent embodied phenomenal field properties of objects.

In this way constituting the ubiquitous epistemological focus and topics of sciences, of all sciences with no exceptions, natural and human; sciences of physics, astronomy, computing science; sociology, political science, anthropology; as well as each and any of all the others.

Andy Crabtree's email note of 3/10/03 reminds Ethnomethodology's Authors that Husserl's programme of lebenswelt origins of the sciences mandated an early and universal commitment to methods of formal analysis. Husserl writes,

"In every step of knowledge taken by the positive sciences, difficulties arise and are resolved, either by pure logic or by an appeal to the facts on the basis of impulses or rational motives that lie in the things themselves, that seem to come from them as requirements which these things, as given, impose upon knowledge." (Husserl, 1990, Lecture I, p. 16)³⁸

In his e-mail summary of *The Gottingen Lectures* Andy Crabtree underlines Husserl's emphatic argument in the following words as Husserl's first policy:

"The natural attitude of the sciences contrasts with the philosophical attitude, which seeks to establish how objective knowledge (not the objective world) comes into existence. The philosophical attitude is concerned, then, with the possibility of objective knowledge." Andy then writes, "To say that objective knowledge is, in the various technical ways of the individual sciences, 'given' by an object's availability to direct experience is not enough for Husserl. Like generations of philosophers before him, he wants to know how it is possible for objective knowledge to be given? More precisely, Husserl wants to know how it is possible for human knowledge to "make contact" with an objective world and so transcend subjective experience? Andy writes, "According to Husserl, we cannot appeal to the sciences to answer the question however, as the possibility of objective knowledge is taken for granted by them and so is put out of question. This is not to say that the sciences do not encounter epistemological difficulties, but that the possibility of objective knowledge is not drawn into question by them: objective knowledge is always possible for the sciences, the abiding question and practical difficulty is through what formal procedures or methods? The formal methods of the sciences presuppose the possibility of objective knowledge and neither question nor account for that possibility but trade on it. We cannot appeal to the formal methods of the sciences to answer the question as to the possibility of objective knowledge, then, as those methods do not answer the question but take it for granted, treat it as given, and so pass it by."

Husserl argues that the question of how it is possible for human knowledge to make contact with an objective world is treated as logically obvious and plain to see by the positive sciences. Nonetheless, the question has plagued philosophers for two thousand years and more, and led to a wide range of influential positions ranging from Rationalism to Relativism and, of late, to Social Constructionism (Hacking, 1999), which Husserl's approach may be

³⁸ Edmund Husserl (1990).

seen as a species of.³⁹ Accordingly, the notion that the abstract formal methods and logic of science may be adopted as a solution to epistemological problems in philosophy is firmly rejected by Husserl. Andy quotes Husserl:

“It is impossible to see ... how operating with assumptions drawn from positive knowledge, no matter how ‘exactly grounded’ they are in it, can assist us in resolving the doubts generated by the critique of knowledge, or solve its problems. If the very sense and value of positive knowledge as such, with all its methodological arrangements, with all its exact groundings, has become [philosophically] problematic, then this effects every principle drawn from the sphere of positive knowledge that might be taken as a point of departure as well as every ostensibly exact method of grounding ... Thus it is clear that there can be no talk of philosophy (which begins in the critique of knowledge and remains entirely rooted in such a critique) orienting itself to the exact sciences as a model, or that it is the task of philosophy to extend and perfect the work accomplished in the exact sciences according to a method that is essentially the same for all sciences.”

Andy writes, Husserl argues instead:

“In comparison to all positive knowledge, philosophy ... lies in a new dimension; and to this new dimension there corresponds a fundamentally new method which is to be contrasted with the ‘natural’ method i.e., the formal methods of positive science that take the possibility of objective knowledge for granted and pass the question by.” (Husserl, 1990, Lecture I, p. 21). (emphasis added)

By underlining this emphasis Andy’s email note of 3/10/03 reminds us that Husserl is not denying objective knowledge and the achievements of the sciences. Husserl is not entertaining the role of Skeptic or the Relativist, but he is asking what makes the transcendent achievements of the sciences possible? That question, Husserl argues, cannot be answered by consulting the formal methods of the sciences, as it is the possibility of the objectivity of those methods which is in question and is not answered by them. Husserl is “indifferent” to the formal methods of the sciences then, as they “take their objects to be transcendent, *at the beginning of epistemology*” (1990, Lecture II, pg. 28)

At this point in his email note of 3/10/03 (to Ethnomethodology’s Authors) Andy notes that Husserl, having in mind his achievement of Transcendental Phenomenological Philosophy writes Thus, some new method is required that allows the possibility of objective knowledge to be explored. This new method is not one that seeks to make contact with the objects of science—as the formal methods of science already do this—but is instead intended to explicate the taken for granted practices and supports upon which those formal methods trade and which make objective knowledge possible. More specifically, and as Husserl puts it,

³⁹ It is worth noting that Social Constructionism is not a unified approach but a gloss on competing perspectives and points of view.

“... what is unclear is the ‘contact with a transcendent’ that is ascribed to knowledge, to knowing ... Knowing is something other than the known object...How can I understand this possibility i.e. HOW SOMETHING COMES TO BE KNOWN. Naturally, the answer is: I could only understand HOW SOMETHING KNOWN COMES TO BE KNOWN if the relation itself, between the knowing and the known object, could be given, as something that could be seen.” (Husserl, 1990, Lecture II, pg. 29, emphasis added)

At this point in his email note Andy, who writes as one of Ethnomethodology’s Authors and who, in light of his own writings and publications is a distinguished contributor to the precious diversity of Ethnomethodological Studies, alerts Ethnomethodology’s Authors with generous advice. He writes, “The sciences may want to invoke formal methods here.”

Appendix # A: An illustrative list of formal methods accounts of social analysis in celebrated studies of the worldwide social science movement

Robert J. Sampson

Steven Pinker’s scheme of regular and irregular verbs in French

Games-with-rules (Ethnomethodology’s Lost Case)

Harvey Sacks’ natural science of behavior

Sample survey methods

Demographic populational descriptions of international immigration

Dourish and Button’s review of Technomethodology

Husserl’s programme described in *The Gottingen Lectures*

Martin Hollis, (Exercises) Trust Within Reason, and Reason in Action

Theory of Games and Economic Behavior

Gigerenzer, Todd, and ABC Research Group

The Annual Review of Sociological Methodology 2004, 2005

Chomsky’s specification of a theory of computable regular expressions

Andy offers cautionary advice to authors of Ethnomethodology’s studies of work and sciences. The sciences—the established sciences—have studies galore that are sufficient cause for professional analysts to celebrate formal methods. Being well assured, the sciences may want to invoke formal methods to escape Husserl’s criticisms of their weak epistemological impact in furnishing adequate accounts of social analysis of order in and as of immortal everyday society.

We shall NOT understand the claim that Andy cautions us about a potential claim that sciences might yet make. Rather we shall take it that the claim is a current claim that is actually advanced by the established sciences as their rightful monopoly at scientific court. To use Andy’s words, in established sciences the relation between knowing and the known object is demonstrably given and plain to see. In the descriptions by sciences of practical, instructable procedures, formal methods provide for the practical observability and

practical objectivity of a science's particular objects, AND no sciences and none of its objects need to be excepted. As far as established sciences are concerned THE ISSUE of transcendence is settled.

Nevertheless, Andy advises THE AUTHORS OF ETHNOMETHODOLOGICAL STUDIES OF WORK AND SCIENCES, FOR HUSSERL, that will not do to settle the issue, because, as Husserl's studies of lebenswelt origins argue in *The Crisis* and *The Gottingen Lectures* formal methods accounts are indexical to—they get their sense from and so they trade on—a host of concerted scientists' practices devised to make formal methods work.

The consequentiality and power of Andy Crabtree's advice to us as authors of Ethnomethodological Studies of Work and Sciences needs to be made transparent and underlined. This is done by Ethnomethodology's Authors extending and completing not only Andy's advice but Husserl's CAVEAT so that both ADVICE & CAVEAT describe clearly and emphatically Ethnomethodology's program.

(The point) (At stake) (The central task of Ethnomethodology's Authors) is to formulate Ethnomethodology's program distinctively (singularly, uniquely) in articulate descriptive (productive) (productional) (procedural) (instructional) details.

These (procedural specifics are identical with) (these objects) are described as situated methods that are identical with the observed course of witnessed coherent constituents of their production. The witnessed reflexively accountable coherent (constituents) (segments) (accountable units) are called haecceities. Haecceities are NOT Details. They are not Details that are so ubiquitously mentioned in endless variety of professional vernacular use.

(CONTINUE) Haecceities make up a new descriptive vocabulary of object production. The vocabulary is being worked out by ethnomethodologists. To replace organizational Things produced in their details. Its purpose is to describe Durkheimian Things by addressing their neglected (figural) (contextural) (configurational) characteristics. Not only is this their central and identifying property. It is also strikingly ignored and neglected. Durkheim's Things are (deep gestalten) (patterns). Accountable analytic units composed endogenously, in-and-as-of-their-lived-temporal-in-course sequentiality, in-vivo, local historicities. "Strings" of coherent contextural constituents of lived orderlinesses in practices of ordinary society. Durkheim specified as Sociology's unique subject matter; sociology's distinctive and singular subject. The objective reality of social facts.

Distinguished with two distinctive orders of coherence: meteorological coherences; and phenomenal field properties.

Anne Rawls shows that for 200 years the social and human sciences have misunderstood Durkheim's objective reality of social facts having lost the phenomena by replacing it with professional dicta of science in social science.

Haecceities are an ethnomethodological neologism. They are excluded from the canon of formal analytic methods of the social science movement.

They are also excluded from the methods and policies of Husserl's formal program of social studies of science that he called The Lebenswelt Origins of

the Sciences. Husserl's formal arguments are replaced by the central policy in Ethnomethodology's identifying domain details.

There need be no mistakes. There is no ambiguity to Ethnomethodology's true intentions which are to introduce and insist, with emphatic certainty, upon Ethnomethodology's Central Policy. The policy is variously called by its identifying property of essential indexicality and is called Ethnomethodology's "rule of practice". The policy is also called EM's procedural rule of practice; EM's method; EM's method of procedure; Livingston's Lebenswelt Pair; (Object); (Organizational object-in-its-details) (Durkheim's Thing) (Durkheim's organizational thing in its details)

Ethnomethodology's central policy and program of studies of work and science.

Ethnomethodology also asserts with that same certainty as empirical contingent the policy's central feature and its central subject matter which is a distinction between Husserl's Program and Ethnomethodology's program of studies of the lebenswelt origins of the sciences: namely, (all) claims of adequate description and evidence of Independent Galilean Objects in Husserl's program ABSENT all relevances of Ethnomethodology's policy to Husserl's program.

Formal methods of sciences are understood as the claims of sciences. The sciences claim as their rightful monopoly at scientific court that the relation between knowing and the known object is demonstrably given and is plain to see in the descriptions of practical, instructable procedures that formal methods provide for the practical observability and practical objectivity of a science's objects -and that NO sciences and none of its objects needs to be excepted.

BUT FOR HUSSERL THAT WILL NOT DO, BECAUSE FORMAL METHODS ACCOUNTS ARE INDEXICAL TO—THEY GET THEIR SENSE FROM AND SO THEY TRADE ON AN OPEN, UNRESTRICTED HOST OF CONCERTED SCIENTISTS' PRACTICES DEVISED TO MAKE FORMAL METHODS WORK IN THEIR DETAILS.

At this point in our book review of Husserl's *Gottingen Lectures*, and speaking, with this policy, of making an open, unrestricted host of scientists' practices work in their details, locally, concertedly, in vivo, and speaking on behalf of Ethnomethodology's interests in motivating Husserl's policies to promote the studies by Ethnomethodology's authors, Ethnomethodology has appropriated Husserl's initiatives.

Ethnomethodology has appropriated Husserl's initiatives with Ethnomethodology's program of studies by Ethnomethodology's Authors of studies of work and sciences.

This policy, that Husserl's program as its central identifying feature can have nothing to do with, identifies Ethnomethodology's central and distinctive subject.

Here is the phenomenon of social order that underlines and highlights the renewal by Ethnomethodology of Sociology's distinctive study of social order. Here is the phenomenon of social order with whose real existence Ethnomethodology is distinctively and uniquely occupied. *And only Ethnomethodology is competent to describe when asked, What IS Ethnomethodology?*

With this policy and its property of essential indexicality, wherever formal methods are found,—in sciences, in all sciences, in the natural sciences, in the mathematical sciences, in the social sciences, in every branch of engineering and technician support, as well as in endless arts, trades, tricks, skills, occupations, jobs, and sciences of practical action and practical reasoning, everywhere, in all sciences from A to Z, from correctly consulting the I Ching for good advice in meeting life's serious adversities, to carrying out the Azande's poisoned chicken oracle, to astrology, to surgical laparoscopy, to orchestral conducting, to up-close magic, *formal methods are being made to work by an open, unrestricted host of scientists' concerted practices "trading on" their indexical properties IN THEIR DETAILS.*

Call this property of “formal methods being made to work by an open unrestricted host of scientists' concerted practices trading on their indexical properties in their details”, their essential indexicality.

With tutorial problems (as a pedagogical resource with which formal methods are taught and learned) and with Ethnomethodological studies of work and sciences, their essential indexicality (requires) (acquires) (achieves) explication that is far beyond naming the essential indexicality of Ethnomethodology's studies of work and sciences a discovered topic; and is far beyond identifying its properties as, say, an instructed action, or a phenomenon of order, or a Durkheimian Thing-in-its-details. Their essential indexicality (requires) (achieves) (acquires) explication just and only in any actual case locally, observably, witnessed, in, as, as of, for, inside, inside with, (thanks to Lois Meyer) a congregation IN VIVO.

In any actual case (of (a) science) Terms are (redescribed) (redefined) and established phenomena of order are respecified.

- (1) INSERT AN EXTENDED DISCUSSION OF A SCIENCE; OF SCIENCES; OF SCIENTISTS'; OF SCIENTISTS PRACTICES; OF FRAKE'S GLOSS; OF LUCY SUCHMAN'S GLOSS; OF SACKS' GLOSS; OF THE INDISPENSABLE CORNUCOPIA OF OCCUPATIONS DISPLAYED IN DETAILS OF ETYMOLOGICAL ILLUSIONS AS ENTRIES IN THE DICTIONARY OF OCCUPATIONAL TITLES
- (2) The term “Essential” in the expression “essential indexicality” is an abbreviation for unavoidable, without remedy, without alternatives, and such that every occasion that demonstrates a remedy for faults uses the identical practices that give cause for complaint to exhibit the cure.

Ethnomethodology's Empirically Contingent “First Cases”⁴⁰

⁴⁰ Credit Eric Livingston for defining “first cases” in Livingston (1986).

The following are several “first cases”. They were collected by Ethnomethodology’s Authors. The cases were learned by researches of formal methods being made to work in their details. Cases are collected in paradigm pairs in family lineages of geneological ethnomethodological materials, results, observations, and reflections of “scientists’ practices trading on an open, unrestricted host of scientists’ practices made to work in the essential indexicality in their details.”

- [1] An exemplary “first case” is described in “The optically discovered pulsar” by Michael Lynch, Eric Livingston, and Harold Garfinkel. The authors of the article quote the transcribed colloquy between Cocke and Disney on the inadvertently tape recorded occasion in and as of which, while interactionally watching and describing the electronic display, Cocke and Disney came to recognize the changing displays as signals from the optical pulsar as their astrophysical discovery.
- [2] Materials from: David Lewis; Doug Macbeth; Lorenza Mondada’s article in *Visual Studies*; Lorenza Mondada’s cited readings; Tim Koschmann; Tim Koschmann’s pages of “publications and presentations.”
- [3] Cases from the file of “18 proxy accounts of =()=”
- [4] Tutorial sources for excerpts of Cocke and Disney’s lived work of the optically discovered pulsar are rare. Nevertheless, acknowledged similarities in coherent haecceities can be found with ubiquitous prevalence according to stories obtained from scientists in the natural sciences where this property is occupationally familiar stock in trade to bench practitioners.⁴¹
- [5] The claim is frequently encountered in laboratory settings of the natural sciences as a local member’s evident pride of occupation that is of practical, certain, dependable but inarticulate expertise with which the particular member of THAT lab, (our shop) as a local resource, administers the essential indexicality of formal methods in, as, about, at and as of the laboratory’s actual work-sites in local essentially occasioned technical coherent organizational haecceities. (The phenomenon escapes from the gloss of “bricolage”.⁴²)
- [6] Stanley Fish teaches that essential indexicality is known to one and all as the vulgar competence of “what comes naturally.”⁴³
- [7] Linguists, sociolinguists, applied linguistics, and teachers of languages as a second language collect and teach episodes of deixis with lexical case details. These materials are notably instructive when used to illustrate that case properties are unavoidable, without remedy, and without alternatives.⁴⁴

⁴¹ FN: Garfinkel, Livingston, Lynch, Pack, Robillard, Wieder, Respecifying the Natural Sciences as Discovering Sciences of Practical Action.

⁴² Cite Mike Lynch.

⁴³ Cite Stanley Fish.

⁴⁴ (Examine Fillmore’s lectures.).

- [8] Witnessable phenomena in particulars of essential indexicality are collected and come to a focus in ethnomethodology's Bibliography of Tutorial Problems and Hybrid Studies of Work and Science.⁴⁵

Acknowledgement

Thanks are due to Andy Crabtree for permitting me to write this article as my extended commentary on his email to me of 3/10/03. Thereby I was able to cast his email as our mutually contrived book review of Edmund Husserl—The Idea of Phenomenology, Translated by Lee Hardy (*The Gottingen Lectures*).⁴⁶

Document #6: Ethnomethodology: hybrid studies of work and science

Michael Lynch's authoritative treatise, *Scientific Practice and Ordinary Action*, (1994) furnishes primordial examples of essential indexicality. He accompanies his cases with encyclopedic coverage of the phenomenon's relevant literature. His exemplary treatise delineates the phenomenon as a discovered topic⁴⁷ in social studies of science. The phenomenon is available to visual and audio recordings with astronomically massive prevalence. Its existence establishes a Bibliography of treatises in ethnomethodology called Ethnomethodology: Hybrid Studies of Work and Science.

These investigations by authors of hybrid ethnomethodological studies are treatises. Like Mike Lynch's treatise they are authoritative ethnomethodological studies wherein formal methods accounts are indexical to—get their sense from and so trade on—a host of concerted scientist practices devised to make formal methods work in their details.

The phenomenon of the essential indexicality of formal methodic descriptions in the sciences is a distinctive feature of adequate description and evidence in the treatises of Hybrid Ethnomethodological Studies of Work in the natural sciences. Therein the phenomenon's availability in exhibits of a methodic description's evidentiary status is certain, singular, and distinctive to ethnomethodological studies of work in the sciences.

Question: Is it exclusive and unique to studies of work in the sciences only by ethnomethodology's authors? Of course not. But collaborating therein, in their relevance to issues of adequate evidence and adequate description with authors in the natural sciences Ethnomethodology's Hybrid treatises are

⁴⁵ Add to this collection of "first cases" and elaborate them from Document #6 Hybrid Studies of Work and Science.

⁴⁶ E. Husserl (1990).

⁴⁷ Explicate the properties of a discovered topic from the files of Respecifying the Natural Sciences as Discovering Sciences of Practical Action..."

exemplary in exchanging news in particulars of the lived work of the natural sciences that Ethnomethodological Hybrid Treatises describe.

(Illuminating cases) (Probative cases) (Perspicuous settings) (Noteable examples) Studies by Lucy Suchman and her co-workers, by Julian Orr, by Eric Livingston, by (the late) Yves LeCerf and his faculty and students.

- [1] The phenomenon of formal method's essential indexicality at work-site was a central subject for Lucy Suchman, Randy Trigg, and Jeanette Blomberg in their collaborative, mutually instructive, participatory case study done with California Caltrans engineers retrofitting the San Francisco Oakland Bay Bridge. Their purpose was to provide the Caltrans engineers with a computerized archival design of engineering documents. The design was described in their article, "Working Artefacts: Ethnomethods of the Prototype", 1999.
- [2] Eric Livingston's doctoral thesis, *Ethnomethodological Foundations of Mathematics*, Routledge and Kegan Paul, 1986 is an extraordinary hybrid. His ethnomethodological case study of work in the natural sciences respecifies, answers, and settles four standing intractable questions in the history of disciplinary mathematics and mathematical sciences: What is mathematics? What is a mathematical object? What explains mathematics' rigor? What is the lived work of mathematical theorem proving?

In his doctoral thesis, with each of these questions, Livingston specifies the lived descriptively adequate and evident work by mathematicians of mathematical theorem proving. All questions of adequacy and evidence of Livingston's descriptions in the details and haecceities of their domain specificity are answerable for their intelligibility and recognition to all mathematicians. His treatise is an ethnomethodological analytic ethnography of mathematicians' lived work of discovering and proving mathematical theorems. Livingston's treatise is unprecedented in the sciences, natural and social.

- [3] A hybrid case by Yves LeCerf, and his faculty that was composed of physicists and computing engineers, working jointly with economists and anthropologists designed and administered a Ph.D. program in Ethnomethodology and Computing Science. The program was certified by the French Ministry of Education and jointly taught in the Departments of Computing Science, and Anthropology. The collaborated program and joint degree was initiated, and until the tragedy of his early death of a heart attack in 1995, was directed by Professor Yves LeCerf, Department of Computing Science, University of Paris 8. At the time of his death his program was recognized as the leading program of ethnomethodology in the world.

A Bibliography of studies by Ethnomethodology's authors of hybrid, domain-specific arts and sciences of practical action and practical reason exists for subjects described and published in many established academic discipline-specific peer reviewed literatures. Authoritative citations in Ethnomethodology at Work, and Doug Maynard's list, Applied Linguistics, Social Psychology, English Literature, Languages, Geography, Law, Management Science,

Clinical Medicine, Psychiatry, Counseling Psychology, Sociology, Anthropology, Civil Engineering, Information Technology, Computing Science, Library Science, and various natural sciences.

Hybrid treatises by Bellman, Bjelic, Burns, Dingwall, Gitti Jordan, Koschmann, LeCerf and colleagues, Liberman, Livingston, Lynch, , MacBeth, Maynard, Meyer, Meehan, Mondada, Orr, Parry, Rawls, Rawls and Coates, Suchman, Suchman and colleagues, and Wieder are uniquely studies by Ethnomethodology's authors. Their studies exhibit the premiere achievements of Ethnomethodological studies of work and science. However, many hybrid treatises that are properly included in the Bibliography of Ethnomethodological Studies are not exclusively the studies by authors who count their studies to be ethnomethodological or identify themselves as ethnomethodology's authors.

The point: Formal methods—formal analytic methods of generic representational theorizing—do not adequately and evidently describe the methods and practices of social analysis that identify in their discipline-specific work-site details ways in which human knowledge makes instructable, witnessable contact with an objective world in the sciences, natural or social.

As Lynch writes:

Methods and descriptions are certainly not useless, and learning to compose step-by-step instructions is an important point of scientific training, but such accounts do not provide the stable grounds for reproducing a practice. Although it is possible to reproduce an observation from a written description, a text can only allude to what eventually may count as a replication of the observation ... It might be more advisable to say that methods accounts are part and parcel of the concerted practices that enable them to be descriptive and instructive. (1994, p. 214)

In Husserl's programme what formal methods accounts do achieve and make available to critical review among a community of practitioners is the objective representation of the objects of the sciences (Husserl, 1970).

Andy writes:

The problem that Husserl has with this state of affairs is NOT the validity status of objective knowledge (again, that is for a community of practitioners to determine) but that the practical observability and practical objectivity of the objects of science is divorced from the "vital" concerted practices whereby formal methods are made to work. Instead the practical observability and practical objectivity of the objects of the sciences is attributed to their formal workings. Thus, there is a gap, possibly a foundational gap in our knowledge regarding the relation between knowing and the known object. A gap that consists of but ignores the vital—in the sense of being alive, enacted and essential, unavoidable, irremediable, without alternatives—practices that provide for the production of objective knowledge: "the sources of knowing," in Husserl's words (1999, Lecture IV, p. 41).

INSERT AUTHORS OF ETHNOMETHODOLOGY'S ANALYTIC ETHNOGRAPHERS: CITE THE PROPERTIES CALLED "IDENTIFYING ORDERLINESES" FOUND IN THE CLIP OF HYBRID ETHNO TREATISES. THESE PROPERTIES ARE ALSO FOUND IN DOCUMENT #7 AND DOCUMENT #8.

THE HAECCEITIES STAND OUT AS "ANALYTIC UNITS" IN ANY MENTIONS OF WHAT'S ETHNOMETHODOLOGICAL ABOUT THE NATURAL ACCOUNTABILITY OF DURKHEIM'S THINGS.

THE FOLLOWING ARE AUTHORS OF ETHNOMETHODOLOGY'S ANALYTIC ETHNOGRAPHERS— (DOROTHY SMITH) (BURNS) (SUDNOW) (SUCHMAN AND TRIGG) (BITTNER) (BELLMAN) (BJELIC) (LIVINGSTON) (LIBERMAN) (MACBETH) (MONDADA) (KOSCHMANN) (MEEHAN) (PAGET) Complete the list.—COMPARE THEIR ETHNOGRAPHERS WITH STUDIES BY AUTHORS OF CLASSICAL ETHNOGRAPHERS IN THE SOCIAL SCIENCES.

CAUTION is needed in any actual case that Ethnomethodology's treatises of Hybrid Studies of Work and Science describe "sources of knowing". Add Husserl's words to cases of ABSENT DETAILS e.g. Beryl Bellman identifies miracles in decision trees. Add to these Blumer's testimonials. ADD the rest. "Sources of knowing" in Husserl's programme are redescribed as academically educated idiomatic lingo that alludes to the practices that its use evokes. Michael Moerman gave ethnographers fair warning by identifying the most esteemed professional ethnographies in social science literatures as etymological illusions. Stanley Fish teaches us with lucid literary exhibits of legal cases as well as with exhibited high arts of reading poetry, and adding to these witnessable exercises of what "normal circumstances, literal language, direct speech acts, the ordinary, the everyday, obvious, what goes without saying, and other special cases" can be made to look like in elevated texts.

What would it take to turn Husserl's documented conjecture into a demonstrable and demonstrated phenomenon?

What would such a literature be concerned with? What might it look like? What would it provide for? And what would news be as its concerns?

Notable hybrid studies of work and science by ethnomethodology's authors reply to these questions.

[1.0] Ethnomethodology's Authors⁴⁸

Albert Adato; Melinda Baccus; Beryl Bellman; Egon Bittner; Dusan Bjelic; David Bogen; Stacy Burns; Derek Coates; Stephen Cole; Jeff Coulter; Andy Crabtree; Robert Dingwall; Nancy Fuller; James Heap; Brigitte Jordan; Kathleen Jordan; Ken Liberman; Michael Lynch; Doug MacBeth; Doug Maynard; Lois Meyer; Jay Meehan; Lorenza Mondada; John O'Neill; Christopher Pack; Anita Pomerantz; George Psathas; Anne Warfield Rawls; Britt Robillard; Bennetta Jules-Rosette; Dorothy Smith; Lucy Suchman; David Sudnow; Rod Watson; David Weinstein; D. Lawrence Wieder.

⁴⁸ This collection is obviously incomplete and should be treated as a provisional place holder.

- [2.0] These questions are answered as the specific subjects of the Documents of the BOOK LIST, as follows:
- (A) The eight Chapters of this BOOK, BOOK TWO in the Series, Working Out Durkheim's Aphorism.
 - (B) BOOK TWO in the BOOK LIST specifies the Ethno collection of Tutorial Problems. Hands on experience doing them is indispensably required for adequately reading, writing, researching, and teaching radical ethnomethodological studies;
 - (C) The Documents in Notebooks of the BOOK LIST called Working Out Durkheim's Aphorism;
 - (D) The core of Ethnomethodology's studies of work and the sciences are Ethno's particular treatises. Each treatise is distinctive. Each treatise is a hybrid study of disciplinary, domain specificity.
 - (E) Hybrid EM's treatises range in domain specificity from the lived work of mathematical theorem proving (Eric Livingston); to judicial arbitration of large money disputes(Stacy Burns); to⁴⁹
- [3.0] Examine The Clip of Ethno Hybrid Studies. It contains a Collection of identifying orderlinesses . Also examine BOOK THREE for more about identifying orderlinesses in EM Hybrid Studies of Work. The Ethno treatises.
- [4.0] ELABORATE on the relevance in this Collection of the EMPHASIS on identifying orderlinesses compared with the notably ubiquitous ABSENCE of domain specificity in studies of work, organization, art, architecture, and science in established peer reviewed Literatures of the arts and sciences of practical action and practical reason. The ABSENCE of domain specificity from established peer reviewed Literatures compared with their articulate EMPHASIS in Ethnomethodology's Hybrid Treatises is Ethnomethodology's discovered topic.
- [5.0] Replace the professional vernacular use of "organization in details" that is so prevalent in the formal analytic generic representational theories of organization of the worldwide social science movement. Replace this idiomatic use with actual cases of Haecceities.

HAECCEITY'S INSTEADS: Haecceities instead of the ubiquitously idiomatic empty vagueness invoked as "the devil is in the details"

(Instead of imitative descriptive characterizations of Things-in-Details)

(Use "haecceities" to replace work, details, context, things. Scratch the ubiquitous popular idiomatic provisions for just-how-Things-are-made-to-work-in-details.)

Losing the phenomenon of haecceities with Cicourel's policies.⁵⁰

⁴⁹ Insert a page of studies by ethnomethodology's authors: Baccus, Bittner, Bellman, Maynard; Meehan, Mondada; Sudnow, Bjelic, Meyer... Finish the list.

⁵⁰ (Anne's very sharp suggestion.)

Another good place to find the phenomenon that is being lost is in architectural work-site discourse.

The Absence of details is ethno's discovered topic. Notably in established peer-reviewed Literatures of the sciences, natural and social. Examine particularly the Absence of Details in encyclopedic histories of philosophy.

[5.0] A NOTE TO ANNE: I finished today's version of the thing I'm calling "The Lebenswelt Origins of the Sciences." That's kind of a daily preoccupation. They are not big changes from day to day, but they're changes. Today's obsession would be the thing that happens when the thing I'm calling the domain specificity of these documents that make up The Lebenswelt Origins comes into view. By that I mean that in Hybrid Studies of Work—think of them as the treatises of—well, they are very clear for me with Ph.D. dissertations by my students. The study you have with Derek Coates would be a similar treatise. Mike Lynch's book is a treatise. Eric's Ph.D. thesis is a treatise. Those treatises as Hybrid Studies are faithful to the work of the scientists whose work they describe. To the bench work; to the discovering work; to the work they were hired to do; to the work they do as it is described by paid terms of employment.

By faithful I mean that Eric is talking about the lived work of proving mathematical theorems in which the spectacular requirement of adequacy in the work he describes is that it is subject to approval by ALL mathematicians. Dave Sudnow's description of the work of playing Bach's 48 Preludes and Fugues of The Well Tempered Clavier is subject to its intelligibility and recognition by professional musicians, and not in any which way but in the accountable haecceities (dismiss details) that Sudnow at the piano keyboard, with hands, body postures, gestural travel, finger movements, scales, sounded doings, listened to, listened for contextural coherences, displays, showings, marks, offers, withholdings... How wonderful and dense Sudnow's actually described (details) haecceities are required to be and are as collaboratively instructable (i.e. accountable) instrumental performances.

I think that's worth obsessing on.

Call that worthy matter that's obsessed upon, a domain of practices, PHI, domain specificity—Just to have a name for it. So that we can locate it in the case of any author's treatise. And we can ask: Does the author actually provide for that? And what else do we think (ask) (require) that the author—in favorite cases of authors—which is to begin with—favorite cases are our students. What else do we think they should provide? And do provide?

And then by comparison, what are on-line discussions calling ethnomethodology? What should on-line discussions be calling ethnomethodology?

Appendix⁵¹

Storage. Add to Document #3

Ethnomethodology's Authors of Analytic Ethnographic Studies of Work and Science:

- (1) An Ethnomethodological Collection of Tutorial Problems.
- (2) Hybrid Ethnomethodological Studies of Work and Science
- (3) Authoritative Authors of Hybrid Ethnomethodological Studies in Natural Science and Logic:

Andy Crabtree (Structural Engineering)

Dusan Bjelic (Galilean Physics)

Tim Koschmann (Surgical laparoscopy)

Michael Lynch (Microbiology);

Doug MacBeth (Classroom science learning);

Lorenza Mondada (Surgical Laparoscopy);

Lucy Suchman (Structural Engineering);

Eric Livingston, (Mathematics);

Yves LeCerf (Computing Science).

Ken Liberman (Enacted Formal Analytic Properties of Reason in Debates by Tibetan Monks of Medieval Texts of Buddhist Logic)

Document #7: Ethnomethodology: the missing what

Ethnomethodology Requires More of Ethnographies as Identifying, Descriptively Adequate and Evident Studies of Social Order in Ordinary Society:

- (1) Ethnomethodology Requires More than is provided by the most esteemed ethnographies in peer reviewed Literatures of the worldwide social science movement.⁵²
- (2) Ethno Requires More to The Lebenswelt Origins of the Sciences than is provided by Precursors to Ethnomethodology.⁵³

Document #8 is called "An Outline of Subjects for a Course of Lectures Occasioned by the Invitation to Deliver the Schutz Memorial Lecture on October 29, 2004" p. 106

⁵¹ Editor's note. The following sections have been placed in an Appendix. They are referred to in earlier sections and are to be integrated into the body of the work. They may be read in conjunction with the earlier sections and are referenced in the body of this text in those places where they are relevant and intended for inclusion at a later point.

⁵² Cites: In Anthropology: Boas, Benedict, Evans-Pritchard, Mead, Bateson, Geertz. In Sociology, the Lynds, Whyte, the Chicago ethnographers.

⁵³ Thanks to Mike Lynch, (1993: Chapter 4).

- (3) Ethno Requires Much More and alternately to what is canonic in sociology's distinctive study of social order as premiere results that are exhibited in and as of the details of formal analytic methods of social analysis by the worldwide social science movement.
- (4) BUT NOT MORE than is provided by ever renewed benefits of diversity to the studies of work and science by ethnomethodology's authors.
- (5) CASUAL SOURCES OF DIVERSITY SUCH AS:

[A]

- (I) Studies mentioned in the co-authored article by Doug Maynard and Steve Clayman;
- (II) An encyclopedia of topics and themes from studies by ethnomethodology's authors, collected in Four Volumes edited by Michael Lynch and Wes Sharrock, Sage Publications, London, Thousand Oaks, New Delhi, 2003
- (III) A Google search for "Ethnomethodology":
 - On 11/21/04 turned up 51,700 results;
 - On Jan 5, 05, turned up 58,900.
 - On October 21, 2006 turned up 332,000
- (IV) Ethno Studies That Answer Long Standing Intractable Questions in Discipline-Specific Literatures
- (V) A Desk-Top Pile & Ten Foot Shelf of Ethno Treatises
- (VI) Paul Ten Have's Web Page, EM&CA

[B]

Where to start? With what? Taking what as an issue? With whose prior authorship? In what detail? What's first? What to do next? What will we find ourselves to have landed in the midst of? With what actual lived work will we busy ourselves? with just what is at hand?

For its wise counsel grateful thanks is due to Maps and journeys: an ethnomethodological investigation, by Barry Brown and Eric Laurier, (2005) for teaching Ethnomethodology's Authors to see into illuminating depths of a map following journey. They begin with quotes from the poet Miroslav Holub. He writes of an army becoming lost in the Alps. By following a map the soldiers find their way back to their post. Their leader reports: At first we were in despair. But we found a map in someone's pocket. We followed it and here we are. The chief examines the map. It is not a map of the Alps but of the Pyrenees.

Document [#8]⁵⁴**“Beyond ethnomethodological precursors to the Lebenswelt origins of the sciences”**

Harold Garfinkel

University of California, Los Angeles

- [1] Protoethnomethodology, by definition.
- [2] Beyond Protoethnomethodology
- [3] Beyond Ethnomethodological Precursors to the Lebenswelt Origins of the Sciences
- [4] Analytic Ethnographic Studies of Work and Science
- (A) By Ethnomethodology’s Authors (This list is Illustrative; provisional; and extremely incomplete. . .)

Albert Adato
 Beryl Bellman
 Edward Berryman
 Dusan Bjelic
 Graham Button
 Jeff Coulter
 Andy Crabtree
 Robert Dingwall
 Christian Heath
 John Heritage
 Gitti Jordan
 Timothy Korschmann
 Yves LeCerf
 John Lee
 Ken Liberman
 Eric Livingston
 Michael Lynch
 Doug MacBeth
 Doug Maynard
 Jay Meehan
 Lorenza Mondada
 Ruth Parry
 Anita Pomerantz
 Anne Rawls
 Ed Rose
 Harvey Sacks

⁵⁴ Disc 98 Schutz Memorial talk, Oct 29, 2004

Manny Schegloff

Wes Sharrock

Lucy Suchman

David Sudnow

Rod Watson

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- (B) The subjects of their studies are place holders in a discipline's distinctive domain-specific details.
- (C) Their studies exhibit criterial experiential properties of social order. These properties are called "Identifying orderlinesses."
- [] Paradigm Pairs of Literatures and their EM alternates. First Cases were established by Eric Livingston.
 - [] Livingston's rule
 - [] Essential indexicality
 - [] Domain specificity
 - [] Mutual instruction
 - [] Phenomenal field properties of Things-in-their-details (abbreviated as PHI)
 - [] "Ten Properties" of formatted queues in my article first written and presented for Lucy Suchman's Work Fest then rewritten for the Manchester Conference and then for *Visual Studies* as Phenomenal Field Properties of the Order of Service in Formatted Queues and Their Neglected Current Situation of Inquiry
 - [] The Endogenous Structures: Immortality; Objectivity; Transiency, and Transcendentality of queues described and alternately exhibited as instructed action in any case, presented in Lucy Suchman's Work Fest
 - [] Pairs, Lebenswelt Pairs, and Ironic Dyads of Instructed Actions and Their Implementation
- (D) What is required of a study for it to be listed in the Bibliography of Hybrid Ethnomethodological Studies.
- (5) Beyond ethnomethodology's precursors to the Lebenswelt origins of the sciences with authors of ethnomethodology's analytic ethnographic descriptions of work and science TO VENERABLE DURKHEIM AND VENERABLE HUSSERL.

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