

Professional and Practice-based Learning

Laurent Filliettaz · Stephen Billett *Editors*

## Francophone Perspectives of Learning Through Work

Conceptions, Traditions and Practices

This book generates a comprehensive account of ways in which practice-based learning has been conceptualized in the Francophone context. Learning for occupations, and the educational and practice-based experiences supporting it are the subject of increased interest and attention globally. Governments, professional bodies, workplaces and workers are now looking for experiences that support the initial and ongoing development of occupational capacities. Consequently, more attention is being given to workplaces as sites for this learning. This focus on learning through work has long been emphasised in the Francophone world, which has developed distinct traditions and conceptions of associations between work and learning. These include ergonomics and professional didactics. Yet, whilst being accepted and of long standing in the Francophone world, these conceptions and traditions, and the practices supporting them are little known about or understood in the Anglophone world, which is the dominant medium for scientific and educational discussion. This book addresses this problem through drawing on accounts from France, Switzerland and Canada that make accessible and elaborate these traditions, conceptions and practices through examples of their applications to occupationally related learning. These accounts offer variations and culturally-specific developments of these traditions, but collectively emphasize a preoccupation with how both work and learning need to be understood through situated considerations of persons enacting their work practice. In this way, they offer noteworthy and worthwhile contributions to contemporary global considerations of learning through work.

*"This book is most important for our community, not only for the workplace learning community, but for the whole field of educational, psychological and pedagogical science."* Professor Hans Gruber, EARLI President from 2015 to 2017

Education

ISBN 978-3-319-18668-9



9 783319 186689

► [springer.com](http://springer.com)



Professional and Practice-based Learning

Laurent Filliettaz

Stephen Billett *Editors*

# Francophone Perspectives of Learning Through Work

Conceptions, Traditions and Practices

 Springer

- Winnicott, D. W. (1971). *Playing and reality*. London: Psychology Press.
- Wisner, A. (1983). Ergonomic or anthropotechnology: a limited or wide approach to working conditions in technology transfer. In *Communication at the first international conference on ergonomics in developing countries*, Lulea, Sweden.
- Wisner, A. (1985). *Quand voyagent les usines. Essai d'anthropologie*. Paris: Syros.
- Wisner, A. (1995a). Situated cognition and action: Implication for ergonomics work analysis and anthropotechnology. *Ergonomics*, 38, 1542–1583.
- Wisner, A. (1995b). The irruption of new technologies: a new challenge for ergonomics and anthropotechnology. *Journal of Human Ergology*, 24, 45–55.
- Wisner, A. (1997). *Anthropotechnologie. Vers un monde industriel polycentrique*. Toulouse: Octares.
- Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry*, 17, 89–100.
- Zarifian, P. (2001). *Objectif compétence*. Paris: Editions Liaisons.

## Chapter 3 Stimulating Dialogue at Work: The Activity Clinic Approach to Learning and Development

Laure Kloetzer, Yves Clot, and Edwige Quilleron-Grivot

### 3.1 Introduction

When entering work environments, psychologists face complex social situations and may wish to transform them. The Activity Clinic team has been answering requests for intervention at work in a variety of settings for the last 15 years, including those associated with public services (i.e. mail carriers from the French postal services, technicians and drivers in the national railway company, teachers at schools, public prosecutors in courts, surgeons in hospitals), private companies (i.e. factory workers, managers, and executives in a multinational electric corporation and in the automobile industry), trade unions, and associations (boxers and divers from sports associations). Requests for interventions may be formulated by managers in the companies, by trade unions, or by mixed institutions such as the French CHSCT (Committees for Hygiene, Security, and Work Conditions). Workplace health is amongst the most widespread issues leading to intervention requests, but professionals may also request our support when they feel that their activity is evolving so quickly and profoundly that they face new situations or problems without the collective capacities to discuss and deal with them. Moreover, vocational training, based on activity analysis, is also a common case for intervention, in which the practitioners collectively look for ways to master the complexity of their work. In all cases, our goal as researchers is to support the development of the collective capacities of practitioners by stimulating types of dialogue at work that allow for a close analysis of the real work activity. Dialogue is a core component of our methodologies, which can be called dialogical

L. Kloetzer (✉) • Y. Clot  
Equipe Psychologie du Travail et Clinique de l'Activité, CRTD (EA 4132),  
CNAM Paris, 41 rue Gay-Lussac, 75005 Paris, France  
e-mail: laure.kloetzer@gmail.com

E. Quilleron-Grivot  
INRS, Working Life Department, Management, Organization for Health and Safety  
at Work Laboratory, 1 rue du Morvan, 54519 Vandœuvre-Les-Nancy, France

© Springer International Publishing Switzerland 2015  
L. Fillettaz, S. Billet (eds.), *Françophone Perspectives of Learning Through Work*,  
Professional and Practice-based Learning 12, DOI 10.1007/978-3-319-18669-6\_3

frameworks. That is, frameworks based on structured dialogues and aimed at further developing dialogue horizontally, between workers, and vertically, between workers and higher levels of the hierarchy.

The Activity Clinic approach is grounded in Vygotskian cultural-historical psychology: We consider the activity of individuals as inherently social and mediated by cultural artefacts, which are at the same time used and transformed by individuals. This approach is also inspired by French ergonomics, with its attention to activity as it is performed by workers and by work psychopathology. In short, it is an interventionist methodology aimed at transforming work, a developmental methodology, as defined by Kloetzer and Seppänen (2014, p. 1):

Developmental methodologies share a critical focus on development in social and work practices... and some specific features: (a) they build on mediation by signs and tools, (b) they aim at analyzing and transforming social practices, (c) they associate practitioners in the collective analysis and transformation of these social practices, (d) the research designs created are dialogical frameworks, based on a complex blend of data collected on everyday work activity and dialogues triggered by these data, (e) in these dialogical frameworks, analyzing everyday work activity is not a goal per se, but a way to trigger transformation, as experience is mediated and transformed into an object of inquiry, and (f) the researchers, besides supporting the interpretations of the practitioners, also try to support the development of these interpretations, thus leading to change and learning.

The goal of this chapter is to present Activity Clinic concepts and one of its developmental methodologies, cross self-confrontation interviews, which are at the core of this approach to learning and development. In the first part, we introduce core concepts and describe the cross self-confrontation methodology. This presentation is supported by data collected during an intervention within the automotive industry, aimed at supporting the prevention of work-related musculoskeletal disorders (WRMSDs). Selected extracts of dialogues in different contexts of cross self-confrontation interviews are presented.

In the second part, we characterise learning and development in this type of developmental intervention. Learning through work is primarily envisioned here in relation to development. Researchers focus primarily on actions to help develop the workers' power to act within their professional milieu, on their organisation, and upon themselves. However, a critical analysis of the developmental research process shows that it generates and requires some learning on the part of professionals. At first, learning appears to be an effect of our collaboration. Workers report or demonstrate learning by appropriation of the dialogical frameworks initially implemented by the researchers. They also report or demonstrate learning about significant aspects of their work activities: about problems, conflicts, or concepts and people, tools, or rules. Learning results here from a secondary, self-reflective view of habits, common constraints, and proven resources, the discussion of which is promoted by the dialogical framework. Learning finally appears at the organisational level, as the goal of our action: an organisational process of integrating controversy about the quality of work as a way to preserve the meaning of the collective activity, health, and engagement of the workers and of the relevance of the professional activity for the larger society.

In the last part of the chapter, we highlight dynamics for activity development.

## 3.2 Presentation of the Activity Clinic: A Clinical Approach for Action

### 3.2.1 Introduction to the Case

The intervention discussed in this work was initiated by the Organisation and Methods Department of a subcontractor in the automotive industry, which wanted to understand the effects of new assembly lines on occupational risks for workers. This required an interdisciplinary study of the work of operators in modular manufacturing units, in collaboration with ergonomists. These units assemble components on car bumpers. They deliver their production in "synchronised workflow" to the car manufacturer, using tightly coupled, "just-in-time" production methods. Some workers had been declared unfit because of lumbar pain, and the company decided to investigate the long-term effects of these production methods on employee health. Managers wished to increase their knowledge about the work of the operators, the occupational risks, and the prevention of WRMSDs.

After extensive observations of the activity and the conducting of an ergonomics diagnosis, it was decided to pursue the intervention using a cross self-confrontation methodology to engage the workers of the factory and their managers in WRMSD prevention strategies (Quillerou-Grivot 2011; Kloetzer et al. 2014; Quillerou-Grivot and Clot 2013). Faced with operator health issues, this intervention focused on the following question: How to disseminate discussion of the problems raised through co-analysis of work to different levels of the company?

### 3.2.2 Cross Self-Confrontation: A Three-Step Process Interweaving Two Clinical Tracks

The intervention interweaves two tracks to create a dialogical framework for "confidential collaboration" (Trentin 2012) within the company. The first track is focused on conducting a clinical co-analysis of the work activities with a group of volunteers. The detailed analysis of actual work activities with volunteer subjects, who constitute the associated research group, is the vital first step required to question the organisational procedures and requirements in a documented and constructive way. On the second track, this detailed co-analysis, jointly performed with the workers within the steering committee formed for the intervention, triggers and constrains the discussions between managers, workers, and the health and production experts who design the work organisation. The clinical co-analysis with workers becomes a tool to transform the conditions of the dialogue at all hierarchical levels in the company. This approach of two interweaving tracks aims to maximise the possibilities for the development of the activity, for the health of the workers, and for transformations in the work situation (Quillerou-Grivot and Clot 2013). However, we are confronted by the complexity of human activity and

work organisations, and complete success in these objectives is quite uncertain. This methodology has now been well documented in French (Clot et al. 2000; Clot 2008) and in English (Clot 2009; Kloetzer 2013; Kostulski and Kloetzer 2014) and used in different fields. Therefore, we illustrate only some key features here.

### 3.2.2.1 First Track: Performing a Joint Analysis in an Associated Research Group

The methodology here relies largely on a group of volunteer workers, involved in the research, called an “associated research group” (Oddone et al. 1977/1981). The collaborative and collective dimension is critical throughout the intervention process. At the very beginning of the research, workers interact with researchers at the workplace, while researchers observe the activity. With their questions and way of observing, the researchers attempt to place the workers in the position to observe their own activity. At a later stage, some workers engage themselves formally in the research and come to discuss their activity in a structured way. They collectively choose relevant work sequences to analyse, which are subsequently filmed in the workplace. The analysis is conducted through repeatedly confronting the workers with these video clips, which they comment on during simple and cross self-confrontations interviews.

Simple and cross self-confrontation interviews focus on the comparison of individual ways of performing tasks. With special focus on their variations, they open the door to new questions and reflections. The co-analysis, as it is conceived here, leads the subjects to enter into a “deferred dialogue” (Quillerou-Grivot and Clot 2013) on the conflicts of their real work activity, to discover the range of each person’s own and others’ ways of performing tasks. This deferred dialogue organises a systematic comparison of these contrasted ways of operating, thus exteriorising them as objects for use in preparing new possibilities for action. The activity of one then can be mirrored in the activity of others. This time for analysis is thus dedicated to “transform past experience into an instrument for dealing with future experiences” (Clot 2008, p. 148).

Lastly, the researchers and volunteers jointly select video clips of the activity and of the interviews featuring debates about important aspects and conflicts of the work. These videos are arranged in a final form, a film-based multi-voiced report, which is presented to a wider audience consisting of other colleagues, managers, as well as the steering committee. In doing so, the researchers aim to articulate the controversies on the work activity and disseminate them within the organisation. Workers demonstrate here that they are experts regarding their work organisation. Their dialogues, as recorded in the methodological framework, may then fuel the reflection process in the steering committee.

In our case here, the associated research group assembled 10 workers, mostly temporary personnel (i.e. 6 out of 10 volunteers). Even though operators need to work in collaboration to meet production goals, this requirement is at the same time inhibited by massive reliance on temporary personnel and high turnover (each week

at least one new temporary worker joins a team of 12–15 operators). In this work environment, health problems remain “taboo” due to fear of job loss, especially given the existence of major interpersonal conflicts amongst operators. Faced with these difficulties in the company, a proposal was made to help a team restore its collective functioning. The primary difficulty in this intervention was the need to encourage reflection about the work amongst participants who were mostly temporary workers. Throughout the intervention, we continued to ask ourselves this question: “Is it possible to intervene despite the instability of the team of operators and the temporal requirements of our methodology?” Nevertheless, we attempted to keep a grip on the intervention framework for those temporary workers to be able to develop reflection about the job and on health issues.

The work co-analysis methodology was deployed over 18 months, in several phases:

- The initial phase of observation (pen and paper) to lead the participants to perceive their ways of operating when alone or in relation with others, of which they were often not conscious (typical comments from the start of the intervention: “but what we do is easy”, “we do everything the same way”, and “our work is in the post description”), and to encourage requests to perform an analysis of the work.
- The second phase of assembling a group of volunteers for the analysis, centred around four different tasks (e.g. carrying bumper bars to assembly line, bumper inspection at the start of the line, mounting of bumpers by two operators in tandem, and replenishment of parts), and conducting simple self-confrontation followed by cross self-confrontation, both of which are based on film recordings.
- The final phase of synthesising the elements of work analysis and video editing to select certain work situations as topics of analysis, followed by selection of cross self-confrontation dialogues; the resulting film was then shown to the entire team of workers and the members of the intervention’s steering committee.

The data, which have been video-recorded and form the basis of this joint analysis, consist of ten interviews in simple self-confrontation (lasting between 1 and 1.5 h each), seven interviews in cross self-confrontation (lasting between 1 and 2 h each), and eight meetings of the associated research group (lasting 1–1.5 h each).

To show the function of these dialogues about a specific action used to perform a task, we present below a short extract transcribed from a cross self-confrontation interview with a female operator (O2), a male operator (O1), and the researcher (R) on the way of inspecting bumpers at the start of the line; at this moment, they are watching a video clip of the female operator inspecting the bumpers. This is a cross self-confrontation between two operators who are recognised as experts in the task by the members of their team. Before performing co-analysis, exchanges between the two operators had been difficult and impossible because of disagreements that they had not managed to articulate there, let alone discuss. However, during their involvement in the analysis of their work, they finally agreed to

confront one another through the medium of their filmed actions. Here is an extract from that cross self-confrontation:

- R: *And the inspection points, the sequence you follow, are they the same?*  
 O1: *No, we don't inspect them in the same way [whispering].*  
 O2: *No.*  
 R: *That is to say?*  
 O2: *We don't start at the same place and maybe don't move through the same positions.*  
 O1: *You tend more [pointing at O1 and then towards the film, while gazing at the screen] to finish with the faceplate.*  
 O2: *Yeah.*  
 O1: *As for me, I finish with the...*  
 O2: *Yeah, I start on the side [lifts left hand], yeah.*  
 R: *Always on the same side?*  
 O1: *That's... that's different [looking at the film clip]*  
 O2: *Hmm, no, that can change... there, it's true [designating the video]: I always start on the left.*  
 O1: *Yeah, me, too, I always start on the left, but see how you finish with the faceplate: it seems as if you didn't even look at it at all [laughing] ... while I, I start [waves hand] on the side and then continue, at last, no... I don't know anymore. It's...*  
 R: *We'll look at it.*  
 O1: *Yeah, that doesn't give the same impression at all.*

In this extract, operator O2 realises that her colleague, operator O1, does not use the same approach to the task even though they work every day in the same team. This moment of discovering subtle, but essential, differences between them regarding a specific work action is crucial. The analysis returns them to the level of the *real of the activity* (Clot 1999), allowing them to detach themselves from the procedure during the analysis session and to resume focus on the procedure afterwards. After the cross self-confrontation sessions, this point was actually the subject of debate by operators, to decide whether or not to show their different approaches to the steering committee. This debate occurred during discussions about putting together a video showing part of the bumper assembly process, followed by dialogues featuring disputes between operators and thus showing, in their own voices, the initiatives they had taken in performing tasks, and the complexity and richness of their occupation. The extract shown above was eventually selected by the operators and researchers for inclusion in the final film to be viewed by members of the steering committee.

Researchers pose the same questions to operators and to themselves: “How will you continue this work that you do together?” and “Think about the future: how will that be of use for you?” (questions for which there are no responses that can be

determined in advance but which could open people up to other possibilities for action in everyday work, starting especially with collective resources, and play a major psychological role for health in the workplace). The work of the clinic with the operators is a means to develop their activity over time, which provides possibilities for acting on oneself or on others. For sure, this work of co-analysis is not sufficient by itself and is not presented as the solution to all the problems. The operators have already experienced that “The collective is never a given at the outset: it always needs to be created and maintained” (Bourmel-Bosson 2010, p. 228). These developments remain fragile and insufficient unless they are supported by the directors and production designers of the company.

### 3.2.2.2 Second Track: Orchestrate Professional Controversy Within the Organisation

The work of the steering committee is initiated from the very beginning and runs in parallel to the work with the subjects. In the steering committee, the multi-voiced film produced from the joint analysis is a critical means to change the frame and forms of dialogue between workers and managers. This dialogue is initiated by introducing new objects into the dialogue: The work activities, analysed and commented in their concrete details, reveal the hidden, frequently conflictual, dimensions of the everyday work. In doing so, the researchers aim to articulate the controversies related to the work activity and disseminate them within the organisation.

In the case here, a series of meetings was programmed. The film was presented in the third meeting, with commentary by the researchers. In the fifth meeting, five workers were invited to discuss how this joint analysis could be exploited and pursued within the company. This last meeting thus provided a forum for collective reflection on a programme to involve operators in company work design projects. The following is an extract in which three managers (the project manager, who is the sponsor, the production manager, and the HR director), a supervisor, and three operators discuss the procedural steps for the visual inspection of bumpers (which specify steps leading from the top – what they call the faceplate – to the sides of the bumpers):

Project manager: *I would like to jump back to this point, because I have a question that we already raised the last time, but which concerns me – it's me leading the project: [post descriptions] define a means, well, define a procedure, a function: "We start on the left side, we do this, and then the rest of it...", and now we realise, based on what we've seen and what you've brought up, that above and beyond this, there are small, big, and medium-sized people, and then, what's more, there are even different ways*

(continued)

of functioning from one person to another, and me, I would like to make the most of this, because it is not always necessarily the case that we listen to you [the operators] ... you, who we just saw on the screen a few minutes ago, what do you think of these manuals, of these instructions that we provide for you in a largely ready-made form, and which you sometimes interpret – you, what do you think about that?

Operator O2: [...] we would say that it's a base, how they want us to function, but afterwards with the range of different people we have here, it might work for some but not for others. Afterwards, it's the interpretation that's necessary; we have to keep them in common as we said before to see the way to do it ... we could say ... because between me and O1, we don't have the same approach and that's ... we would say that in fact it's the same thing.

Production manager: Could we say that the result is the same in the end?

Operator O2: That's it, the result ... we could base it on the binders but we have a hard time respecting them to the letter.

Operator O1: It's more in the sense of not imposing the sequence, the more I think ... in the sense ... we would say ... of identifying each part of the bumpers, the faceplate, the edges, the end caps ... I want to say that bumpers are all made the same way, they all have a faceplate, an end cap, and grilles, so ... afterwards I think that for the operator, the fact of having – to say to him, well, here you have the faceplate, you have the faceplate to inspect, you have the end cap, the edges, fine ... we'd say it simplifies the task for him, by telling him there's that point, that point to inspect – you have all of those points to inspect, and afterwards you organise yourself to do it in the way that you feel is best for you ... that ... that leaves the person free to choose the steps he takes and how he looks at what he needs to inspect.

HR manager: It's more a matter of giving a mission by saying here's this, that, that, and that to inspect, and it's you who ... the way to ...

Operator O1: That's it, like that, it's still ...

Operator O3: Maybe at the beginning ... no, we're shown to the letter in training how it has to be done; afterwards, little by little the person is going to see how we do it and unconsciously do it like us, and at the end of the day, it works just as well as what was specified ... and to know that there's a possibility despite them [post descriptions] to try to have small changes like that, small solutions.

Operator O3: Or to do it in partnership with another operator.

HR manager: If everyone does it differently, we have to revisit it [the post description]

(continued)

Supervisor: Me, I think otherwise ... me, I have two night-time trainers; we must have a common base, because some people, I've already noticed – I don't want to be rude – but if we let them work in the way they think best, they'll think of a certain way and it won't always be right ... because when we're caught up in work and, well, we don't always have an objective view of what we're doing, I find that we can quickly arrive at stupid conclusions. Personally I always try to avoid that and to keep ... because I think the procedure has been well designed in the sense that we start with the faceplate: it's the principal area, and if we start on the sides and the loads of time. According to people at any given time, we don't learn the same way; for sure physically we don't all have the same arms [laughs]; not everyone is like S, you could say that he's picking up a leaf, like that. But it's true in terms of the ways of hauling things and so on. I understand we are all sized differently; we try to make the posts ergonomic and all, but me, I think that the inspection procedures, things like that, they need to be hyper-structured.

Here, during a steering committee meeting, there is further discussion amongst operators about the question of procedures and training of new employees, followed by a supervisor's input. How operators and management continue to develop the debate about the work can become a means to address their activity conflicts, no longer only with people from the line but also with managers and company leaders. This exchange has positive results as, after the meeting, discussions amongst members of operational and functional management take place. They all attempt, from the perspective of their function in the company (design, purchasing, sales, HR, etc.) to pursue several trains of thought. For us, as external contributors, the objective is not to solve the issue but rather to guide the development of the dialogue, of its protagonists as well as its key points. This includes being able to identify new ways of thinking about the work and to make them tangible, without bypassing the *real* and the challenges it poses. And in the steering committee, the operators who are present, and prepared beforehand by the collective work of analysis, stand to gain authority in their work and suddenly gain legitimacy to contribute to the work of production designers and management. The transposition of dialogue amongst operators to a dialogue with management that occurs throughout the process then transforms the analytical mechanism of the intervention potentially leading to its adoption as a dynamic at different levels of the company. In this way, there is a mechanism to find and test potential solutions for work quality and workplace health issues on a day-to-day basis.



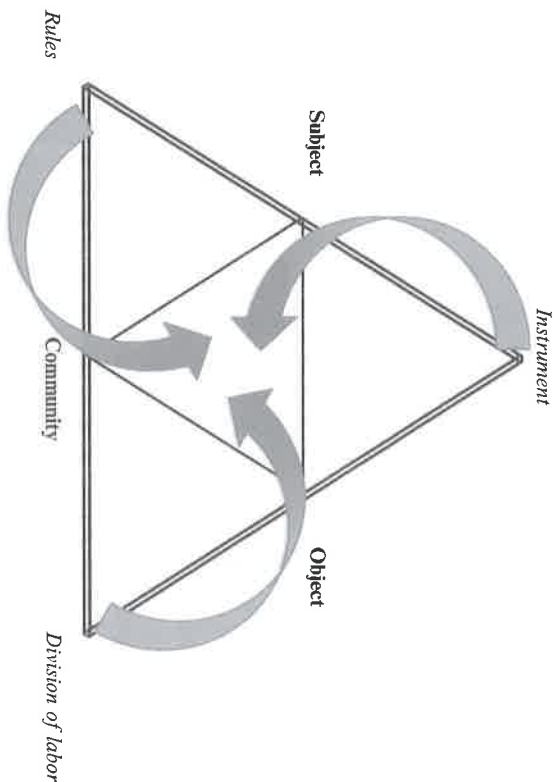


Fig. 3.2 From the activity system to the subjective activity

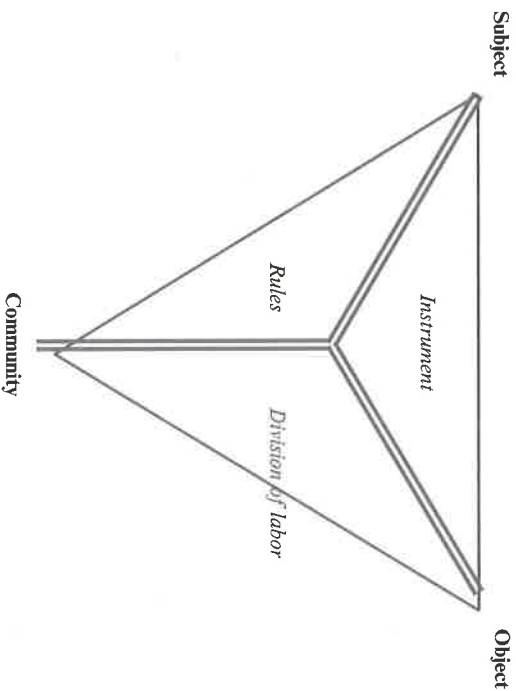


Fig. 3.3 Outcome: the collective dimensions as mediations in the psychological activity of the subject

### 3.2.3.2 Development of the Trade in its Four-Dimensional, Dynamic Architecture

Looking at the sequences above, we can identify different directions in which development may happen. More precisely, four dimensions are simultaneously at play. The *personal* dimension of the work activity refers to the specific way one is performing one's activity, according to one's specific skills, knowledge, history, life story, professional experience, preferences, moods, expectations, worries, goals, hopes, and desires. The quality of their professional actions qualifies them as "good professionals", or, from the French perspective, one who merits the professional title. However, these workers do not work alone: One's work activity is addressed to present, past, and future colleagues, peers, team members, managers, customers, mentors, and experts – all potential addressees of the professional action.

The trade then has an *interpersonal* dimension. It remains alive – or dies – amongst workers and within each of them due to the dynamics of interpersonal exchanges on what to do, to say, to abandon, or to approach differently. But these professional exchanges are not built from scratch. That is, they cannot be fully understood solely from the current context of shared activities. The background of these exchanges is, instead, the history of the professional milieu, the collective memory providing each worker with resources for present action and anticipation of the future. When it exists, transpersonal memory is available for all. It refers to the unofficial organisation of work, as constructed and transmitted by teams in the culture and history of the work setting. It includes the *professional genre* (Clot 1999), that is, the usual ways of acting and interacting, speaking, doing, and relating to people and things in a professional way that are established in a specific work environment. Such a historical heritage functions both as a collective constraint on, and a collective resource for, individual action. The transpersonal dimension is a binding characteristic across generations and individuals, always at risk of disappearing if it is not reconstructed in the course of personal and interpersonal activities. Finally, the trade is not only instantiated in these personal, interpersonal, and transpersonal dimensions but also in an impersonal way, through the diverse elements of the official work organisation – career profiles, social laws organising work and retirement, job profiles, collective conventions, definition of tasks, procedures, processes, operating rules, evaluation standards, performance indicators, professional training, collaboration rules, and division of labour – all define a wholly impersonal world, different from situated practice or collective history, which is stored mostly in written form within organisations and institutions. In ergonomics terms, this codified form refers to the task, what one has to do, as distinct from the activity, what one is doing (Leplat and Hoc 1983). The impersonal dimension of the trade plays an extremely important psychological role. That is, to structure and evaluate what one is doing, to collaborate, and to imagine what one could become and do in the future. This is the dimension that comes into discussion

in the last sequence that we presented, that is, should the control procedures be changed to accommodate the variability of individual ways of proceeding or not?

According to this model, development may happen in the personal, interpersonal, transpersonal, or impersonal dimensions of the activity (including the formal and informal, explicit and tacit work organisation), on subjects, objects, work relations, work settings, or work tools (Clot 2008; Kostulski and Clot 2007). In this model, all four dimensions are bound together, but antagonisms may provoke a loosening of these bonds. The feeling of sharing the same experience at work may disappear due to interpersonal conflicts. A trade that is deprived of transpersonal mediation may degenerate into destructive opposition between a personal, solitary work exercise, and impersonal, spurious work injunctions from the organisation, with all workers at risk of work depersonalisation. Our action in the Activity Clinic implements dialogical frameworks in the company to counteract the processes that loosen the bonds amongst the dimensions and restore the dynamics of this four-dimensional architecture, using the developmental methodology described below.

### 3.3 Learning and Development in Cross Self-Confrontation

In these interventions, learning is primarily tackled in relation to development. The researchers focus primarily on action, to help workers develop their power to act within their professional milieu, on the organisation, and upon themselves. However, a critical analysis of the developmental research process shows that it generates and requires learning on the part of the workers. First of all, learning refers to an experiential process during cross self-confrontation analysis. Through the interactions with the researchers and with their colleagues in the cross self-confrontation framework, workers experience that their work activity, in its smallest details, can be an object of interest, surprise, and thought. They also experience the forms and value of professional controversy. Subsequently, learning takes place in the cross self-confrontation interviews and in the associated research group, which function as a zone of proximal development, enabling each of the workers to relate differently to his or her own work by seeing things differently – through the eyes of others. Lastly, learning is expected at the organisational level: The genre of dialogue that we call controversy is disseminated through the organisation to transform in depth the organisation of the work.

### 3.3.1 Learning as an Experiential Process

#### 3.3.1.1 Experiencing Work as an Object of Interest and Thought

Learning initially results from in situ collaboration with researchers, in this account. At the very beginning of the research, workers interact with researchers in the workplace, while researchers observe the activity. Through their questions and way of observing, the researchers attempt to place the workers in a position to observe their own activity. In this approach, the sustained presence of researchers in the workplace is not required to be unobtrusive so as to avoid biasing the observations of the work activity but instead functions as a methodological tool to engage workers in observation of their own work activity (Simonet et al. 2011). The researchers' goal is to promote discussions on the precise gestures used to perform tasks. Such engagement in analysis of work activity is initially mediated by researcher's presence, viewpoints, interests, and questions that serve to prepare the ground for the next steps of the intervention. Posing questions generates fewer answers than do expressions of interest and surprise, as the Activity Clinic perspective is:

less about questioning to get a definitive answer than about generating a space to elicit a greater range of questioning among the people under observation. (Simonet et al. 2011, p. 113)

Such serious interest and curiosity about the concrete work activity are further demonstrated at all steps of the intervention process: in the dialogical framework of cross self-confrontation as well as in the meetings of the steering committee.

#### 3.3.1.2 Experiencing Shared History in Professional Controversy

In the research process, workers may also have another significant experience: to encounter the power of professional controversy. In an Activity Clinic, some workers become formal members of the associated research group and begin to discuss their activity in a structured way, as presented above. While selecting work sequences for analysis and during the interviews, they may experience what the researchers are looking for: professional discussions based on comparison of individual ways of performing tasks, with special focus on their variations, which open the door to new questions and reflections. This experience has strong affective consequences. People realise that their problems are shared by their colleagues and that they may reflect together on the difficulties, solutions, and outstanding conflicts in the work activity. The workers may discover that they are not alone in facing the difficulties of their work, that their colleagues share the same problems and questions – sometimes with different answers – and, more profoundly, that the day-to-day professional conflicts they tacitly experience are significant in defining the range of their joint professional actions. They may also discover that all their colleagues face the same dilemmas in the activity. They may also realise that these

dilemmas can be discussed collectively. This emotional experience of sharing the same professional history, conflicts, and questions, which the dialogical framework elicits, is the foundation for revitalising the work collective.

### 3.3.2 *Cross Self-Confrontation as a Zone of Proximal Development*

Analysis of work activity and professional controversy also open new possibilities for thinking and action. During the cross self-confrontation interviews and the subsequent discussions in the associated research group, the workers may come to “see things differently” (Vygotsky 1999) and discover new ways to relate to their own work. Workers indicate what they learn: We can identify this in the cross self-confrontation interviews, during the subsequent meetings with their colleagues and during the later discussions with the steering committee. The main demonstrable learning is the appropriation of a genre of discourse, or more precisely of a genre of dialogue, that we call professional controversy.

#### 3.3.2.1 *Dialogue as (and in) a Space of Potential Development*

Part of our research process is to identify traces of development in the thinking of participants during the cross self-confrontation dialogues. Different methods of analysis are used (Kostulski 2005, 2011a, b; Henry and Boumel Bosson 2008). In particular, we proceed with analyses of interlocutory activities in the dialogical framework (Kostulski 2004, 2005; Kloetzer 2008, 2013; Kostulski and Kloetzer 2014). In some dialogues, we can demonstrate an enhancement of objects of the dialogue, through the development of its instruments and addressees. This dialogue is related to the development of workers’ knowledge about the objects, tools, and addressees of their work activity. Here, dialogue serves as a tool to develop thinking on the work activity, thus enabling a space for potential learning. In the cross self-confrontation framework, dialogue itself constitutes a space of potential development. The detailed and comparative analysis of their work activities workers perform can enrich the conversational exchange, leading them to raise arguments, debate them to understand the point of view of their colleagues, and defend their own ways of performing tasks. The need to argue honestly on conflicting aspects of the work activity may induce functional migrations in the dialogue. For example, the discussion may at one point focus on one tool in the work activity, turning this working tool into an argument in the dialogue and, potentially, into an object of the dialogue (Kloetzer and Henry 2010). Such twofold displacement of the function of an element in the work activity – first from the working scene into the dialogue and then from argument in the dialogue to object of the discourse and of the analysis –

places this element in the foreground and the thinking of the workers in a space of potential development.

#### 3.3.2.2 *The Associated Research Group as a ZPD*

Development within an associated research group is highly social. Workers come to see things differently in the course of exchanges with different partners: the researchers, their colleagues, and members of the steering committee. The associated research group plays a critical role in this process. As highlighted by Holzman in the psychotherapeutic context: “Growth comes from participating in the process of building the groups in which one functions” (Holzman 2009, p. 36). Holzman endorses Vygotsky’s view that “qualitative transformation is a collective accomplishment” (Holzman 2009, p. 29), a “collective form of working together” (Vygotsky 2004, p. 202). Holzman defends a developmental learning model in which playful, joint-engagement with the world in early childhood accounts for rapid, qualitatively transformative learning:

Each instance of learning something is simultaneously an instance of developing as a learner. (Holzman 2009, p. 48).

[Children] learn by doing with others what they do not know how to do, because the group (usually the family) supports such active, creative risk taking and performs with them. Most people have not done this since they were very young, and so they have to relearn how to do it in ways appropriate to being adults. (Holzman 2009, p. 37)

In this view, the zone of proximal development is better seen as a building process and as a collective activity, rather than as a dyadic scaffolding relationship. The associated research group serves as a zone of proximal development in this understanding and as a collective form of working together on the creation of new meanings and environments that enable growth.

### 3.3.3 *Controversy in the Long Run: Learning at the Organisational Level*

Learning finally appears at the organisational level as the goal of our action: an organisational process of integration of controversy on the quality of work as a way to preserve the meaning of the collective activity, the health and engagement of workers, and the relevance of the professional activity for the larger society. As is the case with others conducting developmental research in work organisations, we are confronted by the following intervention and research question: How can we move the problems disclosed by the clinical analysis of work activities to different levels of the organisation and support their transformation? Our answer so far is twofold. First, the analysis process can have a long-lasting impact at the organisational level, if it affects the work organisation. On the first track of our

clinical action, professional controversy is aimed at developing the *transpersonal* dimension of the trade. By transferring the controversy into the steering committee, interweaving the paths of trade unions and management, the results of this first development become the means to achieve another goal: the development of the trade in its *impersonal* dimension within the organisation. Second, the intervention process aims at changing the form of dialogue in the organisation, placing professional controversy on the quality of work at its centre. The clinical intervention we conduct with the workers, through detailed co-analysis of their work activities in the associated research group, is interrelated with the intervention we conduct with the experts, managers, and leaders in the steering committee regarding the results of this co-analysis.

### 3.4 Three Principles for Activity Development

In this last part, we reflect on several principles guiding activity development. Research conducted to date in Activity Clinic interventions has identified three principles for activity development, which we consider in a broad sense as a qualitative transformation implying a new functional organisation, in which affective as well as cognitive elements come into play. These are (1) the appropriation of controversy as a developmental tool by workers and throughout the organisation, (2) the use of affects in a developmental perspective through transferential activity, and (3) the functional development of the work collective.

#### 3.4.1 Appropriation of Controversy as a Developmental Tool

As presented above, the appropriation of controversy as a developmental tool throughout the organisation relies on clinical intervention at two levels of the organisation. These are with workers in the initial observations, cross self-confrontation interviews, and subsequent discussions in the associated research group and also with the steering committee, during informal discussions and formal meetings, in which the dialogical artefacts produced demonstrate the possibilities and value of the genre of dialogue. The co-analysis in cross self-confrontation interviews is a critical step in that process as it mediates the two tracks in this process.

In recent years, a significant body of research has documented the mechanisms by which this appropriation of controversy in cross self-confrontation may occur (Kostulski and Clot 2007; Kostulski and Kloetzer 2014). We can define controversy as:

... a form of discursive activity, more precisely a deliberative and reciprocal activity that deploys opposing arguments in dialogue – arguments with the characteristic of being drawn from generic and historical themes within the profession. (Kostulski 2011b, p. 83)

This controversy between peers provides the opportunity for the worker to initiate, develop, and manifest that dialogical form in *inner dialogue*: an internal controversy involving the self or more specifically between the self and the general forms of the professional milieu (Kostulski and Kloetzer 2014). Our methodological frameworks have the function of vivifying dialogical thinking about work, by making use of the interfunctionality of levels of dialogue and the vital function of social relations in the psychological life of the subjects.

However, controversy also calls on processes of functional migration (Clot 2003; Kostulski and Clot 2007; Kloetzer and Henry 2010): A deliberative dialogical activity carried out with a peer becomes the means of stimulating reflection – in a silent conversation with oneself. Interfunctionality of the levels of dialogue and interfunctionality of the analysis and conversational activities in the dialogical framework, therefore, play a critical role in this experience.

#### 3.4.2 Transferential Activity

The second direction explored in our research over the last few years considers the role of affects in the intervention process. Affects may be defined as “the vital discord that arises between the subject’s habitual expectations – their preconceived organizing mechanisms (whether physical, cognitive, or subjective) – and the unexpected within the current activity” (Clot 2013; Quillerou-Grivot and Clot 2013). During the intervention process, researchers may be influenced by various events and experience their own subjective activity. Their ability to take into account such affects, surprises, and emotions – and to understand them as reactions to the work situation – enables the researchers to both better understand what is happening in the work situation and to make use of these reactions to trigger thinking on the part of the workers and managers. In Vygotskian terms, when cognitive and affective functional systems are in conflict, each system may turn into a resource for the other. The transferential activity, envisaged as an “activity of ‘transport of affects’ across the instances that structure all dimensions of work” (Scheller 2014), is a means for the development of new collective, historically situated forms of action.

#### 3.4.3 Functional Development of the Work Collective

In an Activity Clinic intervention, a process of “functional migration” (Vygotsky 2003) of the work collective takes place between the two tracks of our intervention: During the co-analysis, the workers experience the psychological function of the work collective as a resource for individual activity; in the steering committee, we rely on the dialogical artefacts output from the co-analysis phase to trigger and expand controversy within the organisation. The work collective here has another

function, a social function for renewing collective forms of life within the organisation: "This extension of the scope of activity is substantiated in the dialogues on the activity conflicts of workers, when these conflicts become the subject of discussion among process designers and managers. The designers thus have the experience of being affected by the activity of the workers" (Quillerou-Grivot and Clot 2013).

The intervention process is, therefore, conceived as a transpersonal development of the work collective as a whole. This development has a dual function: a psychological function, helping each worker to personalise his or her own work activity, and a social function, helping the organisation to transform the impersonal dimension of the trade. Thus, the role of the work collective shifts during the intervention process, as it becomes a resource for individuals as well as for transformation of the work organisation. This "functional nomadism" (Vygotski 2003; Clot 2008; Kostulski and Clot 2007) both permits and signals new developments to promote health at work, which is defined as production of new power to act on situations (Clot 2008).

### 3.5 Conclusion

This chapter presents some core concepts in the historical development of the Activity Clinic approach. It has also introduced and discussed the developmental methodology called cross self-confrontation, including the relation between learning and development in the cross self-confrontation framework, and qualifies the cross self-confrontation space as a zone of proximal development (ZPD). The prior section reflects on three principles for activity development identified to date in Activity Clinic research: appropriation of controversy as a developmental tool, transversential activity, and functional development of the work collective. To conclude, we would like to highlight that the relations between learning and development in the cross self-confrontation framework are complex. Although the development of subjects, work situations, work collectives, and work organisations is the focus of our interventions, multidimensional learning precedes development. The learning demonstrated in the framework is not only related to knowledge and skills. It also implies genres of discourse and of dialogue and affective transformations and results in the transfer of the dialogical method to the participants. As stated by Vygotsky, development takes place when subjects begin to use for themselves the forms of action that have primarily been used with them (Vygotsky, 1997, p. 105 [from French trans.]). This transfer from the interpersonal plane to the intrapersonal plane is a critical step to provide subjects' thought processes with new tools for development (Vygotsky 1997). Such dynamics "from outer to inner" (Vygotsky 1997, p. 134) are also central to lifelong learning and development processes. The collective happens to be "the source, the field nourishing the development of higher functions" – also in adulthood (Vygotsky 1997, p. 167). In our research to date, subjective, collective, and

organisational developments are mediated by the development of the functions of work collectives. Following Vygotsky, we acknowledge that collective forms not only constitute external constraints for individuals but inform them internally, thus enabling the full development of the individuals: The collective is truly active within the individual.

### References

- Bourmel-Bosson, M. (2010). Analyse du travail et revalorisation du collectif. *Clinique du travail*, 225–236.
- Clot, Y. (1999). *La fonction psychologique du travail*. Paris: Presses universitaires de France.
- Clot, Y. (2003). La conscience comme liaison. In L. S. Vygotsky (Ed.), *Conscience, inconscient, é motions*. Paris: La Dispute.
- Clot, Y. (2008). *Travail et pouvoir d'agir*. Paris: Presses universitaires de France.
- Clot, Y. (2009). Clinic of activity: The dialogue as instrument. In A. Sannino, H. Daniels, & K. Gutierrez (Eds.), *Learning and expanding with activity theory*. Cambridge: Cambridge University Press.
- Clot, Y. (2013). L'inter-fonctionnalité des affects, des émotions et des sentiments: pouvoir d'être affecté et pouvoir d'agir. In *Campinus conference*, Brazil, February 2013.
- Clot, Y., Faïta, D., Fernandez, G., & Scheller, L. (2000). Les entretiens en auto-confrontation croisée: une méthode en clinique de l'activité. *Pistes*, 2(1), 1–7. <http://pistes.revues.org/3833>
- Engeström, Y. (1987). *Learning by expanding: An activity-theoretical approach to developmental research*. Helsinki: Orienta-Konsultit.
- Henry, M., & Bourmel-Bosson, M. (2008). La vie des mots en analyse du travail. *Activités*, 5(2), 25–38. <http://www.activites.org/v5n2/v5n2.pdf>
- Holzman, L. (2009). *Vygotsky at work and play*. Routledge: Taylor and Francis.
- Kloetzer, L. (2008). *Analyse de l'homélie de la messe dominicale: langage et conflits de métier dans l'activité des prêtres. La part de Dieu, la part de l'homme*. Doctoral thesis in Psychology. Paris: CNAM.
- Kloetzer, L. (2013). Development of professional concepts through work analysis: Tech diving under the loupe of activity clinic. *Mind, Culture, and Activity*, 20(4), 318–337.
- Kloetzer, L., & Henry, M. (2010). Quand les instruments de métier deviennent objets de discours: une condition de l'analyse du travail en autoconfrontation croisée? *Activités*, 7(2), 44–63. <http://www.activites.org/v7n2/Kloetzer.pdf>
- Kloetzer, L., & Seppänen, L. (2014). Dialogue and interactions as the "nursery for change". *Outlines: Critical Practice Studies*, 15(2), 1–4.
- Kloetzer, L., Quillerou-Grivot, E., & Simonet, P. (2014). Engaging workers in WRMSD prevention: Two Interdisciplinary case studies in an Activity Clinic. *Work: A Journal of Prevention, Assessment and Rehabilitation*.
- Kostulski, K. (2004). Développement de la pensée et du rapport à l'autre dans une interlocution: «est-ce que c'est un endroit pour poser un paquet de contre-raïls?». *Cahiers de linguistique française*, 26, 113–131.
- Kostulski, K. (2005). Activité conversationnelle et activité d'analyse: l'interlocution en situation de co-analyse de l'activité. In L. Filliettaz & J.-P. Bronckart (Eds.), *L'analyse des actions et des discours en situation de travail. Concepts, méthodes et applications* (pp. 73–108). Peeters: Louvain-la-Neuve.
- Kostulski, K. (2011a). Development of activity through reflection: The case of the public prosecutor's lapsus linguae. In D. Nicolini & O. Eikehard (Eds.), *Changing practices through reflection. Journal of Organisation and Change Management*, 24(2), 191–211.

- Kosulski, K. (2011b). Formes et fonctions psychologiques des réalisations langagières : vers une Psychologie concrète du langage. Thèse d'Habilitation à Diriger des Recherches. Paris: Université Paris 8.
- Kosulski, K., & Clot, Y. (2007). Interaction et migration fonctionnelle: un développement en autoconfrontation croisée. *Psychologie de l'interaction*, 23/24, 73–108.
- Kosulski, K., & Kloetzer, L. (2014). Controversy as a developmental tool in Cross Self-Confrontation Analysis. *Outlines: Journal of Critical Practice Studies*, 15(2), 54–73.
- Leontiev, A. (1975). *Activité, conscience, personnalité*. Moscou: Editions du Progrès.
- Léplat, J., & Hoc, J.-M. (1983). Tâche et activité dans l'analyse psychologique des situations. *Cahiers de psychologie cognitive*, 3(1), 49–63.
- Oddone, I., Re, A., & Briante, G. (1977/1981). *Redécouvrir l'expérience ouvrière. Vers une autre psychologie du travail ?* Paris: Editions sociales.
- Quillerou-Ghvor, E. (2011). *Fonction psychologique et sociale du collectif pour la santé au travail: le cas d'opérateurs de montage automobile*. Doctoral thesis in psychology. Paris: CNAM.
- Quillerou-Ghvor, E., & Clot, Y. (2013). Trois conditions pour une clinique de l'activité en psychologie du travail: le cas d'une intervention dans une entreprise de logistique automobile. *Activites*, 10(2), 229–248. <http://www.activites.org/v10n2/v10n2.pdf>
- Scheller, L. (2014). Activity clinic and affects in workplace conflicts: Transformation through transferential activity. *Outlines: Critical Practice Studies*, 15(2), 74–92.
- Simonet, P., Caroly, S., & Clot, Y. (2011). Méthodes d'observation de l'activité de travail et prévention durable des TMS: Action et discussion interdisciplinaire entre clinique de l'activité et ergonomie. *Activités*, 8(1), 104–128. <http://www.activites.org/v8n1/v8n1.pdf>
- Trentin, B. (2012). *La cité du travail, le fordisme et la gauche*. Paris: Fayard.
- Vygotsky, L. S. (1934/1997). *Pensée et Langage*. Paris: La Dispute.
- Vygotsky, L. S. (1999). Consciousness as a problem in the psychology of behaviour. (N. Veresov, Trad). In N. Veresov (Ed.), *Undiscovered Vygotsky* (pp. 256–281). Frankfurt am Main: Peter Lang.
- Vygotsky, L. S. (2003). *Conscience, inconscient, émotions*. Paris: La Dispute.
- Vygotsky, L. S. (2004). The collective as a factor in the development of the abnormal child. In R. W. Rieber & D. K. Robinson (Eds.), *The essential Vygotsky* (pp. 201–219). New York: Kluwer Academic/Plenum Publishing.

## Chapter 4

# Learning by Participating: A Theoretical Configuration Applied to French Cooperative Day Care Centres

Gilles Brougère

This chapter connects two areas, that of early childhood education (particularly for children under the age of three) and adult education in a framework where there is no explicit educational objective. In these two areas, those of preschool education and what we can call, for lack of a better term, informal learning or rather learning in informal situations, I have undertaken separate studies without necessarily always connecting them. In both cases, for the lack of adequate tools within the theories developed in the Francophone world, I have drawn heavily on English-speaking authors, by importing their concepts and elements of their theory while at the same time reconfiguring them, associating them in a specific manner, applying them to objects to which they had not been applied, developing circulation between English and French, but also by proposing and encouraging the French translation of English texts that seemed to be important to me.

## 4.1 Informal Learning and Early Childhood Care and Education

### 4.1.1 Learning in Informal Situations

On multiple occasions, I have tried to explore learning said to be 'informal', that which is not linked to the outcome of educational programmes whether they be in schools or linked to adult education (Brougère and Bezille 2007; Brougère 2007;

---

This chapter was translated from the French by Claudia Ratti.

G. Brougère (✉)  
 EXPERICE, University Paris 13 - Sorbonne Paris Cité, Paris, France  
 e-mail: brougere@univ-paris13.fr

© Springer International Publishing Switzerland 2015  
 L. Filijietaz, S. Billert (eds.), *Francophone Perspectives of Learning Through Work*,  
 Professional and Practice-based Learning 12, DOI 10.1007/978-3-319-18669-6\_4