Practical applications of Luhmann's work: Observations from a grounded theory perspective.
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Reflections

Practical applications of Luhmann's work: Observations from a grounded theory perspective.
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Preamble

What follows are observations from someone who is relatively new to Luhmann's theory of Social Systems. As such it represents transitory thought processes and therefore is intended to encapsulate a state of awareness of The Theory of Social Systems. The ideas here therefore represent a part of a journey of developing interest in Luhmann's work that has been at the same time rewarding and time-consuming. The observations have been produced as an entreaty for a rejoinder so please feel free with your constructive comments / indications on how to correct and proceed.

Introduction

Statements of the order ‘the practical applications’ imply observations that are based on one side of the distinction general/specific. In making specific observations or claims of a general order it is congruent with the theory of social systems to outline the specifying system of observation and therefore to indicate the nature of application (observation) being implied.

‘The practical applications’ also imply that the general theory or general system of observations (in this case Luhmann’s theory of social systems) is being used for specific purposes perhaps in a semantic manner to illuminate or further observe aspects of the specifying systems form of observation. It follows that the statement also implies the specifying system of observation has something to say about the nature of the general system and vice (the unitary of the distinction). This short paper therefore represents observations concerning the possible interpenetration of Luhmann’s theory of social systems with a specific system of observation termed grounded theory.

It has been observed that the work of Luhmann is too metaphysical and that it lacks relevance for those involved in empirical observation[1]. Indeed the closure underlying the system of observations that is termed systems theory leaves it vulnerable to such attacks. Such criticism however can only be interpreted in the light of the specifying system of observation. It can also be viewed as a further indication of the imperative of observations of an applied order.

From the perspective of systems theory a vital part of any systems form of communication must be concerned with its relation to its environment. It follows that observations from the perspective of the general theory have largely been concerned with a particular environment and therefore a particular pattern of observation. Such observations have consequently been developed in a general and at times semantic fashion and therefore are not directly relevant to some observations of an applied order. This does not result in questions about the validity of general semantic observations – but rather the form of such observations and as a result concerning the observation of such observations.

Criticisms concerning the applicability of systems theory indicate the insistence of the problem and this in turn introduces further complexity in the form of observations such as those contained in this short piece. Before commencing with applied observations it is necessary to make some more descriptive observations about the origins and development of one of the systems in question - grounded theory.

Grounded theory

As is well known that grounded theory has it’s origins in the work of Glaser and Strauss[2]. The method was developed from the results of an investigation into the social–psychological processes involved in dying in hospitals[3]. As a method it was developed in opposition to the grand theories of the time and argued for all theory to be grounded in observations of data[4].

The method is a practical guide in the step by step process of collecting and analysing data

primarily though not exclusively of a qualitative nature. The essential thrust of the method is that the researcher should approach the data with as few preconceptions as possible in order to see what is 'going on'. A core idea or concept in grounded theory is that the theory 'emerges' in the process of observation[5].

Emergence means two things first, that the observations constructed from a grounded theory perspective has to relate to the particular substantive concerns of the people involved as these emerge and secondly, that the structure of the theory itself has it's own emergent form. Glaser appreciated that theory could be structured in any number of ways and not just simply in the form of a hierarchy or as a causal relational model and therefore the order of the observation had to be allowed to emerge[5].

Grounded theory has had an impact on fields as wide as nursing, medicine, dentistry, marketing and business studies[6;7]. It has also been subject to a number of 'revisions'[5;8;9]. When Strauss and Corbin published their book 'Basics of Qualitative Research' differences developed in perspective between the originators of grounded theory[8]. Glaser objected to the book by arguing that Strauss and Corbin had 'forced' the grounded theory researcher to use a particular set of distinctions to organise and structure their data and therefore by definition to preconceive and structure their observations of the world in a particular way. In particular these related to the conditions, causes and consequences surrounding the main concerns of those in the field. Glaser was arguing for an appreciation of the complexity of the world and therefore for freedom in the construction of descriptions and analyses of this world.

The apparent insistence on the use of one core pattern for grouping and organising their observations therefore undermined the idea of emergence since this could now be preconceived in a particular way[10]. Glaser[10] therefore replied to the publishing of Basics of Qualitative research by arguing that the book restricted the distinctions which were to be used when observing data. He argued that grounded theory had been fundamentally altered through the production of this book to the extent that it could no longer be called grounded theory. The differences have resulted in a reappraisal of the roots of the method[4]. What follows is an analysis of the form of data analysis and therefore conceptual development implied in Glaser's form of grounded theory[5;10].

As stated previously the procedures underlying grounded theory are not designed to yield 'themes' within the data but are aimed at developing a theory. By theory what is intended is a conceptual account of the 'main concerns' of those resolving a particular problem[3;5;10]. The main concerns of participants are typically categorised into one or two core variables which serve to organise and integrate the fullest range of variation observed[3;5;10]. In this form of observation the 'incident' is the basic unit of data analysis[5;10] an approach that has also been used in the analyses of Stern[11] and Keddy et al.[12].

The incident approach to grounded theory data analysis occurs when the researcher has a series of observations such as field notes, or

statements from participants[1]. The researcher at the initial stages of the research reads the notes and fractures the data into incidents, which are then summarised using a code or category. Initially this code or category is merely a descriptive nominalisation[2] that marks off the text and summarises it.

At the start of the process the researcher nominalises incidents in as many ways as possible using as many various forms of coding as possible. The aim is to encapsulate many of the possible meanings for each incident (open coding) as they occur to the observer. The researcher then proceeds by analysing incident after incident in the notes. When a second incident of a previously observed code is observed the two incidents are compared with the aim of summarising the difference between the two these observations are noted in a memo and filed under the particular code. The researcher then continues to code as freely as possible.

During this process of open coding the researcher asks a few simple questions – what is this incident or code telling me and how does it vary from previous incidents or codes? and what is this incident or code telling me about the main concerns of those under study? Through this *constant comparative* process the researcher therefore develops a series of observations that summarise variations in incidents. Through the use of coding the researcher also develops a sense of variation in relation to the form of the main concern of participants. The problem for the emergent grounded theory is therefore one of abstraction of meaningful categories that are 'grounded' or based on observations of the perspectives of participants. The goal of data analysis being to arrive at one core code or variable which appears to group all other codes together. The process is an emergent process and involves rigorous adherence to the procedures outlined in the method.

Theoretical sensitivity for Glaser represents the ability to structure the emergent theory so that it 'fits' the ordering of the core concern of those in the field[5]. In this way the transitional nature of the problem under study is captured. When these core categories are decided on the researcher then starts asking how does this incident of this category apply to the core category and in this way the mode of observation takes a different form.

Grounded theory is therefore a method that lends itself to the study of transitional phenomena because it is itself a transitional phenomenon based on the constant comparison of incident to incident. The goal of this process is the emergence of a core set of meanings that are developed with the purpose of indicating observations (and therefore reductions in the complexity) of the problem under study.

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[1] I am assuming that such data constitute observations of the second order – a point that requires further clarification.

[2] The typical method for doing so is well known in qualitative research. In English the form of the language used is typically the gerundive. The use of the gerundive form as such indicates that not only is data analysis is in process of changing but also that there are synchronic and diachronic dimensions to the form of the observation. This as we shall see later has fundamental implications for the generative process at the heart of the method.

Grounded theories are therefore conceptual communications concerning observations on how persons resolve particular problems in a particular area (such as health care or business organisations). Theories that observe the resolution of a particular problem in one area such as a hospital setting are termed substantive theories. In relation to the processes observed and communicated the person conducting the grounded theory is then invited to observe if the same processes occur beyond the current substantive field in other areas. This use of further sampling is termed theoretical sampling. For example, awareness contexts were originally 'discovered' or observed in hospital settings but the researchers soon observed that they occurred as patterns of regularities in other substantive fields such as education and business organisations[2;13]. Such observations when they reach this level or form are considered formal theory – that is as sets of observations that recur regardless of situation.

Grounded theory and systems theory

The method of data analysis of grounded theory, if taken as the incident approach, is congruent with the systems theoretic approach proposed by Luhmann[14]. In systems theory the basic unit of analysis is the 'event'. The event

> *"is the (socially smallest possible) temporal atom, 'an indivisible, all or nothing happening.' 'A single event, then, is a 'dichotomising,' non-quantifiable happening, and nothing more. Its representation on a spatio-temporal model would be merely a point." [14]*

For Luhmann events are not objects, that is to say they are not static in relation to time. Events prefer to pass away and to yield the present to the next event. Each event brings a total change to the past, present and future through the actualisation of the next event. Events are only possible in time and punctuating time through events allows total freedom in relation to time. The properties of events in relation to time are remarkably similar to the properties of incidents in grounded theory. Indeed in the process of data analysis through the 'event' of comparing event to event – abstraction becomes possible. This also reflects the thinking of systems theory that the process of communication begins with an observer drawing indications and distinctions (conceptual codes and categories respectively in grounded theory).

In addition to these considerations the use of the gerundive form indicates something very profound about the nature of drawing distinctions in grounded theory. The form of such distinctions can be made more explicit by considering the form of observation that underlies the approach of Luhmann[15]. Such a form of observation represents indications of how primary observations are made in a practical way from the primitive form of drawing a distinction and

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[3] Something recognised in principle in the empirical social research of Paul F Lazarsfeld and termed the interchangeability of indices[21].

[4] As opposed to the more descriptive from of indication contained in the Strauss and Corbin[8] indicated state which by definition does not require a rigorous formulation of the cross as constant comparison. For the current observer this is the essential difference between these two forms of observation.

crossing over to indicate the other side of the distinction[16;17]. The constant comparative process at the heart of grounded theory of comparing incident with incident follows the same general form of observation.

That there is a congruence between this form of self referential observation is indicated first through the general usage of the gerundive form which indicates both synchronic and diachronic dimensions to an observation thus implying contingency and distinction[18]. The gerundive from of observation indicates not only a marked state or code in the words of Spencer-Brown but also an indication to cross over this state. These forms of coding therefore indicate a current transient state of 'knowing'.

Observing grounded theory coding from the perspective of Spencer-Brown's laws of form[15] it is clear that drawing a distinction around and incident is effectively drawing a boundary, it then follows that.

Axiom 1 the value a call made again is the value of a call.

Therefore to draw the same distinction again and indicate this by a code is to indicate the same value a form of reduction from the complex mass of observations confronting the researcher/observer. In this way the constant drawing of distinctions is operatively a reduction in the complexity of the observations.

Axiom 2 the value of a crossing made again is not the value of the crossing.

To draw a distinction then to continue coding the observations by drawing other distinctions only to return to the original code by drawing it as another incident of the same distinction. Is to begin by drawing a distinction then to cross over into the environment of the developing theory and draw other distinctions of a different value and then on the occurrence of the same distinction recurring is to re-cross into this distinction and therefore adjust the value of the distinction. This is why the observer in grounded theory has to indicate this change in value through the process of writing a memo. It also helps explain why there is an essential tension in grounded theory between descriptive codes and theoretical codes – the subject of ongoing work.

It follows that a more formal specification of the operations at the heart of the grounded theory process from the perspective of the laws of form is required. It is hoped that these basic considerations illustrate that as the observer observes the codes of his emerging theory (his developing self-referential reality) these codes take on their own emergent form. It is therefore a hypothesis of this paper that the process of constantly comparing incident with incident results in the grounded theory researcher conducting the very operations indicated by the instructions at the heart of Spencer-Brown's development of the primitive arithmetic[15]. But so perhaps would any form of observation? This is certainly the implication as noted by Spencer-Brown. It is the order of observations that may be different - something which only further research could reveal.

As Luhmann[14] argues structures abstract from the concrete quality of

elements and events, they take some of the concreteness of the elements and build their own concreteness. Structures endure despite their elements, which can be removed, substituted and interchanged. The idea of structure here can be recast in terms of the structure of an emergent-grounded theory communication. In doing so conceptual codes and their properties - the elements of a given set of observations or theory can be interchanged and substituted - whilst the structure or theory endures[3]. In this sense emergence illustrates the contingent nature of the knowledge or truth content of grounded theory and at the same time the effectiveness of grounded theory communications to reduce complexity. For Luhmann[14] the problem of social science becomes the problem of how to abstract. The method of data analysis at the core of the grounded theory process, when the incident approach is adopted outlines one possible method for such abstraction.

This indicates that the emergent processes at the heart of the grounded theory of Glaser[4] are congruent with the system theoretic approach of Luhmann. This is because they are both based on very similar observational patterns. What remains is to cross over this distinction and briefly outline some of the essential differences between the approach of grounded theory and systems theory.

The application of systems theory to grounded theory and grounded theory to systems theory

Systems theory as stated previously was produced within the environment of general theory and resulted in numerous debates in the realm of semantics[16]. This environment has affected the types of observations that systems theory has tended to make concerning the nature of its immediately apparent environment. These explorations and logical elaborations are therefore an essential component of the current approach and should not be considered invalid. The question is the degree to which systems theory can provide an adequate degree of interpenetration for the researcher who chooses to accept it's basic assumptions and distinctions as a relevant basis for commencing to observe their immediate environment.

In this sense systems theoretic observations become contingent and therefore part of the environment of the researcher as sets of communicative codes of a particular order. The degree of interpenetration between both is one aspect of the application attained through the use of system theoretic distinctions. So what are he implications of such distinctions for grounded theory?

One observation from systems theory for the status of grounded theory observations is that they are necessarily contingent by nature. They cannot represent an existing world outside of communication and as such grounded theory observations would more correctly carry the claim as communications on communications. As grounded theories are based on observations of the second order which are in some respect centred around the interpenetration of people with various social systems they will tend to represent particular forms of communication. Grounded theories will therefore tend to be communications of a transient nature because they are themselves products of social processes and therefore change the nature of the phenomena under investigation. This has been recognised by

Glaser[5;10] and as an observation is relevant to substantive forms of grounded theory in particular. Indeed if the systems theory perspective is accepted that grounded theory observations are social systems communications by their very nature then this would explain their grab and fit to the various social domains in which they can be found. One of the strengths of the method has been its practical consequences for the domains in which the observations have been made.

Ironically perhaps is would also explain why grounded theory is not included within the general sociological literature to a large extent? Perhaps grounded theories are observations that are by their nature internal systems communications and therefore of less applicability to general sociological observations? In a sense therefore perhaps many grounded theories are essentially 'social' but not sociological. Yet the systems theory of Luhmann would tell us that there can be no communications outside society[14;19;20]. From this then grounded theory must be able to see itself as its own object.

One direction for resolving this difficulty in grounded theory is through the use of theoretical sampling whereby the body of knowledge or sets of previous communications are subsequently applied to other substantive fields with the aim of re-establishing the value of these communications (axiom 1). In so doing Glaser[5] has recognised that such observations when successful constitute observations of a different order (Axiom 2) he has chosen to term these theoretical sampling and when successful the result is a formal grounded theory an example of which is cited above (awareness contexts). This however leads grounded theory into the realm of it's own constituted reality and therefore would imply that it would have less and less to say about the social order to which it belongs. Therefore such observations should consider their relationship to observations of a general nature such as those contained within systems theory, in this sense the application of systems theory to grounded theory is about the theoretical interpenetration of two orders of observation.

In addressing questions of the order of application it would therefore be better to consider the distinction used by Luhmann in Observations on Modernity[16] between semantics and structure. This is therefore perhaps were the essential difference between the environment of grounded theory and systems theory lies. The former distinctions are largely concerned with observations of recurrent problem solutions within the structural realm whereas a large part of the latter has been concerned (quite rightly) with another part of its environment – the world of theoretical semantics. In addition Luhmann from the perspective of grounded theory[5] has logically elaborated the possibilities of his original distinctions leading to questions of the order contained in this paper.

In conclusion it seems that questions of the order concerning practical implications that utilise the general specific schema are valuable. There is a great potential for both grounded theory and systems theory in developing such questions. The potential is that grounded theory observations can become more generally accessible and secondly that systems theory observations could become more grounded. When the underlying patterns of these forms of observation are explored a better account of how this may proceed could emerge.

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