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What Does Really Matter in Organization Wikis?

A Sociomaterial Approach

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Abstract

How can we account for technology adoption and use within organizations without relying on preconceived notions of materiality and sociality, notions that inevitably lead us to favor either a techno-centric perspective or a human-centered perspective? In this paper, we argue that an interesting way to do this is to take seriously people's matters of concern. This means two things: taking into account all the matters of concern that come to express themselves in conversations (whether related to tools, rules, documents, principles etc.) and not only the people who voice them; and showing how some of these concerns manage to matter more than others by speaking to, for, with, through or against each other. To demonstrate the theoretical and empirical value of this approach, we analyze two interactional episodes, taken from our longitudinal study of the introduction of a wiki at the French National Agency for Radioactive Waste Management.

Keywords: Technology Use in Organizations; Wiki; Communicative Constitution of Organizations; Sociomateriality; Interaction

Introduction

How can we account for wiki adoption and use within organizations without relying on preconceived notions of materiality and sociality, notions that inevitably lead us to favor either a techno-centric perspective or a human-centered perspective (Orlikowski 2007)? In other words, is there a way to make the relations between the wikis and their users the end points of our analyses rather than their starting points, and this to better understand what actually *matters* in organization wikis? In this paper, we will show that it is possible to do just this while relating the *matters of concern* that emerged over the course of the introduction of a wiki at the French National Agency for Radioactive Waste Management (Andra in French).

We will first discuss the literature on organization wikis and more precisely the question of the de-compartmentalized writing program that is generally associated to the introduction of wikis in organizations. We will see that despite the publication of a few detailed case studies (Danis *et al.* 2008, Caby-Guillet *et al.* 2009, Holtzblatt *et al.* 2010), the *substance* of this program and the reasons for its often-reported failure remain unclear. Following Orlikowski (2007)'s insights, we will argue that these shortcomings come from preconceived categories that keep separate the material and the social worlds, making these studies poorly equipped to account for phenomena in which materiality and sociality are constantly entangled.

To resolve this issue, we will then present a conception of technology use in organizations that is grounded in the CCO (Communication Constitution of Organizations) perspective (Ashcraft *et al.*, 2009; Putnam & Nicotera, 2009). This approach invites us to take people's *matters of concern* seriously. This means two things: (1) taking into account all the matters of concern that come to express themselves in conversations (whether related to tools, rules, documents, principles, etc.) and not only the people who voice them; and (2)

showing how some of these concerns manage to *matter* more than others by speaking to, for, with, through or against each other. To demonstrate the theoretical and empirical value of this approach, we will then analyze two episodes, taken from our longitudinal study of Andra, and show what exactly came to *matter* in the de-compartmentalization program proposed to Andra's employees as well as in its failure.

Organization wikis and the question of de-compartmentalization

The study of organizational wikis comes under the large literature that deals with technology adoption and use within and across organizations (see for instance Barley 1988; Ciborra 2000; Orlikowski 1992; Walsham 1993). While many studies have looked at the ways wiki technology is used in the context of Wikipedia (see notably Black *et al.* 2008; Bryant *et al.* 2005; Cardon *et al.* 2009; Kriplean *et al.* 2007; Viégas *et al.* 2007), comparatively little is known about the uses of this technology behind the firewalls of organizations. Relying on telephone interviews and questionnaire analyses, the first studies on the subject were certainly able to confirm the sustainable presence of wikis in numerous organizations (Majchrzak *et al.* 2006; White *et al.* 2007), but contributed little to the knowledge of the actual uses of this technology. The situation started to change in the subsequent years with the publication of a few detailed case studies based on direct observations, interviews and traffic analysis (Danis *et al.* 2008; Caby-Guillet *et al.* 2009; Holtzblatt *et al.* 2010).

Interestingly, in all these studies the introduction of the wiki in the organization is portrayed as being associated with a wish to *de-compartmentalize* document writing, and thereby improve knowledge management. In every case, the idea, it seems, is to break away from the organization's usual task allocation and to allow all its members to participate in the writing of certain documents, thus allowing for more knowledge to be shared, discussed and

improved throughout the organization. This de-compartmentalization program is notably at the center of Danis *et al.*'s study. The authors describe a case in which the research division manager of a large information technology company asks his teams to write all the documents concerning the planning of their activities on a wiki so as to make every researcher more knowledgeable about the research conducted by the other teams (see p. 496). Though less centrally, the de-compartmentalization program also appears in other studies where the authors report that the teams who installed the wikis were inspired by Wikipedia (Holtzblatt *et al.*, p. 4662) or more broadly by "the Web 2.0 culture of self-organization and free-participation" (Caby-Guillet *et al.*, p. 204).

However, these case studies also report that the de-compartmentalization process tends to fail. The wiki certainly continues to be used (its use even spreads in the organization) but not as it was initially intended. Most of the time, users only contribute to the documents corresponding to the tasks to which they have been specifically assigned. For instance, Danis *et al.* (2008) report that the researchers of the division they studied generally perceive the wiki as an official communication space in which it is not suitable to show informal talks. They also report that the researchers do not feel they have the right to edit or comment the pages of the other teams (see p. 501-502). Caby-Guillet *et al.* (2009) also report that people use the wiki mainly to disseminate information and to cooperate with their close collaborators (p. 217-222). As for Holtzblatt *et al.* (2010), they identify a set of social and technological factors that impede broader usage of wikis for knowledge sharing. These factors include notably: the perception of sharing as extra work, the unwillingness to share unfinished work or to share with a large audience, and the reluctance to edit the work of other persons.

Although these case studies present many interesting aspects, the question of the process of de-compartmentalizing remains unclear. First, the de-compartmentalization

program itself is never fully explained. The authors do not show how exactly the wiki is supposed to contribute to a form of writing that would go beyond team borders. They mentioned that Wikipedia and the Web 2.0 are sources of inspiration; they describe the particularities of the organizations that they studied as well as the characteristics of wikis (editable pages, page reverting, talk pages etc.). They sometimes mention the technical adjustments and the rules of use that are introduced during the installation of the wiki¹. However, none of these authors precisely shows how the sources of inspiration, the organizational processes, the wiki functions, the technical adjustments and the rules *translate* in daily interactions. The reader is left wondering which of these elements actually *matter* in the de-compartmentalization program.

Similar critics can be made about the way these studies tackle the failure of the de-compartmentalization process. The precise mechanisms of failure are never fully explained. The authors generally identify several factors that impede de-compartmentalized knowledge sharing, but they do not really show how these factors *translate in* daily interactions to actually stop the de-compartmentalization process. Consequently, the relevance and the weight of these factors remain uncertain. For instance, among the different factors identified by Holtzblatt *et al.* (2010), which ones are the most difficult to overcome: is it the idea that sharing is extra work? Is it the unwillingness to share unfinished work? Is it the idea that people own their data? The study of Holtzblatt *et al.* does not answer these questions. We do not know what exactly *matters* in the failure of the de-compartmentalization.

We believe that Orlikowski's (2007) reflection on materiality and sociality in organization research literature can help us better understand these shortcomings. As she points out, the material and the social are generally treated as two separate entities in the

¹ For instance, Danis *et al.* (2008) and Caby-Guillet *et al.* (2009) both report that the wiki is associated with the organization's LDAP directory so as to identify the users and authorize their access to the wiki (See Danis *et al.*, p. 500 and Caby-Guillet *et al.*, p. 205).

studies that deal with technology adoption and use within organizations. These entities may be mutually shaping each other through interactions but they remain ontologically separate. This predefined separation poses a problem, according to her, as it leads the analysts to having constantly to choose between a techno-centric perspective (what is happening is the effect of technology) and a human-centered perspective (what is happening is the effect of human action). It then becomes difficult – if not impossible – to account for phenomena in which human and technological agencies are constantly entangled. We believe this problem is precisely what limits the literature on organization wikis.

Indeed, all the studies mentioned above tend to rely on preconceived categories. Danis *et al.* (2008) look at “the interplay of technology, work practice, and organization” (p. 495), Caby-Guillet *et al.* (2009) at the “interaction processes between the users, the technology and the global environment of the activity” (p. 201), while Holtzblatt *et al.* (2010) distinguish between “social and cultural factors” (p. 4666) on one side and technology-related factors (“the reliance on other channels of communication”, p. 4668) on the other side. Far from making the analysts’ work more accurate, we believe that these types of pre-categorizing might actually prevent them from precisely describing “things” such as a de-compartmentalization program and what is causing it to fail. Indeed, by fixing all field elements under certain labels, the authors prevent themselves from retracing how the attributes *of* certain elements can be *transferred to* other elements. If everything that constitutes a wiki is stuck under the label “technology” and everything that constitutes a company is stuck under the one of “organization,” then how can we retrace the way the de-compartmentalization property *of* a wiki is to be *transferred to* a company (as well as what is stopping this from happening)?

Theoretical framework: Matters of Concern

So how can we expect to account for this entanglement between human and technological forms of agency, which constitute, for us, the reality of wiki implementation and evolution? To address this question, we believe that an interesting starting point consists of showing that action is something that is always *shared* between various forms of agency (Latour, 1996), which means that the ascription of a specific action to a given agent is always a matter of *selection* in a chain of agency (Cooren, 2006). For instance, while human beings tend to be considered the *source* of what is said in a conversation, we claim that there is always a way to decenter this type of analysis by focusing on what appears to *animate* a human participant when he or she says something (Cooren, 2010).

Interestingly, human participants often portray themselves as animated by specific concerns or interests, which they implicitly or explicitly express in their conversations (Author *et al.*, in press). For example, someone can position herself as speaking *out of concern* for people's safety, which means that, to some extent, it is also this *matter of concern* – people's safety – that is presented as expressing itself at a given point in a discussion. At first sight, one could retort that this is just a figurative way of analyzing a conversation, but we believe that this type of analysis allows us to precisely take communication seriously and show its connection with materiality (Aakhus *et al.*, 2011).

Communication indeed *matters* because it is not only people who express themselves when they communicate with each other, but also their matters of concern, which are supposed to animate them and provide the accountable/reasonable/reportable character of their conduct (Garfinkel, 1967, 2002). In other words, conversations or discussions never take place in a vacuum, but are engaged by people who worry about specific issues, defend certain positions or fight for specific interests (Bergeron & Cooren, 2012). What we propose to do is

acknowledge this reality by showing entanglement at the interactional level, meaning that *sociomateriality is something that can be identified in a conversation*. In other words, issues, positions and interests can be expressed, heard and recognized in a given discussion, not only the people who voice them.

According to this approach, matters of concern are precisely what make the connection between the context that is supposed to surround a discussion and the discussion itself. Matter indeed comes from the Latin *materia*, which means “the substance from which something is made” or the “grounds, reason or cause for something” (etymonline.com). Etymologically speaking, a matter of concern is therefore what substantiates a concern, i.e., what stands under it (see also Burke, 1945/1969; Chaput *et al.*, 2011), what causes it. No need therefore to artificially reconnect the material with the social. As we see, people constantly create this type of connection or translation when they communicate with each other.

Matters of concerns are therefore what people express in their discussions, but also – and this point is crucial in our argument – what animate them. If they can be seen as co-constructed by the participants, it would be a mistake to *reduce* their mode of existence to this co-construction, since it would amount to disconnecting the conversational world from what animates it, a disconnection that the participants themselves do *not* experience. A matter of concern is indeed something that can be the object of a co-construction or disagreement, but it is also something that people *have* and that they can even point to (e.g., someone can point to a specific area in a machine and say “This is what concerns me, look!”).

Even if some matters of concern can be silenced in a discussion, it does not mean that they do not exist or that the matter they are referring to will disappear. As we all know too well, their inexpression might even sometimes result in catastrophic situations (Tompkins,

1993; Weick & Sutcliffe, 2001). There is therefore no opposition between a constructivist and realist view of the world (Barad, 2003, 2007). What we propose is that certain aspects of reality start to *matter* or *import* more than others precisely because they end up taking multiple forms, which *augment*, so to speak, their level of importance, existence or reality. For instance, a technological glitch might be definitely taking place, but as long as it does not materialize itself into a concern, which someone starts to have and communicate, its mode of existence will remain limited. It is only when this glitch starts to *literally* animate a discussion, i.e., when it starts to be co-constructed *as a glitch* by the human participants, that its existence might augment and become a difference that makes a difference (Bateson, 1973).

So what we propose to do is analyze conversations as these *dislocated loci* where multiple matters of concern and interest can be identified as being voiced and expressed (Cooren, 2010). This approach thus allows us *not* to treat social and material aspects of technology adoption and use as two separate realities. Matters of concern can indeed be technological, but they can be also related to specific values, priorities, hierarchies or principles. If the interactional world is indeed entangled, it is because beings or entities with various modes of existence come to express themselves as matters of concern in a discussion, whether we speak of technological, psychological, organizational or cultural matters. We therefore do not need to choose between a techno-centric perspective (what is happening is the effect of technology) and a human-centered perspective (what is happening is the effect of human action). What we just need to do is observe how interactions evolve and identify all the various beings that come to *make a difference* in a given situation.

Method

The present study formed part of a longitudinal ethnographic study of the French National Agency for Radioactive Waste Management (Andra, in French), which was founded by both Andra and the Regional Council of Champagne-Ardenne (France). From December 2007 to April 2010, the first author worked as participant-observer within one of the teams of Andra's *Scientific Department*. During this time, he contributed to the design and the implementation of a wiki-based *Participative Document Space* in Andra. This position allowed him to collect numerous qualitative data about the project in which he was involved: audio recordings of interviews with Andra's employees, audio recordings of project meetings, diverse organizational documents (e.g. guidelines and meeting minutes), personal observation notes, and snapshots of the document systems used at the agency. This material was then transcribed or directly analyzed by the researchers in several data sessions.

Through these sessions, we progressively identified the recurrent preoccupations, practices or ways of talking of the various project participants. Using our sociomaterial lens, we then identified how certain entities and beings (people, norms, documents, tools, principles etc.) managed to gain more weight and influence than others over the course of the project by speaking to, with, for, through, or against other entities and beings. In other words, we endeavored to identify the elements that came to *really matter* in the wiki project. The two episodes that we analyze hereafter epitomize what appeared to *matter* (i) in the de-compartmentalization program that was proposed to Andra's employees, and (ii) in the failure of this program.

Analysis

Which de-compartmentalization model for the wiki?

To better understand the de-compartmentalization model that was proposed to Andra's employees through the wiki, it is interesting to dwell on the meeting during which the wiki was presented by the first author to Andra's Scientific Director (SD). The following are the first author's personal minutes of this meeting. They have been written based on the PowerPoint slides used during the meeting and on personal notes taken right after it. The meeting took place in September 2008. Its purpose was to present to the SD why it would be a good idea to use a wiki to write an important document of Andra: the *Component Evolution Analysis* (CEA). In this transcription, the first author is nicknamed Tom. Peter (another nickname) is one of the colleagues who worked with him on the wiki implementation.

1 Tom first argues that the production of the CEA is a knowledge management issue for Andra.
2 The CEA describes the likely phenomenological evolution of a radioactive waste disposal
3 during operation. It provides a systematic analysis of the heat, hydraulic, mechanical, chemical
4 and radioactive phenomena that affect every component of the disposal during every operation
5 phase. The CEA thus is a document in which numerous teams' knowledge is being connected:
6 the knowledge of all the *Scientific Department's* teams, the *Safety* team, the *Engineering* team
7 and the *Project* team. The production of the CEA thus constitutes an opportunity for whoever is
8 involved in it to deepen his/her understanding of the connections between Andra's various areas
9 of knowledge. However, only a few agents of the *Integration* team (*Scientific Department*) are
10 usually involved in the CEA. Finding a way to involve all the agents with relevant knowledge in
11 the CEA thus constitutes an interesting challenge.
12 Tom then explains the way a wiki could help meeting this challenge. Usually, both the writing
13 of the CEA documents and the discussions between the writers are scattered in several places:
14 emails, attachments, shared folders, formal and informal meetings etc. This makes it difficult for
15 people with different agenda to retrace and therefore contribute to the ongoing work process. A
16 wiki could help overcoming this problem in two ways: (1) by gathering both the writing and the
17 discussions in one place, (2) by allowing retracing the evolution of both.
18 Tom finally makes a demonstration of the wiki installed on Andra's server. By default every
19 page of a wiki can be edited by every user. Every page is associated with a page *History* that
20 allows to retrace the changes that occurred between the different versions of the page and, if
21 needed, to replace the last version with one of the older ones. Every page is also associated with
22 a *Talk Page* that allows discussing the content of the page. Like any other page, the *Talk Page* is

23 associated with a *History*. Finally, the *Recent Changes* page allows overviewing of all the
24 changes made to all the pages of the wiki. All these functions should enable every agent who
25 has knowledge relevant to the CEA to participate in its production.
26 The Scientific Director (SD) congratulates Tom for his presentation. He also inquires about the
27 wiki: “who gives the right to whom to do what in this? Who will break off the debates?” Tom
28 replies that the organization remains the same: every team leader supervises the work of his/her
29 team and the SD has the final say. Peter adds that it is possible to restrict the access to the pages
30 of the wiki. It is possible to determine who can read and who can write every page. The SD says
31 that using the wiki is a good idea but that it must not put the schedule of the *Design Dossier* in
32 jeopardy. He insists that a way must be found to prevent people from making “last minute
33 changes”. Peter explains that he intends to open the pages to modification only during specific
34 periods of time. During the *Preparation phase* the pages should be opened to everyone, during
35 the *Writing phase* they should be opened to only the *Scientific Department*, and during the
36 *Check phase* to a list of persons to be determined.

In the first part of Tom’s presentation, from lines 1 to 17, the wiki is positioned as speaking to no less than three matters of concern: (a) *work process centralization*, the wiki is what allows “gathering both the writing and the discussions in one place” (l. 15); (b) *work process traceability*, it is what allows “retracing the evolution of both” (l. 15); and (c) *knowledge management*, the wiki is what allows every agent to contribute to the CEA, and thus to “deepen [their] understanding of the connections between Andra’s various areas of knowledge” (l. 8-9). Here, the wiki is thus characterized (1) *by its capacity to speak simultaneously to all three concerns*. However, at this stage, this capacity is purely discursive or rhetorical in the sense that it is only what *Tom says* it is.

The demonstration of the wiki, from lines 18 to 25, aims precisely to fill this gap. It is meant to show that what Tom says is confirmed by what the wiki *itself* can do in front of them. And indeed, the diverse functions of the wiki – the editable pages, the page histories, the talk pages, the recent changes – tend to confirm Tom’s version of the wiki. However, these same functions also appear to say – or to *lead Tom to say* – a bit more than what he had presented previously. The first thing that the demonstration illustrates is that “by default every page of a wiki can be edited by every user” (l. 18-19). In fact, what remains implicit

throughout the demonstration is that *every* function of the wiki is by default accessible to every user. The wiki is thus characterized by the fact that it gives to everyone (by default) equal means to both write and *control* the others' writing (notably by allowing everyone "to replace the last version [of any page] with one of [its] older [versions]" , l. 21). The demonstration of the wiki thus gives voice to a concern for *complete horizontality between the participants*². The wiki that is now emerging is therefore different from the one described at the beginning of the presentation. It is (2) a tool that speaks *not only* to questions of knowledge management, work process centralization and work process traceability, *but also to issues related to participants' equal rights of access*.

The Scientific Director (SD) seems to have heard this additional concern. His first questions are "who gives the right to whom to do what in this? Who will break off the debates?" (l. 27). By asking these questions, the SD thus positions himself as expressing a concern for *vertical authority*, which is supposed to animate him at this point. He indirectly asserts the necessity that someone be given a special right in the wiki, one of stopping the debates between the participants. Interestingly, the SD quickly links his concern for vertical authority with one for *timing control*. As he says, what risks putting "the schedule of the Design Dossier in jeopardy" is notably that people may make "last-minute changes" to the CEA (l. 31-33). Having someone with the power to prevent this situation from happening is a guarantee that the schedule will be respected. We could thus say that the SD is making the concern for vertical authority *speak to* problems of timing control (thus reinforcing the authority and importance of this concern).

² If we listen carefully to the demonstration, we can hear the voice of yet another matter of concern, i.e., the regulation of the wiki. Indeed, if everyone has the same power of control, then how can the participants make a decision when they disagree on something? The demonstration implicitly answers this question by indicating that "every page is associated with a *Talk Page* that allows discussing the content of the page" (l. 18-19). This concern that is being voiced thus invites participants to *solve their disagreements by discussing them*.

A negotiation then starts to determine the place that vertical authority should occupy in the wiki. Tom's answer to the SD is the following: "[with the wiki,] the organization remains the same: every team leader supervises the work of his/her team and the SD has the final say" (l. 28-29). Interestingly, this answer does not directly address the SD's point. The SD wants to know how vertical authority will translate *inside* the wiki. Tom's answer is that the wiki will not affect vertical authority *outside* the wiki. This answer thus aims both to address the SD's concern for vertical authority (and timing control) and to protect the horizontality inside the wiki. It could be paraphrased as this: "decision making processes should remain entirely horizontal in the wiki and usual vertical processes should be used only in case horizontal processes fail."

Peter's answer, lines 29 to 30 and 33 to 36, is quite different from Tom's. He says that the principle of vertical authority can be directly implemented *in* the wiki by defining who can access which page(s) at which time. His idea is to modify the setting of the wiki so that the wiki *itself* distinguishes two levels of users: (a) those who are asked to edit certain pages at a certain time, and (b) those who set who can access which pages at which time. In other words, the idea here is that the wiki would allow sharing of the work on the CEA but not the *control* of the work. In short, Peter's proposal is to more directly address the SD's concern by shattering the idea of complete horizontality between the participants so that (3) the wiki *itself* can speak *not only* to questions of knowledge management, work process centralization and work process traceability, *but also to questions of vertical authority, hence of timing control*. Such is the mode of existence in which the wiki appears to stabilize itself at the end of the meeting.

As we can see, the wiki – or more precisely the de-compartmentalization model proposed through it – is a complex *sociomaterial* being. It is made of (a) spokespersons

(Tom, Peter and, to some extent, the SD) who voice, question, use and demonstrate its features and functions, (b) documents (the CEA and the Design Dossier) that are supposed to be its final products, (c) hard-coded functions (editable pages, access control etc.) that define its functioning, and (d) a series of concerns (for centralization, knowledge management, vertical authority etc.) that this being might speak to or not. As we saw, all these diverse beings and entities do not have the same weight as some manage to *matter* more than others.

Let us take, for instance, the concern for participants' equal right to both write and control each other's writing. This concern certainly matters here as it is voiced by Tom and *spoken to* by the functions of the wiki (the editable pages, the page histories, the talk pages, the recent changes). However, its influence appears to end there. As we observed, it fails to *speak to* the SD's concern for vertical authority and timing control. Conversely, these latter concerns manage to translate into Peter's planning of the CEA, into the access control functions of the wiki, and *de facto* into Tom's proposal to use the wiki to improve centralization, traceability and knowledge management. These concerns come to *really matter* in the de-compartmentalization program because they manage to *speak through* most of what constitute it (see also figure 1 in appendix, p. 29). This, of course, does not mean that this program will be successfully implemented.

When the de-compartmentalization model fails

To understand why the de-compartmentalization model analyzed above failed to work, let us now turn to a meeting that took place in February 2009, a few days after the official start of the CEA writing phase. The purpose of this meeting was notably to discuss the coordination between the diverse writers involved. Were present members of the *Integration* team that was in charge of the CEA (nicknamed Peter, Elizabeth and Alice) as

well as members of other teams of the *Scientific Department* (nicknamed Simon, Alex, Sam and James) who had been asked by the Scientific Director to contribute to the CEA.

- 1 Peter >The goal is that it should be something really collective so if actually< there are big
 2 involvement gaps from one person to another .hhh (0.5) well this will be a bit
 3 discouraging [uh::
- 4 Elisabeth [There will necessarily be big gaps
 5 ((confused noise))
- 6 Simon There necessary are-
- 7 Peter No:: but it shouldn't be a:: 90 10 ok (.) [if it is a 60 40 I'm ok but
- 8 Simon [No no but >I am going to be really basic but
 9 everyone who is in a LG ((Laboratory Grouping)) has a document to hand over by the
 10 end of March that is the LG mid-term report< (1.5) this is well obvious that we are
 11 directly competing between this and the CEA let's not delude ourselves (.) not to
 12 mention the other documents of the [Design Dossier I am not even mentioning them
- 13 Peter [no but there (0.5) we are all on the same boat
 14 there [uh we::
- 15 Simon [NO no no
- 16 Elisabeth [no well no precisely
- 17 Simon we're not all on the same boat=
- 18 Elisabeth =no indeed=
- 19 Simon =this is your mission
- 20 Peter well yeah but I also have three [deliverables to write about the warehouse so
- 21 Simon [no no I am not saying that you don't have other
 22 things to do (.) I totally agree on this you certainly have as much work as the others
 23 that's not the point< but these are jobs within your mission (.) Sam his mission that's
 24 not the CEA that's the LG report (.) there is a little difference (.) this is as if for
 25 example John was to fetch you to work on the design concepts (.) and you had to
 26 spend a third of your time on them and that was not scheduled=
- 27 Peter =yeah but (.) as Eric Smith ((the scientific director)) said in introduction on Friday (.)
 28 he said that it's been a year that:: we know there is this CEA coming I asked you to
 29 save time in your agendas one year ago and he said I am asking you not to derogate
 30 from it (.) word for word so it's been a year also that:: everyone is supposed to get
 31 organized on his own ((inaudible))
- 32 Simon >we agree one hundred percent< ((his voice has a higher pitch))
 33 ((confused noise, laughter))
- 34 Sam but if we had to write the mid-term report a year ago (0.5) it would be a bit empty
 35 ((he laughs))
- 36 Simon [>if you had told me a year ago that I had to save five days for this five days for that
 37 and five days for another thing the same week well you'd tell me yeah you told me a
 38 year ago<
 39 ((confused noise))

- 40 Alex plus one year ago ((inaudible)) the mid-terms they were not scheduled a year ago
 41 Peter well ok but then this should be reported to the management
 42 ((confused noise))
 43 Sam it comes to a point [you say even if you keep on pushing
 44 Elisabeth [but he is not deluding himself he is not deluding himself=
 45 Simon =he is not deluding himself (.) he can't say the contrary
 46 Elisabeth he cannot say anything else than that (0.5) but let's not delude ourselves (.) who's
 47 going to write the CEA uh (.) I have a rather precise idea
 48 ((laughter))
 49 James this will be a collective work

At the beginning of this sequence, we see Peter positioning the collective writing of the CEA (i.e the de-compartmentalization program) as (1) speaking to *a concern for equality between the participants*. As he says, doing “something really collective” (l. 1) means that there should not be “big involvement gaps from one person to another” (l. 1-2); “it shouldn't be a 90 10” (l. 7). However, this definition of collective writing is immediately dismissed by Elisabeth and Simon. According to them, “there will necessarily be big gaps” (l. 4) between the participants. To Peter's concern for how things *should* be, they reply with how things *will* be (l. 4) and how they “*are*” (l. 6). They thus position themselves as speaking to a concern for both *reality* and *experience* (they know how things truly function).

We then see Simon substantiating this position by speaking in the name of *his team's mission* (the *Laboratory Grouping (LG) report*). As he explains, the reason why his team will not be able to contribute much to the CEA is because the agenda of the CEA collides with the one of the LG report (l. 9-11). Note that this explanation allows Simon to again manifest his concern for *experience* and *reality* (how, according to his experience, things really work in this organization). By announcing that he is “going to be really basic” (l. 8), he indicates that he is somehow forced to situate the debate at a lower level so as to make himself understood by his interlocutor. He thereby introduces a sort of teacher/pupil dissymmetry between himself and Peter, which implies that a certain form of *experience* is

supposed to speak through him (and not through Peter). We then see Simon saying that the collision between the agendas of the LG report and the CEA is “well obvious³” (l. 10) and that he does not need to mention the other documents they have to write (l. 12), which is a way to stage *reality* as speaking *by itself*. Finally, through his call to “not delude [themselves]” (l. 11), Simon also presents *himself* as speaking for reality. In summary, Elisabeth and Simon re-qualify the “really collective” writing as (1’) something that *collides with the LG report schedule and thereby with both reality and their experience of it*.

However, Peter is not ready to give up his position. He says: “we are all on the same boat there” (l. 13). According to him, everyone should make the same effort because everyone is facing the same situation (having to write several documents within tight schedules). This assertion reinforces Peter’s call for a “really collective” writing. Indeed, it is now not only Peter who is asking that a minimum of equality be respected between the contributors, but also (2) *the situation of the contributors itself*. In other words, it is as if he were saying that the situation (being on the same boat) was *dictating* that everyone do his or her share.

This view of the situation and what it is supposed to say is immediately refuted by Elisabeth and Simon (l. 15-18). They answer almost simultaneously by repeating “no” and return Peter’s point against him, Elisabeth by adding: “no *precisely*” (l.16) and Simon by repeating what Peter said in a negative form: “we’re *not* all on the same boat” (l. 17). Elisabeth then confirms Simon’s words: “no indeed” (l. 18). There certainly is a strong emotional response here, something that almost carries a sense of outrage, of scandal. It seems that something powerful is leading them to react. This “something” is then made explicit by Simon (l. 21-26). Everyone cannot make the same effort for the CEA because the

³ Note that “obvious” comes from the Latin *obvius*, which means “that is in the way, presenting itself readily, open, exposed, commonplace” (<http://www.etymonline.com/>). Something obvious thus is something that “goes without saying” or that “does not need to be spelled out” precisely because it exposes or speaks for itself.

CEA is not everyone's priority "mission." It is interesting here to dwell on the *way* Simon presents his explanation. He first uses the example of Sam to illustrate his point (l. 23-24), then a comparison that stages Peter himself: "this is as if for example John was to fetch you to work on the design concepts" (l. 24-25). This argumentative move is interesting as it allows Simon to generalize his point. He is no longer speaking only out of concern for his team's mission (the LG report), but out of concern for *everyone's mission*, including Peter's. In other words, the collective writing is here redefined as (2') *what contradicts the very notion of mission allocation*.

However Peter is still not ready to give up his position. He too can summon a voice that is bigger than his: "as the scientific director said in introduction on Friday 'I asked you to save time in your agendas one year ago' and he said 'I am asking you not to derogate from it' word for word" (l. 27-31). We can note here that Peter takes great care to authenticate the voice of the SD. He gives the precise time of the utterance ("as the SD said in *introduction on Friday*"), he uses direct speech the borders of which are clearly delimited, and he explicitly says that he is quoting "word for word" (l. 30). By doing this, Peter is obviously pointing at the figure of *hierarchical authority* that is attached to the SD's voice. He therefore makes the collective writing (3) speak to *a concern for the respect of the SD's authority*.

This argument triggers another emotional reaction. Several participants start laughing and talking together to the point that parts of what they say are inaudible (see lines 31, 33 and 39). What they all say is that they cannot do what is asked from them, referring here again to the *time constraints* they have to deal with. But something else is also being voiced here. Sam and Simon both make their point by presenting absurd situations. They stage an "empty" document (l. 34), a tautological speech ("if you had told me a year ago (...) [I]'d tell [you] 'yeah you told me a year ago'", l. 36-38), and a "week" that contains 15 days (l. 36-37). The

figure that is summoned through these absurd situations is *reality* itself. In short, the collective writing is once again re-qualified as (3') *what contradicts the time constraints of the LG report and thereby reality, as experienced and lived by this people.*

However, this time, this position poses a problem as it implies that the SD *himself* is ignoring reality, that he is literally “deluding himself.” This is precisely what Simon and Elisabeth hurry to deny by *speaking*, this time, *for the SD*: “he is not deluding himself, (...) he can’t say the contrary, he can’t say anything else” (l. 44-46). The SD, they suggest, is both (i) the one who knows that what he is asking is not entirely feasible and (ii) the one whose function is, to some extent, forcing him to ask what he is asking. In other words, if the SD is asking everyone to substantially contribute to the CEA, it is not because he truly expects everyone to do so. It is because he wants to indicate the direction in which his department should strive to go. In short, to restore the consistency of their argumentation, Simon and Elisabeth are led to venture that the collective writing is in fact (4) speaking to two opposing concerns: (a) *an unrealistic one – everyone should equally contribute to the document – and (b) a realistic one – everyone should do what he/she can do depending on his/her priority missions.* This is precisely these two matters of concern that Elisabeth and James are reenacting and playing with when they say: “let’s not delude ourselves, who’s going to write the CEA? I have a rather precise idea” (l. 46-47), “this will be a collective work” (l. 49). In other words, the “collective” nature of the work will be upheld but everybody knows who will end up working for the collective: the *Integration* team, whose priority mission is the CEA.

As we can see, if the de-compartmentalization program is still a *hybrid* being (it features an entanglement of people, documents and concerns for various things), its *substance* is here quite different from what it was in the previous episode. The functions of the wiki and

the question of the participants' access rights have completely ceased to *matter*. Indeed, what now concerns the interactants only is: "how much each designated participant will contribute to the CEA?" It is this concern – and only this one – that end up mattering the most and it is this one that the wiki and its spokespersons should speak to. Two matters of concern thus struggle with each other. The concern that every participant's contribution should be (almost) equal certainly *matters* here, as it is voiced not only by Peter, but also by the Scientific Director (SD) and, to some extent, by the situation of the contributors itself (the fact that they all have to deal with tight schedules). However, as we saw, this concern fails to *speak (and translate)* to the other interactants' concerns for the LG report schedule, the concept of priority mission, their experience and even reality itself (as they all present it). Conversely, these latter concerns do manage to *translate* into the SD's request by giving it a realistic meaning and an unrealistic one. These concerns *matter* in the failure of the de-compartmentalization program precisely because they are what lead to *the emptying of its substance* (the program ends up being little more than an unrealistic proposal, see also figure 2 in appendix, p. 30).

Discussion

As our analyses show, taking communication seriously – i.e. focusing on both what people do when they communicate and on what appears to animate them (i.e. the concern that they raise and voice) – allows us to retrace what comes to actually *matter* in organization wikis. What we would like to emphasize now is that by doing so we also enrich or strengthen the *objectivity* of this phenomenon. Indeed, retracing how a given entity comes to matter in a situation amounts to identifying how it manages to *object* to what other entities are trying to make it do or say, what could also be called its recalcitrance (Latour 1996, 2004, 2005).

As already mentioned, although Wikipedia and the “Web 2.0 self-organization culture” are often cited as sources of inspiration for organization wikis (see for instance Holtzblatt *et al.* 2010, p. 4662 and Caby-Guillet *et al.* 2009, p. 204), it remains difficult to know to which extent they actually matter in the use program proposed to organizational members. What our analysis of the first episode shows is that these elements (i.e. the concern for participants’ equal rights to write and control each other’s writing) can in fact matter very little, to the extent that they may have nothing to *object* to concerns for vertical authority and timing control. Conversely, these latter concerns can matter a lot if they manage (as it is the case here) to *object* to everyone and everything that speak *for* the idea of self-organization.

Similarly, while “the perception of the wiki as extra work” is often identified as one of the “factors” that impede “broader usage of the wiki for knowledge sharing” (see notably Holtzblatt *et al.* 2010, p. 4666-4667), it remains unclear to what extent this factor actually matters in this problem. What we have brought to light in our analysis of the second episode is that this factor (i.e. the idea that collective writing contradicts the notion of mission allocation) can matter a lot, precisely because, by being associated to concerns for a specific mission and for participants’ experience and sense of reality, it can effectively *object* to the idea of a collective writing that goes beyond team borders.

As we can see, questions of *matter* and questions of *objectivity* are intimately connected. Therefore, as long as we will continue to approach technology use in organizations with predefined categories such as technology and users, materiality and sociality, we will overlook not only a lot of what matters in our fields, but also opportunities to enrich and strengthen the objectivity of our analyses.

As pointed out before, taking communication seriously thus means that we ought, as analysts, to stop thinking that *only* people express themselves when they engage in a meeting,

conversation or debate. As shown in our analyses, what also get expressed are their concerns, which animate them in their discussions, meaning that people end up also voicing – i.e., giving a voice to – things and beings that *matter* to them. The key question thus becomes: does what matters or counts to me *speak to* what matters or counts to you? In other words, are your concerns mine or my concerns yours? Although one might retort that it is a figurative way of positioning the problem, we believe that this actually summarizes very well what happened in the interactions we analyzed.

What we also showed is that these very concerns constitute a key feature of the sociomaterial entanglement that Orlikowski (2007) is referring to. It is indeed through the expression of these matters of concern – which can take the form of reality, experience, authority, horizontality, the wiki, people's mission, work overload, etc. – that we can see one of them – the wiki, for instance – augmenting or decreasing its level of existence. In the case we studied, the wiki ends up decreasing its mode of existence because its spokespersons (the Integration team) do not manage to make it *speak to* other concerns, the ones of the other teams of the Scientific department. Since their concerns do not speak to each other, no translation can take place and they cannot become each other's spokespersons.

Had the wiki succeed in speaking to (the reality of) people's mission, to (their experience of) what their workload consists of, to the line of authority they have to abide with, it could have become (an expression of) their mission, workload and line of authority. In other words, it could have increased and augmented its level of existence by becoming part of this sociomaterial entanglement. It is, as we showed, because it does not address or speak to these concerns that the de-compartmentalization remains a nice project, not a reality.

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Appendix

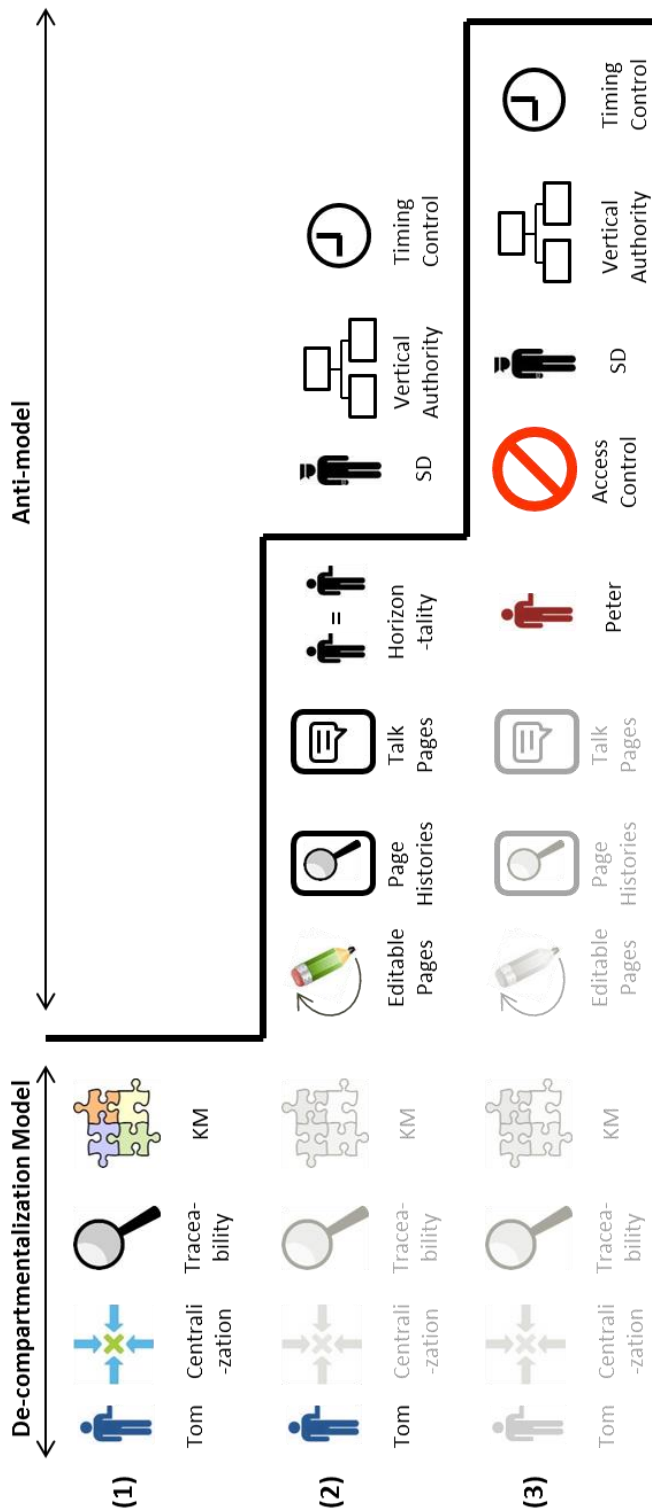


Figure 1: Matters of concern of the first episode

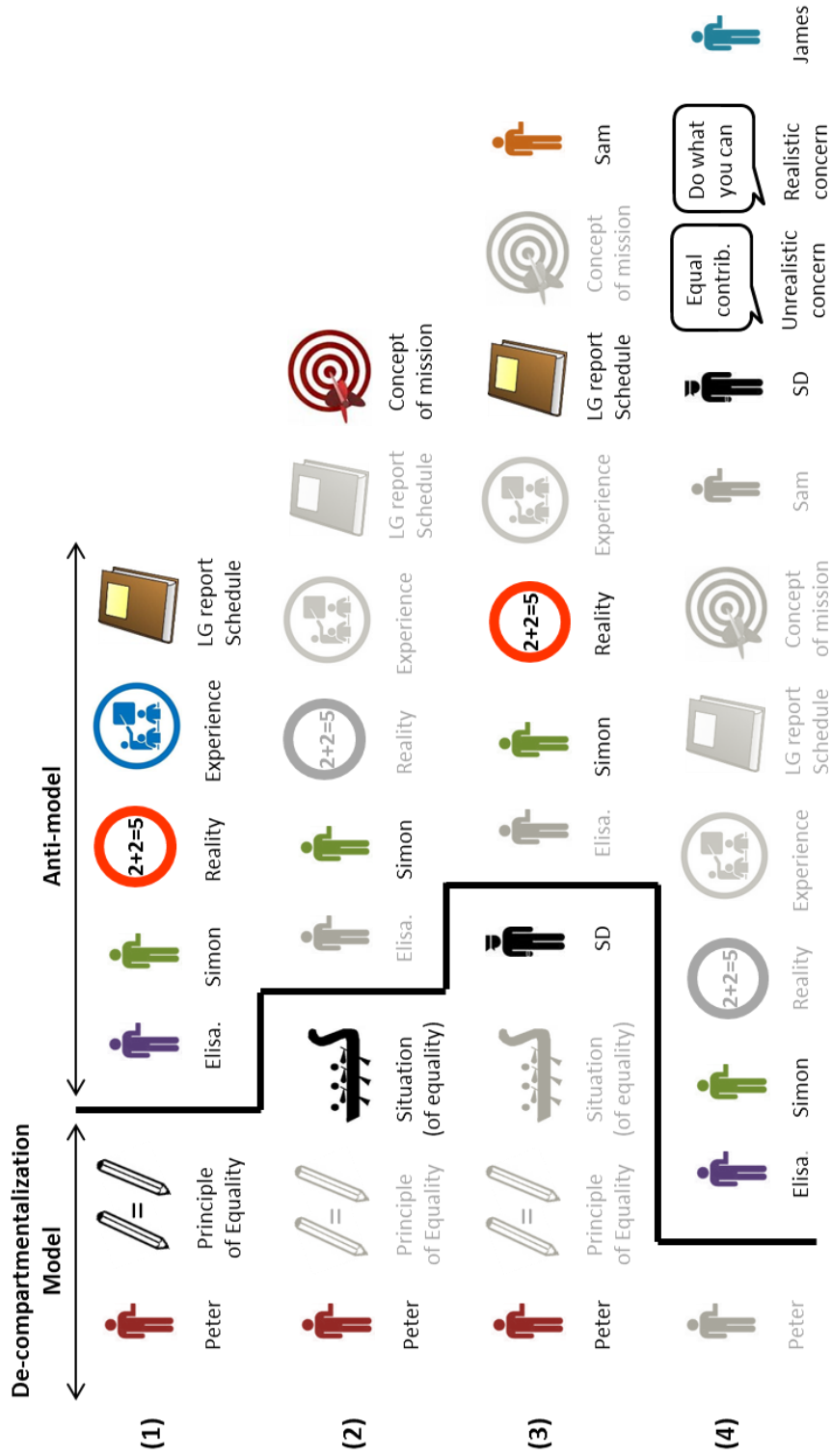


Figure 2: Matters of concern of the second episode