Comment développer la créativité des études utilisant la théorie enracinée ? Choix épistémologiques et stratégies pratiques dans la quête de créativité

Rodrigo Bandeira-de-Mello, Fundação Getúlio Vargas (FGV-EAESP), São Paulo, Brésil

Lionel Garreau, DRM (CREPA), Université Paris-Dauphine, Paris, France

Correspondance :

Lionel Garreau
Dauphine Recherches en Management (CREPA)
Université Paris-Dauphine
Place du Maréchal de Lattre de Tassigny
75775 PARIS Cedex 16
lionel.garreau@dauphine.fr

Résumé en français:

La théorie enracinée a été initialement développée pour proposer une alternative aux méthodes hypothético-déductives, qui formaient le courant majeur de la sociologie des années 1960, en visant à créer de nouvelles connaissances en se fondant sur les pratiques sociales. Face à l'ambition de vouloir créer de nouvelles connaissances au travers de l'utilisation de la théorie enracinée, de nombreux chercheurs mentionnent les difficultés inhérentes à cette méthode dans le développement de théories innovantes (Fendt & Sachs, 2008; Guillemette, 2006; Shalley, Gilson, & Blum, 2000). Cependant, la créativité reste une notion sous évaluée dans la littérature associée à la théorie enracinée. Les commentaires à propos de la créativité sont soit diffus(Charmaz, 2000 ; Glaser & Strauss, 1967 ; Strauss & Corbin, 1990) , soit limités (Dey, 1999 ; Douglas, 2003 ; Fendt & Sachs, 2008 ; Goulding, 2001 ; Locke, 2001 ; Wells, 1995). Ce papier cherche à clarifier dans quelles mesures la créativité joue un rôle dans le développement d'une théorie enracinée, ainsi que comment atteindre un certain niveau de créativité. Nous discutons d'abord les implications des choix épistémologiques dans les différentes versions de la théorie enracinée sur les potentialités de créativité dans le processus de recherche. Nous montrons que la place de la créativité diffère selon les approches utilisées : orthodoxe (Glaser and Strauss, 1967), pragmatique (Corbin & Strauss, 1990, 2008 ; Strauss & Corbin, 1990, 1998)ou constructiviste (Charmaz, 2000, 2006). Nous proposons trois stratégies de recherche permettant d'aider le chercheur dans sa quête de créativité. Nous nous appuyons sur près de dix années de pratique et d'enseignement de la théorie enracinée pour montrer comment les pratiques mentionnées peuvent aboutir à une meilleure créativité du chercheur. Nous ne proposons pas une liste exhaustive des techniques et stratégies mais mettons l'accent sur trois d'entre elles : le travail en groupe, les connaissances en art et la créativité in vivo.

Mots clés : Théorie enracinée, créativité, sensibilité théorique, épistémologie, méthode de recherche

How to develop creativity in Grounded Theory? Epistemological choices and operational strategies in the quest for creativity

Rodrigo Bandeira-de-Mello, Fundação Getúlio Vargas (FGV-EAESP), São Paulo, Brésil

Lionel Garreau, DRM (CREPA), Université Paris-Dauphine, Paris, France

Summary:

Grounded Theory (GT) methodology was originally proposed as an alternative to hypothetic-deductive methods of the mainstream Sociology research in the late 60s, aiming at creating new knowledge on the basis of the emergence of latent social patterns. While this ambition of creating fresh knowledge seems appropriate, there are difficulties inherent to the development of innovative and creative grounded theories (Fendt & Sachs, 2008 ; Guillemette, 2006 ; Shalley et al., 2000). However, creativity is an under evoked issue in the literature on GT. Mentions of creativity in GT literature is either diffuse (Charmaz, 2000 ; Glaser & Strauss, 1967 ; Strauss & Corbin, 1990) or scant (Dey, 1999 ; Douglas, 2003 ; Fendt & Sachs, 2008 ; Goulding, 2001 ; Locke, 2001 ; Wells, 1995). Our communication contributes to clarify to what extent creativity has a place in GT as well as how to enhance it. We first discuss the implications of epistemological choices underlying different versions of GT on the role of creativity in the research process. From early works of the pioneers (Glaser and Strauss, 1967), new GT versions have been developed, either focusing on the tactics to develop grounded theories in a practical way (Corbin & Strauss, 1990, 2008 ; Strauss & Corbin, 1990, 1998) or on its epistemological background (Charmaz, 2000, 2006). We show that the quest for creativity differs among these existing GT approaches. We also present three creativity-enhancing strategies to help researchers in their quest for creativity. We derive from our almost 10-year experience of developing GT as researchers and instructors to show how these strategies lead to creativity. We do not ambition to give an exhaustive set of techniques and strategies, but we focus on three of them, namely the collective work, the use of art knowledge, and in vivo *creativity.*

Keywords: Grounded Theory, Creativity, Theoretical Sensitivity, Epistemology, Management Research.

INTRODUCTION

Grounded Theory (GT) is a research method "*based on the systematic generating of a theory from data. […] It offers a rigorous, orderly guide to theory development*" (Glaser, 1978 p.2). A large part of the literature about GT has focused on the practical use of this methodology in order to produce acceptable results by the scientific community. Specifically, it has been shown how hard it is to follow the preconceptions of Grounded Theory in practice (Fendt & Sachs, 2008 ; Goulding, 2001 ; Wells, 1995).

Nevertheless, Grounded Theory seems to meet expectations of many researchers thanks to its potential fruitful use in addressing specific situations (for example Goulding, 2002 ; Heugens *et al.*, 2004 ; Partington, 2000 ; Sousa & Hendriks, 2006). What seems to attract researchers is the Grounded Theory's potential for generating fresh, innovative theories. We argue that to reach such a level of innovativeness, researchers have to be creative. The problem is that creativity is not addressed in GT literature. Closely related to creativity, the concept of theoretical sensitivity has been present in the pioneers' work (Glaser & Strauss, 1967) and in last versions of GT (Corbin & Strauss, 2008 ; Morse *et al.*, 2008). However, the concept of creativity and how creative researchers can be theoretically sensitized seem to be neglected by previous research.

Creativity plays a key role in GT. Weick (1989) presents theory construction as a process of disciplined imagination. Therefore, we show in this paper how imagination may be disciplined according to two levels: a) according to GT paradigms; and b) the operational level of theory construction techniques.

In order to clarify the extent to which creativity can be used in GT research we show that the space for creativity varies according to epistemological choices underlying different versions of GT. We also present three strategies to enhance creativity derived from our experience as researchers and instructors. We do not ambition to present an exhaustive set of techniques and strategies, but we focus on three of them, namely the collective work, the use of art knowledge, and *in vivo* creativity.

1. THE QUEST FOR CREATIVITY ACCORDING TO THE EPISTEOMOLOGICAL BACKGROUND

1.1. CREATIVITY AS A KEY COMPONENT OF GT

Grounded Theory was developed to improve scientific innovation (Guillemette, 2006). The pioneer work of Glaser and Strauss (1967) was set to give scientific research a different tone (Dey, 1999). "*Theories developed in GT are generally 'new' theories which are more or less linked with existing theories. Here lies the claim to promote innovation*" (Guillemette, 2006 p.33). As many authors show (Fendt & Sachs, 2008 ; Guillemette, 2006 ; Wells, 1995), GT gives much power to emergence in the research process, which should increase innovation. But doing research under GT canons raises many pitfalls. Even if these pitfalls are acknowledged by researchers, the quest for innovation through creative research should not be abandoned. The literature usually addresses the quest for innovation through the concept of Theoretical Sensitivity, which is described as a core competence of researchers developing good quality grounded theories.

Sensitivity is the "*ability to pick up on subtle nuances and cues in the data that infer our point to meaning*" (Corbin & Strauss, 2008 p.19). Theoretical sensitivity should enable the researcher to creatively develop innovative theories. Some techniques have been developed in GT literature to increase this capability. Corbin & Strauss (1990 ; 2008 ; 1998) provide tools and several examples to show excerpts of pertinent analysis. Wilson Scott (2004) suggests the use of the conditional relationship guide and the reflective coding matrix. Clarke (2005) suggests the use of mappings to help making sense about the data. Merlino & Martinez (2007) provide tools to mix qualitative and quantitative data to construct better theories in grounded theory analysis.

Whereas creativity can be defined as "*the production, conceptualization or development of novel and useful ideas, processes, or procedures*" (Shalley *et al.*, 2000 p.215), it is noticeable that these authors do not use the word creativity even if they talk about a close phenomenon, i.e. developing theories that would explain phenomenon in ways that were never explored before (Corbin & Strauss, 1990 ; Glaser, 1992).

In the next section, we move to the description of the epistemological assumptions underlying three main versions of GT. This will enable us to analyze the space creativity has according to these different epistemologies.

1.2. THREE DIFFERENT EPISTEMOLOGIES FOR GROUNDED THEORY

The historical development of the GT has shown that it "*is by no means an unequivocal or uncontested issue*" (Locke, 2001 cited by Sousa & Hendriks, 2006). We can indentify three versions to Grounded Theory on the basis of their epistemological background: the traditional Glaserian version, the popular Straussian version, and Charmaz's constructivist version. The role the researcher plays during the research process differs among these approaches. The earlier version of the methodology (Glaser & Strauss, 1967 ; Glaser, 1978, 1992), as advocated by Glaser (1978, 1992), is called orthodox GT. It is based on the conception that good grounded theory research will allow the emergence of latent social patterns within an specific substantive area (Glaser, 1998). In this conception, the researcher struggles to be as neutral as possible. New incoming data must be objectively compared to analyzed data along properties and dimensions. The results can then claim theoretical generality. This conception of GT tends towards positivism in his epistemological conceptions.

Strauss and Corbin developed a more pragmatic approach of GT based on the systematic use of techniques that would make the emergence of the latent social pattern more secure (Corbin & Strauss, 1990, 2008 ; Strauss & Corbin, 1990, 1998). This systematic application of techniques sets the question of forcing preconceptions over the data biasing the emergence of legitimate and relevant categories and relationships. (Glaser, 1992 ; Kelle, 2005). Strauss and Corbin accept the idea that the researcher may produce an impact on the research process and results. They emphasize the interplay between the researcher and the data, the role of creativity, subjectivity and objectivity, the processes of induction and deduction, and the advantages of researcher introspection to enhance theoretical sensitivity. Their goal is not to prevent researcher's bias, but to deal explicitly with the researcher intervention to allow for public assessment of rigor and quality. The Straussian version strongly focuses on the epistemology of the Symbolic Interactionism, in which the reality is socially constructed through the intersubjectivity of individuals interacting within a substantive context.

The third approach to GT research claims a constructivist epistemology for GT. Developed by Charmaz (2000 ; 2006) this approach denies that the researcher can be neutral or that we can

get complete knowledge of his influence on the results. The researcher has a strong impact on selecting relevant data (the concept of theoretical sampling), on analyzing the data, and on creating the data (e.g. through the questions during the interviews). Denying this influence is counter-productive. Charmaz (2000 ; 2006) proposes to reset the basis of the GT on constructivist assumptions. Instead of focusing on producing explanations on how individuals act and react upon a socially constructed reality, Charmaz (2006)'s approach also takes into account the subjective meanings individuals attribute to everyday experiences and how they make sense in building the social reality. The final grounded theory is a construction, a consensus between the "subject" and the researcher.

These three grounded theory approaches provide different guidelines for the research process. These differences have been stated as one of the major problems of using GT for practical research (Fendt & Sachs, 2008 ; Goulding, 2001). We focus here on one of the major issues concerning the role the researcher plays in GT: the quest for creativity vis-à-vis the trade-off between subjectivity and objectivity.

1.3. THE PLACE FOR CREATIVITY IN THE GT RESEARCH PROCESS

In the orthodox approach, creativity lies in the choice of the substantive area, and in the process of enhancing theoretical sensitivity. The question of finding an interesting substantive area is often neglected by GT researchers who focus more on the inherent interest of the method (Sousa & Hendriks, 2006). Theoretical sensitivity is a broad concept that embraces many processes within the development of grounded theory. One of them is memoing, which plays a major role in creativity development. Glaser and Strauss advise the researcher to write original ideas about the data that lay in front of his or her eyes. Creativity also help the researcher during constant comparison and theoretical sampling, specifically in the process of choosing different sources and types of data, i.e. whether they are "*interview, observation, document*" (Glaser, 2002). As the original purpose of applying GT is to develop novel and creative theories, creativity does have a place in orthodox GT. However, the creative researcher should be aware of biasing the results. The theory should emerge as relevant to the field and trained researchers need to avoid misleading or forcing the data. Glaser and Strauss (1967) proposed a rupture to hypothesis testing as a method for generating theory, but not a

complete rupture to positivistic assumptions concerning such as a neutral researcher and an external reality.

The Straussian view of GT is more pragmatic. Here new areas for creativity emerge. The resulting grounded theory is produced as a result of a balanced process of objectivity and subjectivity. As Strauss and Corbin argue, the research process is both a science and an art. The subjectivity side means discovering categories, properties and dimensions through theoretical comparison. Constant comparisons are not bounded to real data, but can include other kind of knowledge (e.g. songs, films, researcher previous knowledge), imagination (possible situations never seen), or introspection (Strauss & Corbin, 1990, 1998). The objectivity side means adherence to the data. The aim is to verify if creativity has led to fallacious interpretations, which should make sense in the data and incoming data. At the same time, while the Straussian version gives creativity an important role, the emphasis on the verification does not imply a complete rupture toward subjectivity. The researcher has to find equilibrium between objectivity and subjectivity.

In the constructivist view of GT, the results reflect a consensual reality among research participants and the researcher. The co-construction of the theory between actors within the substantive area and the researcher can lead to original points of view. Instead of being neglected or subjected to proofs of verification, the researcher's subjectivity and creativity is overly introduced into the results. Professionals and the researcher can interact to each other to enhance creativity in the development of the theory.

We synthesize our ideas in Table 1. In each case, we show how creativity can be reached along with the main stages in the research process. Shadow table cells show where creativity can be seen as having a larger role and the others point where creativity is hard or impossible to develop. We can see through this table that for GT, epistemological and methodological choices are interrelated. The ways of reaching creativity in GT depend on the epistemological background chosen by the researcher. Constructivist GT is less affected by the trade-off between objectivity and subjectivity, whereas in Orthodox GT researchers have to keep in mind that objectivity is their premium objective all along the data collection, analyzing and reporting process.

Table 1: Places for creativity according to the three main GT streams

	ORTHODOX GT	PRAGMATIC GT	CONSTRUCTIVIST GT
Choice of substantive area	**Find interesting substantive areas**	**Find interesting substantive areas**	**Find interesting substantive areas**
Memoing	Ideas about categories and relationships	**An important tool for registering creative ideas and insights for further verification and public assessment**	**A record of ideas generated at any moment of the research with a great emphasis on researcher's reflexivity. A tool for reaching consensus between participants and researchers.**
Theoretical Sampling	**The way "the analyst […] decides what data to collect next […] in order to develop his theory"**	**The search for any data (to be collected or that have already been collected) to develop the theory and test hypothesis**	**The quest for new data that gives more power to the emerging theory, particularly as a result of addressing subjective questions.**
Constant comparisons	Based only on real data	**Based on any type of element, data from the field or other**	**Based on any type of element**
Researcher's influence on the field	Biases that should be avoided	With care and reflexivity. Researcher intervention is verified upon incoming data.	**Process that can be managed to give the theory more power with stronger and more illustrative data**
Writing	**Based on the data gathered and organized through theoretical sorting**	Based on an analytic logic that should preconceive the writing process.	**Based on the researcher's competencies to make the reader feel the theory**

It is important to understand the role creativity plays in developing grounded theory, its possibilities and limits according to each of main its main versions, because it directly impacts the researcher's work and the quality of results. Otherwise, without being conscious of its choice, the researcher would produce compromised results that will be most likely evaluated

using non-adequate criteria. This is often present in researches with mixed references from three approaches without taking into consideration the impact each paradigm induces.

To conclude, constructivist GT is the paradigm where creativity can take more space. As we know that GT procedures should enable the discovery of new knowledge, creativity is of great utility to reach such result. It may be a reason why GT tends to develop more in the constructivist stream than in the orthodox way (Morse et al., 2008) and why Corbin lately declared she has been highly influenced by constructivists (Corbin & Strauss, 2008).

We reveal where creativity may lie in GT process, according to the stream in which the researcher positions his or her research. But, we did not answer the tricky question: "how can researchers increase creativity in Grounded Theory?" The second part of this paper aims at answering this question and focuses on three operational strategies to reach creativity.

2. STRATEGIES FOR ENHANCING CREATIVITY IN GROUNDED THEORY

We present three strategies to enhance creativity in GT. We derived them from our experience of almost a decade as researchers and instructors of GT with the support of CAQDAS software, such as ATLAS.ti[1]. The three strategies we present seem particularly interesting to us because they encompass different means to enhance creativity and have shown their value in sensitizing ourselves and our students. We base our presentation on "speaking examples" (Bizeul, 2007) in order to convince the reader about the relevance of our analysis. We develop first how collective work can improve creativity in GT research. Then, we show that Art knowledge can be useful in finding creative way to interpret data. Finally, we deal with the central element of *in vivo* creativity, i.e. the ability to develop concepts from data.

[1] CAQDAS are software developed to help researchers manipulate qualitative data in order to develop theories. Bournois *et al.*(2002) make a review of different types of CAQDAS and explain the specificities of three of them. Atlas.ti project, for instance, received a major influence from GT during its development stage. Bandeira-de-Mello & Garreau (2008) explain how Atlas.ti can improve theory development according to GT specific evaluation criteria.

2.1. HOW CAN COLLECTIVE WORK IMPROVE CREATIVITY IN GT RESEARCH?

2.1.1. Theoretical considerations

Collective research is hard to put into action because of coordination processes that underlies the collective work. Despite these difficulties, collective work seems to be a way to achieve creativity without moving to pure subjective analysis. Indeed, O'Connor *et al.*(2003) show how a research project team can improve the quality of the results of GT research. Different researchers with multiple competencies in various research fields may contribute with complementary insights. This adds new venues for interpretation and prevents from an over polarization of the interpretation done by one individual. Project management techniques help the authors to reconsider the research work as a project to be accomplished collectively thanks to coordination, leadership, mutual understanding, etc. Nevertheless, the work of O'Connor *et al.* (2003) is based on the description of a specific research, and does not mention how creativity could be developed.

The relationship between collective work and creativity is pervasive in the literature. For instance, the use of positive affects in a small group can lead to creativity (Amabile, 1997 ; Amabile *et al.*, 2005), the collective sensemaking process that is necessary to analyze data can be achieved collectively and lead to creativity (Drazin *et al.*, 1999 ; Hargadon & Bechky, 2006 ; Sutton & Hargadon, 1996), or the presence of a creative leader who can lead a group towards creativity (Kets de Vries, 1997 ; Shin & Zhou, 2003).

It is particularly important to notice that under collective work the trade-off between objectivity and subjectivity in order to achieve creativity is not a problem. Data interpretation is a collective negotiation among team members. Inter-subjectivity comes into play and forms a consensus. Individual subjectivity is constant compared to others in order to foster a shared reality among research team members. This also means that collective work can be used in any stream of GT: from orthodox to constructivist. However, collective work strategies are not a panacea: it raises many problems, from the formulation of the research question to the writing of the research (O'Connor et al., 2003).

We provide examples of the usefulness of collective work in the interpretation process of data in GT research. We focus on three processes that can improve creativity. We show that these processes also reinforce the potential persuasive power of theories as they are collectively discussed before being presented to the academic community.

2.1.2. Examples

First, group work can be a good resource for researchers wanting to test their interpretations. No double coding procedure is mentioned in GT literature. This does not mean that there is no value in getting the agreement of other researchers on the interpretation done by a researcher on the data. Testing interpretation in informal working sessions can increase relevance of interpretations. During these working sessions, we could witness participants' interventions that were incisive in changing the course of unfolding interpretations because the researchers had not thought about a possible way of interpreting the data. One of us lived such experience when he was presenting potential results of his study in front of foreign researchers. The audience had different theoretical categories in their mind and suggested potential new ways of interpreting the data. The researcher looked back at the data with other potential pertinent categories in his mind. Creativity can be increased if participants talk freely during working session, which cannot be the case when power struggles appear or when hierarchical relations are too strong among the participants. The work context is then very important to develop creativity in groups (Amabile *et al.*, 1996 ; Shalley *et al.*, 2000).

Second, besides testing one's interpretation with an audience, exploring the data collectively represents a higher degree of collective work since a whole team of researchers work on the data. Even if Forst and Stablein (1992) recommend that researchers "*handle their own rat*", i.e. work with their own data, we think that collective interpretation is useful, especially for young researchers who are not confident with their capabilities. Indeed, the processes of analysis in GT is particularly complex and requires a high degree of theoretical sensitivity. As the analysis begins with data collection, we can imagine collective interpretation sessions initiating at the very beginning of the research. A group of three or four researchers with various orientations could give the opinion about what potential ways the research could take. This prevents researchers to polarize the analysis according to their own theoretical background or according to their institutional background. Such sessions are much harder to organize because researchers are often quite unsecure at the beginning of their research. They do not want to say much about the starting work and may worry about giving their data to others. This brings back the work on positive affects in group to increase creativity (Amabile, 1997 ; Amabile *et al.*, 2005), as well as the techniques of leadership (Kets de Vries, 1997) and the group members motivation for collective work (Klimoski & Hayes, 1980). One of us participated to such a group that was composed by five researchers. Every month, the group gathered and worked on the data of one or two of the participants. Mutual trust and mutual

need for psychological support made the collective work possible for a three year long period. As soon as the status of one of us changed (moving from PhD Student to Assistant Professor), collaboration failed and the group disappeared.

Third, CAQDAS software may help coordinating workgroup research. ATLAS.ti, for instance, has a co-authorship tool that manages the contribution of each team member controlling access to data and the authorship of every created object. Such tool can be even used remotely, being the team members spread geographically. The graphical interface of ATLAS.ti (Net views) help making more tangible group interpretations what facilitates sharing the work with others. The same benefits are provided by several outputs such as a list of codes and citations, memos and commentaries. Each researcher taking part into the project can add value to the project at every step of the analysis process. Microanalysis can be reinforced while reading and commenting other's analysis of data. Cross interpretations may emerge while emerging interpretations interact with each other. New categories may be more complete, i.e. declined in new properties and cover a larger set of data. In this case, the whole group of researchers works on a common body of data in order to enhance the creativity capability of each member. On the one hand, the traceability of each movement in the analysis prevent from hazardous contribution, as the legitimacy of each researcher can be valued in this process. On the other hand, creative contribution can be particularly valued inside of the group, as the authors of each movement can be easily identified by the software.

2.2. THE USE OF ART KNOWLEDGE TO ENHANCE CREATIVITY IN CONSTANT COMPARISON THINKING

2.2.1. Theoretical considerations

A fundamental process frequently used in social sciences (Przeworski & Teune, 1970 ; Smelser, 1976) and in grounded theory is comparative thinking. It helps defining the properties of the concepts related to a specific situation. In orthodox GT, comparative thinking relates to constant comparisons, which is based primarily on empirical, or incident – incident comparison. In both pragmatic and constructivist approaches, comparative thinking process can be based either on empirical data from the substantive area or on theoretical comparisons, i.e. based on elements from our experience or from the literature. "*We use theoretical comparisons in analysis for the same purposes as we do in everyday life. When we are confused or stuck about the meaning of an incident […] or when we want to think about*

an event or object in different ways (a range of possible meanings), we turn to theoretical comparisons" (Corbin & Strauss, 2008 p.75).

Creativity, theoretical sensitivity and theoretical comparisons are directly interrelated. Creative researchers are more prone to discover subtle traces of innovative theories in the field when doing theoretical comparisons. We suggest that the knowledge of arts helps enhancing creativity and theoretical sensitivity during comparative thinking. In applying the existing techniques to develop theoretical sensitivity, suggested by Strauss and Corbin (2008 ; 1990) and Charmaz (2000 ; 2006), knowledge about arts contributes to sensitizing the researcher about novel latent meanings and concepts.

We argue that the knowledge of arts provides the basis for creative theoretical comparisons in both pragmatic and constructivist GT. Art provides a way to see things from a renewed point of view (Mearleau-Ponty, 1945). Cinema, theatre and literature offer alternative comparisons with everyday life situations. The knowledge of architecture can lead us to think about how the space shapes actor's reality when studying a substantive area. Music about love or despise make us think about opposite emotional responses. Painting and photography provide frames through which a specific situation can be watched.

Artistic work is a passionate form of expression which conveys or produces feelings in the spirit of those to whom it interacts. We feel and experience an artistic work uniquely. That is how art help us to uncover categories, properties and dimensions. Artistic manifestations may provide good insights for the researchers as they usually represent different standpoints for several "properties" such as aesthetics, love, politics, social behavior, and even economics. The researcher draws from what he or she already knows to make sense of the data in front of his or her eyes. Therefore, feeling or experiencing such different emotions or being touch by the conveyed messages from an art work is a way to increase theoretical sensitivity and creativity in interpreting data.

2.2.2. Examples

Our experience as Grounded Theory researchers and instructors provides us with many examples of the importance of art knowledge in enhancing creativity in theoretical comparison. Music, for example, is indeed a good resource for the researcher. During an analyzing session with graduate students, we were discussing the meaning of "despise". The context was a research project in which the main purpose was to explain how franchisees cope with franchisor's restrictions in fast food chains. One of the interviewed franchisees said he

was feeling despised by the franchisors, although he had made a large investment to build a huge and nice store. Despite the fact that the contract had so far been honored, he expected a different treatment from the franchisor. The instructor asked the students what would be possible meanings for his feeling, and what would a person feeling this way would do. In a "far out" comparison, the instructor made the students think about possible situations they knew, such as in a marriage. A spirited student answered this question singing a popular song, embedded in Brazil's folklore, about the non-corresponded love between a man and a woman. A part of this song says "*I know that acting like this; I am exposed to the despisement from all of you; sorry, but I want you all to know; that she came back to me*". While this song referred to the despisement from the man's peers, other songs were suggested by the students making explicit different aspects of despising. At the end, after the performance of the "singers", the students became more sensitized in a level good enough to open different venues of interpreting the work of a despised franchisee.

In another example, while one of us was researching the low rate of innovation from members in a real estate company in the retail sector in France, the researcher first focused on organizational elements like coordination mechanisms, people competences, and reward programs. Compared with other teams of the company, the possible explanations provided by these elements were not able to explain why people were not innovative. One day, in a trip to Rio de Janeiro, the researcher got stuck with the shape of the Petrobras tower, built by Niemeyer. This architect made us realize that without such unique shape, it would not be possible to have direct natural light in the building. The comparison with the building where the researched company runs its activity in Paris was astonishing (see Appendix A). The impact of natural light on the innovation capability had not yet been researched. When the researcher was subsequently interviewing project members in France, "light" emerged to be a major issue. It seemed that members of the French company were recreating in new projects the environment where they were working and living, which means dark and sad. Our use of basic architecture knowledge helped us to think "out of the box". It brought us a different *repertoire* to interpret data in a way that was different from well established organizational theories.

The book called "The Firm" shows the influence a company has on a new employee. It reveals, among other issues, ethical problems employees face when dealing with illegal and dark practices of their companies. The television show "Dirty Sexy Money" reveals the same mechanism. While researching on the sense project managers give to their jobs, one of us

used excerpts from this book and this TV show to enhance potential interpretations of empirical data, and to reveal creative and non-obvious aspects of organizational culture. The researcher used the trade-off between private life and professional life, just like the main characters experienced in the book and in the show, to explain identity dilemmas of actors in a company. He created the categories “influence of the values of wives or husbands” and “soft pressure of the company” to improve interpretations. The resulting models showed increasing consistency as these categories were created.

One of the major characteristics of constant comparison is the definition of properties and dimensions of a category. Properties and categories may easily emerge if the researcher thinks about opposites or differences, e.g. the flip-flop technique proposed by Strauss and Corbin. It is precisely the comparison between oppositional extremes that make possible to think about abstract properties of a category. The notion of “beauty”, for instance, only makes sense with respect to the opposite notion of “ugliness”, or “not-beauty”. Two different objects are therefore comparable with respect to the same notion or implicit characteristic; that is, in this example, the abstract property of aesthetics.

The work of an artist is usually one of constant comparing. An artist is rarely neutral. If a piece of art needs to follow a specific trend, its features are defined with respect to what is not a trend. If it has the purpose of shocking the audience and wants to breakthrough established definitions, its features are defined with respect to these very established norms. As the researcher, the artist needs to have a great comprehension of different and opposite standpoints in order to fully accomplish its task to convey the message. As a famous Samba composer in Brazil once has said, “it is only possible to write a song about happiness, if one has experienced sadness”.

Finally, art knowledge may shed some light into how grounded theories should be presented. From a postmodernist approach to grounded theory (Clarke, 2005 ; Goulding, 2002), the resulting theory does not need to be analytically structured in explicit properties and dimensions. It is, in fact, an open reality waiting for the reader to complement it. The work of a postmodernist researcher in developing grounded theory in practice is much like the work of an impressionist painter. The artist makes explicit his or her impression of the scenery leaving the frame open for the observer. In Monet’s “a Woman with an Umbrella”, the revolving sky and the color of the field are strong impressions of the painter’s reality. However, the woman has no face. She could be anyone the observer wants her to be.

We gave here examples of how art can be used by researchers to enhance creativity in constant comparison in GT. This process is very different from collective interpretation of data. Nevertheless, they both show that researchers can achieve creativity while doing GT research. Creativity may not only lie in the formal processes of analyzing. Guillemette (2006) showed that these processes, in all streams of GT, have counterparts that may prevent research from innovating. Creativity may rather lie in quite informal process, like collective working and the use of art knowledge that is rarely used by researchers in strategic management.

2.3. *IN VIVO* CREATIVITY

2.3.1. Theoretical considerations

The abductive inference underlying grounded theory development primarily aims at increasing the level of abstraction in the analysis. This means that, as the research process unfolds, the researcher struggles to reveal general concepts from the data. If one pictures two levels, the "discourse" level (or the data level) and the conceptual level, the latter being more abstract than the former, the abduction inference requires a series of "trips" between two levels (sometimes a "drugless trip", using the metaphor of Glaser and Strauss). These movements interchange abstraction and verification, induction and deduction, in order to develop abstract concepts that fully account to possible explanations for the phenomena under study. As the process develops under a comparative thinking, open, axial and selective coding phases are applied aiming at the ultimate, and perhaps unattainable, goal of theoretical saturation.

Part of the difficulty is accessing valuable data. Interviewees very often cannot articulate what they are really thinking or how they perceive a specific situation. However, sometimes they provide valuable clues to researchers about how they are interpreting the world. One of these clues is *in vivo* codes. They refer to abstract concepts, which are found directly in the data or empirical level. This is an outstanding opportunity because the concept is provided by the researched individuals themselves.

The definition of what we call *in vivo* creativity is twofold. First, it refers to the ability of researched individuals to articulate his experiences in the form of interesting analogies, metaphors or figurative speech (*in vivo* codes). Second, it refers to the researcher ability to identify, use and interpret these *in vivo* codes productively to develop the theory. These two

sides of the definition are necessary and sufficient conditions because if individuals are not able to articulate them there is not much what the researcher can do in this respect (he or she can however ask the right questions, but the ability to articulate such *in vivo* codes pertain to the spirit of the researched individuals). The researcher creates a break in the stream of data and use a theoretical category that has been mentioned by the interviewee. He uses what Weick (1995) calls bracketing to discover what is behind actors' mind when using theoretical elements to answer questions from the researcher.

As researchers may turn into arts to help sensitize them, they also can look for *in vivo* creativity. Analogies, metaphors or figurative speech are vehicles for delivering valuable elements for the developing theory. First, they are context bounded, embedded in interviewees' culture, and often represent regionalisms and local expressions. Second, they economize on communicating complex ideas. Third, they also point out to expected reactions from researched individuals. Finally, such *in vivo* concepts reflect relevant comparisons because they are made by the interviewees. Note that theoretical comparisons are an important tool of the constant comparison method proposed by Strauss and Corbin (2008 ; 1990 ; 1998) to uncover categories, properties and dimensions. We sometimes can rely on interviewees' own analyzing capability to improve our interpretation of phenomena (Latour, 1989, 2006).

We consider that this strategy creates no specific problem in pragmatic and constructivist GT, as constant comparison can be based on theoretical elements as well. For orthodox GT, we argue that this *in vivo* analysis is acceptable but researchers should take care about the way they develop the analysis. Whereas they can use this strategy to think another way, categories and codes may wait for further analysis to be based on incident to incident comparison. Then, they may take other denomination, which would be more related to elements from the field, rather than an alternative framework, i.e. strategic management and social sciences vocabulary rather than art or fictive situations vocabulary.

2.3.2. Examples

We provide three examples of *in vivo* creativity derived from three different research projects. The first project was about how small building firm managers strategically changed their firms to adapt to the turbulent, high-governmentally influenced, Brazilian environment during the 80's and 90's. One of us found an interesting comparison made by an interviewee: he said

that, under such context, the purchasing of an apartment was like a “black box”. The researcher turned his attention to the comparison suggested by the individual. What characteristics of the purchase of an apartment in extreme uncertain situations were shared by a “black box”? The researcher thought about the black box of an airplane. It reveals important and, sometimes, surprising information after a plane crash. Three properties of the category “costumers’ perception of the purchasing of an apartment” were then proposed and further validated: uncertainty (one knows the content of a black box only after a crash), surprise (how surprising is the revealed information), and damage (how bad was the crash). In the research context, inflation was around 30% per month, the currency changed almost every two years, contracts were not honored and housing financing rules changed frequently. Hence, “the crash” could be the bankruptcy of the building firm (the contractor), or deadline delays, and even a never finished project. The notion of a black box was very well adapted to that reality. Managers realized how difficult was to sell their projects under such situations and adopted strategies to cope with these adversities based on how customers perceived the risk of buying a residential unit (housing financing in Brazil was not very well developed at that time).

The second example is drawn from a research project about how successful firms cope with the government hostility in Brazil. In a case study of a world-leader compressor manufacturer (for utilities like air conditioning, refrigerator, etc.), one of us heard from a manager that 20 years of history in R&D investments made possible to the firm “walk with its own legs”. Indeed, the firm became independent from foreign technology and capable of developing a technology that further granted access to the European market. This figurative talk made the researcher realize that instead of nurturing relations with the government in order to survive and to profit, as many firms in Brazil do and as anecdotal information would suggest, the government was seen as a “wheelchair” or something that could help a handicap to walk, like a can. This comparison implied avoiding proximity with the government and deploying strategies to protect the firm against environmental hostility. In this case, investments in technology and the internationalization strategy was central for the firm to cope successfully with environmental hostility.

The last example is drawn from the study of the sense actors give to projects in a French retail store company. One of the projects we explored faced difficulties, especially conflicts between project members. During an interview, the project manager mentioned that the sales manager was part of the “bride’s basket”. Indeed, the project manager had to cooperate with a

partner, who already had an agreement with an external sales manager for this project. Then, the project manager could not choose the team members he was working with: the sales manager was part of the "bride's basket". This metaphor led us to consider the properties of a bride's basket to consider the properties of the situation the project manager was living:

i. The basket is a package of different elements
ii. The basket is useful because it help the transportation of diverse elements
iii. The basket is a unity, the elements inside create a "whole" that can be inseparable
iv. Concentration of things in a basket does not diverse risk if the basket is broken or lost.

Using these elements, and adding the specific interpretation of the "bride's basket", we could use the project manager's own expression as a category to explain specific relationships in a project. This type of *in vivo* analysis helps the researchers to improve creativity as they change the framework in which they lead their analysis. Thinking about a basket is different than thinking about a project. The use of *in vivo* elements helps researchers in their creative endeavor as it reliefs thought from pre-set elements and avoids forcing analysis on preconceived literature on the field.

CONCLUDING REMARKS

While creativity is a key component of GT, it has not found much interest from the academic community. We show that the role of creativity differs according to epistemological choices. It is important to notice that creativity has a larger role in the in constructivist GT whereas it has a smaller role in orthodox GT.

We provide three strategies, to improve creativity in GT. First, collective work can increase creativity in GT research. While testing interpretation, collective interpreting or running the research as a project, researchers can benefit from interaction with peers. Second, the use of art knowledge revealed a particular potential to build creative interpretation about data. Third, researchers can derive theoretical comparisons from *in vivo* concepts benefiting from increasing relevance and insights. These strategies are based on illustrative examples that we found relevant, taken from our experience of GT users and lecturers. These strategies to improve creativity in a GT framework could be taken as hypotheses to be further tested in experimental design studies, for instance.

Some questions need to be asked and answered: Would specific evaluation criteria applied to scientific research prevent us from importing creativity techniques into the academic field? How can we persuade the audience of a scientific work developed through creative strategies?

We hope our ideas help shedding some light into how doing grounded theory in practice. We did not ambition to be exhaustive but to present analysis of our own experience as researchers and instructors of grounded theory. We imagine that many researchers have developed such strategies to enhance creativity in the GT field. The combination of these intuitive strategies presented in a textbook could be a good complement to GT basics (Charmaz, 2000 ; Glaser & Strauss, 1967 ; Strauss & Corbin, 1990). In other words, if we take the framework proposed by Alvesson et al.(2008), GT researcher have focused much more on D-reflexivity (i.e. deconstruction, defensive and discipline) than on R-reflexivity (re-imagination, revisions, restarting). It is now time to take both into account to increase creativity while working on rigorous scientific standards.

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Appendix A: Pictures of the buildings that lead to the focus on light

Petrobras Tower
The light comes from the open parts of the building

French Building
Many offices are not accessible to natural light.