

## REGROUNDING GROUNDED THEORY – OR REINFORCING OLD PREJUDICES? A BRIEF REPLY TO BRYANT

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### ABSTRACT

*This article extends the debate on grounded theory method (GTM) commenced by Bryant (2002). It discusses the charges of ‘phenomenalism’ and ‘naïve inductionism’, that Bryant levels at GTM, and asks if they are fair criticism of the method, or reinforcing prejudices about GTM that might hinder its take up in the field of information systems research. In particular, the article considers the idea of the researcher using GTM as a ‘blank slate’ with no preconceptions, and finds this idea not to be supported in the GTM literature. The central paradox of GTM, as a subjective coding process which also claims to systematic is also discussed. The article concludes with some suggestions for IS researchers using GTM, and also questions how much GTM is actually used for theory generation in IS.*

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### INTRODUCTION

Grounded theory (Glaser and Strauss 1967) has been increasingly used by qualitative researchers in the information systems discipline in recent years. *The Discovery of Grounded Theory* (Glaser and Strauss 1967) was seen as quite revolutionary at the time. This book outlined a research methodology that aimed to systematically derive theories of human behaviour from empirical data and was also a reaction to ‘armchair’ functionalist theories in sociology of the time (Kendall 1999, Dey 1999). As

Bryant points out, it is useful to discuss Grounded Theory *Method* (GTM) in order to distinguish the process of generating grounded theory (the method) from its objective, a ‘grounded’ theory about a particular phenomena, so called because the theory has a very close tie to the data and therefore can be ‘grounded’ in the data. After its inception in 1967, GTM spread fairly quickly as an accepted qualitative research method, particularly in the health field. There were several more books and articles by the co-originators which developed, and later, debated the method (Glaser & Strauss 1967,

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**Table 1 Key Characteristics of Grounded Theory Method (Cresswell 1998)**

1	The aim of grounded theory is to generate or discover a theory.
2	The researcher has to set aside theoretical ideas to allow a ‘substantive’ theory to emerge.
3	Theory focuses on how individuals interact in relation to the phenomenon under study.
4	Theory asserts a plausible relation between concepts and sets of concepts.
5	Theory is derived from data acquired through fieldwork interviews, observations and documents.
6	Data analysis is systematic and begins as soon as data is available.
7	Data analysis proceeds through identifying categories and connecting them.
8	Further data collection (or sampling) is based on emerging concepts.
9	These concepts are developed through constant comparison with additional data.
10	Data collection can stop when no new conceptualisations emerge.
11	Data analysis proceeds from ‘open’ coding (identifying categories, properties and dimensions) through ‘axial’ coding (examining conditions, strategies and consequences) to ‘selective’ coding around an emerging storyline.
12	The resulting theory can be reported in a narrative framework or as a set of propositions.

Glaser 1978, Strauss 1987, Strauss & Corbin 1989, Strauss and Corbin 1990, Glaser 1992, Strauss & Corbin 1994, Glaser 1995, Glaser 1998).

As a well established method for analysing qualitative data and generating theory in other fields, it is perhaps not surprising that there is increasing interest in using GTM in IS. Dey (1999), drawing on Creswell (1998) gives 12 characteristics of GTM and these are shown in Table 1.

GTM is well signposted in the literature which makes it attractive to new researchers, as it does give very clear guidance on how to code qualitative data, and table 1 gives some indication of the extent of that guidance. However, it should be noted that GTM is as much about generating theory inductively as it is about analysing data, though less used for this in IS research thus far. The notion of *setting aside theoretical ideas* is often held to imply that the researcher does not look at existing literature, and GTM has been much criticised for what is seen as a *tabula rasa* approach, where the researcher is a ‘blank slate’. However, Glaser and Strauss’s position on this is actually less stringent than at first glance. One challenge for IS researchers using GTM is how to tailor this essentially inductive research process to the more conventional, and

deductive, presentation required in theses and journal articles.

In the field of information systems research, GTM has been used mainly, though not exclusively, in interpretive research as GTM is a useful way of analysing qualitative data, irrespective of philosophical position. Some examples from the past decade in IS include Toraskar 1991, Orlikowski 1993,

**CONTRIBUTION**

This paper is both a reply to Bryant’s (2002) article in *JITTA* on grounded theory method, and an extension to the debate on the use of GTM in IS. In particular, the paper looks at the charges of positivism levelled at GTM by Bryant’s article and asks if they are firstly fair, and secondly, if those charges matter.

The paper extends the debate by examining the central paradox of GTM – that it is an inductive method, founded on a subjective process – the coding of data – that claims to be a systematic, unbiased method for generating theory. It also suggests that IS researchers look closely at whether they are using GTM simply as a coding method, or as a method of generating theory.

Urquhart 1997, Urquhart 1998, Urquhart 1999a, 1999b, 2001b, Adams & Sasse 1999, Baskerville & Pries-Heje 1999, and Trauth 2000 – most of these articles, but not all, are interpretive research. GTM has been increasingly described and debated as well as more and more IS researchers discover the method, and Howcroft & Hughes 2000, Urquhart 2001a, are two examples of this debate in IS. GTM has been widely debated in other fields as well, as it is, after all, a method of 35 years standing.

Antony Bryant's (2002) article in *JITTA* entitled 'Re-Grounding Grounded Theory', is an example of the increasing re-examination of grounded theory method (GTM) that is taking place in IS, as it is used by increasing numbers of researchers to analyse qualitative data. Bryant gives an excellent assessment of grounded theory from both a systems and ethnographic perspective. He quite rightly points out that GTM needs to be retrieved from its apparently positivist origins – so far so good, especially as most of the application of GTM in IS seems to be in interpretive research. Unfortunately, he neglects a large body of work in other fields that debates precisely that point, and he makes some sweeping claims about the nature of GTM that beg for a reply. The concern here is that overstated claims of GTM's positivist nature simply reinforce old prejudices about GTM that bear little relation to how it is used today in IS.

This article revisits some of the issues raised in Bryant's article, and extends the debate by considering how the process of coding in GTM contributes to the subjectivity, or otherwise, of the method.

- Firstly, this article re-examines the charge of positivism made by Bryant, and considers its importance for IS researchers, given the prevalence of GTM use in interpretive, rather than positivist, IS research.
- Secondly, the idea put forward in the Bryant article that GTM applies the rule of phenomenism is discussed. As defined by Giddens (1974), phenomenism asserts that only reality immediately apprehended by the perceiver can be

classified as knowledge and this is part of the philosophy of positivism. The issue here is how this relates to the focus on 'data' in GTM and whether one is a necessary precursor of the other.

- Thirdly, the charge of 'naïve Baconian inductionism' contained in the Bryant article. This charge essentially relates to the *tabula rasa* which some people think GTM requires. This article examines that charge and what the implications are for IS researchers use of the literature when using GTM.
- Finally, this article extends the debate by discussing the subjective nature of the coding which is at the heart of GTM – and asks the question, if coding is an essentially subjective process, how systematic a method of theory generation can GTM actually claim to be?

#### **GTM – QUALITATIVE METHOD IN POST POSITIVIST CLOTHING?**

GTM is paradoxical and unique – a method for analysing qualitative data which also claims to be a *systematic* way of generating theory. For this reason alone, there are bound to be debates about whether it is positivist or interpretivist in nature. Certainly, in the 1967 book, Glaser and Strauss make great play of the systematic nature of their method of theory generation, and there are many positivist sounding statements in that book. However, one has to consider the historical context of the time; *Discovery* was published at a time when many so-called softer fields, such as sociology, were striving for academic respectability and wanted to be seen as 'scientific'. Bryant makes the interesting point that the central texts of GTM have been almost silent on the issues of epistemology and philosophy over the past 30 years, and that this is surprising given the developments that have taken place in these areas. While the central texts may not have debated it much, many people using it in other fields have done so. At this point, we can also ask, why is it at all necessary to debate whether GTM is positivist or interpretivist in nature?

One key to why the debate is important to interpretive IS researchers at least, is

contained in the Klein and Myers (1999) paper on principles for conducting interpretive field research, where they state that researchers should make the fundamental philosophical assumptions of their research clear. Many interpretive methods, such as ethnography, phenomenology, and hermeneutics, have a clear philosophical basis. In using the method, one also accepts the accompanying philosophy. So, for any interpretive researcher using GTM, the challenge is to discover what the philosophical foundations of GTM are, and whether use of the method carries some philosophical implications. Given that most of the use of GTM seems to be by interpretive researchers, it is important that the philosophical position of GTM be debated.

One way of trying to get to the philosophical basis of GTM is to look at the background of the originators and their views. As Bryant also points out, one of the originators of grounded theory method, Strauss, comes from the symbolic interactionist school (Annells 1996), something rarely remarked upon in information systems literature. Symbolic interactionism holds that the individual enters their own experience only as an object, not a subject, and that entry is predicated on the basis of social relations and interactions (Mead 1962, in Annells 1996). This leads Annells (1996) to place grounded theory within an ontology of critical realism, as part of the post-positivist paradigm (Guba & Lincoln 1994). Critical realism holds that there is one reality, however imperfectly apprehensible (Guba & Lincoln 1994). Annells (1996) points to statements by Glaser (1992) about the classic mode of grounded theory focusing on 'concepts of reality'(p.14) and searching for 'true meaning'(p.55) as evidence of a critical realist position. It should be noted however, that Glaser (1999) has said:

“In some quarters of research, grounded theory is considered qualitative, symbolic interaction research. It is a kind of takeover..”

Interestingly, both symbolic interactionism and grounded theory have also been claimed as *interpretive* approaches, where the ontology is one of socially constructed meaning systems which is based on an internal experience of reality (Neuman

1997). Grounded theory has also been linked to philosophical hermeneutics which offer an alternative to empiricist and historicist accounts of science (Thompson 1990). Strauss and Corbin's (1990) suggestion of a conditional matrix, which incorporates consideration of larger contextual issues of historical, political and economic conditions, can be seen to lean toward a relativist approach (Annells 1996). Strauss (1987) suggests that the researcher is actively involved with the method, and again this can be interpreted as a relativist statement (Annells 1996). In contrast to the very post positivist sounding 'criteria and canons' of Strauss and Corbin (1990) for judging grounded theory studies, Glaser (1992) states that the criteria for judging a grounded theory are 'fit, work, relevance, modifiability, parsimony and explanatory scope'. These sound considerably closer to Guba and Lincoln's (1989) *authenticity* criteria for constructivism, such as fairness and improved understanding, than Strauss and Corbin's (1990) criteria. So, it seems that both Glaser, Strauss, Strauss and Corbin, have at different times, and sometimes simultaneously, leaned toward both post positivism and interpretivism. Madill, Jordan and Shirley (2000) argue quite convincingly that the philosophical position adopted when using grounded theory depends on the extent to which the findings are considered to be discovered within the data, or as the result of construction of intersubjective meanings. They locate the former view as Glaser's (1992) position and the latter as Strauss and Corbin's (1990).

One of the enduring paradoxes of grounded theory is that, above all it is an *inductive* method and has been stated as so from the very beginning (Glaser & Strauss 1967), and yet it is seen as a post positivist method. Post positivism, like its predecessor still places great value on *deduction* as a way of discovering a research problem. Grounded theory's original aim was to *inductively* generate formal theory, via the route of substantive theory (that is, pertaining to a particular area), in the field of sociology.

Glaser (1992) lays great stress on the 'emergent' nature of grounded theory method,

and states that the data should not be ‘forced’ into conceptual categories. It is the inductive and emergent nature of the method that seems most at odds with an underlying ontology of critical realism. Strauss and Corbin (1990) talk of a ‘reality that cannot actually be known, but is always interpreted’.

Bryant rightly says the characterisation of grounded theory method, as proposed in 1967, is a product of the political and historical context of the time. He says that it is surprising that the founders, in the 1980s and 1990s, have not engaged positivism with critiques. Why is it surprising? The key to this lack is simply that, GTM is, first and foremost, a *method*, and indeed all the writings of the founders are bound up with this concern, rather than philosophical issues. Bryant himself is careful to distinguish between grounded theory as a possible outcome of using grounded theory method, and the method itself.

It is probably appropriate to quote Glaser (1999), who stated during a conference address:

*“Let me be clear. Grounded theory is a general method. It can be used on any data or combination of data.”*

While it is clearly useful to consider the philosophical baggage that any research method might have, it may simply be that the focus of grounded theory method, as a method of analysing data, has precluded much consideration of ontology or epistemology by its founders. This gives rise to the varying interpretations of others using the method (Thompson 1990, Anells 1996, Madill et al 2000) as being simultaneously located in relativism, hermeneutics and constructivism, especially when it has been used by researchers in other fields for over thirty years.

In information systems GTM has been largely used within an interpretive context (Toraskar 1991, Orlikowski 1993, Urquhart 1997, 1998a, 1999a, 1999b, 2001b, Baskerville & Pries-Heje 1999, Trauth 2000) but also more positivist ones (eg Adams and Sasse 1999). One could argue that, as long as IS researchers are clear about their own philosophy, GTM can then be subsequently located in any paradigm as a way of analysing data.

Thus, it is questionable whether there is an urgent need to retrieve GTM from its positivist origins; this has been quietly happening in IS for over a decade. Perhaps the final word should go to Orlikowski and Baroudi (1991), where they reference Glaser and Strauss (1967) and GTM, as an example of an *interpretive* viewpoint. They quote Glaser and Strauss’s (1967) statement that the primary endeavour is to describe, interpret, and analyse the social world from the participant’s perspective, and that all rigid a priori researcher imposed formulations of structure, function, purpose and attribution are resisted (Glaser and Strauss 1967, in Orlikowski and Baroudi 1991). On the face of it, this would seem a very interpretive way of looking at the world and is contained in the very first book ever written on grounded theory method. So, since 1991, some researchers in IS have seen GTM as an interpretive method, concerned with analysing the world from the participants perspective – thus it provides a means to analyse participants *interpretations*.

Bryant however does level some serious charges at GTM, namely the ‘rule of phenomenalism’ which is linked to value-neutral observations, and ‘naïve Baconian inductionism’ (Haig 1995) which assumes the researcher as a *tabula rasa* or blank slate, going into the field without any preconceptions. The next two sections examine these charges in detail.

## IS GTM GUILTY OF PHENOMENALISM?

Bryant goes to some length to claim that GTM is at heart phenomenalist. As defined by Giddens (1974), phenomenism asserts that only reality immediately apprehended by the perceiver can be classed as knowledge, and this is part of the philosophy of positivism. What Bryant seems to be saying is that, because data is seen as an unexceptional category and simply what is observed, this points to a consistently positivist and phenomenalist strand in GTM, especially when the theory is ‘grounded in the data’.

One difficulty here is this – is the issue the grounding in the ‘data’, or the use of the

word 'data', or both? It is not clear why use of the word data, or grounding in data, should be positivist or phenomenalist. The waters are muddied further when Bryant quotes Haig (1995) who says that theories typically are grounded in phenomena, not data. This only serves to confuse, as the word data used in GTM can be shown to be quite a broad term and to cover some 'phenomena'. Haig (1995) does give a working definition of phenomena (p.3) as a 'varied ontological bag that includes objects, states, processes and events and other features which are hard to classify'. He contrasts this with data which are in his view are idiosyncratic to particular contexts (p.4). However, Strauss (1987) points out that there are *many* sources of data, and these *are not confined to observations*. It is noteworthy that GTM is also said to be good for studying *processes* (Glaser 1978, Orlikowski 1993), which in Haig's (1995) view would fall into the category of phenomena.

Haig then goes on to suggest that theories in GTM should be grounded in phenomena, not data. Yet the definition of data provided by GTM suggests that at least some of this 'data' is in fact phenomena in Haig's terms. GTM aims to build *substantive* theories, meaning that the theory is particular to the object of investigation only. This is similar to the idea Haig puts forward about a theory being grounded in data idiosyncratic to particular contexts. One possible interpretation of this is that, in Haig's view, GTM should be orientated to larger scale theories – relating to his particular definition of phenomena. Interestingly, Strauss (1987) takes much the same line when he talks about substantive theories shading into larger, more formal theories.

Haig's views – partially represented in Bryant's article and expanded on in this one, can perhaps be seen as a sideshow with regard to the charge of phenomenism, albeit an interesting sideshow. There is perhaps a difference between Giddens' view of phenomenism as represented by Bryant, and Haig's (1995) view of phenomena. In any case, Haig seems much more concerned with the theory generation side of things.

More importantly, Bryant's claim that, in GTM, data is seen as an unexceptional

category and that it is simply what is observed, needs to be challenged. The problem here is that the process of theory generation in GTM involves *coding*. Coding means that the data is analysed and transformed into categories. Most people would agree that coding, by its very nature, is an inherently *subjective* process. Therefore it is hard to see data as an unexceptional category as Bryant claims, and why this would contribute to a charge of phenomenism and positivism. Bryant also raises the very same issue of subjectivity later in his paper, when he rightly says that, stripped of its scientific veneer, GTM is essentially concerned with meaning construction. A key question about GTM is whether two researchers, given the same data and the same research problem, would come up with the same categories for their data. This contradictory and somewhat paradoxical idea – a systematic method for generating theory (GTM) based on an essentially subjective process (coding and induction) that can and does have different results depending on the researcher, is discussed later in the paper.

If the issue is that somehow it is not possible for a theory to be 'grounded in the data', or that to do so is somehow phenomenalist, then there are many interpretive users of GTM that would disagree. For many researchers using GTM to analyse qualitative data, the whole attraction of GTM is precisely that close tie to the data. For any conceptualisation that a researcher chooses to make, the method of constant comparison (which involves constantly comparing instances of data labelled as a particular category with other instances of data, to see if these categories fit and are workable) can provide many instances of that particular conceptualisation. This produces rigorous research, because any claim made will be backed up by not one instance in the data, but repeating instances. Moreover, because GTM codes observations at a detailed level, the concepts produced tend to be more substantial than if one had done a 'top down' analysis and picked broad themes from the data.

## THE CHARGE OF NAÏVE INDUCTIONISM AND THEORETICAL SENSITIVITY

Bryant also makes much of Haig's (1995, p.2) charge of 'naïve Baconian inductionism' in GTM. He also criticises DeVreede et al (1999) paper, which uses GTM in a cross cultural field study of GSS, for using a form of inductionism that has been largely discredited. He is also critical of De Vreede et al's lack of justification for being guided by existing theories. These two issues are linked, and are bound up with the way GTM is wrongly perceived as not taking cognisance of other theories and literature.

If we look carefully at Haig's position, he does in fact elaborate on what 'naïve Baconian inductionism' is, by saying the charge of naïve inductionism equates to the way that

*'grounded theory is depicted as a tabula rasa view of inquiry, which indefensibly maintains that observations are not theory or concept dependent' (p.5).*

Haig goes on to refute the charge of 'naïve inductionism' by pointing out that Glaser and Strauss (1967) explicitly say that

*'the researcher does not approach reality as a tabula rasa..[he or she] must have a perspective in order to see relevant data and abstract relevant categories from [it]' (emphases added).*

The 'tabula rasa' idea, therefore, can be seen as a corruption of the idea of *theoretical sensitivity* (Glaser 1978). One of the tenets of theoretical sensitivity is that the researcher enters the research setting with as few predetermined views as possible, especially logically deducted, prior hypotheses (Glaser 1978). That said, theoretical sensitivity is increased by being steeped in the literature and associated general ideas (Glaser 1978), so that a researcher will understand what a theory is. Thus the idea of theoretical sensitivity can be seen as an injunction against a deductive mode of thinking rather than an injunction against the literature or concepts per se.

(Glaser 1992, p. 31) further elaborates by stating that theoretical sensitivity is:

*An ability to generate concepts from data and relate them to the normal models of theory in general..*

So, literature is used to help build the theory, and the substantive theory related to the literature, *but only once the substantive theory has been developed*. According to Glaser (1992, p. 31), the dictum in grounded theory is that there is no need to review the literature in the substantive area under study, and that this idea is:

*'brought about by the concern that literature might contaminate, stifle or contaminate or otherwise impede the researchers effort to generate categories..'*

He hastens to add though, that this applies only in the beginning, and that when the theory is sufficiently developed, that the researcher needs to review the literature in the substantive field and relate that literature to their own work (Glaser 1992).

Strauss's (1987) opinion on the issue of literature, was that the advice about delaying the scrutiny of related literature applies full force to inexperienced researchers, but less so to experienced researchers who are already good at subjecting a theoretical statement to comparative analysis, and would question whether it would hold 'true' under different conditions. Strauss (1987) also says that, once a grounded theory is developed, researchers should grapple with other theories, and either incorporate them or critique them.

So the position of DeVreede et al (1999), in relating their theory to the TAM model, does in fact have some support in the grounded theory canon of literature. Bryant makes an interesting point in questioning whether the 'cognitive evasion' required by this position is actually possible. Clearly the founders of GTM saw it as a device to prevent unoriginal, deductive and derivative thinking about categories in the early stages of a theory, but are also interested in how a grounded theory might relate to other theories.

The 'tabula rasa' idea remains a popular misconception about GTM, and can in some cases make it difficult for IS researchers to adopt the method. Postgraduate students in

IS wishing to use the method can find themselves restricted by a standard view of research which assumes that a complete literature search, and a very defined research problem, comes before entering the field. Similarly, the standard format of a journal article puts literature before the study results, implying that this is what happened, whereas in practice the grounded theory user would do the bulk of the literature searching afterward.

That said, there is nothing in the GTM literature that specifically precludes looking at relevant literature *before* entering the field, and then conducting a further search in order to relate the theory produced to the literature. The thing to keep in mind is the purpose of the injunction about delaying the literature search – which is to produce categories that are not influenced by concepts from the literature. If a researcher produces categories that are reminiscent of existing theories, this goes against the emergent and inductive nature of GTM. Worse, the researcher can end up ‘forcing the data’ (Glaser 1992) into preconceived categories. In practice, a researcher can refer to existing literature before commencing data analysis, but should be mindful – and check for – categories that may have come from the literature.

### **THE PARADOX OF GTM – INDUCTIVE AND EMERGENT AND SYSTEMATIC?**

Bryant rightly identifies the problem with GTM as it being offered in terms of both a qualitative one, and also a good scientific one (It is also what makes the debate so interesting). An associated problem is that the method has clearly evolved over the period of 35 years, so for every seeming positivist statement by one founder, a correspondingly interpretivist statement can be found by another. As GTM has been used in the health field for as many years, many contradictory statements can be found in this stream of research as well.

One could argue that the method itself is paradoxical. When Glaser (1992) talks about ‘emergence’, his major concern is that the data should speak to the researcher, rather than be ‘forced’ into categories. He criticises Strauss and Corbin (1990) for being overly

prescriptive and over concerned with description and conceptualisation (this is the essence of the famous ‘split’ between the co founders in 1992). It seems that Glaser is arguing for induction in its purest sense. Most researchers who have used GTM will attest to that ‘emergence’ – not necessarily a mystical process, but one where one sees the data in an entirely new way. Putting aside preconceptions does result in original insights to the data, and the method of constant comparison does enable the researcher to understand their data set and ‘ground’ the theory. So, as a process GTM combines creativity and some rules to enhance that creativity.

So, how does that creativity and subjectivity stack up against the claim that theory can be systematically generated? Certainly, the advantage of GTM is that it has well signposted procedures, reassuring to novice researchers. More importantly, it enables the researcher to demonstrate that a particular coding procedure has been followed, and this helps justify research. It is arguable that all good research should be able to demonstrate a chain of analysis, and GTM helps in this regard.

With regard to how systematic GTM is, Madill et al (2000) carry out an interesting exercise when they examine what happens when two researchers analyse the same data set using GTM. Unsurprisingly, the analytic categories generated by the two researchers *are* different. Madill et al then analyse the outcomes from realist, contextual constructionist, and radical constructionist perspectives.

They conclude that, from a realist perspective, the issue becomes one of level of analysis, and that the categories can be reasonably well integrated into themes. From a contextualist perspective, researcher subjectivity is the issue – and analytic style is an aspect of this. Researchers would be expected to identify different codes depending on training and research interests. Thus, researchers should articulate their position to enable the reader to judge their analyses.

The radical constructionist perspective would be concerned with the issue of reifying subjectivity and underlying rhetorical devices

that may exist in the text (Madill et al 2000). What is interesting about this exercise is that the degree of ‘subjectivity’ detected depends entirely on the philosophical position of the researcher using the coding method. Thus Madill et al neatly separate out the coding process of GTM from any accompanying philosophy and then consider that coding from the researchers own philosophical perspective. So, how systematic the method is may be entirely in the eye of the beholder and linked more to philosophical position rather than any rigour inherent in the method itself.

Madill’s approach of separating research philosophy from the coding process of GTM seems a much more reasonable way of looking at GTM. Certainly, it has been used in IS more as a coding *method* rather than a research method imbued with a particular philosophy. It is arguable that the take up of GTM of IS in the past 10 years has much to do with it being a clearly explicated and well respected method of coding qualitative data, rather than a concern with building theories. There are other approaches to coding, such as using predetermined codes or taking a ‘middle order’ approach (Dey 1993), where some preliminary distinctions in the data are made. Miles and Huberman’s (1994) chapter on coding and analysing data also provides a wider perspective on coding qualitative data per se. Experience with using GTM shows that it is essentially a ‘bottom up’ coding method. Therefore, it is not unusual for researchers to find that GTM gives them a low level theory which they find difficult to ‘scale up’ appropriately.

One issue then, in our use of GTM in IS is to clearly identify what we are using it for a) a coding method, or b) a method of theory generation. There is ample evidence in IS literature for the first use, much less for the second. One useful side effect of using GTM in IS could be a much more detailed consideration of the role of theory – and generation of our own theories specific to IS.

## CONCLUSION

This article has attempted to refute some of the charges of positivism made of GTM made by Bryant, and to extend the

debate further about the use of GTM by IS researchers.

In dealing with the idea that GTM is positivist (or indeed post positivist), we can ask, does it matter that it is? The answer is that, to interpretivist researchers, it does matter, lest they import a philosophy along with the method, that is at odds with their own. What is interesting is that the founders themselves seem to have leant in different directions over the past 35 years, on this issue. This is possibly because the focus is primarily on the method, and the mechanics of analysing data using the method. In other disciplines, researchers seemed to have claimed GTM for both interpretivism and positivism. How is this possible? Partially because GTM is itself paradoxical – a coding method (and coding is of necessity subjective) that claims to generate systematic theory. One pragmatic answer for IS researchers is simply to use GTM as a method, within their own philosophical bias. As Bryant points out, GTM’s seemingly positivist origins do not negate its use by interpretive researchers. Bryant notes Orlikowki’s (1993) description of GTM as inductive, contextual and processual, and this is an excellent description of the strengths of GTM.

At the same time, how exactly GTM is being used by IS researchers should merit more of our attention. At the moment, it seems to be used much more as a coding method, as distinct from a method of generating theory. There is very little discussion in IS literature of how theory might actually be generated using GTM, and there is still not much in the way of practical examples of coding. It is significant that Glaser (2002) is now contributing to that debate by writing about conceptualisation and the need to distinguish between description and analysis. There are a number of implications for researchers in IS considering using the method.

Firstly, researchers also need to be aware that GTM, however respected as a method, is not the only method of qualitative coding of data available. Secondly, they need to know that there are particular issues associated with the detailed level of analysis that GTM requires. Thirdly, IS researchers need to carefully consider their use of the

literature and how this fits into a conventional research process. Fourthly, they need to consider if they are intending to generate a theory, or simply use GTM's well defined coding procedures.

Some researchers in IS have written about the experience of using GTM, notably Hughes and Howcroft (2000), and Urquhart (2001a). What is required now is more attention to the practical issues that are presented whenever GTM is used as a method of qualitative data analysis. At the moment, the issue of theory generation in IS using GTM seems largely unexplored.

As more IS researchers use the method, more discussion of philosophical and practical issues surrounding GTM will emerge. On at least one point (if not on a number of points) Bryant and this author are agreed – GTM has a long and healthy future in IS, and is a viable and useful qualitative research method. The philosophy, practice, and the various uses and abuses of GTM in IS are well worth debating. In particular, we need to ask ourselves – is GTM simply a useful and 'respectable' coding method for qualitative data in IS, or are we serious about using it as a method of theory generation?

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