Chapter 3

Working in virtual knowledge: Affective labor in scholarly collaboration

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Scholarly work, especially in the humanities and social sciences, is often seen as solitary. The lone, creative individual, reading and writing while sitting on a chair and gazing out a window, is a powerful image even as it draws attention to the very unglamorous nature of such work. This image of routine, often rather lonely activity contrasts sharply with the much more exciting one of teams of scientists working together in a laboratory, collecting samples, analyzing data and sharing ideas. But the reality of scholarly work in the humanities and social sciences has always been otherwise. Scholars in these fields often work together, for example, to conduct multinational and/or longitudinal projects; to turn raw archival and other data into systematic, comprehensible, and usable database records; to comment on colleagues' work; to write with others to produce fluent prose, and so on. Thus, scholars in the humanities and social sciences routinely engage in collaborative work, and in affective labor stemming from such collaboration, when engaged in the production and distribution of knowledge. The diffusion of information and communication technologies (ICTs) that has occurred over the past decades offers many possibilities for augmenting or disrupting such collaborative work, by shifting the boundaries between visible and invisible tasks, influencing the division of labor within teams, as well as by bringing to light various affective underpinnings of scholarly practice. In this chapter, we focus on such affective aspects of scholarly work, and we develop a conceptual framework for understanding the range of affective activities scholars undertake in the social sciences and humanities in order to collaborate. We focus particularly on affective activities that may be changed by the incorporation of digital technologies into everyday scholarly practices. Thus, we explicitly

address the working practices that are emerging with the use of ICTs in virtual knowledge production, as discussed in the Introduction to this volume.

We draw upon three sets of resources to develop our conceptual framework. The first is theoretical, including the debate around immaterial and affective labor, that started with Karl Marx (1861-63). In recent times, such ideas have been developed as a means of understanding the ways in which ICTs are implicated in processes of globalization and de-territorialization within contemporary capitalist relations of production (Castells 1996; Hardt and Negri 2000; Terranova 2004). Furthermore, the introduction of ICTs into work makes previously invisible elements of collaboration visible, and we pose the question of whether this happens at the cost of affective labor, which may sometimes be best left implicit and tacit. Thus, we also draw upon another theoretical resource, namely literature about invisible work from the sociology of (computer-supported) work and of health (Star and Strauss 1999). While there has been much discussion in that literature about technology in relation to both affective labor and invisible work, very little has focused on scholarly work. In discussing scholarly work and affective labor, we also draw on theoretical resources in the rhetoric of science (Gross 1990) and upon recent studies focused on affective aspects of scholarly practice (Fraser and Puwar 2008; Gill 2010).

Our second resource comes from an empirical research conducted by one of us (Stefan) about international collaboration in the field of social and economic history. In this field, geographically dispersed groups of historians collect data on specific regions and time periods to construct large datasets for international comparative research (cf. Olson et al. 2008; Shrum et al. 2007). In order to enhance access to their colleagues and to each other's data, the historians make use of computing and communication technology.

The third resource is our own experience of working together in writing this chapter. This resource builds on reflexive ethnographic approaches (Haraway 1997; Woolgar 1991;

Mol 2002; Anderson 2006; Atkinson 2006; Ellis and Bochner 2000)[1], and it seeks to make visible our work practices related to collaborative writing. Such reflections on our own experiences of collaboration are not only a resource, but also an attempt to contribute to filling a gap in critical analyses of scholarly work, which we discuss throughout the chapter. As Rosalind Gill points out, '[f]or all the interest in reflexivity in recent decades, the experiences of academics have somehow largely escaped critical attention' (2010, 229).

In the next section, we discuss the debates about immaterial and affective labor and how they relate to academic labor. The section ends with an outline of the three categories we use to understand scholarly collaboration, namely care work, articulation work and persuasion work. We then introduce our two empirical cases: the collaborations of economic and social historians and of ourselves. Each of the previously identified categories is then discussed more fully, in both theoretical and empirical terms, focusing on how they can be used to understand collaboration in situations where digital technologies are omnipresent. We conclude by discussing what our analysis means for the study of scholarly work and for the study of affective labor, suggesting that both could be improved by recognition of the other.

The changing nature of labor and scholarly work in the digital age

The changing nature of labor generated by the increasing use of ICTs in the late 20th century has been a topic of detailed analysis in sociology, economics, political science, and other fields (Castells 1996; Hardt and Negri 2000; Terranova 2004). Designated under the umbrella terms of "informatization" and/or "digitization," the ICT-driven transformations of production and labor practices have been identified as causing—or anticipated to cause—the following structural, organizational, and ontological changes: deterritorialization of production processes; abstraction of labor practices; a shift toward immaterial and affective labor. All of these changes constitute a new type of economy, captured by a variety of

qualifiers, such as post-industrial, information, digital, network or knowledge (Bell 1973; Negroponte 1995; Tapscott 1996; Castells 1996; Boyett and Boyett 2001; Webster 2002).

In this new type of economy, the network emerges as the dominant organizational model of production, which simultaneously provides and calls for collaborative labor structures organized without physical centers and spatial limitations. Put differently, the network as an organizational model of production facilitates deterritorialization of labor practices. Such a tendency toward deterritorialization is considered to promote the virtualization of labor processes and relations, i.e., to endorse computer-mediated functioning and existence of production sites and teams. Hardt and Negri (2000) posit that deterritorialized, virtualized work leads to abstracted cooperation. This arises through a process of homogenization, through which different professional practices become converted into identical operations of manipulating information:

> In previous periods, ...the tools generally were related in a relatively inflexible way to certain tasks or certain groups of tasks.... The computer proposes itself, in contrast, as the universal tool, or rather as the central tool, through which all activities might pass. Through the computerization of production, then, labor tends toward the position of abstract labor. (Hardt and Negri 2000, 292)

Deterritorialized, virtualized, homogenized, and abstracted knowledge and labor in the information economy get another, and apparently important change, by shifting progressively towards virtual labor and immaterial labor.

Immaterial labor, introduced in Marx's *Theory of Surplus Value* (1861-63), refers to those labor practices in which the product is not separable from the act of production. Marx gives the examples of teachers, doctors, priests and artists. In Hardt and Negri's account (2000), immaterial labor refers to information processing or conceptual work such as problem solving and/or symbolic manipulation, found in media production, web design, marketing,

and the like. Other recent theoretical descendants of Marx's concept can be recognized in Bourdieu's (1980, 1986) notion of social capital, Foucault's (1976/1998) idea of biopower, as well as in Deleuze and Guattari's (1980/1987) theorizing on the production of innovations, values, and thinking processes, and in contemporary feminist studies, which have expanded the concept of immaterial labor to the areas of domestic life, biological reproduction and sex work (Fortunati 2007). Particularly relevant for the analysis of the information economy are the conceptions of immaterial labor presented in the work of new media-oriented scholars, such as Hardt and Negri (2000), Lillie (2006), Coté and Pybus (2007) in which immaterial labor is central to the move from manufacturing to information processing jobs, characteristic of the information economy.[2]

Scholarly work, the form of immaterial labor analyzed in this chapter, is a distinctive example of an informational occupation. As Webster points out, academic work both includes and opens the door to "the highest level informational occupations, those found at the hub of informational capitalism" (2002, 117). Interestingly, Marx already identified scholars and teachers in his original account on immaterial labor (1861-63). This early recognition confirms that some professions, such as academic work, involve immaterial labor as their primary mode of production, regardless of technological, economic, and overall societal developments. Some other forms of labor, however, emerge alongside such developments. For instance, the notion of "user labor" is directly associated with Web 2.0 practices related to user-generated content; this notion continues to provoke debates on the economic, social, ethical and other aspects of such a technologically-generated novelty (van Dijck 2009; Baym and Burnett 2009; Terranova 2004). Moreover , as Gregg (2011) argues, mobile technologies in particular challenge the affective and immaterial dimensions of both the work and the everyday life of professionals in informational occupations.

Information jobs, including scholarly work, employ information, communication, and affect as central elements of their production processes. This type of immaterial labor is bound up with human interaction, and hence with the creation and manipulation of affects. Hardt and Negri (2000) thus define affective labor as a form of immaterial labor focused on the creation and manipulation of affect. Similarly, Massumi (2002) presents affect as the ability to affect and/or to be affected, and argues that "affect is central to an understanding of our information-and-image-based late capitalist culture" (p.27). Although Massumi identifies affect as central to late capitalism, the significance of this notion can be found in much earlier writings. For instance, in one of the earliest accounts of affect, Aristotle describes affect, the basis of *pathos*, as "all those feelings that so change men as to affect their judgements" (Aristotle 2004, II.1). These words, from the 4th century BC, portray activities targeted at the creation and manipulation of affect almost identically to how contemporary authors depict and interpret affective labor. Still, Massumi also posits that "our condition is characterized by a surfeit of [affect]," and warns that, despite such a surfeit, "there is no cultural-theoretical vocabulary specific to affect" (p.27). We aim to contribute to such a vocabulary by proposing three categories of affective academic work, and it is to that task that we now turn.

Our definition of affective labor draws upon the literature as well as on our understanding of the concept which emerged throughout the course of writing this chapter. In our conceptualization, affective labor refers to activities that create, sustain, and/or modify behavior and judgments[3]. In a scholarly environment, affective labor can be found in formal and informal interactions between scholars, and between them and other social actors. The production of affect is also part of the goal of much academic work, for example in teaching and in the preparation of texts.

In the remainder of this chapter, we explore the notion of affective labor with regard to scholarly practice, aiming to highlight, analyze and interpret forms and roles of this aspect

of academic work in relation to how the use of ICTs mediates processes of scholarly collaboration and knowledge production. In our analysis, we furthermore deploy the concept of invisibility, integral to both affective labor and scholarly practice.

Star and Strauss (1999) introduce the concept of invisibility to portray "the ecology of visible and invisible work," arguing however that "no work is either inherently visible or invisible" (1). They identify three ways in which invisibility of work is achieved: creating a non-person; disembedding background work; and abstracting and manipulating indicators. Creating a non-person refers to those situations in which the product of the work is visible but the worker is invisible – for example, much cleaning in domestic and other settings. The people who do the cleaning are often invisible – arriving late at night or early in the morning; but the result of their labor is visible to all. Disembedding background work is almost the reverse – the workers are quite present but (some of) the work they do is relegated to the background. For example, in hospitals nurses are very visible but much of the work they do in looking after patients is taken-for-granted. Abstracting and manipulating indicators refers to the ways in which formal indicators are used to make certain tasks invisible. In academic contexts, for example, when productivity is quantified by a set of norms for different teaching, research and administrative tasks, then some of the sub-tasks of care and consideration become invisible. Universities increasingly deploy workload allocation systems based on notional numbers of hours for different tasks in order to balance the amount of work across individuals or across departments. Such systems rarely provide for the types of affective labor discussed here.

The concept of invisible work has been used to powerful effect in analyses of healthcare work (Mesman 2008; Mort et al. 2003) and in computer-supported cooperative work (CSCW) (Schmidt and Simone 1996; Suchman 1987). Much of the literature on healthcare focuses on the invisible work of low paid medical support staff, such as nurses,

and even lower paid ancillary workers, such as cleaners. More recently (Oudshoorn 2008; Wathen, Wyatt and Harris 2008), the invisible work of patients and the family and friends who care for them has received more attention. CSCW research draws upon earlier studies by Strauss (1985) about work and the division of labor; Strauss was concerned to focus on actual work practices and their task division rather than on the social division of labor. He also introduced the concept of articulation work to capture particular sorts of invisible work, namely "the meshing of the often numerous tasks, clusters of tasks...the meshing of efforts of various unit-workers (individuals, departments, etc.)" (1985, 8). Strauss's concept of articulation work and our own concepts of care work and persuasion work constitute three main categories of the conceptual framework we propose in this chapter and employ in analysis of affective elements of scholarly practice.

Star and Strauss (1999) caution against attempts to make everything visible or to formalize all work, arguing that there are good reasons for some work to remain invisible.[4] We accept this point and develop it further in the following sections of this chapter, focusing on the role of ICTs in making various work practices visible. Also, we emphasize that there can be 'bad', 'unproductive', 'unnecessary' and in other ways negative affective labor, positing that those aspects particularly come to the fore with the emergence of technologically-mediated visibility.

Based on our analysis of the literature, summarized above, as well as on our fieldwork with historians and our own experience as academics (in general and in this particular instance), we identify three main categories for understanding the affective labor involved in scholarly collaboration. As previously mentioned, the three categories are care work, articulation work and persuasion work. These are not intended to be either comprehensive or mutually exclusive but are meant to be used as a heuristic to draw our attention as analysts to those aspects of scholarly work that often remain invisible or unspoken. Affective work is

often only mentioned in passing in the literature. In our conceptual framework, affective engagement plays a central role in all three categories. Before defining and illustrating each of these categories more fully, we introduce the empirical cases on which our analysis is based.

Introducing the cases: Historians collaborate and so do we

As discussed in the preceding section, scholarly work has long been seen as a good example of immaterial labor. Despite this, as several scholars have commented, scholarly work has remained exempt from critical analysis (Gill 2010). This chapter contributes to filling that gap by drawing on fieldwork done in the framework of a research project, 'Socio-technological aspects of collaboratory projects in social and economic history', as well as on our own experience of scholarly collaboration in general and of writing this chapter in particular. The fieldwork entailed an ethnographic study of the practices, risks and opportunities of the implementation of the collaboratory model in the field of social and economic history.[5] More precisely, the project analyzed a number of collaboratories related to the International Institute of Social History (IISH) in Amsterdam.[6] These collaboratories included between 20 and 60 members, with varying backgrounds, located around the globe. Each collaboratory revolved around a specific research topic such as labor relations, strikes and lockouts, migrant organizations, life courses and occupations. In most cases, effort was geared toward harmonizing and sharing existing databases, although some collaboratories built new databases by reinterpreting regional or national censuses and other material. Each collaboratory used computing and communication technology (see collab.iisg.nl), and they also met a few times a year at conferences and workshops.

The fieldwork covered the period from early 2008 until the beginning of 2010 and combined various ethnographic techniques, including participant observation, text analysis

and interviewing. An important part of the fieldwork was Stefan's attendance at both formal as well as informal parts of international workshops and conferences. In addition, various members of the collaboratories – within as well as outside the IISH – were interviewed.[7] The online interaction between the members of the various collaboratories was studied closely by monitoring and analyzing the use of the collaborative software and the mailing lists. Finally, all the relevant documents on and by the collaboratories, such as funding proposals, guidelines on metadata, taxonomies, code books, minutes of meetings, and position papers, were examined.

Our second empirical example comes from our own experience of scholarly collaboration in preparing this chapter. Our collaboration began in early 2009, when Stefan and Sally individually responded to the call for abstracts for this volume. In the spring of 2009, they began meeting together to prepare a joint extended abstract. Smiljana joined the VKS at the beginning of July, and was invited to contribute to the preparation of this chapter very soon thereafter. Some features of our early encounters are discussed below. The empirical material about our collaboration includes conversations and emails, earlier drafts of the chapter, and written reflections we developed individually at different points during the preparation of this chapter. When we first prepared such reflections we did not anticipate they would appear in the final version more or less in their original form (sometimes edited slightly in order to make them comprehensible for a wider audience). In addition, we reflected on comments made by internal VKS reviewers (Clement Levallois, Stephanie Steinmetz, Charles van den Heuvel, Paul Wouters), who suggested that their comments could be used in our analysis, as well as anonymous reviews organized by the publisher and editors.

Although the idea to reflect explicitly on the production of this chapter was mentioned in the extended abstract prepared at an early stage, it took some time to find an approach that suited our ambitions. The idea of a reflexive approach proved to be very useful, since it

enabled us to discuss our personal experiences in academic collaboration and thus highlight aspects of affective labor that could not be easily included in our discussion of the fieldwork on historical collaboratories for ethical, methodological and epistemological reasons. We used our own collaboration to help us think through some of the more personal and affective experiences of academic collaboration without compromising the ongoing confidentiality and trust relations that Stefan continues to have with the historians. Including our own experiences also stems from a more general methodological concern about how to capture emotional and affective processes in scholarly collaboration. In our view, it is highly problematic to attempt to describe the collaborative practices of other scholars as if they were something remote and exotic, about which we could know and be objective. To focus on 'sense' while denying our 'sensibility', as discussed further in the next section, is not only ethically dubious, but it also deprives us of an important source of insight.

To illustrate our methodological and epistemological concerns and the use of our reflections, we provide the following example. In this example, Smiljana reflects on how a remark made during a workshop to discuss early drafts of chapters for this book led her to consider the research process and how to write about it:

> I was back on the 'S-team'[8] board, both emotionally and intellectually. And isn't it exactly what we are writing about in this chapter? Is it possible to separate emotional and intellectual aspects of academic, especially collaborative, work? Are we and do we want to be professionals who are adding, editing, interpreting the data without adding/editing/interpreting our own and our colleagues' feelings emerging from a professional activity? What if we … switched from traditional *Introduction-Theory-Method-Results-Conclusion* structure … to a form of academic expression that would stress and encourage reflexive writing? Wouldn't such a shift give us a new lens to

observe and understand better theoretical, methodological, epistemological, and other decisions put forward in scholarly texts? (Smiljana's reflection, 11-09-09)

In addition to illustrating some of our methodological and ethical concerns, this reflection also talks about the importance of care work.

Care work: Looking after people, data and technology

In this section, we introduce the concept of care work, which entails work done in looking after our colleagues, our tools and our outputs, and which is the first building block of the conceptual framework we propose in this chapter. We provide some additional background to the concept before discussing different instances of care work, namely care in the choice of collaborators as well as various instances of technically-mediated care work, such as care of technology, intellectual property and/or metadata. We conclude this section by examining the positive and negative aspects of carelessness.

We use 'care' deliberately, aware of its double meaning. It can mean 'taking care of', thus it can refer to the ways in which scholars care for their sources, their own data and texts, their colleagues and their material resources, such as computers and computer programs. Care also means 'being careful', as scholars often are with their own claims and those of others. However, by using the term 'care' we do not imply that academic work is necessarily always either caring or careful. Sadly, uncaring and/or careless treatment of data, sources, texts and colleagues is not unknown in scholarly practice. The advantage of 'care' is that it draws attention to how various aspects of scholarly work can be understood from the perspective of affective labor.

In scholarly practice, care work has both formal (formalized) and informal aspects. Formalized aspects are exemplified in disciplinary ethical codes, citation styles, peer review processes, promotion committees, and the like. These formalized and visible aspects of

academic care work are indispensable elements of socialization into the scholarly community, taught and practiced throughout academic curricula. Informal, and commonly invisible, elements of academic care work encompass a broad spectrum that often goes under a rather vague umbrella of personal and/or institutional 'style of behavior'. Along this line, academic organizations are deemed as more or less hierarchical, collaborative, considerate of newcomers, open to innovation, and so on. Similarly, some academics are known to be supportive, careful readers of colleagues' texts, attentive listeners to colleagues' problems, willing to share contacts, sources and resources, non-authoritarian in their interactions with others. Others are known for exactly opposite behaviors. At an extreme, Gill (2010) observes the growing aggression in anonymous peer review, wondering when it became 'acceptable to write of a colleague's work, "this is self-indulgent crap"' (239).

Clearly, many informal aspects of academic care work are not unique to academia. Other arenas of professional work share similar benefits and/or difficulties and enjoy relatively high levels of autonomy. Yet, the academic community might be especially vulnerable to difficulties arising from this sphere of professional practice, due to its continuous effort to safeguard itself from affect in any 'secular' meaning. Academic 'sense' has traditionally been juxtaposed with non-academic 'sensibility', as a carefully nurtured, especially self-nurtured, image of scholarly practice. Focused on its proclaimed pursuits of rationality and objectivity (even when embodied in anti-positivist, postmodern, and other lines of thought), the academic community, nevertheless, sometimes falls into fallacy *pars pro toto*, assuming that features of formal academic work warrant analogous features of informal activities. If academics are trained and subsequently assessed on their ability to gather, analyze and present their findings non-affectively (and here we consciously avoid the term 'objectively'), it is expected that they will engage in other activities in the same manner. But counter-examples are not hard to find. For instance, partners for co-operative research

and writing are often chosen, or avoided, not only on the basis of research interests and areas of expertise, but also by virtue of compatible and/or desired status positions, projected institutional and/or individual benefits, personal styles of writing and professional behavior, and other affective reasons. We ourselves did this. We do not work on the same project and we come from different disciplines, yet our reasons for working together were as much affective as instrumental. As Sally wrote of her reaction to the suggestion made by the (other) editors that she and Stefan work together:

> I've done a lot of co-authoring in my career, and I'm becoming increasingly fussy about whom I work with. It's not always an easy process but when it works, it results in something better than I could have done by myself. I liked the idea of working with Stefan – I had liked the style of his PhD very much and he seemed like someone I could work with on a more personal level. So we met (…). We talked. (Sally's reflection, 08-09-09)

Stefan, however, was more ambivalent at first, largely as a result of earlier experiences:

> To be frank, I had mixed feelings about this idea [to co-write a chapter with Sally]. ...I always envisioned the process of co-authoring as being one of the most inspiring moments of academic dialogue. In practice, however, my few experiences in this field proved to be rather disappointing. No discussions that went on for hours in dark pubs, no in-depth engagement with my contributions by the other authors (at least not at the level I was hoping for). (Stefan's reflection, 09-09-09)

Amongst the historians whose work we analyzed, personal networks and styles of behavior also dominate the process of selecting collaborators. In some cases, the collaborations date from before the formation of the actual collaboratory. One collaboratory, for example, builds on a national data collection project which started in the early 1990s and only became a collaboratory in early 2008. In other instances, the idea to create a collaboratory was the

starting point for finding suitable collaborators. Identifying people with appropriate expertise and comparable research approaches subsequently proved to be difficult, especially since these projects revolved around methodological innovation in the field and thus required a relatively high amount of trust among the participating historians. A related issue is that the work is done for the most part on a voluntary basis. Individual participation is not based on financial incentives, but mainly on social bonds and academic opportunities. Many members are part of the wider network of the IISH and often have a longer tradition of co-operating with researchers at the institute. The fact that the collaboratories are initiated by the IISH is sometimes mentioned as an additional reason to participate, because of its leading position in social and economic history.

The most obvious form of care work in computer-mediated collaborations is the care of the technology itself. Traditionally, there has been a clear division of labor between scholars in the humanities and social sciences and technical support staff in universities or research institutes. If not antagonism, there is often incomprehension on both sides. In relation to the discussion above about how invisibility is achieved, technical workers are non-persons for many scholars. The technicians themselves and the work they do to ensure a smooth-running infrastructure are invisible. As with cleaning, it is only by its absence or failure that it becomes visible to the academics.

In an attempt to overcome the need for technical expertise, the historians chose to use the collaborative software, Liferay, a relatively light and easy-to-use package. It was expected that future support by technicians would be limited and that researchers would be responsible for (and take care of) software maintenance. Besides the efficiency argument, it was argued that this would ensure that the researchers engaged with the software and learned how it functioned. Most researchers remained reluctant to get into the software, and constantly commented on minor flaws in the software and the lack of immediate technical

support in those instances. In the end, most historians kept expecting that the software should work effortlessly and viewed the technical support staff merely as service providers. The technical specialists, on the other hand, only rarely engaged in depth with the way the historians use this sort of software in their daily work routines. As part of an interventionist research strategy, Stefan acted as an interface in this process and mediated the interactions between the academic and the technical staff (see Wyatt, Scharnhorst, Beaulieu and Wouters, this volume).

We too used collaborative software that was being developed and introduced within the Virtual Knowledge Studio contemporaneously with the preparation of this book. All three of us are rather cautious of the virtues of such spaces. Nonetheless, we did use the VKS collaboratory (VKSC) rather intensively, as we reflected during an email exchange:

> I already put 'my part' of the chapter in the collab, but I am still working on it. By the way, it is interesting to see that our collaborative space - as self-declared techno-skeptics - is the most intensively used of all in VKSC. (Stefan's email to Smiljana and Sally, 20-10-09)

This illustrates that academics do not have to be particularly enthusiastic about ICTs in order to use them effectively.

The introduction of technology and the formalization of data bring other questions of collaboration and ownership to the fore. Issues of intellectual property have always been important in research, and there are long-standing systems of copyright and patenting for dealing with them. The development of shared databases raises new challenges, especially for historians who do not have established guidelines regarding the sharing of data or the acknowledgement of the work needed to create and maintain shared data. The development of intellectual property arrangements in social and economic history can be understood as

formal care work. Since historians are increasingly sharing their data at various stages of the research process, (open) data licenses are now prominently on the agenda.

Sharing historical data implies sharing knowledge about the process of collection and analysis of the data. This knowledge is formally created in various ways: historians add metadata to their dataset (the usual list of attributes of the individual dataset), they make annotations in the database (used to specify the process through which the data has been obtained from existing data), and they are supposed to write methodological papers (extended accounts of data collection and analysis). In principle, they can also discuss the research process in their publications, although this is not very common in the field of history and most collaboratories are not yet in the publishing phase. In addition, members of the collaboratories exchange knowledge about the research process during workshops and conferences, via online discussion fora, and via emails and mailing lists. The amount of care invested in these processes varies strongly.

As mentioned earlier, care work is sometimes missing and it is not always positive, and we end this section by examining such instances. An example of lack of care – for others' work schedules and needs – is the absence of engagement between members of the historical collaboratories. Very few of them approach this pro-actively. Most have to be asked repeatedly to contribute their data or the accompanying meta-knowledge. The collaboratory appears to be a low priority and they only react when asked. Despite the general acceptance of collaborative research, both in history and in other academic fields, it remains rare for researchers to come together systematically as an interpretive community where the multiple, situated and distinctive subjectivities and perspectives of the researchers are exchanged in an 'interpretive zone' (Wasser and Bresler 1996, 6). Rather, there is a tendency to decontextualize, reduce and objectify fieldwork into textual transcripts, with researchers engaging in limited explicit reflexive processes to 'put back in' and take into account the

contexts, subjectivities and research relationships through which these texts and knowledge are produced and made meaningful (Mauthner and Doucet 2008, 977).

In our own experience, we have also witnessed acts of carelessness or of being carefree, which made us aware that both people and technology can provide opportunities for negative care work:

> We [three of us] returned to the issue of 'negative' affective labor – and shared some experiences Smiljana and I had recently had in other contexts – unproductive performance of niceness and the role of email[9]. I doubt we can use such examples as they involve other colleagues but at least they sensitize us to the dark side of affective labor (of course, there are much darker sides in academia – plagiarism, ripping off graduate students). (Sally's reflection, 21-09-09)

In the same reflection, Sally also discussed a specific act of care, or carelessness, which might be termed "epistemological carelessness":

> When Smiljana and I talked on Friday, she asked me if she should do more reading in order to expand the 'jottings' document [very first draft of theoretical section]. I encouraged her to just write – that she probably already knew more than enough to expand that document. Of course, I think my colleagues should read, but sometimes I think in academic work we get too caught up in the literature and sometimes it pays to let oneself go. (Sally's reflection, 21-09-09)

This injunction to carelessness, or to the importance of being carefree, resonated with Stefan:

> Originally I had not planned to work on some more reflections – although we agreed to do – but Sally's reflections inspired some ideas. One of them relates to the last point of Sally's 21-09 reflections, about the advice to 'just write'. For me, Sally's writing in general and her reflections in particular really inspire me to write without first spending several years with my nose in the books. …I always make academic

> writing much more complicated than it needs to be and then I spend weeks to make the text readable again. (Stefan's reflection, 22-09-09)

Finally, we recognize that our focus on technically mediated care work means that some important aspects of care work, particularly face-to-face interactions with colleagues, is under-estimated. We will return to this in the conclusion but now turn to the second building block, articulation work.

Articulation work: Going with the flow

Articulation work refers to those labor practices that support the articulation and co-ordination of distributed work. The notion of articulation work was picked up in the CSCW literature to refer primarily to the work that gets things back on track in the event of work processes going wrong or not working or simply not having been anticipated by those who designed the system. The concept has been used to argue that designers (and those who study them) should pay attention to 'the hidden tasks of articulation work' to understand why computer systems work or not (Star 1999, 387). Strauss points out that articulation work is, "a kind of supra-type of work in any division of labor, done by the various actors" (1985, 8). Similarly, Bannon and Schmidt stress that, "articulation work arises as a [sic] integral part of cooperative work as a set of activities required to manage the distributed nature of cooperative work" (1992, 7). We closely follow Strauss' original expression of articulation work and its use within CSCW, as it captures the work of co-ordination. In this section, we begin by discussing co-ordination work in academic collaboration before discussing what the technical mediation of co-ordination work in such settings means for the autonomy, visibility and in/formality of scholars and tasks.

Depending on the size of the group, the amount of articulation work needed to co-ordinate the co-operative work varies. The articulation work we did in order to write this

chapter is obviously not as substantial as that needed to manage and co-ordinate the creation of a large database by 40 historians. In all cases, however, articulation work is often not taken into account in the development of a collaborative project and rather falls in the category of invisible work. In practice, articulation work proves to be one of the most time-consuming activities in a collaboratory. However, since this type of work is rarely visible, extra co-ordination efforts are often not covered in the budget of a collaboratory and many funding agencies do not recognize the actual costs incurred, a phenomenon that has also been observed in other academic collaboratories (Cummings and Kiesler 2005).

The size of a group is not the only factor determining the extent of articulation work required. The degree of conjunctive tasks, for instance, can also play an important role. Conjunctive tasks (Sonnenwald 2007, 646) are those tasks which entail contributions by all – or at least the majority – of the group members in order to complete them. In the case of the collaboratories in social and economic history, such tasks entail the creation of a common code book, data licensing, metadata guidelines, or a collectively used taxonomy. The development of a code book, for example, requires a lot of discussion, co-ordination and, eventually, agreement in order to be useful for the data-gathering process of all members of the group. In general, those collaboratories having the most conjunctive tasks also required the most articulation work.

In the collaboratories in social and economic history, most research tasks are carried out individually. Each historian contributes data on his or her own theme, region and/or time period of expertise. Often, these collaboratories originate from one or more national projects, which try to increase their scope. Adding foreign experts to the project team means that the collaboratory covers more ground, but it also necessitates the co-ordination of a greater number of individual efforts in order to make the comparison of international data possible.

Our own co-ordination required the creation of some clarity on the expectations we each individually had with regard to the chapter and how to proceed. Since most texts develop their purpose and affect in the creative process of writing, we were fully aware of the limitations of such an endeavor. Still, we extensively discussed the set up of the chapter during various meetings in the canteen, particularly our use of some kind of taxonomy. We also discussed the appropriate term. Instead of 'taxonomy' we could also have used 'classification', 'types', 'sensitizing concepts', 'heuristic', each of which has slightly different connotations.

For Stefan, this discussion showed how one needs to be explicit in collaboration; maybe even more than one would be if one did not collaborate:

> Looking back on our meeting last Thursday it is obvious that I had some problems with the whole concept of a taxonomy. I probably still have them (and I would certainly prefer to call 'it' a conceptual framework), but now it seems much more interesting that we actually had such a long discussion on this concept. ... Normally, when working alone, I would not have bothered to think for long about my discomfort [with the term 'taxonomy']. I would have probably proceeded to work on the chapter without including a taxonomy. But the collaboration required me to be explicit. (Stefan's reflection, 22-09-09)

This requirement to be explicit about certain aspects of the research process seems to be especially relevant when co-creating large historical databases. The geographically distributed nature of a collaboratory entails that historians are explicit about the collection, construction and analysis of their data. However, traditionally, historians do not elaborately discuss their research process in their publications or in the information accompanying their data. In contrast to sociologists and other social scientists, social and economic historians do not explicitly and systematically discuss the steps taken during the research process, nor do

they consistently reflect on the methods and methodologies used to collect and analyze their data. In part, this can be explained by the discipline's tradition to write both for academics and for a general audience. The idea is that the latter cannot be bothered with technical discussions about the research process or else they will lose interest in the study at hand.

Obviously, there are limits to what one actually can make explicit. Not all knowledge is recordable in easily transferred forms, such as documents (cf. Finholt and Olson 1997, 28), and as a result it is not easily shared across distance. Nevertheless, in the case of co-creating social scientific data, one can develop elaborate rules for annotation and metadata. In doing so, one can transfer some of the tacit knowledge about a dataset and thus potentially improve interpretations of data by secondary users (cf. Zimmerman 2008). However, such a system is very time consuming and it is unclear whether collaborators think that this extra effort produces enough extra benefits. Moreover, as Michener and his colleagues (1997, 335) argue, there is no end to metadata: 'There is no unique, minimal, and sufficient set of metadata for any given data set, since sufficiency depends on the use(s) to which the data are put'.

If articulation work is defined as a set of activities required to manage the distributed nature of cooperative work, then co-ordination is too narrow a concept. Co-ordination suggests that such tasks are planned and are capable of being planned. The advantage of articulation work as a concept is that it captures both formal, planned co-ordination activities as well as all the informal, invisible, ad hoc, unplanned work that people do, especially when conducting complex tasks in large organizations distributed across time and space. Such articulation work within academic contexts includes the communication of know-how and tacit knowledge about an academic field and about how systems within the organization work.

The unplanned and informal dimensions of articulation work are also closely related to the idea of corridor talk and the loss thereof in collaborations without co-location. In a

collaboratory, the regular mechanisms of meeting in the corridor and enquiring about work-related or personal issues are absent. The implications of this are difficult to uncover in full, but the actual loss of common ground and the need to bridge distance is an important issue in relation to articulation work. One issue is the need to arrange face-to-face meetings, with their concomitant financial and organizational implications.

Historians working together to construct shared databases undertake much of the articulation work identified in the CSCW literature about the design of information systems, especially in relation to classification. Communication about tasks, task divisions, timetables, classification, system design, especially as these are made increasingly public on electronic discussion lists and fora, are also an important part of articulation work. With the wider adoption of collaborative software in academic practice, articulation work makes increasingly visible previously not necessarily observable elements of scholars' work.

Another example of making scholars' work increasingly visible through the use of ICTs comes from our own experience of sharing calendars. During the time we were working on this chapter, all members of the Virtual Knowledge Studio were asked to share our web calendars with colleagues. Aimed at facilitating the planning of meetings, this request had one peculiar feature. Namely, we were instructed not to select a "busy/not busy" option when sharing calendars, although such an option would still serve the goal of facilitating the scheduling of meetings and similar activities. Instead, we were instructed to make visible the specificities of our engagements. Some colleagues noted that their calendars included information about private engagements and thus were not appropriate for sharing and thus they chose the "busy/not busy" option, despite the instruction. One colleague, in private communication, explained why he only ever put his dental appointments in the shared calendar, 'because [he] did not like the way it was superimposed'. "Corridor talk" went a step

further, raising the question of whether scholars really wanted and needed to share with colleagues *all* of their professional engagements.

This example illustrates the phenomenon of blurring the boundaries between the public and the private, well known in the analysis of blogging, twittering, and other new media-prompted communicative practices. Yet, it also illustrates Star and Strauss's observation that, despite the possibilities provided by ICTs, "some forms of … discretion activity may often be best left unspecified, and not represented in system requirements" (1999, 9). On a more fundamental level, the case of shared web calendars points to the question Star and Strauss propose as a starting point in thinking about CSCW: "what exactly *is* work, and to whom it might (or should) be visible or invisible" (1999, 10; italics in the original). Indeed, shared calendars have long been an object of interest within CSCW. In a review of the field in 1993, Bannon and Hughes point to the asymmetry "between the work required and the benefits accrued" (1993, 25), suggesting that senior managers are the main beneficiaries of such systems.

In this section, we have demonstrated how articulation work can expand not only as a result of larger groups working together, as would be expected, but also as a result of the growing explicitness of co-ordination required when technologies are introduced. Articulation work not only makes previously invisible tasks more visible, it can also add to the range of tasks. Also, as the calendar example shows, calls to facilitate articulation work can sometimes be ambiguous and prompt debates on some of the fundamental themes in academic practice, such as the scholars' right to autonomy, authority and confidentiality of work. These aspects of scholarly work are closely related to our third category of persuasion work and the rhetoric of science, discussed in the following section.

Persuasion work: The gentle art

The rhetoric of science has become an established field of inquiry (Perelman and Olbrechts-Tyteca 1969; Gross 1990; Simons 1990; Gross and Keith 1997; Harris 1997; Fahnestock 1999; Ceccarelli 2001; Gross 2006). Yet associating rhetoric with science, and persuasion with scholarly discourse, can sometimes provoke hostility from academic colleagues who regard such ideas as almost blasphemous. This arises from the academic community's previously mentioned efforts to dissociate itself from the field of affect and to establish scholarly work as exclusively logos-based. Yet, the beauty of rhetoric is its two millennia old tradition of demonstrating, across historical, cultural and ideological contexts, that logos, ethos and pathos cannot be separated.

In the domain of science, a rhetorical approach posits that claims of science are the product of persuasion. "Rhetorically, the creation of knowledge is a task beginning with self-persuasion and ending with the persuasion of others" (Gross 1990, 3). But what exactly is the subject of scientists' persuasion and self-persuasion? Gross explains that:

> the rhetorical view of science does not deny "the brute facts of nature"; it merely affirms that these "facts," whatever they are, are not science itself, knowledge itself. Scientific knowledge consists of the current answers to three questions, answers that are the product of professional conversation: What range of "brute facts" is worth investigating? How is this range to be investigated? What do the results of these investigations mean? Whatever they are, the "brute facts" themselves mean nothing; only statements have meaning, and of the truth of statements we must be persuaded. (1990, 4)

Our third category refers to the persuasion work that is part and parcel of scholarly practice. We distinguish three main forms: credibility work, reputation work and position work. Credibility work refers to those elements of scholarly practice captured above by Gross. In

this type of activity, scholars' labor is aimed at persuading others (colleagues, peer reviewers, scientific community, funding agencies, general public, and so on), as well as persuading themselves that the phenomenon of their analysis is worthy of investigation and that the proposed method(s) of data gathering, analysis, and interpretation best meet the accepted criteria of validity and reliability. Closely related to this, reputation work is aimed at demonstrating that a scholar is capable of producing an analysis that meets those criteria, namely that he or she possesses sufficient expertise to produce research findings and conclusions that will be regarded as valid and reliable by his or her academic peers. Finally, position work refers to those scholarly activities related to achieving, confirming, and preserving a certain status/position in an academic community. These three sub-types of persuasion work are closely related, and commonly appear in the sequence credibility-reputation-position. Put differently, achieving credibility, that is, persuading others of the credibility of a scholar's work, commonly leads to achieving scholarly reputation, i.e., into attaining and/or confirming the reputation of an expert in a given research area. Such an achievement further leads into a scholarly position; that is, it leads to attaining, preserving, or losing a specific position in an academic community, both at the level of a scholar's immediate institutional surrounding, and at the broader research community level.

In the historical collaboratories, the use of ICTs brings elements of persuasion work to the fore in a specific way. Namely, the use of ICTs renders visible various aspects of scholarly work, as discussed earlier. One problem that historians face in this regard is the difficulty in assessing how explicit the producer of the data needs to be so that others could understand the specificities of his or her input and, consequently, assess the credibility of his or her work. Another problem that emerges from the use of ICTs is the fear of outside scrutiny. Through explicating that which was implicit, through making public what was private, patterns of practice become open for scrutiny and contestation (cf. Berg 1997, 1086).

In a field in which the research process has always been predominantly implicit, making the research process more amenable to inspection by others can be an important obstacle to collaboration. In practice, the obstacles to investing time in sharing knowledge and working together might be too great. Despite being part of a team, many researchers work in individualistic ways. However, some historians also argued that the collaborative projects as such did actually increase discussions among peers, but primarily during face-to-face meetings, like workshops and conferences, and only rarely via mailing lists or in the forum of the collaborative software.

As Kok and Wouters (this volume) argue, the use of ICTs in the creation of large historical databases also created some discussion among peers in the social sciences and humanities. Among mainstream historians, the increased use of computers and statistical methods by social and economic historians is often frowned upon, partially due to a more general scepticism about quantitative research methods and a preference for persuasive story-telling. The social science community, on the other hand, was increasingly persuaded by the more nuanced research results of social and economic historians. Kok and Wouters show how earlier attempts to create and analyze large historical datasets did not always meet the exact standards of this community, but more recent efforts are generally considered to be both credible and persuasive.

Our own efforts in writing this chapter also included various aspects of persuasion work, starting with self-persuasion related to the credibility of the selected topic(s) and method(s). Over the course of writing the chapter, we also had numerous offline and online discussions related to the credibility of various parts of our work. As described earlier, Stefan had doubts about the proposed theoretical and conceptual frameworks, so Sally and Smiljana attempted (ultimately with success) to persuade him of the validity of such an analytic strategy. Still, some of Stefan's worries remained, as one of Sally's reflections illustrates:

> At our last meeting (3 November) Stefan raised his worries about our insufficiently sophisticated theoretical framework – worries prompted by his reading of Gill and Pratt (2008). This got me really worried. But I have had time to read the article and now I'm less worried. … [They] are doing something rather different, and I think we can actually use parts of it. (Sally's reflection, 11-11-2009)

On the other hand, Smiljana had concerns about the fieldwork data:

> What I would like to see related to ethnographic work are very specific examples, something like "on November 14, 2008 the following message (…) was posted to the collab on international labor. Immediately after, few historians reacted by posting the following replies (...). This example illustrates difficulties in articulation work, which arise when ...". I am making this all up, of course, just to illustrate. In the same way, we need concrete examples—quotes—from interviews and citations from the documents analyzed. (Smiljana's in-text comments, 03-11-2009)

Our reviewers also had comments and suggestions for enhancing the argumentation of this chapter. Stephanie said, "I have to admit that I am not sure whether I find the presentation of results as purely narratives very convincing". Along the same line, Paul asked, "would it be possible to also have personal quotes / anecdotes from the historical case study?" Clement suggested that, "the defense of the thesis along the whole chapter could be made more salient." Similarly, Paul observed that "currently, the empirical stuff is rather loose, but you obviously know this. So I would be interested to see how you will weave the material together into a strong story."

These comments clearly illustrate the importance of persuasiveness in scholarly discourse and debate: pure narratives are not *convincing*; the *defense* of the thesis could be more salient; the materials should be woven together into a *strong* story. These expressions used by our reviewers indicate that both the "brute facts" and the statements made about them

play a role in establishing the credibility of scholarly work and, ultimately, in the processes of knowledge creation and validation.

Persuasion work confirms the importance of affective labor in scholarly practice. However, such a role is rarely visible and/or stated. One instance of the academic community's disclosure of its "vulnerability to affect" is the institution of blind peer review, which is rooted in an acknowledgment of the possibility of affect influencing scholars' judgment. Still, even this hallmark of academic work does not always nor fully reflect the whole range of scholarly activities susceptible to affect. Fraser and Puwar argue that "emotional and affective relations are *central* to the ways in which researchers engage with, produce, understand and translate what becomes 'research' " (2008, 2; emphasis added).

Those relations, though, stem from different roots. Sometimes, affective aspects of academic work get edited out of the scholarly record because they are deemed inappropriate for scholarly discourse.[10] More significant however is the fact that such "discursive inappropriateness" might undermine academic credibility, by pointing at those aspects of scholarly practice rejected within an ideal model of modern science:

> Laying out the affective details [of research] often seems to detract from academic authority. The sense of adventure, drama, mystery, fear—and sometimes, let's face it, the boredom—which produces research ... risks revealing, perhaps even 'exposing', the so-called unscholarly, anecdotal, irrational and unscientific dimensions of the research process. The very opposition between rational and irrational, analysis and imagination, subjectivity and objectivity, constitutes an important if not a central part of the legacy of an ideal of modern science (Fraser and Puwar 2008, 4).

Still, losing academic credibility is not an end but rather a beginning of an academic drama that might emerge from disclosing the affective elements of academic work. As previously mentioned, credibility leads to reputation, which further leads to position; and this chain

works in both ways, upwards and downwards. Properly trained agents (as Bourdieu would put it) of scholarly practice are not expected to have emotion while on duty, when collecting, analyzing, and/or presenting "the brute facts of nature." On the contrary, they are trained and expected to "add to the sum of valid, reliable, statistically demonstrated, 'objective' knowledge. After which, they would go into the field to witness to their faith, spread their learning and presumably reproduce themselves" (Wander and Jaehne 2000, 214). Challenging such an academic order not only results in potentially damaged academic credibility; more importantly, it results in the loss of a scholar's ability to participate in the academic market, in other words, to exchange the products of his or her scholarly labor. As Fraser and Puwar state:

> while we [scholars] do not sell our 'raw' research data but rather make it an accessible resource to each other, it is nevertheless a commodity in kind which can be translated into (exchanged for) published articles, royalties, esteem-ratings, reputation, status, departmental income, promotion and invitations in the global circuits of academic productivity (2008, 14).

This point summarizes the credibility-reputation-position interplay in scholarly work, by highlighting one of the best-kept secrets of scholarly practice; namely, the fact that academic work, just like any other type of labor, strives for profit, whether in the form of affective revenue, such as recognition and reputation, or in the more tangible one of money and other material resources. Still, the image of an idealistic and (nearly) altruistic scholar is so prevalent that even critically oriented authors seem to accept it too readily. For instance, in her recent and worthwhile endeavor to put the academic community under scrutiny, Gill portrays scholars as people "notoriously bad at talking about (poor) pay;" who fail to "secure pay deals that even keep pace with inflation; " who are "more likely than any other occupational group to do unpaid overtime;" yet, who are "deeply invested in and passionately

attached to their work" so much so that they "often draw no distinction between [their] work and [them]selves" (2010, 232). Contrary to this, in one of the rare, openly critical accounts of scholarly practice, Wander (in Wander and Jeahne, 2000) writes:

> Morning after morning, day after day, year after year, I faced arguments based on 'science'. Then one day in the early 1970s, after about five years of struggle, it dawned on me that what I was hearing was not science. The arguments were not about science; they did not have science as their purpose. They were about hiring, retention, tenure, promotion, chair elections, travel funds, etc. … These efforts had less to do with science … than with resource allocation. (2000,.214)

Of course, it would be both cynical and unjust to claim that the allocation of resources constitutes the main part and/or purpose of scholarly practice. Yet, concealing this and similar aspects of academic work is equally unjust, as it implies concealing not only the fact that scholarly labor can be unconstructive, negative, and unpleasant, but also obscuring the complexity of knowledge production and validation, which is the point we elaborate in the concluding section of this chapter.

Conclusion

In this chapter, we have begun to develop a vocabulary for discussing the affective labor involved in scholarly collaboration. We have introduced three categories of care work, articulation work and persuasion work in order to understand the ways in which the affective labor of scholars may change as they produce virtual knowledge and work in technologically intensive environments, characteristic of late capitalism. We have drawn attention to the ways in which scholars care (or do not care) for their data, their tools and themselves, as well as for their relationships to colleagues. We have illustrated the importance of articulation work, and the ways in which it is changed with the introduction of collaborative tools, which themselves

affect the relative in/visibility of different tasks. We have also explored how persuasion work figures into scholarly practice, shaping this practice, academic collaborative relationships and the production of academic works.

There are at least three issues we have not been able to explore fully. The first is non-mediated care work, and the importance of direct interaction for affect. The dependence on technology as a collaborative tool renders face-to-face care work even more invisible. Our own reflections are full of examples of face-to-face care work, particularly the pleasure we all had in our meetings that took place in our workplace canteen. We have not included discussion of that here, given our focus on technologically-mediated care work. The second issue we have not discussed is the gendered division of affective labor. Research in other sectors, such as health, demonstrates that care work is often women's work. In the case of organized religion, on the other hand, much of the (visible) care work is done by men (e.g. imams and priests). While we expect that gender plays an important role in academic settings, it has not been our focus in this chapter.

The third issue is the potential for using technology directly in knowledge production (see Levallois, Steinmetz and Wouters, this volume) rather than as a tool for supporting collaboration as we have done in this chapter. In the case of the Labor Relations Collaboratory there is a lack of reliable quantitative data about labor relations in the pre-modern period. In those cases, the experts need to construct guesstimates. The best way of doing this remains controversial amongst historians, and until now, advanced statistical or modeling techniques have not been deployed for filling gaps in the historical record.

But we have begun to fill some gaps of direct interest to us. The literature on immaterial and affective labor has hitherto neglected scholarly work, despite it being one of the paradigm cases of immaterial labor. One advantage of focusing on the affective labor of scholars, that might have resonance for other types of work, is the double nature of scholarly

collaboration where affect is both the outcome and part of the process. As our discussion of persuasion work demonstrates, producing affect is central to the scholarly process; whereas our discussions of care and articulation work focus more on affect between scholars.

As mentioned in the introduction to our two cases, one reason we included our own collaboration as a case was that we felt it was easier to discuss our own feelings about working together. It would have been more difficult to do so for the historians because not only would we have to impute motivation, feeling and affect but also because it could appear as if we were judging them in ways we do not want, given we have neither full information nor do we want to damage Stefan's on-going relationship with them. In retrospect, we realize that we underestimated the difficulties of using our own experiences in this way, something also experienced by Hernández and his colleagues (2010, 11) when they wrote autoethnographic accounts of their academic careers. It was not only the collaboration amongst the three of us that influenced our work, but the broader context in which we work, including reviewers of this chapter, other contributors to the book, other colleagues at the VKS. In order to protect those wider working relationships, we have sometimes exercised a degree of self-censorship in choosing not to include some of our observations or email exchanges. This does confirm, however, that preserving invisibility is sometimes crucial to good care work. Realizing the complexities of our collaboration not only confirmed what we already knew about the deeply social nature of scholarly work, but it also reinforced our view on affective labor as one of the most important elements of scholarly practice.

Romanticized and stereotypical narratives, which depict scholars' work as exclusively logos-based, aimed at producing knowledge and bettering the world conceal the fact that the academic community is not immune to both positive and negative aspects of affective engagement, and that, in fact, those emotional engagements constitute an inevitable element of knowledge production. Therefore, to understand the dynamics of knowledge production

more fully, scholarly practice should be rethought and reformulated so as to reflect the full range of scholarly labor—the practices of care and neglect, the complexities of articulation work, the importance and hidden dimensions of persuasion work, and so on. In short, academic sensibility, with both its positive and negative faces, should become an equal counterpart of academic sense in analyses of scholarly practice and knowledge production.

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[1] We have cited here a selection of an extensive literature in cultural studies, science and technology studies and post-structuralist anthropology which have deployed self-reflexive styles of writing.

[2] The 'immaterial labor' debate is largely concerned with the changing nature of labor in late capitalist economies. There is indeed much more to be said about how the changing nature of immaterial and affective labor as experienced by scholars relates to the increased commercialization of universities and publicly funded research more generally. That is beyond the scope of this chapter. However, see Fraser and Puwar 2008; Gill 2010.

[3] See Krause (2008) for a detailed account on relationship between affect and judgment.

[4] For example, those involved in the so-called caring professions may carry on interacting with students or patients in a holistic way, under or outside the surveillance of bureaucratic accountability.

[5] Bos et al. (2007, 656) define a collaboratory as an organizational entity that spans distance, supports rich and recurring human interaction oriented to a common research area, fosters contact between researchers who are both known and unknown to each other, and provides access to data sources, artefacts and tools required to accomplish research tasks.

[6] Although the project aimed to understand the impact of the collaboratory model on knowledge production in social and economic history, and thus explored changes in the exchange of tacit and implicit knowledge, the project was not specifically designed to study affective labor.

[7] In total, 35 historians, economists, sociologists and demographers were interviewed. Besides having different disciplinary backgrounds, the interviewees also worked in various countries (UK, Russia, USA, Germany, Turkey, Portugal, Uruguay, Argentina, South-Korea, India, the Netherlands, Italy, Spain, Finland, Brazil). Although more men with high academic status were interviewed, the group of interviewees also included women and scholars in the early stages of their career.

[8] This refers to ourselves. As Smiljana recalls, 'when Sally submitted the abstract [for the VKS book workshop in August], the first sensation of *ourness* suddenly struck me. What triggered such a sensation was a nickname Sally came up with: "Please find attached a slightly longer outline for the chapter being prepared by the "S-team", she wrote, alluding to our first names. So, perhaps symbolically, accidentally, and/or semi-jokingly, the team was born.' (Smiljana's reflection, 11-09-09)

[9] The politics and etiquette of email, especially the cc function, is analyzed by Gregg (2011), especially in relation to how email can intensify work.

[10] As Fraser and Power put it, "it is still more feasible to preserve the affective qualities of an enquiry within a novel than it is within the documentation of fieldwork" (2008, 3).