A Cultural Psychological Reflection on Collaborative Research

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Conference Essay:

ESF Exploratory Workshop on Collaborative Case Studies for a European Cultural Psychology. Veysonnaz, Switzerland, 8-10 September 2006, organised by Tania Zittoun (Université de Lausanne), Flora Cornish (Glasgow Caledonian University) and Alex Gillespie (University of Stirling)

Abstract: This essay reports on discussions that took place at a workshop on collaborative research in European cultural psychology. The production of knowledge in social interaction is, for sociocultural psychologists, something that is observed and theorised as it is undertaken by research participants. Researchers less frequently reflect on the social relations through which their own scientific knowledge is produced. The workshop focused on five empirical collaborative research projects and aimed to explore the intellectual significance of the social relations of collaboration. In the course of the workshop, we developed a cultural psychological conceptualisation of collaboration as an institutionally situated interaction between divergent perspectives with a (partially) shared goal. This perspective leads us to consider the value of divergent perspectives in instigating reflexivity and novelty. We present here a framework of dimensions for describing different forms of scientific collaboration which may be useful for researchers planning future collaborations.

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Key words: collaboration, reflexivity, research practice, cultural psychology
1. Background: The Context of Collaborative Research Practices

The image of the lone researcher in an ivory tower, single-mindedly exercising his or her individual genius seems to bear little relation to the social practices of research today, though perhaps it never had much validity. Contemporary research projects are often collaborative endeavours, bringing together researchers of different disciplines or from different countries, with different theoretical and methodological expertise; or bringing together researchers and the potential "users" of the research, such as policy-makers, practitioners, or the public. These social practices of knowledge production are interesting for theoretical and methodological reasons; reflecting on these issues gains particular importance in an institutional climate which encourages multi-partner research collaborations. [1]

Current policies for the funding of research call for large-scale collaborations, privileging international and inter-disciplinary research projects. Such policies are based on the idea of having a "critical mass" of researchers. The principle is that only large-scale projects will make a perceptible difference, while small-scale ones are unlikely to have any impact. Thus, there is a "European Research Area" (EUROPEAN COMMUNITIES, 2002) which is intended to bring coherence to the research activities conducted across the European Union, and to provide a mass of researchers that can compete with the United States as a producer of economically valuable innovations. And there are the European Commission's Framework Programmes, which are set up to fund major collaborative projects, not to nurture solitary genius. Collaborations between natural scientists, social scientists and research users are called for to ensure that these research programmes produce evidence-based products which will advance economic, social, or medical interests. An audit culture requires deliverable outputs which can be clearly linked to the inputs of funding (STRATHERN, 2000). The idea that science is an evolutionary collective development, with ideas being taken up and developed, sometimes evolving into a socially useful product, sometimes not, is too hit-and-miss for the audit culture. [2]

We outline this context, not to suggest that this impetus is necessarily mistaken, but to suggest that, if scientific collaborations are a fact of life, it is imperative for scientists and especially social scientists to reflect on the intellectual significance of collaborations. What does our research stand to gain from collaboration? What impact do the social relations of collaboration have on the knowledge which we produce? [3]

Such reflections on the practical social relations through which our knowledge is produced are not typically found among the contents of methodological texts, or
in the writing-up of our findings (BERGMAN, 2003; MEY, NIEHOFF, & FAUX, 2003). Research methods are usually written of as instruments or techniques to be applied by a lone, inter-changeable researcher. But methods are used, and interpretations are produced, within social and institutional settings that have as much impact on the knowledge produced as the methodologies and theories employed. With this in mind, the authors of this essay convened a workshop to reflect on the practices of scientific collaborations from the theoretical point of view of cultural psychology. [4]

The topic of collaboration has received attention from researchers interested in promoting successful collaboration in organisations and those interested in social studies of science. For example, corporations and institutions are aware that innovation can be stimulated by inter-organisational collaborations (GRAY, 1985), and the question of how such collaboration can be successfully achieved, at all levels, has led to a surge of research interest in technologies for collaboration (BOLAND & TENKASI, 1995). Information technology has moved the means of collaboration from letters and notice boards to collaborative software, virtual message boards and multi-author documents (ROTH, 2000). Even within the research process, which is our domain of focus, there exists a long standing tradition of collaboration. For example, action researchers promote collaboration between researchers and participants as an ethical, self-reflective, and genuinely participatory methodology (HERON & REASON, 2001). Sociologists of science have patiently observed how scientists produce knowledge through social interaction (LATOUR, 1987; MONDADA, 2005). [5]

While research on collaboration is highly elaborated within each of these domains, we believe that sociocultural psychology can make a novel contribution to understanding the implications of collaboration for knowledge production. Sociocultural psychology has rich theories of how people interact with each other and with objects, and in particular, how novelty and self-reflection can emerge from these relations. The workshop was designed to bring together researchers who usually study other people interacting and producing knowledge, and asked the participants to use their theoretical frameworks to reflect upon their own processes of knowledge construction through collaboration. From a methodological point of view, collaborative research offers a distinctive angle on current concerns about “quality” in qualitative research. As we shall elaborate further below, introducing a collaborative component to a piece of research can be a way of promoting the highly prized “reflexivity” about our methodological choices (SEALE, 1999). Accordingly, the aim of the workshop was to examine what sociocultural psychology can contribute to understanding collaborative research practices, especially amongst sociocultural psychologists. [6]

Thus, with the background of an institutional context that privileges collaborative research, a set of theoretical tools for the study of collaboration, and a methodological interest in the value of collaboration for research quality, the authors convened a workshop designed to stimulate theoretically-informed, methodologically-useful reflections on collaborative processes. [7]
The aims of the workshop were:

- to develop theoretical and methodological tools, based on sociocultural psychology, for planning and reflecting on collaborative social science research,
- to provide a context for participants to reflect on their working practices of collaboration, to become more "reflective practitioners",
- to contribute to the strengthening of cultural psychology in Europe,
- to build capacity for future collaborative research. [8]

In the workshop discussions, there was a significant sense of progress, and it emerged that it would be useful to capture the discussions and distinctions that arose. In this Essay, we present a conceptual perspective on the significance of collaboration, and a set of distinctions and propositions concerning collaborations, informed by sociocultural psychology, which we developed in the workshop. After an outline of the content of the workshop in Section 2, Section 3 will elaborate the characteristics of a particularly sociocultural conceptualisation of collaboration. Sections 4 and 5 then examine some of the consequences of this conceptualisation for the reflective design of research collaborations. [9]

2. A Workshop for Reflective Practitioners

Reflecting on their collaborative research practices is not a routine activity for researchers. The intention of the workshop was not to have a set of polished presentations of research findings upon the chosen topic, but rather to create a space in which the work of reflection could be done collectively. As such, the workshop was an opportunity for researchers to become more "reflective practitioners" on the social dimension of the art of research, and was designed to pursue this agenda. It was held over an intensive two-and-one-half days in a secluded mountain hotel in the Swiss Alps. Leaving behind the usual daily interruptions and ever-present deadlines at our desks, to work, eat, drink coffee and sleep in a hotel with 21 other Cultural Psychology researchers, made for intense conversation and a satisfying sense of learning. If one is to reflect, one needs something concrete to reflect upon, and so, to provide case material to think with, the workshop was structured around five collaborative projects, each allocated half a day. Two representatives gave presentations on each project, and were followed by two discussants. To take advantage of the opportunity to think collaboratively, almost half of the time for the workshop was devoted to discussion and questions. [10]

We outline here briefly the presentations of the five projects, before elaborating on the general discussion and learning that took place. [11]

2.1 "The SLOAN Project on family interactions"

This is an international collaboration between the University of California at Los Angeles (USA), the University of Linköping (Sweden), and the University of La
Sapienza (Italy), on the lives of middle class working families, presented at the workshop by Karin ARONSSON from Sweden and by Francesco ARCIDIACONO and Clotilde PONTECORVO from Italy. Video data on everyday family interaction are being collected in each country and analysed by a research team in that country. The researchers share a conversation-analytic theoretical approach to the data. Regarding their collaborative practices, the presenters described doing analysis collectively within their national research teams, where they jointly interpret particular segments of video. They explained that the impetus to pursue a particular topic is usually developed within a national research team, with the international collaborators taking up that topic if it is also of interest to them. In such cases, the researchers can use contrasts between the datasets to help with interpretation. This group also circulates draft papers among the international group of collaborators for comment. [12]

2.2 "The Change Laboratory"

The Change Laboratory is an approach to research-intervention in organisational settings developed at the University of Helsinki, which has engaged in over 60 interventions over 20 years (ENGESTRÖM, forthcoming). The Change Laboratory entails a collaboration between researcher-interventionists and members of an organisation (such as a school, a hospital, a bank) when the organisation has identified a problem in its work. Yrjö ENGESTRÖM described how, in this collaboration, researchers present the organisation’s workers with examples of their own activity and theoretical tools drawn from cultural historical activity theory, to jointly construct an understanding of the source of the organisational problem. A further form of collaboration, namely collaboration between different theoretical perspectives, was presented to the workshop, with Annalisa SANNINO presenting a discursive interpretation of the events of the Change Laboratory, to complement ENGESTRÖM’s cultural historical activity-theoretical interpretation. The value of collaborating across multiple theoretical and practical points of view, held together within a shared paradigmatic frame, was highlighted in this project. [13]

2.3 "The DUNES Project"

DUNES is a multi-country collaboration between cultural psychologists and software designers, with the aim of producing educational software to promote argumentation skills among school students. Nathalie MULLER MIRZA and Valérie TARTAS described the difficult work of negotiating a shared understanding of the way of working and the tasks, when collaborators come from different professional cultures (educational researchers based in universities and software designers in private companies), highlighting the importance of making explicit the goals and division of responsibility. They also pointed to the creative value of having conflicting perspectives within a project. [14]
2.4 "Transition in Eastern Europe"

This project investigated issues of trust, responsibility and democracy in Eastern and Western Europe, following the break-up of the Soviet Union. It brought together an international team of researchers working within a shared theoretical frame of dialogicality and social representations (MARKOVÁ, 2003). In presenting the project, Ivana MARKOVÁ and Jana PLICHTOVÁ highlighted the value of international data collection from a sociocultural point of view. They explained that the purpose of multi-country data is not to compare countries on variables that are supposed to mean the same thing in each country (as in cross-cultural psychology), but to make evident the historical, social, and ideological constitution of psychological phenomena. In this study, focus group data were considered as the product of a collaboration between participants. Ivana MARKOVÁ pointed out that this collaborative aspect of focus groups is crucial, since participants are engaged in two activities: talking to each other while simultaneously talking about the topic. [15]

2.5 "World War II Diaries"

The project on World War II Diaries involves interpretation of a shared dataset by three researchers, each with a different conceptual focus. The data come from a set of publicly available diaries written by Britons during World War II and held at the Mass Observation Archive at the University of Sussex. Tania ZITTOUN described the researchers' collaborative process and emphasised the value of collaboration in producing richer, more multi-voiced, and more daring interpretations. [16]

2.6 Discussions and synthesis

The presentations of these five projects stimulated wide-ranging discussions. To capture what was learned about collaborative research through these discussions, the organisers took detailed notes throughout the workshop, and gave participants a task of noting down what they had learnt from the workshop and how the workshop would change the way they carried out their own collaborative research. These notes form the basis of our remaining discussion of what was learned from the workshop. [17]

3. Conceptualising Collaboration

From the diversity of projects represented at the workshop we sought to develop a common conceptual framework to capture the core features of research collaborations from the perspective of sociocultural psychology. A core theme to emerge was the tension between similarity and difference in the perspectives of the participants engaged in a collaborative project. We came to consider collaboration as an institutionally situated interaction between divergent perspectives with a (partially) shared goal. A research collaboration can be defined as one in which divergent perspectives are brought together to address a shared question or object in the interest of producing knowledge. These
divergences might be across researcher-practitioner divides (as in the Change Laboratory), across countries (as in the SLOAN and Transition in Europe Projects), across theoretical perspectives (as in the World War II Diaries Project), or across disciplines (as in the DUNES Project). Many more axes of difference could be identified, but most important in this respect was the presence of qualitatively different perspectives upon the object of knowledge. Thus, collaboration is not simply an extra pair of hands to implement the lead researcher's ideas. The term collaboration does not describe the role of the research assistant who is instructed to follow set procedures to determine inter-rater reliability or the technician who is asked to produce a clearly-defined tool. For instance, when discussing the respective roles of senior and junior researchers within the Italian research team for the SLOAN Project, Clotilde PONTECORVO and Francesco ARCIDIACONO described efforts to make use of junior researchers' perspectives (as opposed to simply making use of their ability to operate a video camera or transcribe conversations). One of their means of doing this is an informal rule for team meetings that when discussing the data, it is not only the professor who offers interpretations, but all present should make a contribution. [18]

From this perspective on collaboration, workshop participants were interested in the contradictions, conflicts, and complementarities between different perspectives, and the critical awareness that these can yield, rather than the effort to demonstrate accuracy or validity through the involvement of a second researcher (DARGENTAS, 2006). The Change Laboratory, for instance, is a collaboration between researchers and various groups of workers and managers in organisations. This combination of perspectives is not intended to converge on the most valid interpretation of the organisation, but to stimulate new solutions to organisational problems. The theoretical apparatus and outsider status of the researchers bring a new perspective to bear on the working practices in the organisation, which can trigger reflection and the development of innovative solutions. Furthermore, alternative interpretations of Change Laboratory data offered in the workshop by Annalisa SANNINO and Alex GILLESPIE did not refute or confirm the original analysis presented by Yrjö ENGESTRÖM. Rather, they identified new aspects of the phenomena under study, and instigated critical reflection on the limitations of the particular theoretical tools of the original analysis. A contrasting example is provided by the project on Transition in Eastern Europe. Here, the participants were all researchers, but they brought a variety of perspectives, thanks to their different historical experiences in their different countries. Ivana MARKOVÁ and Jana PLICHTOVÁ highlighted the value of the different personal sociocultural experiences within the multi-national research team. As members of the societies under investigation, the multi-lingual researchers' common sense and linguistic understanding helped the team to make sense of their complex research material on different meanings of democracy in different countries (MARKOVÁ & PLICHTOVÁ, forthcoming). From this perspective, the value of international studies is not to subsume the research of one country into another's framework, but to apprehend the diversity of approaches in different countries (MOSCOVICI & MARKOVÁ, 2006). [19]
While divergences are the lifeblood of a collaboration, an interaction cannot proceed without partners sharing some basis for their work together. This usually includes negotiating roles, rules of functioning, and the nature of the task to be undertaken (GROSSEN & PERRET-CLERMONT, 1994; HEATH, 2004). In their presentation of the DUNES Project, Nathalie MULLER MIRZA and Valérie TARTAS highlighted the importance and the challenges of negotiating a shared frame, particularly when there are major differences in the assumptions, constraints and expectations of those collaborating. In this collaboration between educational researchers and companies which design and market computer software, during the early phases of the project, it emerged that the researchers and the software designers had very different understandings of what education is and how it might be supported by software. Whereas the software designers considered education as a problem of information management and control, the educational researchers expected the software to flexibly support learners' active and questioning engagement with the material. Extensive negotiations were needed in order to construct a shared understanding of the frame for the team's work together. Put more generally, there needs to be a (partially) shared understanding of the objective and the terms of reference of the collaboration (ROMMETVEIT, 1974), otherwise each partner will be puzzled by the apparently inappropriate contributions of the other. It helps if each partner understands the constraints and assumptions that the other persons bring with them. As MULLER MIRZA and TARTAS described, the definition of a sufficiently shared understanding of the nature, the modality and the aims of a collaborative project is a time consuming process. This work is worth the effort as such negotiations tend to improve the work carried out in the collaboration (GROSSEN, 1996; GROSSEN & BACHMAN, 2000). [20]

Finally, research collaborations always take place within a set of institutional constraints. Funding agencies, researchers' employers, whether universities or private companies, research teams, journals, research sites and participants all put in place some constraints on a collaboration. In his discussion of the SLOAN Project, Charis PSALTIS questioned how the interests of the charitable foundation which funded the study had shaped the research questions and the collaboration itself. Pointing to the SLOAN Foundation's stated interest in the promotion of flexible working in American families for business reasons, he questioned the extent of academic freedom when research funding is premised upon a particular set of values (PSALTIS, forthcoming). Researchers' own institutions also set up constraints, and when collaborating researchers belong to different institutions, balancing the simultaneous and sometimes competing demands of each institution can be a challenge. A simple, humorous example was provided by a representative of one of the large international projects who spoke of the difficulty of simply finding a week when everybody is at work in projects that cross countries and continents. Representatives of the DUNES Project encountered institutional challenges in their efforts to work with teachers as "end-users". They found that the relationship between university researchers and members of the teaching profession was very different in different countries. While some partners expected the teachers to be on hand to pilot the software as instructed by the research team, others expected to involve the teachers more
actively in the research process. The general situation to which we are pointing here is that each person in a collaboration brings a different set of constraints and expectations, and the various institutional structures constraining each participant have to be at least minimally compatible, in order for the collaboration to function. [21]

Some of the participants at the workshop expressed concern that researchers were being pressed to collaborate for the sake of collaborating, due to funding agency incentive structures. They stressed that a collaboration should be undertaken primarily for good substantive reasons. Funding agencies certainly recognise the constitutive power of their criteria. For instance, one of the European Science Foundation's five core values is "Responsiveness" (EUROPEAN SCIENCE FOUNDATION, n.d.). This means that, rather than narrowly defining the intellectual agenda, the ESF wishes to allow academics to take the intellectual leadership, while ESF will be "responsive" to that leadership, simply offering support to projects that would not otherwise have been possible. This is certainly a value that is welcomed by academics, but nonetheless, funding agencies must have criteria, and those criteria will be constitutive of the research proposals produced. For instance, if the ESF position is that multi-national collaborations are the kinds of projects that would not be possible without their funding, that will create an extra-scientific incentive for multi-national projects. [22]

4. Why Collaborate? The Significance of Divergent Perspectives

With this conceptual focus on divergences of perspective as the core of a collaboration, to understand the impact of collaboration on the production of knowledge, we can now ask: What do divergences of perspective do for the knowledge that we produce? Or what do researchers stand to gain from confronting divergent perspectives? The workshop discussions focused on two main scientific aims that collaborative research may advance: reflexivity and novelty. [23]

4.1 Reflexivity

Reflexivity is highly-prized in qualitative social research (MRUCK, ROTH & BREUER, 2002; SEALE, 1999; WILKINSON & KITZINGER, 1996). From a developmental psychology perspective, reflection is the basis for the emergence of a more complex, more differentiated, and possibly generalised understanding (VALSINER, 2007). From the theoretical starting-point that our knowledge is socially constituted, as researchers we are called upon to be reflective about how our theoretical, methodological and practical choices, our social positions and personae, have shaped the interpretations we produce. Despite repeated exhortations to qualitative researchers to be reflective, there exist few concrete suggestions for activities that would help one to do this difficult work of reflection (BOLAM, GLEESON, & MURPHY, 2003). Collaborative research contains one possible answer, following the insight that when we reflect on our own assumptions, we do so, not from an abstract disinterested god's eye view, but from another interested embodied perspective (NIETZSCHE, 1887; GILLESPIE, 2007). Researchers in the three-country SLOAN Project described how the
presence of researchers from other countries could problematise everyday practices represented in their data, causing them to reflect on their own culture’s practices in ways that they would not otherwise have done. As with the research on transition in Eastern Europe, the culturally-embedded common sense perspectives (not only the professional perspectives) of the researchers were a resource for the critical questioning of the data, which eventually led to the most insightful interpretations and conclusions. Reflecting on their knowledge construction process, the researchers from the World War II Diaries Project described taking on the role of “devil's advocate” in relation to each others' interpretations. Thus, the presence of a collaborator's different perspective can facilitate reflection on one's own perspective, as it is problematised by the contrast with that of the other. [24]

With this insight, we can suggest that collaborations can be constructed to facilitate critical reflection. Collaborators can be chosen to differ on the dimensions upon which one wishes to reflect. For instance, if one collaborates across disciplines, then it is likely that one will be led to reflect upon one's paradigmatic assumptions. Alternatively, collaborating with somebody who has expertise doing empirical research in a different area on different phenomena may facilitate reflection on the peculiarities of one's phenomenon of study. [25]

4.2 Novelty

Contrasting views were expressed in the workshop about the possible relationship between collaboration and novelty. On the one hand, the confrontation of conflicting perspectives can produce novel questions and new solutions to problems. The preoccupations, questions, and problems of a particular discipline, a theoretical approach, or a field of practice can be reframed anew through a different lens. We have already outlined above the value of different perspectives for stimulating novelty in the case of the Change Laboratory and the study on democracy in Europe. MEAD’s (1932) concept of emergence is applicable here. Novelty can emerge because the knowledge of one participant gains a new relevancy when viewed from the perspective of the other participant. [26]

However there was a concern not to romanticise collaboration, and to remember the value of sustained individual work. Much important work is done by the individual researcher sitting at a computer. Clotide PONTECORVO pointed out that the most difficult part of the work (writing a book, or at least drafting the sections of the book) has to be done alone. She suggested that at the stage that one's ideas need clarification, working together with others can be valuable, as the communication process helps to clarify and refine the ideas. But that once one has a clear idea, careful solitary work is needed to consistently implement that idea. Following our claim about the value of divergent perspectives, if the individual collaborators have not developed a strong individual perspective, they will not bring that "added value" of divergence to a collaboration. Hence, periods of solitary work to cultivate strong individual perspectives are equally important as periods of joint working. [27]
The more critical point of view that collaboration can in fact inhibit creativity and novelty was an important topic of discussion. Social psychological processes within the group of collaborators, such as a "diffusion of responsibility" or "groupthink" might occur, so that the collective output is less good than individuals would have ensured (Latané & Darley, 1970; Janis, 1972). Working together can also lead to conservatism, where what is produced is only the "lowest common denominator", which all can agree on but which does not say anything very significant. Aaro Toomela argued that genuine creativity is fundamentally an individual, not a collective act. The most significant advances in science, he argued, do not take place when the objectives and intended outcomes are clearly defined in advance, but entail the creation of new, as yet unknown, questions, new objectives and new perspectives (Toomela, forthcoming). Thus, collaboration may be good for elaborating knowledge within a given paradigm, but the constraints of communicating using existing concepts with one's collaborators might inhibit the creation of something genuinely new. [28]

5. Dimensions for Describing a Collaboration

It is worth distinguishing among the wide variety of social relations that can be termed collaboration, as different forms of collaboration have different implications for the knowledge production process. During the workshop discussions, five main dimensions were used to describe different forms of collaboration:

- similar basic assumptions vs. different basic assumptions,
- a division of labour vs. overlap of tasks,
- familiarity between the collaborators vs. a lack of familiarity,
- centralised control vs. distributed control,
- shared goals vs. divergent goals. [29]

There are undoubtedly many other ways of characterising collaborations. These dimensions are simply the ones that were afforded the most discussion at this workshop from the point of view of a set of sociocultural psychology researchers. The dimensions here are descriptive rather than prescriptive. Neither end of any of these dimensions is the "right" one, but the various locations on the dimensions have different implications for how the collaboration might be designed in order to take advantage of the divergent voices in a collaboration. The first two of these dimensions were the ones to gain most detailed attention in the workshop, and thus we have chosen to discuss these two in more detail. [30]

5.1 Similar basic assumptions vs. different basic assumptions

Collaborating with a colleague who shares one's theoretical and methodological presuppositions is a very different experience from collaborating with somebody with contrasting assumptions (such as inter-disciplinary collaboration). Where the parties share assumptions, their work together is likely to be made easy by much implicit self-regulation in line with those assumptions. Where the parties have
very different assumptions, they may need to work harder on making their assumptions and expectations explicit so that each understands why the other contributes as they do. In this case, the collaboration may need additional time and flexibility to develop a shared basis for working together, in order to be able to learn from each others' different perspectives. There will always be differences between the parties' specific goals and interests in the collaboration. But for meaningful interaction to take place between them, there also needs to be some shared understanding of the broad purpose of their collaboration. Regarding the development of knowledge, a group of likeminded colleagues are likely to develop knowledge within their paradigm, while very different colleagues may stimulate reflection on each others' paradigms. Such paradigmatic reflection can be paralysing as much as it can be enlightening. [31]

For instance, the SLOAN Project researchers began from a shared theoretical approach and shared expectations about how academic collaborations function. Thus, they easily understood each others' intellectual aims and expectations, and could provide each other with useful comments on draft papers aimed at their specific discipline. By contrast, the DUNES Project was a collaboration between two very different working cultures which required extensive negotiation of the terms of the collaboration, and entailed challenging reflections about the expectations of each side. While the partners are unlikely to be able to contribute to each other's discipline-specific contributions (such as software or learning sciences articles), their joint product was an evidence-based software tool that could be widely used by school students. [32]

5.2 Division of labour vs. overlap of tasks

In some collaborations, the various tasks to be done are strictly divided between the partners, with each person carrying out distinct activities, while in others, participants all take part in the important tasks. The strong division of labour model tends to be associated with more centralised control, as in a traditional research team with a principal investigator responsible for the intellectual rigour of the research, but distant from the practicalities of data collection and analysis, and research assistants who implement the research with little opportunity to have an impact on the intellectual frame of the research. This model is an efficient way to complete a well-defined task. If such a project seeks to make use of the divergent perspectives within it, then good communication processes will be essential. [33]

Most of the projects at the workshop seemed to encourage some overlap on the important tasks of the research, such as data collection, interpretation of the data and writing. At the Italian centre of the SLOAN Project, the director of the research undertakes some of the data collection, the research team collectively discusses interpretations of segments of text, and several researchers contribute to the write-up. By having overlapping tasks, the various members of the research team have shared objects about which they can communicate, debate, and exchange perspectives. Within a strict division of labour, by contrast, the object of each person's activity is not shared. Communication is restricted to each
party providing finished outputs for the next person in the chain, and their different perspectives do not enter into debate. On the other hand, the division of labour and of expertise is the source of the valued different perspectives. The overlap in tasks should not be so complete as to erase the differences in perspectives. We return again to the tension between similarity and difference in the collaborative relationship. [34]

6. Evaluation and Future Directions

In writing this essay we have sought to capture initial reflections by a group of sociocultural psychologists on one of the social processes through which scientific knowledge is produced. The approach that we have taken here has been informed by socio-cultural psychology. We emphasise the value of conflicts and differences, and the partiality of the mutual understanding achieved (MARKOVÁ, 2003; PERRET-CLERMONT, PERRET & BELL, 1991; ROMMET-VEIT, 1974). The analysis we have presented suggests that the value of collaboration comes from the diversity of perspectives, and that collaborations can be designed to allow those diverse perspectives to be brought into creative argument about the object of investigation. This is a particularly Meadian and Vygotskian idea in that it links the intra-psychological dynamics of reflection to the inter-psychological, or social psychological, dynamics of collaboration. This perspective could be used to inform empirical studies of the practice of collaborative social science. This theoretical orientation would focus attention on the different perspectives, how they are co-ordinated about an object and how they are constrained by their institutional location. The studies would examine how the collaborative process shapes the content of the knowledge produced, and how the substantive topic under investigation shapes the form of the collaboration. One form that such a study could take would be observational. By observing the development of a research collaboration, one could examine the impact of the various "dimensions" of collaboration. Such a study could seek to identify the social and cognitive processes through which novelty or reflectivity emerge or are suppressed, or how research teams avoid the conservative effects of social influence, and take advantage of its creative effects. An alternative approach would be genealogical. To trace the impact of the social relations of collaboration, a study might begin with the core contribution to knowledge claimed for a piece of research and then unravel the processes through which that idea came about. Such a study would look for traces of the social process of collaboration in the final product. [35]

The sociocultural perspective that we have outlined is of course only one of the many possible theoretical perspectives that could be brought to bear upon the issue of how collaborative research shapes knowledge production. From alternative perspectives, other researchers might ask what practical and epistemological issues are raised by taking an ethnomethodological, a cognitive, or an actor network theory approach to the phenomenon of collaboration. [36]

The very tentativeness of our discussion brings us to one of the particular strengths of the workshop. Our discussion is preliminary and tentative because
the issues which we addressed were not well-worn familiar issues. Participants had to think on their feet, and work hard within the workshop, to conceptualise the collaborative practices in which they had been involved. The genre of a workshop for "reflective practitioners" is an exciting way of implementing collaborative development among peers. [37]

Acknowledgements

The workshop was made possible thanks to a grant from the European Science Foundation. We are grateful for the input of Professor Dalina DUMITRESCU who represented the ESF at the workshop, and Isabelle PROBST who helped it all to run smoothly. Most especially, we thank all of the participants for their enthusiastic critical engagement in the workshop. What we present here is an outcome of their energetic and thoughtful contributions. Thanks to Francesco ARCIDIACONO, Karin ARONSSON, Aleksandar BAUCAL, Gerard DUVEEN, Yrjö ENGESTRÖM, Uwe FLICK, Michèle GROSSEN, Pernille HVIDI, Ivana MARKOVÁ, Nathalie MULLER MIRZA, Anne-Nelly PERRET-CLERMONT, Jana PLICHTOVÁ, Clotilde PONTECORVO, Charis PSALTIS, Annalisa SANNINO, Valérie TARTAS, and Aaro TOOMELA.

References


Toomela, Aaro (forthcoming). Sometimes one is more than two: when collaboration inhibits knowledge construction. Integrative Psychological and Behavioral Science.
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