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## **Rethinking Work through (Work)Spaces: Current issues for organizational change and development of teams and competencies [symposium]**

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## 1788 - RETHINKING WORK THROUGH (WORK)SPACES: CURRENT ISSUES FOR ORGANIZATIONAL CHANGE AND DEVELOPMENT OF TEAMS AND COMPETENCIES

Name of the proponents of the symposium:

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Raluca Ciobanu – EDF R&D

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Psychological and organizational literature has rarely considered materiality (Orlikowski, 2007), and especially space, as an integral part of organizational life and workplace individual and collective experience. Workspaces characteristics (in terms of layout, noise, light) are at best featured as components of the physical working conditions and studied in relation to occupational hazards, stress (Burke, 1988; Evans & Cohen, 1987) or job performance and satisfaction (Vischer, 2007). In the recent years, an increasing number of modern companies considers workspace design and layout as a mean to support and manage organizational change and knowledge-sharing amongst professionals and teams. This evolution in workspace design and management calls for more research in work and organizational psychology on space as embedded within activities and as an object of study in its own right (Ianeva, Ciobanu & Vacherand-Revel, 2016).

This symposium gathers academics and practitioners and intends to open up a theoretical and methodological discussion on several critical issues related to the (re)design, the appropriation and management of work through workspaces. What are the theoretical frameworks and concepts relevant for understanding space in its psychological, social and organizational dimensions? How could the design of work environments effectively support professional activities? In what ways workspace design and organization could trigger learning processes and support competence development? Why space matters for work psychologists?

The expected contribution of the symposium is twofold. First, it should provide a basis for a theoretical and epistemological debate among the contributors (work and organizational psychology, cultural-historical activity theory, French ergonomics, clinic of activity). Second, the presentations of empirical research and workplace interventions will highlight practical and workplace intervention-related issues.

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Ianeva, M., Ciobanu, R., & Vacherand-Revel, J. (2017). De l'aménagement des bureaux à la transformation des modes de travail : quelles répercussions collectives ? *Psychologie du Travail et des Organisations*, 23(2), 137-158.

Orlikowski, W. J. (2007). Sociomaterial practices: Exploring technology at work. *Organization studies*, 28(9), 1435-1448.

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### **Office Design and Organizational Change: an Activity-Theory Perspective**

Maria Ianeva – Center for Research on Work and Development, CNAM

Office design and layout are increasingly considered by companies as a strategic resource. Today a growing number of organizations choose to implement non-territorial flexible offices also referred to as “activity-based” workplace environments (ABW) in order to, both, reduce the real-estate costs and to support organizational change and work performance. This global trend in restructuring office design and work (Bodin, 2010; Cajander & al., 2015) is an important challenge for academics and practitioners. Consequently, several recent studies in work psychology (Ianeva, Ciobanu & Vacherand-Revel), ergonomics (Heddad, 2017) and sociology (Benedetto-Meyer & Cihuelo, 2016) sought to develop our understanding of space as related to work activities.

The purpose of this presentation is to bring into focus and discussion the contribution of activity theory (AT). AT is an interdisciplinary theoretical framework which involves different trends of research (Engeström, 1987 ; Cole, 1995; Clot, 1999) and focuses on the purposeful, meaningful and material character of collective activities. In order to do so, we report on an empirical study on the design and implementation of an ABW within an Information Technology company. The study builds upon AT and situated cognition (Lave, 1988 ; Scribner, 1997) and deals with the impact of these office solutions on collective work practices. Results show that the ABW provides a framework for both interpreting the work of colleagues and organizing one’s own work. The presentation provides reflection on office design as an intervention on organizing processes and activities and an analysis of its conditions and consequences for supporting activity development.

**Keywords:** cultural-historical activity theory, activity-based workplace, office work

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## **Thinking about workspaces during the work design process: the conditions for dialogue and the physical environment for contributing to health and safety at work**

Edwige Quillerou – INRS, Working Life Department

We will present transdisciplinary research that combined an engineering approach including Human-Centered Design (Boy, 2015) with occupational psychology including “Clinic of Activity” perspective (Kloëtzer, Clot & Quillerou, 2016) for improving the work done by the designers and for taking care of the future workers. We will be basing our presentation on a design project about a new tool for commercial pilots in the cockpit, conducted in the laboratory with a flight simulator (Boulnois, 2018). We tested different kinds of interviews with expert pilots in a different space context for each stage of technical development of the system. We will show especially how the simple self-confrontation interview in a cockpit simulator was important for the pilots, the designers and the work analyst. Then, we will explain how the crossed self-confrontation interview under special space conditions allows dialogue to take place between the designers and the pilots for imagining the future workplace using emergent workspaces. The space conditions were worked on throughout the design process – including during work analysis and design testing - and the psychological, physical and social space conditions for each trade and for each human activity were revisited. In this way, the occupational psychologist organized the framework for dialogue about the present and the future work spaces to anticipate the changes in work organization, enhancing inter-professional collaboration, and finally increasing the health and safety benefits for the pilots, and potentially the other workers, at the same time.

**Keywords:** transdisciplinary research, design work, workspace, dialogical framework, environmental conditions

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# New way of learning in the nuclear industry: the “activity spaces” as a tool for competence development?

Raluca Ciobanu, EDF R&D

As the development of employees’ competencies is an issue for organizations, professional training design relies more and more on bottom-up “activity” approach. The entry point for the design of training environments is currently the work activity (Heddad, 2016; Rogalski, 2003). Research (Béguin & Clot, 2004 ; Rognin, 2002 ; Grosjean, 2005) highlights the use of the work environment as a resource for organizing the current and future action of the professionals.

Through a design approach and a training experiment, our study addresses the role of activity spaces (material and relational) for trainings in nuclear power plants. Several studies of our R&D department (Couix et al., 2015 ; Fucks & Boccara, 2014) have already shown that a training has to match real work situations in order to be efficient. In the case we present, the training participants have to orient themselves in a material space as well as a relational and organizational spaces.

The results of our experiment confirm the relevance of providing different pedagogical orientations that emphasize the activity over the previous task-oriented and top-down approach. The instructors-trainees and trainees-trainees interactions take place in an open and dynamic space with an important interindividual variability in order to promote active learning that use based on the joint discovery and analysis of real work by the collective. In this context, the co-presence of the participants is more important than the task at stake. Moreover, this new way of learning is a challenge for the instructors and trainees as well as for training designers.

**Keywords:** professional training, activity spaces, development, competencies

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**It is only in movement that spaces show what they are:**

**A clinic of activity perspective on (work)spaces**

Jean-Luc Tomás - Center for Research on Work and Development, Cnam, Paris

The term space is particularly polysemic. In the field of work analysis, and without seeking exhaustiveness, we identify the material space, the space of discussion, the mental space, the space of work, the space of creativity, the space of the body, the space of activity, the space of intervention.

In the clinic of activity, space is not a unit of analysis. It is the activity, with its conflicts, its impediments, its renewals of goals, means and motives that is the unit of analysis. Consequently, it is not the spaces - and their relationships - that explain the activity, but it is the activity of the professionals that is explained with them. Indeed, the activity of professionals is carried out in spaces that do not overlap. In fact, the spaces are therefore structurally in conflict. By moving a famous quote from Vygotsky (1997, p. 43), we can say that it is only in movement that spaces show what they are. And it is when these movements are prevented or hindered that work becomes a risk to health and efficacy.

In order to show how these movements can become supports for the development of the professionals' power to act (Clot, 2009), we will use clinical materials from an intervention within a neurosurgery department. These materials will allow us to question the links between the organization of space, the space of subjectification, the space of compromises on conflicts of criteria, the space of relationships with others, the space of the body (Tomás, 2008).

**Keywords:** clinic of activity, intervention, development, activity

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## **Situated acceptance as an approach for thinking workplaces in relation with activity: the case of in the context of Activity based environments**

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The main goal of this communication is to reassess the workplace as a main component of the activity by taking into consideration the diverse phenomenon accompanying the transformations of the physical setting of work. This brought us to question the organization of the workplace as an asset or as a constraint for the business development. Our research is interested in the activity-based workplaces. We question the way these space typologies influence their users' activity.

To do so, we have established a two-phase methodology. Three days of observation amid three different units evolving in activity-based workplaces have helped us to identify the uses that emerged from these spatial typologies. Then, a set of two interviews with 8 participants have been conducted based on the four dimensions of the situated acceptance model (Bobillier Chaumon, 2013) and on picture elicitation. Therefore, we show that these workplaces foster cooperation and can enhance and improve the work collectives with new ways of organizing the activity. The collectives came out strengthened and the mechanisms that the individual develops and mobilizes to appropriate her/his space make it relevant for her/his activity (Grosjean, 2005). In that sense, we also found that the workplace doesn't always provide the sufficient possibilities for the employees to work as they want. Due to this issue, the individual must overcome these problems with his own resources. Furthermore, these typologies of space embody the organization's values, which can go against personal and collective values. Hence, individuals can encounter difficulties to give meaning to their activity.

**Keywords:** activity-based environments, situated acceptance, workplace

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