

10-2008

CREATING ORGANIZATIONAL PARTICIPATIVE INNOVATION: EXPLOITING THE POWER OF ORGANIZATIONAL DYNAMIC LANDSCAPES

Luca Rodighiero

University of Trento, Faculty of Sociology, Italy, luca.rodighiero@studenti.unitn.it

Follow this and additional works at: <http://aisel.aisnet.org/mcis2008>

Recommended Citation

Rodighiero, Luca, "CREATING ORGANIZATIONAL PARTICIPATIVE INNOVATION: EXPLOITING THE POWER OF ORGANIZATIONAL DYNAMIC LANDSCAPES" (2008). *MCIS 2008 Proceedings*. 24.
<http://aisel.aisnet.org/mcis2008/24>

This material is brought to you by the Mediterranean Conference on Information Systems (MCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in MCIS 2008 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

CREATING ORGANIZATIONAL PARTICIPATIVE INNOVATION: EXPLOITING THE POWER OF ORGANIZATIONAL DYNAMIC LANDSCAPES

Rodighiero, Luca, University of Trento, Faculty of Sociology P.zza Venezia, 41 38100 Trento,
luca.rodighiero@studenti.unitn.it

This paper explores the ways an organizational network should reflect upon its communicative processes and its responsible and decision making management. As regards the emergency interventions of the Civil Defence, the communication concerns the following: the selection and the taking charge of the information, the coordination on the spot, widespread procedures and local knowledge of the working practices. The central issue is how to define a participative way for the shared realization of an organizational network description, seen as a dynamic landscape. The various forms of knowledge embedded in the heterogeneous network organizations could be translated into landscapes, starting with paper based design games and finishing with a collective participation of a dramatic performance, sharing different but necessarily coexisting interpretations of the interventions.

The paper describes this reflective path, divided into three workshops: the first workshop concerns the definition of the network boundaries and its components; the second workshop regards the shared description of two noteworthy interventions; the third workshop is about the immersion in a control-room, as the ideal stage for a participative representation of an emergency. It concludes with a proposal of a landscape design, a knowledge enriched version of an Event Trace Diagram, constructed as a prototype starting from the recordings of the performance in the control room. Furthermore the paper suggests the possibility of a digital coordination place, as a kind of a 2.0 dashboard collaboration tool.

Keywords: organizational network, shared knowledge, organizational landscapes, 2.0 collaboration tool.

LANDSCAPES, INFORMATIONS, RESPONSIBILITY

How can an organizational network deal with the complex range of its internal representations, practices and sense making processes? How can the network coordinate the organizations to perform an appropriate action? Regarding these questions, the paper explores the opportunities guaranteed by the participative and shared depiction of these frames (Goffman, 1959).

I use the metaphor of organizational dynamic landscapes to describe the specificity of the single organization. A landscape is the unique combination of facts and artefacts (Latour, 1998), human and non-human, natural and cultural (Gagliardi, 1990): men, machines, working practices and narratives. These elements are dynamically involved in the organizational routines: they are not static, they are enacted and reproduced by human and non-human actors and they change their perspectives, role by role, department by department, organization by organization. According to the metaphor, an organizational network is to be considered as a setting populated by co-present and even competing set of representations. What happens when the network, in order to accomplish its mission, lines up the various landscapes?

The answer to this question can be found during emergency interventions of the Civil Defence. Civil Defence is the public organizational network in charge of guaranteeing first-aid and assistance to the population, coordinating the organizations and the operators on the spot and informing political and administrative institutions. A large number of actors are activated by a single Civil Defence operation, actors belonging to different organizations and intervening at the same time in an often chaotic and unforeseeable situation. Moreover, during their interventions, the operators not only enact their own organizational landscapes, their working practices and relationships, but they also have to deal with the others. They have to coordinate on the spot and they have to adapt their actions reciprocally. Procedures and manuals state the right thing to do and the right person to call. But the actions in the context seldom follow manuals. Actors have to face ambiguous information and overlapping actions.

An information, especially during emergency situations, implies an high responsibility level. Ambiguous information means ambiguous responsibility attribution. What and where are the important informations? Who holds them? What is the right thing to do here? Procedures drift towards contextual practices (Ciborra, 2002) and the information flows become unpredictable.

THE WORKSHOPS

Communication and responsibility management is a central issue for the network. Is it therefore possible to provide the network with a series of collaborative tools through which the landscapes can be reciprocally shared and understood? And the considerable information managed in the right cooperative way? I attended some focus group sessions oriented towards the sharing of different working practices and the participative designing of a possible new management of information flows regarding the Civil Defence. One or two prominent representatives of each component of the network attended the workshops.

I refer to M.J. Muller's idea of Participatory Design as a practice leading to a hybrid and heterogeneous form of organizational knowledge, capable of providing and supporting the organization with new insights, comparing different interpretations and perceptions (Muller, 2002). Through the participants collaborative work (Brandt, 2004) the different and coexisting interpretations of the PC interventions can be depicted portraits, recognizable inscriptions of responsibility attributions, as shared procedures and as a well distributed exchange and understanding of the information. The main intent of the focus group was to facilitate the people, who have to cope with coordination and day by day emergency management problems, to outline together some participative hints for the design of an integrated and appropriate information management .

In the following chapters I will describe the focus groups as the reflective moments during which the actors look reciprocally at the networking landscapes through the “windows and mirrors” perspective (Jacucci, Martin, 2008): comparing the different interpretations with their own landscape, recognizing the contribution of the others in the interventions, sharing practical knowledge and producing reciprocal comprehension.

From the paper to the live performance

The first meeting was dedicated to the definition of the network boundaries. The participants were divided in heterogeneous groups, and they were asked to list the actors/organizations being a part of the Civil Defence network. One of the first immediate reactions was: “It’s obvious!”. Sure?

Through four posters, coloured post-it boxes and felt tip pens, each group (five or six people) negotiated a specific network depiction. The members shared their “index-book” and started to point out their respective relations of major importance, up to compete between each other for the most complete paper-made reconstruction of the network. The posters became a discussion point and the different design fashion of the posters emerged; the definition of some macro-labels for the organizations (public or private, administrative or military, kinds of intervention and so on) was the most controversial issue and the point of contact at the same time: what is the actors’ most appropriate position? Each group gave its own answer, making the complex form of the network conditional on the blank sheet. During the realization of the sketches emerged quite a lot of overlapping actions and conflicts of competences. An easy task and taken for granted became a place of confrontation, the key to reciprocally discover a part of the organizational landscapes.



Figure 1. Three different organizational boundaries representations.

The debate concerning the boundaries and the internal relations regarding responsibility was a preliminary approach to the central topic of the second workshop: the paper-based designed account of two outstanding Civil Defence interventions.

This time the attendants were divided into two groups. First of all, they decided themselves which case to analyse and what should be the most efficacious kind of representation. Both groups chose a radial organization of the spaces on the blank-sheet. Dividing the posters in sectors, with a brief description of the emergency in the centre, they reviewed their actions, minute by minute, as directly involved actors and managed to give an overall vision, composing their single experiences as pieces of a puzzle and sharing both their predetermined and “drifted” actions and interpretations of that single case. Concerning just those two specific operations, they reciprocally recognized the contextual landscapes and became aware of the part played simultaneously by the other participants.

take a responsible decision. The audience participated to the drama, completing the story with their own experiences during the Salò earthquake.

An isolated landscape became a relational, collective and shared representation of a Civil Defence action. The script became an oral novel about the collective elaboration of the responsibility. The immersion on the spot and the involving performance surprised the workshop participants who spontaneously offered their contributions to repeat the experience in other control rooms. The question now is how to translate this oral novel into an artefact of a network memory? How to point out the critical situations that influence the communication flows?

Event trace diagram

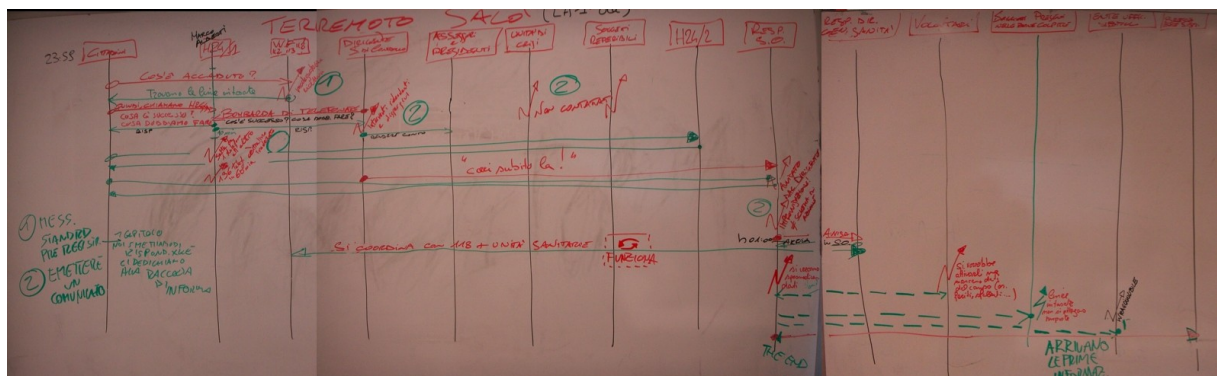


Figure 4. Event trace diagram prototype.

There are many different ways the collective oral novel could be represented as a recognizable and shared organizational landscape. The workshops are still going on so the work group has not faced this problem so far.

One of the possible solutions is the participative realization of an Event Trace Diagram (Due, 2002): the diagram represents the actors of the situations through vertical lines and the relationships between them through horizontal ones. A prototype concerning the first moments of the performance is depicted in figure 4. The communications, feedbacks and actions enacted by all the actors involved in the seismic emergency are horizontally represented and extended by the relational knowledge created during the previous workshops. The prototype is limited to only a few minutes of the recorded performance, from the chaotic and confusing start to the arrival of the first informations. Failures and adequate decisions are represented and codified by different colours; the actors are chronologically arranged. The whole picture can represent a dynamic organizational landscape: it is contextual, it is participative, it embeds different and co-present work practices, it retains a knowledge sharing process and can be a cross-organizational learning tool. The artefact stands for a common network memory and could be useful for the planning process of communication flows and responsibility management.

POSSIBLE DIRECTIONS

If we consider the dynamic landscapes like the Etd prototype as an exploratory tool, it can be understood in two distinct ways.

The landscapes as an hermeneutical and reflective key-concept for organizational analysis, concerning tacit knowledge, communicative processes, working practices and competitive sense making processes, able to compare different but connected networking interpretations of reality.

The landscapes as the content of a complex and shared digital coordination setting. The actors could have to deal with a non-physical place, a recognizable and common dashboard, as many web 2.0

applications, where: informations are stored, shared between all actors and taken charge of, depending on their relational value; responsibility chains are immediately and graphically available; each actor should be able to see the action path of the others involved in the network; in this way these paths could be verified, approved, blocked or could modify the planned action of the reader.

References

- Brandt, E. (2006). Designing exploratory design games: a framework for participation in participatory design, in Proceedings of Participatory Design Conference 2006, Trento .
- Brandt, E. and Messeter, J. (2004). Facilitating collaboration through design games, Proceedings of the eighth conference on Participatory design: Artful integration: interweaving media, materials and practices, July 27-31, 2004, Toronto, Ontario, Canada.
- Ciborra, C. (2002) *The Labyrinths of Information: Challenging the Wisdom of Systems*. Oxford:Oxford University Press.
- Due, R.T. (2002) *Mentoring object technology projects*, Yourdon Press.
- Gagliardi, P. (ed) (1990), *Symbols and artefacts. Views of the corporate Landscape*, Berlin, de Gruyter.
- Goffman, E. (1959). *Presentation of Self in Everyday Life*. New York: Doubleday.
- Jacucci G., Martin M., "A second step back for managing ambiguity besides reducing uncertainty", Proceedings of MCIS2008, AIS eLibrary.
- Latour, B. (1987) *La Scienza in Azione*, Edizioni di comunità, 1998.
- Muller, M.J. (2002) Participatory design: the third space in HCI, in *The human-computer interaction handbook: fundamentals, evolving technologies and emerging applications*. Lawrence Erlbaum Associates, Inc., Mahwah, NJ.