Interpreting the conundrum of social mechanisms: Insights from grounded theory

Josefsson, Magnus Centre for Policy Modelling, Manchester Metropolitan University m.josefsson@mmu.ac.uk

1 Introduction

I propose a systematic qualitative approach to the interpretation of narratives with a specific focus on dimensions of causality within a social setting. I base this approach on grounded theory [GT] Strauss [1] on linguistics Wood, Nunnaly [2], [3] and other exponents of qualitative analysis that concern themselves with understanding the complexities of causality and particularly those who do this in the context of improving the accuracy and relevancy of social simulation. There are notable examples of existing work that incorporate qualitative techniques to develop simulation. Taylor [4] in a Doctoral thesis used Ethnography to understand the impact of e-commerce on value chains. In this case Taylor did not anchor his analysis as deeply in the narrative as proposed here. Taylor's treatment of qualitative data was granular, accepted at face value rather than elaborating on whatever deeper meaning might reside in his respondent's use of words.

Bharwani [5] also used Ethnography in her study of agro climatic systems. Her treatment of interview data was more detailed and Bharwani amongst other things looked for conditional sentencing within a story "*if it is on the list and it looks good people will buy it*" and "*if a system is working well, it will spread like wildfire*". I propose an approach not dissimilar to Bharwani in its functions but where the analysis goes further in systematically deconstructing a narrative through coding of its elements. Such an approach looks beyond the description and conditional sentence of Taylor and Bharwani and towards a deep understanding of the functions of social construction as expressed in language.

2 Deconstructing an encounter [Antecedent and Consequent]

Language is without doubt one of the most important tool for empirical investigation in social and organizational research [6]. Language creates a sense of stability, order and anticipation enabling us to construct a functionadfa, p. 1, 2011.

© Springer-Verlag Berlin Heidelberg 2011

ing social reality that we feel we understand [7][8]. It is therefore logical and natural to use language in its natural expressive form as a gateway to investigate complex social mechanisms. Such mechanisms of course are not necessarily deterministic or expressed in language unconditionally but rather they may appear as a tapestry of relationships that conflate to cause a social system to behave in a certain way. In view of this it may be inappropriate to make deterministic statements about cause and effect and rather we should see our assertions for what they really are i.e. *auxiliary conjectures* [9]. A practical tool to develop such conjectures is an analytic framework that appears in Strauss [1], see figure 1 that can be used as a systemic way of making sense of qualitative data sets and particularly narratives.



Fig. 1. Analysing causal dimensions

Strauss [1] provides practical guidelines on how to use the framework. For instance a particular *condition* can be noted by the respondent's referral to an event or experience, i.e. *because things move quickly* where *because* indicates the presence of a particular condition i.e. *speed*. Conditional codes therefore appear in a referral to a condition *because it* or *for that reason* suggesting that a particular condition is or was prevalent in the system. Similarly, *consequences* appear when respondents refer to activity that took place as a consequence of a particular condition e.g. *because things move quickly* [condition] we had to change our management structure [consequence] where the consequence of speed is a change in structure. The construct *Identity* is signified by the respondent referring to himself the individual [*I*] or the collective [*We*] or when his use of language suggests shared meaning and purpose *what we do or where we want to be or who we are.*

This can also reveal some of the properties that characterize the agent population. For instance *we enjoyed working with other people* and *we enjoyed the process of doing it* suggests intrinsic interest and a motivation to interact with other agents. Interaction can be explored by the presence and contextual use of *Gerunds* [10]. In linguistics a *Gerund* is a noun derived from a verb by adding the characteristic (*ing*) at the end. The form describes an action or process as experienced by a respondent e.g. *running* or *believing* or *talking*. Those can be further broken down as appropriate to indicate the presence of purposeful activity e.g. *creating a culture*, intentional activity e.g. *tightening a strap* or a process e.g. *thinking about change* [2].

3 Understanding a target system

I consider two salient features from a recent analysis of small firm dynamics. The features emerge from an interview with the firm's managing director. The firm's industry faces a critical skills shortage. Hence, much effort is spent to retain whatever skill the firm possesses but also great effort is made to attract new skill by signaling the particular organizational properties perceived to be attractive to those skills. It has been found that should the firm neglect to demonstrate those properties, skills will eventually defect and either establish themselves independently or join another firm. Either way constitutes a competitive disadvantage to our firm. To understand this problem one must understand the properties of the agents in question but also the dynamics of defection including the material conditions that combine to condition-action. Simply put, one concerns agent attributes, the other the set of conditions that led to defection. Consider the following.

[PROP] Those kinds of people [employees] tend to really want the freedom to get on with what they are there to do

[PROP] They really thrive on the options to get better and better and to improve themselves in that area

[INT] There was a dynamic...that was really working and again something that we now went onto essentially ruin as we grew and created silos [CD] [Because] it does affect motivation the more control you apply.

> [CD] [Because] people just start to just do the job and you are taking away their thinking in many respects

[CQ] What really kicked it off for me was that there were a couple of key individuals that we had lost

The example given here should not be taken for a decision tree or a true causal network but rather an early conceptualization of a causal framework

[INT] You were taking away

the decision and choices and

autonomy that these people

were looking for

demonstrating how narratives can be distilled to explore the dynamics of condition-action even out of a set of informal interviews. The example draws some of the properties [PROP] of the agent population particularly those that drive and motivate them i.e. freedom, intrinsic interest, autonomy and secondly it demonstrates conditions [CD] that potentially led to their defection [CQ] i.e. control, audit, silos and so the problem appears connected to the firm's internal processes [INT] i.e. founded in micro-interactions rather than in any discrete event. We do not consider any external factors that may play a role in defection such as the lure of other firms exhibiting the desired properties or outbidding our firm in terms of remuneration. Although obviously conceptual, nevertheless it is suggested that using GT techniques in this way can deliver valuable insight into social settings and is useful when considering complex causal mechanisms and so can augment any modeller's arsenal of methods.

4 References

- [1] A. L. Strauss, *Qualitative Analysis for Social Scientists*. Cambridge: Cambridge University Press, 1987.
- [2] F. T. Wood, "Gerund versus Infinitive," *ELT Journal*, vol. XI, no. 1, pp. 11–16, 1956.
- [3] T. Nunnally, "The possessive with gerund: What the handbooks say and what they should say.," *American Speech.*, vol. 66, no. 4, pp. 359–370, 1991.
- [4] R. Taylor, "Agent Based Modelling. Incorporating Qualitative and Quantitative Methods: A Case Study Investigating The Impact of E-Commerce Upon the Value Chain.," Manchester Metropolitan University, 2003.
- [5] S. Bharwani, "Adaptive Knowledge Dynamics and Emergent Artificial Societies: Ethnographically Based Multi-Agent Simulations of Behavioural Adaptation in Agro-Climatic Systems," University of Kent, 2004.
- [6] M. Alvesson and D. Karreman, "Varieties of discourse: On the study of organizations through discourse analysis.," *Human Relations*, vol. 53, no. 9, pp. 1125–1149, Sep. 2000.
- [7] R. Chia, "Discourse analysis as organizational analysis," *Organization*, vol. 7, no. 3, pp. 513–518, Aug. 2000.
- [8] M. Maclean, C. Harvey, and R. Chia, "Sensemaking, storytelling and the legitimization of elite business careers," *Human Relations*, vol. 65, no. 1, pp. 17–40, Jan. 2012.
- [9] J. Lofland, *Analyzing Social Settings: A Guide to Qualitative Observation and Analysis*. Belmont: Wadsworth Publishing Company, 1971.
- [10] J. Saldana, *The Coding Manual for Qualitative Researchers*. London: Sage Publications, 2009.