

Co-tracing and perpetuation of collective micro-decisions relating to action within an organisation

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Overview of challenges and objectives

Actors within organisations are regularly faced with a disparity between initial intentions and ensuing actions. This is a general problem and any new knowledge providing a better insight into the processes at work in such situations could lead to new methods and new instruments for collective action. This general problem can notably be seen in a hospital where members of staff attempt to coordinate their actions in order to improve the quality of care. The challenges here stem from the need to control health problems (public health, iatrogenic illness) and public spending.

This joint action supposes a certain amount of work to collectively analyse the situations and issues, to input thought, to build up shared knowledge and views and to design solutions, decisions and action. All of these cognitive activities have a collective framework and involve interaction between those involved. The project therefore aims to study the cognitive processes behind the partially joint action of different people, rather than looking at this action from the point of view of the individual alone.

Several research work registers will be used in this project to study and build on the issues:

- In sociology, analyses performed over the last few decades have focused on the processes bringing about a shift in goals and have attempted to reconstruct the chain of pragmatic incidents and take into account the disparities between the chosen patterns of action and what actors actually do. Our project is more specifically devoted to change actions within organisations. It is also based on work to align the perspectives held by co-present actors and draws on an analysis of the efforts made by actors to “structure” situations and problems, as well as an analysis of the translation processes and the role of collective writing processes.
- The disparity issue relates to the problem of producing collective micro-decisions and perpetuating these in relation to the objects mobilised or built up in the process and the traces produced. Recently, cognitive psychology has looked into the process of decision-making in cooperative systems. The instrumentation/instrumentalisation of action, including action in collective situations, is another research perspective in relation with this project. The main idea here is to understand the role and function of the instruments as action mediators.

- In linguistics, recent work has focused on the corpora mobilised by the protagonists and, notably, the construction of shared concepts and interface terminologies. These studies are also linked to the development of new linguistic analysis computer tools.

The problem is describing and building a model of the mechanisms behind the interactions, behind the building and tracing of the collective cognitive micro-decisions that help to perpetuate a decision, build common references and translate intentions into action.

Review of research schedule

The project aimed to compare and contrast several types of detailed analyses of the processes of interaction between co-present individuals. This also included the different types of material, objects and traces implemented along with monitoring the organisation of actors and the traces produced in work teams.

The idea was also to experiment with the working groups by introducing new intermediary objects likely to be re-used in interactions between actors and able to modify the process behind decisions and the perpetuation of collective production.

Finally, the aim was to understand why terms become common to several participants in order to help design linguistic analysis software that includes such dynamics and attempts to resolve the problem of meaning by shifting the linguistic level of current tools.

The field: the project consisted in working on collective action due to take place at the Grenoble CHU (university hospital). The aim of this action was to control infection-related risks and it involved a transversal working group in the hospital.

The project also planned to set up a *corpus of data* for cross-analysis by the four teams present. This corpus was to be built according to the following methods: 1. Participative observation at all working group meetings leading to detailed minutes. 2. Collection of a video-recorded corpus of work meetings in order to pinpoint the interactive, oral, gesture-related and micro-decisional processes, as well as the processes resulting in the production of traces. 3. A field survey (monitoring actors and intermediary objects in the organisation, the courses of action taken and the transpositions to which these are subject) and a series of interviews (audio recording) with the actors.

The *schedule* drawn up in May 2001 was as follows:

- Oct-Dec 2001: additional bibliographic research.
- Nov 2001-March 2003: participative observation in working groups and monitoring of actors.
- Nov 2001- Feb 2002: recording of working group meetings.
- Dec 2001-March 2003: analysis of interactions and traces; analysis of linguistic variances.
- June- Sept 2003: Drawing up of reports. Feedback to actors. Drafting of publications.

Midway progress report (September 2002).

Some significant changes in relation to the objectives and schedule initially set must be pointed out. All of these arose from the enormous constraint imposed by our choice to work in a concrete field of collective action, which was, moreover, part of a particularly complex organisation. The idea was to follow the action undertaken by the protagonists as closely as possible. Given this choice, researchers found themselves highly dependent on the situational ups and downs occurring in the field; the situation was very far removed from the comfortable context of experimental research where the production of facts to be studied can be better controlled and planned. However, although not an easy context, it did at the same time prove to be full of teachings for the observer tracking the courses of action and the collective dynamics in general. The fact that these dynamics do not develop according to the initial plan constitutes, in itself, a rich source of information for analysis. Complaining about these field-related constraints is far from what we want to do. On the other hand, such a situation does require constant work on the sociologist's behalf to adapt to the changes in the situation and

continue to follow the course of our intellectual project. The first major change with respect to the initial project was a change in the field. With respect to the work on collective action to control the risks of infection in the Grenoble CHU initially planned, we were led to make a choice about another transversal collective action project: the setting up of a blood transfusion file for patients. However, the arrival of experts at the hospital - ANAES (national agency for health accreditation and evaluation) in view of its accreditation - meant that we had to wait until January 2002 to effectively begin our field investigation work. Having said this, the visits from these ANAES experts interfered greatly in our project since they highlighted the hospital's shortcomings with respect to its transfusion file. The hospital's reaction was to set up a "transfusion safety project" action plan with working groups and a Steering Committee. Following the visit of the ANAES, tension between the various protagonists emerged, which at times complicated access to the field. Furthermore, since the working group did not have any specific work or meeting schedule, it became very difficult to observe them. The working group at last met, but only once and in an improvised manner, causing our project to collect a corpus to fail.

However, all was not lost for our sociology team who were ready to go out and meet, observe and question those involved. On the contrary, we managed to reap an interesting harvest of events, analyses of the situation and strategic thinking of the protagonists. We were thus able to follow the actors and analyse the documents they produced (reports, correspondence, trace objects, etc.) in order to reconstitute the different courses of action, which were caught up in each other creating tension. We were able to gather some of the diverse points of view of those present. Today, this investigation has provided us with some particularly rich and interesting material, which constitutes, moreover, the main result of this first "year" of investigation. The next part of our investigation was similar, partly because the action in the field followed the same course and our project was to observe and analyse that course and, partly, because we had still not met with all those involved in the collective action, whether they were internal or external to the hospital.

Based on this material, we drafted reports and other intermediary working documents. Above all, we were able to draw up a detailed account of this collective action; this account (currently 40 pages long) is extended as the action unfolds and more actors are interviewed. Writing this account, together with a number observation reports for those working in the field, is part of our project, which consists in designing and theorising tools for sociological representation in order to provide better guidance for and better understanding of the action. The idea is to produce a vision of the object studied (in our case the collective cognition process, the micro-decisions and the tracing and co-tracing activities). One chosen solution was therefore to write the history of the transfusion file and what can be understood from it today. The aim was to write a fairly complete account of the phenomenon, making a clear distinction between what was backed up by empirical information and what was purely hypothetical on behalf of those involved or the observer.

The next step will be to submit this account to the actors in the field so that they can make additions, define their position in relation to the account, complete and add the finishing touches to it. This account is an intermediary object that must enable the actors to build up shared knowledge of the problem and the history, and inform any new actors involved in the project. For us, as researchers, it is also a question of producing a distanced account and understanding the different points of view. Submitting the account to the actors should logically induce new expressions and interactions in the field, which will then relate back to the drawing up of the account.

Following this step we will start work on collective, multi-disciplinary (i.e. sociological, psychological, linguistic and public health-related) thinking about and analysis of this account. Here the aim will be to reread the account and analyse it in relation to the issues outlined in our project with respect to the collective decision and micro-decision

processes, to the co-tracing and perpetuation of decisions and to the role of intermediary objects. Our research hypothesis is to see the transfusion file as a collectively produced form (as a problem, solution or decision) with a change process that has to be understood. The knowledge of the field obtained through investigations adds to the GRC-Codisant (psychology) working methods by introducing an “inter-meeting” dimension when, usually, the analysis focuses only on the “intra-meeting” history. It will then be necessary to describe the general dynamics of fusion between what is said and what is done both during and outside of meetings, especially meetings we have yet to investigate. Many things are said and done during a meeting. It will therefore be a question of reporting on the various forms adopted from a semiotic, corporeal and artefact-related point of view. One of the main aspects we wish to explore is the intermediary object that actors manufacture and put into circulation. The resulting account is also an explanatory theory of the phenomenon; an explanation in terms of processes that cannot simply be summed up by a limited number of factors.

The problem of collecting a corpus of video recordings should be solved in September 2002. Indeed, following experiments with the computer form of the transfusion file in one care unit, we wrote a report to the members of the unit concerned. This report should, in what follows, serve as a basis for a feedback analysis meeting. This meeting will be initiated by us with the approval of the “transfusion safety” project manager. Our report will act as an intermediary object likely to get people to talk and mediate exchanges between protagonists. Following the experience feedback, the meeting should also lead to the collective re-design of a solution. We are counting a lot on this meeting to help us put together the first corpus of video recordings, which will then constitute the main empirical working basis for our colleagues in psychology and linguistics.

We furthermore decided to undertake analysis work in a different field, but still within the framework of the Grenoble CHU. This time the action studied aims to implement management and quality improvement in the hospital care units. The corpus of data for this project comprises the transcriptions of monthly meetings (about ten) held by the Quality team of a medico-technical unit that we monitored as part of our observation work within the framework of another project. Analysis is currently underway.

As well as describing the corpus, the analysis focuses on the use of possibly recurring terms and expressions from one meeting to the next, and from one category of protagonists to another. The objective is to see whether, during the different meetings, the protagonists keep the same expressions; this perpetuation of terms could be considered, from a working hypothesis standpoint, as the perpetuation of micro-decisions forming the collective action dynamics. The idea is also to study modifications to terms and expressions, as well as intersection markers between the various socio-cognitive worlds (extraction of shared terminology or interface terminology, the stability of which is examined over time). The aim is to see whether over time the non-specialists “borrow” the terminology of the specialists and, conversely, whether the specialists begin to use familiar expressions. On this basis, we therefore intend to work collectively, taking the shared issue as our starting point.

At the same time as linguistic analysis work on the corpus, research, thinking and discussions focus on the analysis tools to be used (extractors of specialised expressions, collocations, etc.) and on potential and desired changes for these tools.

Work programme

According to what has been outlined above:

- Collection of a corpus of video recordings relating to a feedback and collective re-design meeting, based on a report drawn up by us.
- Analysis of the corpus of video recordings starting.

- Further field investigations (observations and interviews), in order to follow the courses of action on the one hand and complete the panel of actors to be interviewed on the other hand.
- Submission of a first account of action courses concerning the transfusion file to those involved so that they may add to it, take a stance in relation to it, complete it and add the finishing touches. It is also a question of producing a distanced history and knowing the different points of view.
- A working day based on bibliographic work.
- Multi-disciplinary, collective analysis of and thinking about the account. Two joint working days. The aim will be to analyse our case in relation to the issues of the research project.
- Further analysis of the corpus focusing on the Quality approach.
- Collective rework of different analyses, comparison of approaches and collective building of the first syntheses.
- Drafting of research reports and joint working seminars.
- Identification of appropriate academic value contributions to be made; first drafts and discussions of these.