'This Page is not Intended for a US Audience
A Five-act Spectrale on Online Communication, Collaboration and Organization

Tunby Gulbrandsen, Ib

COPENHAGEN BUSINESS SCHOOL
HANDELSHØJSKOLEN
SOLBJERG PLADS 3
DK-2000 FREDERIKSBERG
DANMARK

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Supervisors:

Associate professor Sine N. Just (chair)

Associate professor Anne R. Pedersen

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ABSTRACT

Background

Society, in the 21st century, is digitally networked – marked by computerization, fragmentation, commodification and mediation of relations in ad hoc realities; constantly reconstructed through the changing dynamics of the network that makes up its fluxing structure, a network defined by its entanglement of the social and the material.

Objective

In this networked society we are only what the network makes us. We are only the nation, organization and individual the network communicatively constitutes us to be, what meanings it constructs of us. A vast variety of research has been conducted on how these processes play out, but only sparse empirical research has been conducted in terms of how networks 'create' health care organizations. Organizations defined by the binary public/private, that operate under strict communication regulations, on an increasingly tough market. Employing the Danish pharmaceutical company Novo Nordisk as a case, this dissertation asks: How is the communication about Novo Nordisk organized on online communication platforms; how are meanings about the organization constructed online in collaboration between the organization and its stakeholders?

Theory

In addressing this issue the present dissertation offers 'The Collaborative Paradigm' as a theoretical framework for the understanding of these processes. A framework that advocates for a discontinuation with old communication theories in order to focus on the distinctiveness of the new forms of communication. It is argued that online communication is distinct in that it is two-way mass communication, between unknown, exaggerated selves, or digital representations of humans or organizational actors, where the private goes public in a hypertextual, uncontrolled form, unconstrained by offline time and space. A process in which the one interacts directly with the few, and indirectly with the many. Consequently, it is argued, online communication must be explained in terms of its dynamic fluidity, as a never-ending process, determined by the ability to invite to and the willingness to participate in collaboration.

Method

The main methodological implication of the theoretical starting point is a renewed commitment to the study of communication as a relational process. This entails a restraint from locating or stabilizing communication anywhere outside the process, a restraint that may be handled by first admitting that what one is conducting is an analysis of a construct, an assemblage or interpretation of the process, a snapshot depicting how, at a specific and subjectively chosen point in time, two-way mass communication is unfolding online. And secondly, where the quality of this snapshot – measured in terms of its ability to capture the 'uncapturable', to fixate without distorting – is ensured by including both qualitative and quantitative data, since the investigation of single utterances and single online technologies, alone will not be able to depict online communication in processual and collaborative terms.

For this study a single case mixed method content analysis of the communication between Novo Nordisk and its stakeholders on five communication platforms (Facebook.com, YouTube.com, Flickr.com, Wikipedia.com and NewYorkTimes.com) was conducted. A sample of 4.245 communicative contributions, from the forth quarter of 2004 till the third quarter of 2011, was collected and coded, using a systematic coding scheme and the software SPSS.

Findings

The findings from the study 1) empirically detail the theoretical collaborative topography of online communication. The collaboration is marked by the unequal distribution of resources, as findings suggest that on some platforms one single actor may hold a privileged, controlling position compared to other participants, but never in the process in its entirety. In addition, it is established that the majority of the communicative process is played out through shouting/voting/cheering, meaning participants are more likely to use the 'like' and 'dislike' options as means of communication compared to textual or visual means. Furthermore, the findings suggest that 2) the current communication regulations organize the collaboration in a paradoxical way. The regulations, which do not address but apply to online communication, are on the one hand used by the organization as a strategic tool to censor the communicative process on some platforms, while almost forcing them to be absent on others. Whereas the stakeholders, who are not under regulation, but who the regulations claim to protect, are left to play by their own rules in a state of anarchy with the risk of being exposed to misinformation. In addition, it is demonstrated that, dependent on the entanglement of humans and technology, these paradoxes are organized in different degrees of fragmentation/coherence; it is demonstrated how the technological infrastructure created through social interaction (e.g. design and innovation of new technologies) sometimes presents the social interaction which the technology makes possible (e.g. by offering different potentials for interaction both with the technology and other actors) as a more cogent or systematized meaning formation than actually occurs. How non-human actors sometimes make the actions of human actors seem more linear, then they are. Finally, 3) the study suggests that this paradoxical and fragmented/coherent process is driven by centrifugal forces with centripetal consequences. The study points to how three dominant online meaning constructions, which present themselves as narratives, converge into one overarching meta-narrative. The meta-narrative being Novo Nordisk as a 'ruthlessly profit seeking socially responsible heavenly work place'. The findings demonstrate how, regardless of the differences and contradictions that exist both within and across the different communicative contributions to the process, an overarching meaning about Novo Nordisk emerges in and through the juxtaposition and entwinement of the individual actors that constitute the process. As such, individual contributions become a collective story about what and who the organization is. Not because the individual contributions always directly relate to each other, nor because they reflect the same attitude or sentiment, but because they are all concerned with the same matter – Novo Nordisk. On an individual level the communicative process may seem fragmented and disparate, but on a collective level, a network level, they converge.

Implications

The findings from this study have three main implications. First, they strengthen the understanding, and following the significance, of communication as collaboration. It is suggested that this understanding could be further deepened in future studies by including the offline motivations of the actors, highlighting the relationship between online and offline events closer. Secondly, the study impacts the way organizations should interact with their stakeholders, especially online, stressing the collaborative nature of meaning formation. As such, the study points to the continued importance of strategic communication, but where the strategy needs to focus on how to invite to a collaborative meaning formation, as the formulation of the invitation becomes determining for how the meaning formation is played out. And finally, that the current communication regulations are ripe for reform, as these today do not serve their purpose in protecting stakeholders, but rather end up as an unintended strategic tool for the organization.

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Ib Tunby Gulbrandsen

Copenhagen, August 2012

MISE-EN-SCÉNE

EXPOSITION

A crisp spring morning, during my daily Facebook procrastination, I fell over a post by one of my friends:

'Tomorrow is the day! Can't wait to start working at my idol company'.

Being an occasional online stalker, I immediately clicked on his profile to find out who this 'idol' was. And, I admit, to stalk in general.

I remembered him as a fun and adventurous guy, so I leaned back ready to be entertained by witty updates and even wittier pictures from his action-packed life.

But: disappointment.

There was no wittiness. No reports of any action. Not even funny links to quirky sites. The profile was full of 'boring being': updates that told of birthdays, graduation and beers in the sun: pictures showing holidays, cars and beers in the sun. And of course the status update about his 'idol company'.

Initially I had overlooked that his idol was tagged in the original update:

Novo Nordisk.

The pharmaceutical company. A Danish corporate jewel. Or at least a big time money-maker that is known to be socially responsible and community engaged. Something we Scandinavians love. If they are tagged, it must mean they are on Facebook too, I thought.

So, disenchanted with the lack of entertainment on my friend's profile and with valuable procrastination time to spare, I ventured into Novo Nordisk's Facebook profile. Not expecting to be entertained by corporate comedy, but rather thinking that some enlightening procrastination could be a nice transition back into ‘work-mode’.

But ‘work-mode’ never returned that day.

Upon entering I was immediately met by a disclaimer stating:

‘This page is not intended for a US audience’.

Well aware that I was currently on a US-developed and -run social networking site, I was puzzled.

Confused.

What?

Not for a US audience?

On Facebook?

Ridiculous.

Initially I blew the profile off. And with it the company. It simply came across as too ridiculous. A kind of ridiculous I was not in town for that morning.

But right under the disclaimer was my friend’s post. He had apparently posted it on their wall as well. While rereading it I noticed, to my astonishment, that it had been ‘liked’ by 24 Facebook’ers in just one hour! Many of which I could see, after stalking their profiles as well, were employees at Novo Nordisk (or at least were in the organization’s network). Underneath my friend’s post was another post. Seemingly referring to some sports event, it read:

‘Thank you for a great run’.

Underneath it was another post. This one linking to a YouTube video showing some company event. Then another. One more. Ten more. I kept reading.

I flipped through their pictures. There weren't that many, but I noticed that other Facebook'ers, and not Novo Nordisk, had posted most of them. I realized that people were actually more than fans of this organization. They were interacting with it. Talking about it. Sharing experiences of it.

I then fell over a post by 'Justine Anderson'. I stalked her profile, and despite her strict privacy settings, I could see that her current hometown was Boston.

Now I was doubly puzzled.

Were Americans posting on the Novo Nordisk wall despite the disclaimer about it being 'not intended for a US audience'?

Should Novo Nordisk tell her to stop? Or at least delete the post?

Were there more posts by this ostensibly non-intended 'US audience'?

But just then, in the middle of 'comprehension frustration', my phone rang.

Mom.

Procrastination time was over.

However my PhD project had just begun. I was hooked. Intrigued. Puzzled. How can a statement like that make any sense? Does it have any effect?

I wanted to know more. I wanted to understand how this online sphere actually 'worked'. And who 'worked' it. I wanted to understand how the interaction between companies and their surroundings played out online. How it played out on places like Facebook.

So, as of that crisp spring morning, I started on what now presents itself as a five-act spectacle about the organization of online communication in the 21st

Century. A story concerning how processes of meaning formation about organizations are played out online between an organization and its constituents. A spectacle about a particular organization set in a particular time: the Danish pharmaceutical company Novo Nordisk and its state of online communicative becoming at the beginning of a new millennium. More precisely, this is a spectacle about the quest to investigate:

How is the communication about the Danish pharmaceutical company Novo Nordisk organized on online communication platforms; how are meanings about the organization constructed online in collaboration between the organization and its stakeholders?

The spectacle is presented over five acts, where the four first address specific, yet interdependent and essential sub-issues leading towards the answer to – the dénouement of – the research question. In ACT I, I present 'The Collaborative Paradigm': the theoretical framework for the investigation, which this spectacle is about. The act highlights how I understand online communication as a collaboration that is dependent on the participants' ability to invite to and willingness to participate in a co-construction of meaning. And how this notion stems from the distinct features I claim online communication has. In ACT II, one of two particular circumstances for the online communicative process concerned with the pharmaceutical company Novo Nordisk is addressed, namely communication regulations. In the act an empirical study of the organizing effects of regulations on the collaborative process described in ACT I is conducted, emphasising how the discrepancy between regulations formulated for offline communication and the topography of online collaborative meaning formation come to organize the process in a paradoxical direction. In ACT III, the second of the two particular circumstances for the online communicative process is addressed: the intertwinement of the social and technical. Through an empirical study of the collaborative communicative process, it is argued that the socio-technical entanglement organizes the process in different degrees of fragmentation/coherence. Then, in ACT IV the traces of this paradoxical and fragmented/coherent collaborative meaning formation are analysed, suggesting that the collaboration plays out as narrative struggles over what and who Novo Nordisk is, struggles that may be conceptualized as centrifugal forces with centripetal consequences; a myriad of narratives that over time converge into one meta-narrative. Finally, in ACT V, the spectacle reaches its end, or rather its 'never-end', with an attempt to answer the overall issue, to critically reflect over the spectacle presented and to point forward in regards to the spectacle's contributions and implications. But first, the *Mise-en-scène.*

The term *Mise-en-scène* was introduced by the French playwright and director André Antoine in the late 1800's (Corvin, 2008), and refers to the stage directions a playwright has written into his or her play, to convey his or hers intended milieu and actions for the performance of the play. It is a set of provisions, or a reader manual, detailing the setting, the characters, set design and alike. In other words, a way for the writer to ensure that the director, actors, designers and producers, get an idea of what the meaning of the text is, and how it is intended to be performed.

Though this text is not a play and (probably) never will be performed on a stage, it too has a *Mise-en-scène*. I, the writer, have a certain milieu, a certain context, in mind within which the text should be read. But compared to a play, this article-based PhD dissertation has less artistic liberty in the sense that it is required to answer and account for its genesis. Keeping with scientific traditions, however contradictory and unclear they might be, I will therefore in the following make an attempt at explaining the backdrop of this text. A backdrop that pays homage to many historic and current scholars, scholars whose texts have been a source of inspiration, irritation and instigation for this thesis. Though their stories have been retold many times, and therefore may come across as familiar to you, the reader, they are presented here with the purpose of describing the outset of my PhD project and the scholarly debate to which I wish to contribute.

First, I present the spectacle's *Fabula*; here I will detail the project's theoretical grounding and its academic starting point. Second, I will introduce the main *Characters* that inhabit the story: the organization 'Novo Nordisk', its 'Stakeholders' and 'I' the investigator. This will be closely followed by an account of the *Set design*, the way the scenery is created; that is, the methodological considerations and choices that facilitate this investigation. Finally, I will offer the *Syuzhet* of the spectacle, the structure of the dissertation, as it will present itself.

Out of fear of getting caught in the fabula vs. syuzhet discussion as it has been played out and criticized by notables like Jacques Derrida (1979) and Mikhail Bakhtin (1973), I use the term fabula to mean the story within which the five-act spectacle is set, and syuzhet to mean the structure of that spectacle. Or as Jerome Bruner might put it: the syuzhet is the plot of the spectacle, and the fabula its underlying theme (Bruner, 1986). Further, I would like to point out the two interchangeable meanings behind my use of ‘spectacle’ in this thesis. First, according to Online Etymological Dictionary, the word spectacle means ‘a specially prepared or arranged display’, a borrowing from the Old French *spectacle*, itself derived from the Latin *spectaculum*, meaning a show. And if anything, PhD dissertations are specially prepared and arranged displays, small shows of what the candidate has accomplished. Not like a Volksbühne performance or Saturday Night Live show, but an arranged display of a concentrated knowledge production accumulated over a certain period of time and now presented as a piece of text. A spectacle. Secondly, I use the word spectacle to refer to a trait of contemporary society as the French theorist Guy Debord describes it. In his seminal book *The society of the spectacle* (2004), he argues that we live in a society where all social relations are mediated by images, symbols and signs, where ‘reality’ has become a representation, and not ‘reality’ in itself, as there no longer exists a real ‘real’. The spectacle presents itself simultaneously as all of society, as part of society, and as instrument of unification (Debord, 2004), meaning the whole and its parts cannot be separated. In this context, this means that this dissertation, this story, itself becomes a part of the society within which it is placed and which it aims to describe. The text is my representation of reality, it is not Reality. It is a mediation of reality as I, interdependent of my context, my relations, have come to see it. What you are about to read then, is the account of a spectacle within a spectacle. A spectacle that officially started at in September 2009 and now, in August 2012, has found its closure.

FABULA

This spectacle, this investigation, takes place in the 21st Century where, as some argue, the grand narratives of the industrial revolution and the rationality of the enlightenment are dead (Griffin, 1989: 338). Instead, the characters inhabiting the story all live in a networked society – a society where there are no fixed structures, where 'reality' is created ad-hoc, and where sociality is digital and glocal, determined equally by humans and technologies (Stiegler, 1998). In this hyper-complex setting, the characters communicate in order to constitute themselves and their surroundings. They actively participate in the construction of reality; they are bricoleurs – constantly, and repeatedly, assembling different bits and pieces in order to make sense. For all of the characters in the story, this means that they are only 'real' - they only exist - through digitally networked participatory processes, where communication becomes constitutive of reality and self through collaborative meaning construction.

In the trilogy *The Information Age: Economy, Society and Culture* (1996; 1997; 1998) Manuel Castells describes contemporary society as a network society where all social structures are organized around electronically processed information networks. And within this network, or rather networks, 'social life has become an endless process of deconstruction and reconstruction' (Castells 1996: 470), creating a society marked by de-centralization, fragmentation, hyper reality and symbolism (Venkatesh et. al, 1993). As Schulze (1993) describes it, there has been a shift in social life from 'Beziehungsvorgabe' to 'Beziehungswahl' – from pre-given relations to relations of choice. Today, traditions and pre-determined social structures have lost their omnipresent role, leaving it up to the individual to actively construct his or her own social bonds. Making the lives of individuals into D-I-Y (Do-It-Yourself) lives, decreasingly decided or guided by a great Other (be it tradition, belief, class etc.) (Beck, 1992). As a consequence, Karin Knorr-Cetina (2000) argues, the main structural conditions for modern society have become the de-socialization of society and the objectification of social relations. Former links between communities and social life are being disintegrated – individuals no longer need to, or are forced to, identify or relate to their family, hometown, workplace etc., if they do not wish to. The social ties are looser, leaving it up to each and everyone of us to create our own social structure. And in these new social structures, relations have become objectified. Objects, like technology, have become important in how people relate. Your social status might today be more decided or judged based on, for instance, your digital connectivity, rather than your family tree. We relate less to grand social structures, and instead utilize them as symbols in new social constructions as we see fit (Knorr-Cetina, 2000). This development stems from the enhanced liquidity of society; institutions (formal and informal) no longer have time to coagulate (the demand for constant change prohibits this) and thus they cannot serve as frameworks for our actions and aspirations (Bauman, 2000). We therefore have to organize our lives on our own, linking together an unending series of sporadic events, planning actions and calculating the likely gains and losses of our acts (or failures to act) (Beck, 1992).

Debord takes this notion of society one step further by arguing that social life has been replaced by mere representation, a spectacle. His theory describes a 'society on the move' (Lash and Urry, 1994: 252), where '…the commodification of goods and services becomes secondary to the commodification of human relationships' (Rifkin, 2000: 97). In this spectacle, created by a confluence of advanced capitalism, the mass media, and the types of governments who favour these, social relationships are mediated by images. Not that the spectacle is a collection of images held apart, rather the mediation through images is a means of establishing relationships between people who can only make sense of one another through cultural objects and associations. This in turn means that the image of something or someone becomes more important than 'what it actually is', because there exists no 'actuality' – the image becomes 'reality': 'Everything that was directly lived has moved away into a representation' (Debord, 2004: 28). Resembling Jean Baudrillard's notion of the *simulacrum* (Baudrillard, online), Debord's argument is that contemporary life has become fixated on reality as representation – on the removal of experiences actually lived and the insertion of mediated life experiences. And because the spectacle becomes the entire sum of human interaction, the essence of social interaction has declined from being to having and subsequently to appearing (Debord 2004: 30). But there is nothing for the individual to gain by appearing if the appearance is not acknowledged through the spectacle. The individual is dependent on the rule and acceptance of their social interaction in a network of others. This networked spectacle is according to Castells the defining feature of our current state (2000).

Through simultaneous scale extension (nationalization and internationalization) and scale reduction (smaller living and working environments) (Barney, 2004) the networked individual is becoming the basic unit of society. According to Castells, the scope of the network society is both global and local, sometimes indicated as 'glocal', and it is defined by its network logic rather than command logic, a logic that 'substantially modifies the operation and outcome in processes of production, experience power and culture' (Castells, 1996: 469). First and foremost by de-centring performance and by sharing decision-making. A network has, by definition, no centre. It exists based on the binary logic of inclusion/exclusion. The network only includes what its actors find useful and necessary, and what is not, is excluded. Castells presents the network as a structure comprised by different, but interconnected nodes, where the nodes increase their importance by absorbing more information and processing it more efficiently (Castells, 2000). If a node declines in its performance, other nodes take over its tasks, and the network effectively rearranges itself. Castells' main argument is that the interaction between nodes comes to shape society. Or more precisely, their conflicting interaction, their fight to gain importance as a node, creates the social structures which social life is organized by -- the networks have thus become 'the new social morphology' (Castells, 2000).

This networked society, also alters the societal power relationships. Castells argues that historically power was institutionalized; it was hierarchically organized in power centres, but the electronic information networks are dissolving these centres; they are disorganizing the hierarchy (2000). Thus, contemporary information networks of e.g. capital, production, science, and communication challenge, and sometime bypass, institutions like nation-states, churches, schools, hospitals and other kinds of bureaucracies. Not that the institutions lose their right to exist, rather they see their authoritative privileges constantly called into question. The networked society should not be understood however as a power-less or anarchic society. Within the networks, some nodes will, due to their ability to process more information than other nodes, increase their importance and become what Castells terms 'power-holders' (2000). These 'power-holders' only have power equal to their ability to be trusted by the network with an extra- share of information. And as long as the network trusts them they remain influential – a trust that might not be out of 'free will', but rather necessity (as there might not be alternative network structures that can provide the same). The nation-state network is an example of this; we might not be content with the network's focus or direction in its entirety, but alternative networks are not easily established. This is visible in the compliance some nation-state networks display (e.g. the Scandinavian nation-state networks), and the chaos others experience (e.g. the Egyptian nation-state network).

The ones for whom these new power structures may have the biggest impact, are the nodes that are not able to process significant amounts of information. They quickly decline in importance for the network, and may even be excluded. Sometimes referred to as 'the digital divide' (Chinn and Fairlie, 2004; Norris, 2001), this is visible both on a personal and global level. Some individuals in contemporary society may not be able to operate technology well enough to take advantage of the new media world; some might not even have access. And since the network logic requires the nodes to maintain or increase their importance by constantly processing information, being unable to access the information will automatically exclude you (Castells, 2000). The networked society is not 'open for all', but rather open for those with access and capability. In a way, the networked society may be accused of privileging the already privileged. But as we have seen with the Arab spring, and as will be addressed shortly in regards to the rise of a participatory society, the networked society does provide opportunities for breaking old power structures and creating new power relationships.

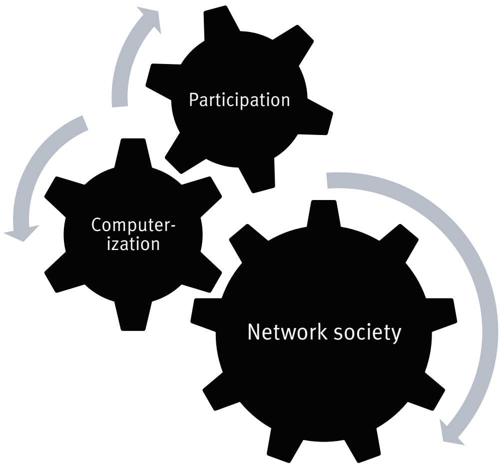
The notion of networks is, of course, not new; to the contrary, society has always been organized in networks: family network, village network, nation network. These networks traditionally had a major advantage and a major problem, in contrast to centralized hierarchies (Castells, 2000). The advantage was that they were the most flexible and adaptable form of organization; the problem was that they had considerable difficulty in coordinating functions, and managing complexity. But, Castells argues, what is 'new' is that with the introduction of new communication technologies, networks are now able to decentralize performance along a network of autonomous components, while at the same time being able to coordinate all this decentralized activity with a shared purpose of forming meanings (Castells, 2000). And as such society becomes marked by 'digitality' or 'technogene Nähe' – technogenic closeness (Beck, 2000): relations might be geographically separated (de-localized), but technology creates closeness. Former social networks were not able to do the same. What we are seeing is the emergence of networked individualism – we are building the social along self-selected networks, depending on the needs and moods of each individual, yet in constant need of affirmation by the network. Some of these networks can be lifelong, and they are not free from context. Rather we are no longer bound by predispositions to the same extent as earlier, but we can still choose to be or at least keep repeating whatever structures (like traditions, beliefs etc.) we choose.

In understanding the new structures that the network creates, it becomes important to recognize that the network is not exclusively made up of humans, but also includes non-humans (e.g. computers) (Latour, 2005). And in the networks, these non-humans are as influential and participatory in the meaning formation process as humans – a theme more thoroughly addressed in ACT III ‘Socio-technical organization of online communication’ (see p. 139). Contrary to scholars like Marshall McLuhan, Friedrich Kittler and to some extent Castells (though he would probably object), however, I do not see the technology in these digital networks as determining for society, nor do I believe that society determines technology. They are coeval (Stiegler, 1998). McLuhan declared in 1964 that technology is an extension of human senses: ‘all media, from the phonetic alphabet to the computer, are extensions of man that causes deep and lasting changes in him and transform his environment’ (McLuhan, 1964: 54). In his opinion, the condition of current society is an ‘effect’ of media and technology (Siapera, 2012: 7). He was later supported by Kittler, who in the opening line of his *Gramophone, Film, Typewriter* stated that “The media determine our situation” (1999: xxxix). But they both fail to notice what Bernard Stiegler calls epiphylogenesis (1998: 177) – the coupling of humans and technology; how they are joined at the hip, so to say, where technology makes us human and we make technology. More precisely Stiegler (1998) sees the technology of digital networks as a third kind of memory, an ‘exteriorized’ memory alongside genetic memory and epigenetic memory (the nervous system), which in turn means that the digital networks that make up society are networks where technology and humans are co-originary. This implies that the communication and meaning formation that takes place within the network, becomes organized by the intertwinement of humans and non-humans, between the social and the technical (Orlikowski, 2002).

Participation

A consequence of the emergence of a digitally networked sociality is that all aspects of life in highly industrialized modern societies, have become occupied with computerization, or as Lev Manovich states: ‘Today we are in the middle of a new media revolution - the shift of all culture to computer-mediated forms of production, distribution, and communication’ (2001: 19). And following the wave of innovation in communication technology, interactions between clients and servers have become more dynamic and user-to-user interactions more direct (Harrison and Barthel, 2009), enabling individuals to construct and share their own media and information products regardless of their technical skills. We have become active agents in the processes of meaning formation; we have become participants in (the construction of), and not audience to, societal structures and sociality.

Figure 1: Network society, computerization and participation.



Henry Jenkins calls this shift ’cultural convergence’, a shift fostering ‘a new participatory folk culture by giving average people the tools to archive, annotate, appropriate and recirculate content' (2004: 93). A shift that is not only noted in an online context, but also in society at large, e.g. in the studies and discussions of how Western democracies have moved from passive 'informed' citizenry to rights-based and voluntaristic citizenry (c.f. Hartley, 1996; Norris, 2001). According to Jenkins, the shift is most visible through popular culture, where skills acquired through plays and games become applicable in the realms of education, work, and politics; institutions attempt to break their entrenchment by engaging in grassroots fan communities (2004), and as such, the grassroots, the network, have direct impact on the operation of social institutions like religion and business.

Throughout *Convergence Culture*, Jenkins relies on Pierre Levy's concept of collective intelligence (1997); describing the phenomenon of collective human action and the ability to 'collectively think' about problems. Levy argues that

> 'in an intelligent community the specific objective is to permanently negotiate the order of things, language, the role of the individual, the identification and definition of objects, the reinterpretation of memory. Nothing is fixed' (1997: 17).

Jenkins asserts that this 'unfixed', disorderly, undisciplined, and unruly state is both the strength and weakness of collective intelligence (Jenkins, 2004: 53). Echoing, Castells' network theory, he argues that the participation will always be voluntary, temporary, and filled with tactical affiliations; people will only remain in affinity groups as long as they meet the emotional and intellectual needs of the individual (2004: 57). But they will participate. Because they can. And because they must in order to remain meaningful to selves and others. 'They' meaning the nodes, the actors in the network. Be it either as individuals, organizations or technology. This increasingly participatory culture manifests itself in the widespread excess to networked computers and Internet. Software developers have recognised this culture of participation with the introduction of 'open design', visible in the Open Source Movement; open access to and control over software, in order to develop the product. A participatory culture that, according to Hilde Voorveld, Peter Neijens and Edith Smit, (2009) is also acknowledged within marketing scholarship and management, as well as other realms of society (Bar and Riis, 2001).

Following Mark Deuze (2009), by actively participating through digital networks, we adopt, transform, manipulate, and reorganize conventional ways of understanding our surroundings; we reflexively construct our realities as digital bricoleurs. Referring to Claude Lévi-Strauss (1962), John Hartley defines bricolage as the process of creating 'with materials to hand, re-using existing artefacts and incorporating bits and pieces' (2002: 22). Derrida has extended the notion arguing that that '[i]f one calls bricolage the necessity of borrowing one's concepts from the text of a heritage which is more or less coherent or ruined, it must be said that every discourse is bricoleur' (2001: 360, see also Deleuze and Guattari, 2004). In other words, we construct meanings; we understand the world, by remixing and reassembling individually separate actions, ideas, signs and symbols we have at hand, that we are surrounded by. Actions, ideas, signs and symbols that might not have any prior connection with each other, or any linear or causal links. Instead they are combined as we 'see fit' into narratives, until another narrative fits better (Fisher, 1989).

For the bricoleur, reality, or originality, becomes a constantly negotiated and contested construction. With reference to Anthony Giddens, one could argue that we are immersed in highly personal 'life politics', through which the multiple private and public spheres we (assume we) belong to get meaning (1991: 209), but where those meanings not necessary present themselves as consistent, nor rational or deliberate. This is noticeable in the case of for instance Facebook, where the act of writing about and linking to random content from the Internet, while adding private musings and thoughts is the rule. The process is chaotic, disorganized and unplanned, and creates a challenge in regards to determining what may/should count as credible information. Instead we are constantly browsing, switching and engaging with and between different sources of information in a digital networked spectacle. But the concept of bricolage should not be confused with 'endless freedom and infinite creativity', as the bricoleur is 'constrained not only by pragmatic considerations such as suitability-to-purpose and readiness-to-hand, but by the experience and competence of the individual in selecting and using appropriate materials' (Chandler, 1998: online). And the bricolage is always dependent on its context, on the inclusion/exclusion in networks concerned with meaning formations. Because communication in this networked participatory bricolaged spectacle is collaborative. Not as a matter of passing on some piece of information, but more fundamentally in the construction of meanings, because 'people get meanings from other people through communication' (Brummett, 1999: 159), through interaction.

As with any individual in the network, an organization is equally dependent on a sense of self in order to interact and operate; as the ones with which it interacts are dependent on a sense of who the organization is to be able to interact with it (c.f. Albert, Ashforth and Dutton, 2000; Baumeister, 1998; Freeman, 1984; Granovetter, 1985; Rao et. al., 2000). And this 'sense of self' is formed through a collaborative communicative process involving anyone with a vested interest in the organization, anyone who at any point is part of the network concerned with the organization (Gioia et al., 2010; Hatch and Schultz, 1997). Within the networked spectacle we hence assign certain traits to others (and ourselves) in order to understand why they act and react the way they do. This entails that communication about organizations, meanings about them, is something we construct, not something organizations inhabit or transmit. Meaning is something we negotiate, not receive. And for organizations this inter-subjective, relational, back-and-forth nature of social and material interaction (Shotter, 2010), what Kenneth Gergen calls 'confluence' (2010), defines who or what they are. The organization is nothing but the network; they are what their interrelations with others constantly (re-)assemble them to be. The organization becomes a fluxing bricolage, a tapestry of all the symbols, signs and actions the organization in collaboration with its surroundings come to collect and add to the never-ending story about itself. And in this communicative process no one has absolute and stable power; no one is able to dictate the direction of the meaning formation. Instead the process is marked by constant power struggles and meaning-negotiations, as will become visible in ACT II, III and IV.

Some scholars argue that this constant state of flux is not conducive to a portrayal of processes that stops long enough to constitute an organization (see e.g. Chia and Langley, 2004). I disagree. I do not believe that the network produces a stable entity, but I believe that the interaction that the networks are made up of can, over time, reproduce and ritualize meaning making about the organization, as it can and does about other 'realities'. As a consequence of the bricolage certain artefacts, symbols and signs will be reused, recontextualized and repeated in such a way that the network that comprises an organization becomes stabilized over time. For this to happen, the network needs to continue 'talking about it', or rather it needs to continue 'doing'/'making' the organization. And as long as it does, we are able to talk about an organization. Not as an entity, but as a temporary result of a constant collaborative construction process, made possible and attained by social interaction (Mueller and Whittle, 2012). The organization may be constantly in the making, but it is nevertheless an organization.

In conclusion, all these developments have created what I term a networked spectacle – a society marked by fragmentation, ad hoc realities, commodification and mediation of relations through images; a society that is constantly reconstructed through the changing dynamics of the network that makes up its fluxing structure. And in this fluxing structure 'appearing' has become more important than 'having' or 'being', as there is nothing stable to 'have' or 'be'. You are what you appear to be in the network – you are only the nation, organization or individual the network makes of you. The idea of something only being that something as a result of its context is old news, the new news is that the context has become more and more digital, making the network not only bigger (as it is not constrained by offline space), but also more efficient (as it is not constrained by manual offline labour). And within this process, what specifically interests me is how the communicative process between organizations and their stakeholder is played out, how it is organized. I am interested in the specific case of want the collaboratively created 'Novo Nordisk bricolage' looks like.

CHARACTERS

This spectacle has three main characters: the old organization 'Novo Nordisk', the multi-headed creature 'Stakeholders' and the Norwegian investigator 'I'.

Novo Nordisk

89 years old, Danish of origin, favourite colours are blue and white, lives in a poly-amorous relationship.

The history of Novo Nordisk begins in 1922 when Professor and Nobel laureate August Krogh and his wife, physician and researcher in metabolic diseases, Marie Krogh, travel to the US and become acquainted with two Canadian researchers, Frederick Banting and Charles Best. Banting and Best are known for treating diabetes patients with insulin extract from bovine pancreases, a treatment that has caught the interest of the Krogh's. Upon returning, they decide to acquire a license to produce insulin in Denmark. But the Krogh's discover that they are in dire need of partners. The hence collect a group consisting of doctor Hagedorn, apothecary Kongsted and the brothers Harald and Thorvald Pedersen. By the end of 1922, they manage to secrete insulin from a bovine pancreas, by March 1923 the first patients receive treatment, and the Nordisk Insulin Laboratorium is founded. But only a year later one of the brothers, Harald, is fired after disagreements with doctor Hagedorn. In a declaration of sympathy, his brother, Thorvald, decides to quit, and in an act of revenge the brothers establish Novo Terapeutisk, a direct competitor to Nordisk Insulin Laboratorium. During the following 65 years the two companies compete vigorously, until a truce is negotiated in 1989 when the two companies merge, creating Novo Nordisk. But rather quickly the new company out-grows itself, and in 2000 it is split into Novo Nordisk (operating within the insulin and other drugs industry – the case organization for this dissertation), Novozymes (operating within the enzymes industry) and Novo (a holding company).

After this short story within the story, we have arrived at the present: today Novo Nordisk is the leading producer and marketer of insulin products, with a global market share of 51% (Euroinvestor, 2012). The organization has its headquarters in Bagsværd, Denmark, with production facilities in seven countries, affiliates in 76 countries, and as of summer 2012, 32.000 employees world-wide (Novo Nordisk, 2012). The organization is a full member of the European Federation of Pharmaceutical Industries and Associations, and known for its engagement with society (Lehrskov-Schmidt, 2004). Novo Nordisk has for instance sponsored the International Diabetes Federation's Unite for Diabetes campaign, and launched the Novo Nordisk Changing Diabetes World Tour — a tour that began in Copenhagen in September, 2005, then visited Europe, Africa, Australia, Asia, and culminated in being stationed in New York City for the inaugural World Diabetes Day on November 14, 2007. Novo Nordisk also sponsors a variety of sport events like marathon and IndyCar.

But why make Novo Nordisk one of the main characters in this spectacle, you might ask. Well, because it operates under two defining factors: 1) a fast growing and engaged market and 2) national regulations on interaction with international stakeholders. Today 180 million people are living with diabetes, a number that by 2030 is likely to be more than double (WHO, online). Novo Nordisk is in other words operating in a large and still growing industry. Global

Industry Analysts (2012) predicts that by 2017 the diabetes therapy industry will be worth over 32 billion USD worldwide, consolidating it as one of the largest sectors in the global healthcare industry. This is significant because, a) the more people that are affected, the more are likely to engage with companies like Novo Nordisk. This means that not only is the online communication about the company that occurs today important and active, but it will be even more so in the future. Findings from this investigation, therefore, have the potential of not only retrospectively understanding how the meaning constructions about the company play out, but also pointing to future possibilities. And b), being a provider of health care products also means that the organization is operating in between private and public interests, which entails numerous stakeholders from patients and relatives, via physicians to interest groups and governmental bodies. This is noteworthy because the stakeholder group with which it interacts is diverse and will potentially provide the opportunity to investigate an equally diverse process. Added, research on stakeholder-engagement suggests that stakeholders affiliated with chronic disease invest more in finding information and in interaction online (Stevenson, 1999), they therefore come to constitute an interesting sample for the investigation of online communication.

Secondly, Novo Nordisk is interesting because it is part of an industry that operates under strict regulations. Production, development, labelling, promotion and stakeholder interaction, to name a few, are all subject to regulatory constraints put on the industry by national and regional regulative bodies (governments and industry organizations). Noteworthy in this context are the regulations that pertain to communicative efforts by the organization, e.g. promotion and stakeholder interaction; interesting because the regulations do not address online communication, but nevertheless pertain to online communication, and because the regulations are limited to geographical boarders, while online communication is not. As will be dealt with in detail in ACT II (see p. 67), these regulations put Novo Nordisk, and its industry fellows, in a particular situation: having to comply with national regulations formulated for offline communication on supra-national online communication platforms.

Finally, the focus on Novo Nordisk is also prompted by the fact that whilst there has been studies discussing the possibilities of online corporate communication strategies within the health care industry (Alkhateeb, 2008; see also Butler, 2002; Gellad and Lyles, 2007; Pesse, 2006; Schiavo, 2008) and research on the industry's offline communication and branding efforts, suggesting the industry's efforts are unsuccessful in engaging their stakeholders (Lehrskov-Schmidt, 2004; see also e.g. Ladha, 2005; Moss, 2007; Wengel, 2004), no empirical research has been identified during the course of this investigation addressing how meaning formations about health care organizations are organized on online communication platforms in a networked society. This spectacle, this investigation, has therefore the potential of breaking new grounds by adding valuable empirical evidence and theoretical conceptualizations to the field.

Stakeholders

Age unknown, origin unknown, known to love and hate Novo Nordisk, uncommitted.

The other leading character in this spectacle is Novo Nordisk's stakeholders; a multi-headed character. The notion of 'stakeholder' is in this investigation used in the broad sense of anyone with a vested interest in the organization; that is, anyone choosing to participate in the communication about Novo Nordisk, given that the very act of participating is indicative of an interest. And as this dissertation does not aim at investigating how specific stakeholders (with specific interests) interact with and about the organization, but rather how all of them, combined, interact with and about Novo Nordisk, a multi-headed one-bodied character was created. This creation was also prompted by the problem of identifying and separating the different stakeholders from each other on online communication platforms. Communication platforms are often created in ways that reduce social clues and create possibility for anonymity or alternative selves (Carnevale and Prost, 1997; McKenna and Bragh, 2000). In most instances it is therefore impossible to distinguish the different stakeholders from each other. This arguably creates a freer space for contributions as the contributors do not have to disclose their identities, but at the same time this makes it difficult to identify them. This 'good-bad' quality of online communication is hard to ignore or circumvent. And any attempt to circumvent it, and hence embark on the quest of creating a more nuanced measurement of the online stakeholders, would, in my opinion, be extremely speculative as this would entail a close-reading of each individual post, followed by a more or less qualified guess regarding what kind of stakeholder the contributor might be. At least in regards to the platforms included in this study, it was not possible to break down the stakeholder group into more nuanced categories. And nor was this an aim of the study.

But this multi-headed character of course 'hides' a copious group of participants in the communicative process analysed. Seeing that Novo Nordisk is a private company dealing with a highly public issue, health care, it is reasonable to assume that the body consists of 1) patients with diabetes, 2) general practitioners (providing patient care and prescribing drugs), 3) investors and 4) shareholders, 5) patient organizations, 6) governments, 7) families (of those affected by diabetes), 8) employees and 9) the general public. The last, rather wide group includes for instance those who participate in sports events sponsored by Novo Nordisk, but are otherwise not affected by diabetes or involved with the company in any other way. It also includes those who seek information about the company in relation to, for instance, doctoral research or encounter other stakeholders' communication about Novo Nordisk on different communication platforms, for instance as a friend of someone who shares their opinion about Novo Nordisk on Facebook.

As with any investigation on online communication, this group of course only includes the stakeholders that are online and participate in some way. Put differently, this is a story exclusively concerning the stakeholders that are 'on the right side' of the digital divide. This excludes all those stakeholders who do not have access or capability to operate on online communication platforms, usually identified as older people and citizens in countries with low internet penetration (Norris, 2001.). This is therefore, inevitably, a spectacle about how well connected individuals in highly technological societies collaboratively communicate, construct meanings, about Novo Nordisk. Or what Kroker and Weinstein (1994) fairly critically would call 'the virtual class'.

I

31 years old, Norwegian of origin, sushi and salt liquorice are favourite fares, lives in a committed trans-Atlantic relationship.

The last character worth a short presentation is ‘I’, also known as the investigator. During this project I have primarily been at the Department of Organization at Copenhagen Business School (CBS), where I have also done my course work and taught graduate classes. In addition I have been a visiting scholar at two American universities. First at Annenberg School of Communication at University of Southern California, then at Center on Organizational Innovation at Columbia University. The former for five months in the spring of 2011 under the supervision of Professor Margaret McLaughlin, the latter for five months in the autumn of 2011 under the supervision of Professor David Stark. Prior to embarking on the life as a PhD fellow, I acquired an MA in contemporary culture studies and a BA in dramaturgy and political science. Following I worked four years as a producer and head of communications within the arts industry, before venturing back into academia.

SET DESIGN

As with any spectacle, this too has some particular ideas about the set design in which it should be seen. In the following I will therefore present the specific reasons behind the methodological framework employed and the research design created for this investigation.

Constructionism and relationalism

When undertaking a research project, one is faced with the question of how one understands the nature of (scientific) knowledge. And as a direct consequence of the social theory I have presented above, I see scientific knowledge and my object of study as relational social constructions.

In conceptualizing my understanding of social construction, I lean on Papert and Harel's distinction between social constructivism and social constructionism:

> 'The word with the v [constructivism] expresses the theory that knowledge is built by the learner, not supplied by the teacher. The word with the n [constructionism] expresses the further idea that this happens felicitously when the learner is engaged in the construction of something external or at least shareable...a sand castle, a machine, a computer program, a book.' (1991:1)

Barnett Pearce elaborates by adding that '...[social] constructivists foreground perception while social constructionists foreground action" (1995: 98). The distinction is not how many people are involved in the construction nor whether the process is social, as both are equally social. The distinction is what social processes underwrite the construal; social constructivism can be seen as a mental process, significantly informed by influences from social relationships, while social constructionism emphasizes the interaction in social relationships as the conduit through which the self and reality is articulated (Gergen, 2001: 60). For this project I will employ the latter conceptualization, the understanding of social constructions as constituted by interactions, where 'reality' (or realities) is something that a set of actors has constructed through interaction.

This understanding is aligned with, if not completely overlapping, a relational approach to understanding social life taking its departure from the notion that substances (e.g. utterances, individuals, organizations) derive their meaning, significance and applicability from the changing functional roles they play in a trans-action with other substances (Emirbayer, 1997: 287). As such, it is the trans-action that becomes the primary unit of investigation, since the trans-action determines or establishes the substance's function. From this point of view, the social world does not consist of individual acts or interactions between fixed individuals, but rather the sum of interrelations between transforming substances. I cannot fruitfully talk of Novo Nordisk and the meanings about the organization without including the communicative process that constructs the meanings about Novo Nordisk, as the process of communicating both comes to construct the meanings and de facto Novo Nordisk. The spatiotemporal context therefore becomes vital to the understanding of the actions undertaken by the substances, since the substances are seen as dynamic in nature, as on-going processes rather than as stagnant ties between static entities (Abbott, 2001). This implies that communication is not the work of independent actors and does not unfold according to the will or intention of the communicators. Furthermore, it implies a shift from an emphasis on the causal relationship between producers and consumers of communication, to a concern with communication as an autonomous process that is productive of actors as much as it is produced by them (Gaggi, 1997; Callon, 1986). Thus, processes of meaning formation replace individual actors as loci of knowledge and understanding. It is the relations, the network, that collaboratively and continually construct meaning; that constitute communication – and the 'object' of this investigation.

In the 2008 *Handbook of Constructionist Research*, the editors summarize the 'leading idea' of constructionism and indirectly highlight its close ties with relationality: the world we inhabit and our relations to it 'are not simply and self-evidently there' – rather, participants 'actively construct the world of everyday life and its constituent elements' (Gubrium and Holstein, 2008: 3). Taking this relational social constructionist stance has three main implications. First, language is not merely seen as a tool for representing things in the world, but as a way to 'create, sustain and transform various patterns of social relations' (Shotter, 1997: online): as a process of constructing social realities. Second, the individual is seen as 'dialogical', and not as an independent and bounded existence, or as a language user describing reality (c.f. Hermans et al., 1992; Hosking and Morley, 1991). The individual is a multiple of selves, each of which is constructed in particular relations with particular others in always on-going relational processes (Sampson, 1995). And third, that the investigator, I, become inextricably linked to the research process, as both an observer and constructor.

To avoid 'becoming my own study', I have in this research process been informed and guided by Norbert Elias' concepts of 'involvement' and 'detachment' (1987). His argument is that a scholar cannot separate the two; I will not be able to obtain absolute involvement, nor absolute detachment from my surroundings, the process I am studying. I will always be a part of it, as it is I, with my background and objectives that conduct the study. The only way to deal with this two-headed challenge as a researcher, Elias argues, is to on the one hand cultivate the ability to maintain emotional neutrality and detachment, and on the other acknowledge that how I experience the material I investigate, will, and should, contribute to the production of the knowledge of the social processes to which I attend. In other words, first I must design a theoretical and methodological framework that is solid enough to create a detachment between the material and me, and second I must admit that this subjectively created framework is part of the knowledge production. In short, and as already alluded, what I present in this dissertation is my construction of a reality. And even though I have sought to construct it in a thorough and transparent way, leaning on acclaimed and respected predecessors and their concepts, it will be, and should be, my story. And not *the* story. Because science is, according to Ludwig Wittgenstein, constructed local ontologies or 'language games' (1953), where the construction includes not only the objects of scientific discovery, but also science and scientific practices of the researcher such as theorizing, inquiry and intervention.

Following, and in line with the understanding of society as a networked spectacle, I must investigate the relational processes that come to construct the meanings about Novo Nordisk on online communication platforms. And to investigate this process I have chosen to conduct a single descriptive mixed method case study. The reasons behind this choice, and the execution of it, will be detailed in the following, starting with case study research and then the mixed methodology employed.

Case study research

This is a descriptive single case study (Yin, 2009): it involves the formulation of a descriptive theory (as will be presented in ACT I), followed by subject-observation and data collection, which is then compared to the theory (as will be presented in ACT II, II, IV and V), and it is concerned with one organization, one case. According to Merriam-Webster's dictionary (2009) a case study is 'an intensive analysis of an individual unit (e.g. an organization) stressing developmental factors in relation to environment.' It is in other words not a methodological choice, but rather a choice of what is to be studied, since the 'unit' may be studied in a number of ways (qualitatively, quantitatively, mixed etc.). What come to demarcate a case study are 'the unit's' boundaries; in this case the communication, the meaning construction, about Novo Nordisk on selected online communication platforms. The Webster definition also suggests that case studies are 'intensive', meaning detailed and in-depth, and that case studies are marked by 'developmental factors'. The latter implies that a case typically evolves over time, often as a string of concrete and interrelated events that occur 'at such a time, in such a place' (Flyvbjerg, 2011: 301). This is also the case with the present study; it attempts to provide a detailed and in-depth account of the online communication about Novo Nordisk over a longer period of time, from the fourth quarter of 2004 till the second quarter of 2010.

The selection of my case is what Flyvbjerg calls ‘information-oriented selection’ (2006: 426), a selection made in order to maximize the utility of information from single cases. As mentioned earlier, I chose the case based on the likelihood that there would be substantial online communication to be observed -- it was selected on the basis of expectations about its information content. Other organizations could of course also have been chosen, but as detailed on pages 34-37, I believe that Novo Nordisk is in a unique situation, both in regards to the industry it operates in and based on the assumption that its stakeholders, its context, is likely to be more engaged and diverse than stakeholders of other types of organizations. I consider both arguments valid and informed reasons for making this choice in order to conduct the investigation at hand. Following the case selection, and in an attempt to pre-empt some of the repeated criticism of single case study research (to which I will attend in ACT V), I have chosen to study the online communication about Novo Nordisk using a mixed method approach.

Mixed method approach

Before I commence, a clarification is due. Unlike Lynne Giddings (2006) I do not differentiate between ‘methodology’ and ‘method’ when describing the mix. The latter cannot be separated from the former in this particular case. The mix is visible in what Denzin and Lincoln (2005) define as ‘methodology’; the abstract theoretical assumptions and principles that underpin a particular research approach, reflective of specific scientific or social science disciplines. And it is visible in the methods, specifically the processes of data collection, analysis and presentation of findings (Creswell, 2003). The two levels are, from my point of view, inseparable as the first leads to the second. ‘Methodology’ guides how an investigator frames the research question, and decides on what 'methods' to use; the 'methods' being how one gets to the outcome, the practical means. Hence I will in this chapter use 'mixed methods' as describing both levels interchangeably.

On the editorial page of *The Journal of Mixed Methods Research*, mixed method research is defined as 'research in which the investigator collects and analyses data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study or program of inquiry' (2012). This definition overlaps with Burke Johnson and Anthony Onwuegbuzie's: 'the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study' (2004: 17).

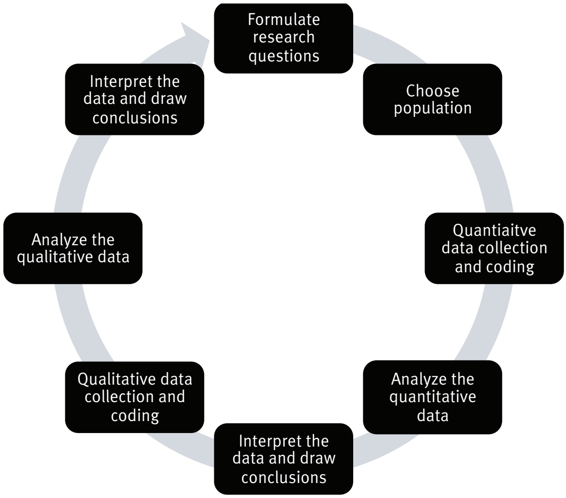
The mixed method research tradition is often presented as a way to make peace between two enemies: the advocates of quantitative vs. the advocates of qualitative research (Giddings, 2006, see also Creswell, 2003; Johnson and Christensen, 2004; Tashakkori and Teddlie, 2003). The argument is that during the last century the competing advocates have engaged in 'paradigm wars', where purists have emerged on both sides (cf. Campbell and Stanley, 1963; Lincoln and Guba, 1985). On one side we have the quantitative purists (see e.g. Ayer, 1959; Maxwell and Delaney, 2004; Popper, 1959) who articulate assumptions about research that are in line with what is often termed positivist philosophy: social observations should be treated as entities in much the same way that physical scientists treat physical phenomena and the observer is separate from the entities that are subject to observation (Johnson and

Onwuegbuzie, 2004). As such, social scientific inquiry should be objective, with the aim at making time- and context-free generalizations (Nagel, 1986), where real causes of scientific outcomes can be deemed reliable and valid. On the other side we have the qualitative purists who reject positivism, and argue for constructivism, idealism, relativism, humanism, hermeneutics, or postmodernism (see e.g. Lincoln and Guba, 2000; Schwandt, 2000). They articulate the existence of multiple-constructed realities, and following, that the observer and the observed cannot be separated because the subjective observer is the only source of 'reality' (Guba, 1990). In addition they argue that time- and context-free generalizations are neither desirable nor possible, that research is value-bound, hence making it impossible to differentiate causes and effects (Johnson and Onwuegbuzie, 2004). But during the 1990's many scholars started advocating for the inadequacy of this division, arguing that the so called 'incompatibility thesis' (qualitative and quantitative research paradigms cannot and should not be mixed) (Howe, 1988), was faulty, and promoting mixed method research as the third research paradigm bridging the divide (Morse, 1991). And as such reaching basic agreement on several points of earlier philosophical disagreement (Phillips and Burbules, 2000). This entails, following Johnson and Onwuegbuzie (2004), that one should acknowledge that what appears 'reasonable' can vary across individuals and that what we observe is affected by our background knowledge, theories, and experiences; observation is in other words not a direct window into 'reality'. This means that we can only obtain probabilistic evidence, not final proof.

I have employed the mixed method approach in order to overcome shortcomings of the individual methods (qualitative and quantitative) and to break down the confines of traditional perspectives. First of all, by mixing methods I am more likely to avoid the limitations and often raised criticism of purely quantitative or qualitative studies (Miller et. al., 2011). And secondly, as noted by Greene et al. (1989) mixed methods research makes triangulation possible (i.e. seeking convergence and confirmation of results from different methods studying the same phenomenon), hence also allowing the investigation to be informed by the findings from one method when utilizing the other.

Following the societal diagnosis presented in the *Fabula* and building on the predecessors within mixed method studies, I have chosen to conduct a mixed method case study, utilizing a sequential mixed design; 'multiple approaches to data collection, analysis, and inference are employed in a sequence of phases.' (Tashakkori and Teddlie 1998: 149-150). This means, as figure 2 shows, that data, collected and analysed from one phase of the study (quantitative data), are used to inform the other phase of the investigation (qualitative data).

Figure 2: Sequential mixed research design



The research process

The research was conducted over a three-year period, corresponding to my employment as PhD scholar at Copenhagen Business School; September 2009 till August 2012. After a thorough literature review, informed by the scientific grounding detailed in this *Mise-en-scène* and stemming from my initial puzzlement, I determined the research question that would be guiding for the process (as also mentioned in the *Exposition*, p. 17):

- **How is the communication about the Danish pharmaceutical company Novo Nordisk organized on online communication platforms; how are meanings about the organization constructed online in collaboration between the organization and its stakeholders?**

The question does not explicitly imply or detail any specific method, but as has been argued and will be explained further in the presentation of the theoretical framework in ACT I, a mixed method design was determined as the most appropriate approach. In addition, the research question was formulated in such an open way that the creation of more detailed and narrow supporting research questions (sRQ) was found necessary.

First, I needed to theoretically define what I meant by, or how I understood, online communication, as this would provide me a theoretical framework for the analysis. Following, the first sRQ is:

- **How should online communication be conceptualized?**

Secondly, seeing that Novo Nordisk is an organization set in an industry that operates under communication regulations, I found it essential to empirically investigate what effect these regulations have on the online communicative process defined by sRQ1. Hence, the second sRQ is:

- **How is the organization's and its stakeholders' participation in the online communication process about Novo Nordisk organized by communication regulations?**

Closely tailed by the need to detail the effects of the regulations on the communicative process, I also found it crucial to examine how the relationship between the basic elements of the process, humans and technology, came to influence the process. As such, the third sRQ is:

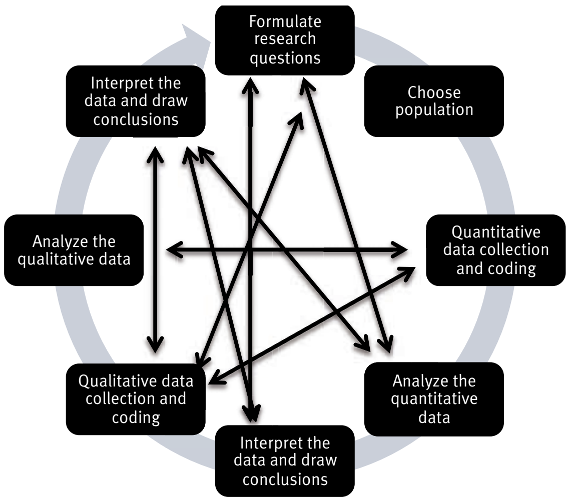
- **How is the online communication about Novo Nordisk organized by the intertwinement of the communication platforms' technology and the participating actors' social practices?**

These three questions were formulated in order to highlight aspects that I believed to be determining for how the process I wanted to investigate unfolds. But the three questions also prompted the formulation of a fourth sRQ, that would be able to go 'closer' to the process, or rather examine how the process the three other sRQs aimed at describing, came to construct meanings about the organization. The formulation of this question was further informed by the notion that humans and organizations construct reality through narratives (a notion that will be fully addressed in ACT IV). And so, the fourth sRQ is:

- **What organizational narratives are collaboratively constructed about the Danish pharmaceutical company Novo Nordisk across selected online communication platforms, and what – if any – overarching online organizational meta-narrative emerges from the combined collaborations?**

The formulation of these four supporting research questions further impelled me to make the decision to write an article-based PhD dissertation. By doing so I could split up and present the different steps taken in order to address the overall research question and I would be able to publish my findings underway (we do live in a 'publish or perish' world after all). Early on I debated whether or not the articles should (or could) present themselves as mixed method studies, both due to the still limited number of outlets for mixed method studies and due to the uncertainty about the completeness of the individual analyses. But as the project progressed, I decided that not only the project as a whole, but also each individual article should be mixed method research. As a consequence, the research process did not play out as neatly as figure 2 describes. It was more disordered, more marked by going back and forth, more as depicted in figure 3. But the various steps were taken cautiously and with intent, even though they were revisited as the project progressed. In the following I will detail the steps taken in regards to data collection, coding, measurement and analysis.

Figure 3: The actual sequential mixed research design



Platform selection and data collection

The data collection started with a qualitative search of relevant communication platforms. By manually entering a wide range of online communication platforms – on some looking up the profile of Novo Nordisk (if the platform was constructed in such a way that a profile existed), on others searching for posts tagged with 'Novo Nordisk' – I identified five platforms as relevant due to substantive communication about the organization.

1) www.facebook.com
2) www.youtube.com
3) www.flicker.com
4) www.wikipedia.com
5) www.thenewyorktimes.com

Though most readers probably are familiar with, if not active users of, these platforms, I will provide a short presentation of them. Facebook is a social networking website launched in 2004. The website's membership was initially limited to Harvard students, but was later expanded to other colleges in the Boston area, the Ivy League, and finally it became an open platform in 2006 (Abram, 2006). As of May 2012, the social network had over 900 million active users, more than half of them using Facebook on a mobile device. To be a user of the website you must register, after which you can create a personal profile, add friends and exchange messages. As a user you may also join common-interest user groups and become fan or like topics, people and organizations, such as Novo Nordisk.

YouTube is a video-sharing website, created in 2005, on which users can upload, view and share movie clips, TV clips, and music videos, as well as amateur content such as video blogging and short original videos. The contributions on the website are from both individuals and media corporations, in addition to other organizations like Novo Nordisk. Unregistered users can watch videos, while registered users can upload an unlimited number of videos. According to YouTube, the website has over 800 million unique users visit each month, of which 70% comes from outside the US (YouTube, online).

Flickr is a picture-sharing website, created in 2004. Photos can be viewed without user registration, but an account must be made in order to upload. Registering an account also allows users to create a profile page and to add other Flickr users as contacts. Yahoo! reported in June 2011 that Flickr had a total of 51 million registered members and 80 million unique visitors (Yahoo, online).

Wikipedia was founded in 2001 as an offshoot of Nupedia, a now-abandoned free encyclopaedia project. It is a free, collaboratively edited Internet encyclopaedia supported by the non-profit Wikimedia Foundation. It consists of over 22 million articles in 285 languages (over 4 million in English alone). Anyone with internet access, regardless of age, may contribute, but each contribution is recorded, even the smallest edits, and publicly viewable. Since its creation in 2001, the website has, according to Wikipedia, grown into one of the largest reference websites, attracting 470 million unique visitors monthly as of February 2012 (Wikimedia, 2012).

And finally, The New York Times is an American daily newspaper founded in 1851. Its website is the most popular online newspaper website in the world, receiving more than 30 million unique visitors per month (Adams, 2011). A monthly limited number of the newspaper's online articles are publicly available, while unlimited access requires registration and subscription, though this can, in some cases, be bypassed through the newspaper's RSS feeds. Most articles posted on its website have a comment feature where readers are free to comment, though it requires that you are a registered user (but not that you subscribe).

The investigation could of course have included other, additional or fewer platforms, but with a wish to have a broad spectrum of sites, yet a manageable amount of data, a choice was made. The selection of these five platforms was made based on the different communicative opportunities they provide the organization Novo Nordisk and its stakeholders. From the possibility to create a company platform mediated by the organization (like Facebook) via platforms mediated by opinion leaders and editors (like New York Times and Wikipedia), to less mediated platforms (like YouTube and Flickr). It was also a priority for me to include communication platforms that predominantly communicated through visuals (like YouTube and Flickr), as visuals are an important dimension of online communication and often a means for convergence across the platforms (when e.g. a film or picture from YouTube or Flickr is reposted via Facebook or in the commentary thread on New York Times) (Stromer-Galley and Martey, 2009).

Following the qualitative search and platform selection, data of all communication about Novo Nordisk, including text, pictures, videos, 'likes' etc., on the five platforms from the fourth quarter of 2004 to the second quarter of 2011 was collected. The timeframe of the collection was a matter of pragmatism: the first communication traced about Novo Nordisk on any of the platforms was posted on Wikipedia October 11, 2004, and by the end of the second quarter of 2011, I was forced to stop the collection as I needed ample time to conduct the analyses of what had become a sample of over 4000 communicative contributions to the process.

Sample

A 'sample consists of a subset of elements from the population selected according to a sample design, which specifies the rules and operations by which the sample is to be chosen from the population' (Pedhauzer and Schmelkin, 1991: 319). In this context this means that the sample consists of the communication between Novo Nordisk and its stakeholders on the selected platforms, during the decided timeframe. The sample hence represents a selected section of all the communication between the organization and its stakeholders, and not the online communication conducted between the two in its entirety.

The total number of elements, or what I will term communicative contributions, included in the sample is 4.245 (100 % of the sample). Of these contributions Facebook accounts for 843 contributions (19.9 %), YouTube for 158 (3.7 %), Flickr for 521 (12.3 %), Wikipedia for 248 (5.8 %) and The New York Times for 2.475 (58.3 %). Since a large portion of online communication is composed of 'likes' and 'dislikes', and since all text can be edited (especially on Wikipedia), the sample was broken into major and minor contributions. This was done during the collection in order to give a more nuanced depiction of the collaborative process. When all minor contributions (likes, dislikes, spelling corrections etc.) were removed from the sample, the total number of contributions is 1,166. As table 1 shows, of this subset Facebook accounted for 194 contributions (16.6 %), YouTube for 139 (11.9 %), Flickr for 518 (44.4 %), Wikipedia for 136 (11.7 %) and The New York Times for 179 (15.4 %).

Table 1: Contributions – platforms, major and minor.

Source	Number of contributions	Percentage of total	No. of major contributions	Percentage only major
Facebook	843	19,9	194	16,6
YouTube	158	3,7	139	11,9
Flickr	521	12,3	518	44,4
Wikipedia	248	5,8	136	11,7
New York Times	2475	58,3	179	15,4
Total	**4245**	**100**	**1166**	**100**

Measurement and coding

A 'measure is an observed score gathered through self-report, interview, observation, or some other means' (Edwards, 2003: 313), and for this study the measurement was created using a systematic coding scheme developed highly inspired by previous literature on content analysis of online communication (Cho and Huh, 2010; McMillan, 2000). Five measures were applied: 1) Contributor, 2) Originality of contribution, 3) Type of contribution, 4) Major/minor contribution and 5) Contribution sentiment. During the coding a 'Contributor' was defined as the source of the utterance and coded as a) Organization, b) Stakeholder and c) Unknown. In the instances where the communicator was clearly identifiable as the voice of the organization (e.g. when using the onscreen name 'Novo Nordisk' on Facebook) the contribution was coded as 'Organization', while 'Stakeholder' was used in the instances where the communicator was identifiable, but not as the organization, hence representing all other identified actors participating in the process. As noted in the presentation of the 'Characters' earlier in this *Mise-en-scène* (see p. 34), it is most often impossible to distinguish the different stakeholders from each other in online communication, due to the reduced social clues and possibility for anonymity that online communication platforms provide. As a consequence a further division of this group was not obtainable. Finally, the category 'Unknown' was only used when the identity of the communicator was not provided at all, e.g. the identity of who used the 'like' or 'dislike' options on YouTube and Flickr (that is, only the number of 'likes' was listed, not who 'liked'). In line with the previous comment about stakeholder categories, it is important to note that 'identity' here only refers to online identity, and not the contributors' offline identity. The offline identity of the contributors is of no interest in this study, as it is solely the online collaborative meaning creation that is investigated.

The measurement 'Originality of contribution' was given three degrees according to which the data was coded: a) Original, b) Comment and c) Hyperlink. An original contribution was defined as a contribution that was not a direct response to any other contributions, for instance a picture or text. One example of this is a disclaimer on Novo Nordisk's Facebook profile posted by the organization itself:

> This page is not intended for dicussions [sic] about products made by Novo Nordisk A/S. As such, postings or comments that contain product discussions may be removed.

A comment was defined as a direct response to an original contribution, for instance an utterance using the comment option or by liking or disliking the original contribution. One example of this is a comment by 'Pdevi' to a New York Times op-ed published on April 1, 2010:

> They [the pharmaceutical industry] don't want to spend 25 cents a bottle to help ensure the safety of people; they need that money to give to their CEOs and the Republican Party.

Hyperlink was defined as a contribution where a link to another website or contribution was used instead of text, picture, video or like/dislike. In the cases where the contribution was a combination of these, an individual assessment was made in order to clarify which was the dominant. The same individual assessment was used when coding 'Type of contribution', which was defined as a) Text, b) Video, c) Picture and d) Like/Dislike. 'Major/minor contribution' was coded as a) Major or b) Minor. A minor contribution was defined as using the like/dislike option or correcting mistakes in hyperlink addresses or text. An example is when the contributor identified as '131.155.36.15' on October 6, 2005 corrected the year when Nordisk Insulinlaboratorium was established from 1922 till 1923 on Wikipedia. All other contributions were coded as major contribution. Finally, the measurement 'Contribution sentiment' was coded as a) Positive, b) Negative and c) Neutral. Positive was defined as contributions that expressed support for or goodwill towards the organization, e.g. praising products, working conditions and other aspects of the organization or posting pictures that had positive connotations like people smiling while wearing t-shirts with the Novo Nordisk logo. One example of this is a post by 'NovoNordiskDevice' entitled 'Celebrating 25 years of Novo Nordisk Insulin Pen' uploaded on March 21, 2011, on YouTube. [1]

[1] http://www.youtube.com/watch?v=wWt5nQXer4w

Negative was defined as expressions of unflattering sentiments about or animosity towards the organization, e.g. criticizing its products or behaviour, such as 'Sarthak Maurya's comment on Novo Nordisk's Facebook wall, on April 7, 2011:

> you guys are really mean and pathetic..for your personal benefits you are not providing us the better medication...n really mean all this....HATE YOU..

Neutral was used in instances where neither positive nor negative sentiments could be traced in the contribution, as when the contribution was predominantly 'factual', e.g. years and dates for the establishment of the organization. It should be noted that in the instances where a negative contribution was 'liked', the 'likes' were coded as negative contributions, since they must be assumed to refer to the individual contribution and not the organization as such.

The data was coded by me, the investigator, using a coding scheme and the software SPSS[2]. A small sample was test-coded by a fellow researcher to ensure reliability, and the intercoder reliability was 0.81, which is at the acceptable level (Neuendorf, 2002).

In addition, all major contributions were manually marked and systematized by me according to the following topic categories: 1) Product, 2) Socially engaged, 3) Employee, 4) Profits, 5) Critical and 6) Non-product. The first category was used when the communicative contribution detailed or mentioned information about Novo Nordisk's products, e.g. posts where information about products or the use of products was shared. The second category was used when the contribution was concerned with the topic of Novo Nordisk as a socially engaged organization, e.g. contributing with posts telling about their efforts to fight diabetes through engagements in sports events or as like '167.206.144.30's' post on Wikipedia on September 22, 2009:

> Novo Nordisk have sponsored the International Diabetes Federation's Unite for Diabetes campaign — one of many campaigns that helped to successfully pass UN Resolution 61/225, making November 14 World Diabetes Day.

The category 'Employee' was used in the instances where the contribution clearly addressed becoming, being or wanting to become an employee at Novo Nordisk, e.g. contributions detailing open positions or the life on 'the inside'. One example is a post from Flickr by 'Tine Rugaard Møller' made on October 1,

[2] SPSS (Statistical Package for the Social Sciences) is a computer program used for survey authoring and deployment, data mining, text analytics and statistical analysis.

2007 showing how 'Tine Rugaard Møller' was welcomed to her new workplace (Novo Nordisk) with flowers on her desk.

Ny arbejdsplads

For contributions that shared information about Novo Nordisk's quest to raise profits, the category 'Profits' was used, e.g. posts suggesting the organization pulled out their products from Greece due to the financial crisis and the risk of profit loss. The category 'Critical' was used in unison with the earlier mentioned 'Negative' measurement, meaning expressions of unflattering sentiments about or animosity towards the organization. Finally, the category 'Non-product' was employed to group contributions that did not fall under the other categories.

The identification of the categories was reached through a close reading of each individual contribution and as such conducting an analysis of 'message content and message handling' (Budd, Thorp, and Donohew, 1967). Analyzing online communication introduces many challenges to the content analysis process, one being that the scope of material may be too large and hence could make an in-depth analysis convoluted (McMillan, 2000). To avoid losing the qualitative level of the analysis, this part of the investigation was not coded in SPSS, as some contributions conveyed several of the selected categories. A coding in SPSS would require that the investigator, I, decided what was most prevalent in each contribution. And contrary to what was the case with 'Originality of contribution' and 'Type of contribution', I did not wish to 'compromise' at this level of the analysis, as I was not looking to make statistical inferences about the content of the contributions. Instead the material was carefully mapped into groups and subgroups, and hence provided me with a substantial systematized material for the concrete analyses that each supporting research question required. The statistical analysis was kept at the level of the communicative process that involved the identification of the actors, the identification of their contribution (in terms of style, type and originality) and in terms of the contributions general sentiment.

Quality and legitimation of the study

Because of the complexity involved in combining qualitative and quantitative studies, mixed research challenges the question of validity. First of all, one is confronted with what to call the concept of validity. As noted by Charles Teddlie and Abbas Tashakkori (2003), although the term 'validity' is routinely used in quantitative research, I, along with many scholars, object to the concept of validity since it implies that there is a Truth. Validity will always be relative to a particular context, situation, language system, or worldview (Schwandt, 2001). One could even make the argument that the concept of validity (and the word) is representing a debunked modernist perspective that champions universal rationality, rules, order, logic, and the like (Onwuegbuzie and Johnson 2006). A possible solution to this challenge involves what Teddlie and Tashakkori refer to as 'using a bilingual nomenclature' (2003: 12) based on the terms 'inference quality' and 'inference transferability'. Because inferences are made in research studies regardless of their qualitative or quantitative nature, the concept of 'inference' transcends the quantitative and qualitative divide.

Inference quality consists of the two parameters 1) design quality and 2) interpretive rigor. Design quality denotes the methodological rigor of the mixed research study, whereas interpretive rigor pertains to the strength of conclusions. In this study, I have sought to address both parameters. First by ensuring that the selection of sources, collection of data and process of analysis was conducted thoroughly and informed by previous and acclaimed studies. Secondly, by including a diverse and substantial amount of data – large enough to lower the risk of investigator manipulation, small enough to allow for in-depth analysis. Whether or not this has been accomplished I will discuss in detail in ACT V.

In regards to inference transferability, denoting the generalizability of the findings, this entails the transferability of the population included in the study (whether or not it is transferable to other individuals, groups, or entities) and ecological transferability (if it is transferable to other contexts or settings). Even though the value of transferability can (and will in AVT V be) discussed and questioned, it is a factor any PhD fellow is faced with, especially in business schools like CBS. Two often asked questions are: What are the implications of your study? And how is your investigation relevant to others? In other words, how transferable are your findings. As with inference quality, I will address both the specific and possible general implications this investigation has in ACT V. But there is no doubt that this thesis has implications for other organizations: firstly for organizations within the health care industry, secondly for other heavily regulated organizations (e.g. the financial sector) and thirdly for organizations who are being communicated about online (meaning most organizations in the 21st century). This is a spectacle about a particular organization set in a particular time, I will never claim otherwise. But I will claim, despite the uniqueness and particular relevance of the chosen organization, that the communication observed, the processes of meaning formation analysed, are not exclusive to this organization, to the characters that inhabit this spectacle. These processes are, as hopefully will become evident, part of larger societal trends.

Ethical considerations

Finally, a note on the ethical consideration behind this investigation. As I am more interested in public meaning formation, compared to meaning formation in closed online communities, I chose to only include publicly accessible platforms. As a consequence, I am faced with the question of how materials from these public spaces can and should be included in scientific inquiries. With the emergence of online communication as a field of study, guidelines for ethical social science research in cyberspace have been the topic of much debate (Kozinets, 2002). The ethical concerns revolve around two nontrivial, contestable and interrelated concerns: 1) Is online communication platforms to be considered a private or a public site, and 2) what constitutes 'informed consent' in cyberspace? But no clear consensus has been reached on these issues, and therefore there are not yet established any ethical procedures for scientific research in cyberspace (Kozinets, 2002: 8).

Due to the lack of any established ethical procedures, I have, in line with Rafaeli (quoted in Sudweeks and Rafaeli, 1995), taken the standpoint that 'informed consent' by the participating informants in this study was implicitly given when they made posts on a public site. When contributing with material on open platforms like those included in this study, one has made a conscious choice of voicing one's opinion in public, hence also to be subject to public scrutiny, including research. On the question of providing the informants with anonymity; slurring or totally covering the identity of this study's informants, would damage the legitimacy of the study since it would mean I would not be able to provide direct links and references to the actual sources. By making the informants anonymous, the study could more easily be manipulated by the investigator. Regardless, this study is not aimed at understanding particular subjects' contributions, but rather the broader flow of events concerning a specific organization. The examples used in this dissertation should therefore not be seen as analyses of particular contributors with the intent of ridiculing/criticizing/hailing, but rather as examples of more general tendencies.

SYUZHET

'This page is not indented for a US audience' is a spectacle played out over five acts, four of which are distinct research articles either published or under review. This structure is a consequence of the main and supporting research questions formulated for the investigation; the dissertation is therefore to be read as individual, yet interdependent acts, offering separate inferences that during the course of the spectacle will interweave and interact in different ways, until they all converge in the final ACT V.

ACT I – The Collaborative Paradigm

ACT I presents 'The Collaborative Paradigm': the theoretical framework for the investigation of which this spectacle is about, answering sRQ1: How should online communication be conceptualized? In the act it is argued that a discontinuation with old communication theories is necessary in order to focus on the distinctiveness of the new forms of communication. By taking this approach, online communication is understood as distinct in that it is two-way mass communication, between unknown, exaggerated selves or digital representations of humans or organizational actors, where the private goes public in a hypertextual, uncontrolled form, unconstrained by offline time and space. Consequently, it is asserted, online communication must be explained as a never-ending process, determined by the ability to invite to and the willingness to participate in collaboration. The act ends in suggesting that these insights entail a restraint from locating or stabilizing communication anywhere outside the process. And this restraint is proposed handled by first admitting that what one is conducting is an analysis of a construct, a snapshot of a collaborative process, depicting how, at a specific and subjectively chosen point in time, two-way mass communication is unfolding online. And secondly, by including both qualitative and quantitative data in the snapshot, since the investigation of single utterances and single online technologies, alone will not be able to depict online communication in collaborative terms.

This act is co-authored by Sine N. Just, and corresponds to an edited version of the article 'The collaborative paradigm - Towards an invitational and participatory concept of online communication' published in 2011, in *Culture, Media and Society*, 33 (7): 1095–1108.

ACT II – Offline Regulation of Online Communication

In ACT II, 'Offline regulation of online communication', one of two particular circumstances for the online communicative process concerned with the pharmaceutical company Novo Nordisk is addressed, namely communication regulations. The act offers findings from a mixed method study answering sRQ2: How is the organization's and its stakeholders' participation in the online communication process about Novo Nordisk organized by communication regulations? In the act it is advocated that the regulations, which are formulated for offline communication, come to organize the online communicative process in a paradoxical way, which is exemplified by for instance the disclaimer made by Novo Nordisk on its Facebook profile 'This page is not intended for a US audience'. The disclaimer, and other contributions, is featured to suggest that the regulations are used by Novo Nordisk as 1) a strategic tool to censor the collaborative process taking place on some platforms, while 2) almost forcing it to be absent on others. As such, the organization's participation in the communicative process is organized in terms of disclaimers and hidden promotion aimed at either adhering to the regulations or circumventing them. The stakeholders' participation, on the other hand, is organized as a 'free-for-all' – which sometimes creates self-justice, while at other times creating unconcealed product discussions that do not always take the risks and benefits of the product into account. The analysis shows that the organization accounts for only 3.3% of all the communicative contributions included in the sample, of which most is on the company-controlled Facebook page. The act ends in arguing that the offline regulations come to dictate the online communicative process in a paradoxical direction, where the organization about which the process is concerned is on one side partly silenced, and on the other given a strategic tool to in turn silence critical or off-topic stakeholders. Whereas the stakeholders, who are not under regulation, but who the regulations claim to protect, are left to play by their own rules in a state of anarchy with the risk of being exposed to misinformation.

ACT III – Socio-technical Organization of Online Communication

In ACT III, the second of the two particular circumstances for the online communicative process is addressed answering sRQ3: How is the online communication about Novo Nordisk organized by the intertwinement of the communication platforms' technology and the participating actors' social practices? The act conveys that the process is organized in more or less fragmented ways, fragmentations that are conditioned by both the technological infrastructure created through social interaction (e.g. design and innovation of new technologies) and the social interaction the technology makes possible (e.g. by offering different potentials for interaction both with the technology and other actors). The act claims that the communicative process becomes contingent on the nature of the relationship between the involved actors. In doing so, the act offers findings on how negotiations over meanings, the struggles, become not a matter of human vs. human, or human vs. technology, but rather human and technology vs. human and technology. The act ends in asserting that the entanglement creates different conditions for the level of possible coherence in the process – the more potential or possibilities the human actor is provided in the communicative process, the more fragmented or chaotic the process becomes.

ACT IV – Collaboratively Constructed Contradictory Accounts

ACT IV offers findings from a study answering sRQ4: What organizational narratives are collaboratively constructed about the Danish pharmaceutical company Novo Nordisk across selected online communication platforms, and what – if any – overarching online organizational meta-narrative emerges from the combined collaborations? In the act it is argued that based on the concept and findings presented in the previous acts, the collaborative, paradoxical and fragmented co-production of meaning is played out as a centrifugal narration process with centripetal consequences. This assertion is based on the claim that people make and present meaning through narratives, and that the same holds true for communication about organizations, because organizations can be seen as the narratives that people construct in ways which maintain and objectify reality. Through a content analysis of the communication about Novo Nordisk, three dominant online meaning constructions that present themselves as narratives are identified. Following, the act demonstrates how these narratives converge into one overarching meta-narrative. The meta-narrative being Novo Nordisk as the ruthlessly profit seeking socially responsible heavenly work place, a meta-narrative made up of the three interrelated, yet disparate tales about Novo Nordisk as 1) a socially responsible organization and engaged in society at large; 2) an organization primarily concerned with fulfilling its own objectives – profit maximization; and 3) a great and employee-centred workplace. The act ends in a discussion of how the unsurprising nature of the findings – that an organization is seen as both socially responsible, profit seeking and as a good workplace– is the actual point, and not a sign of analytical weakness. It is argued that the rather predictable narrative identified confirms the claim that online collaboration should be conceptualized as a centrifugal process with centripetal consequences. Per se, ACT IV demonstrates that regardless of the differences, inconsistencies, and contradictions that exist both within and across the different communicative contributions to the process, an overarching meaning about Novo Nordisk emerges in and through the juxtaposition, opposition and entwinement of the individual actors that constitute the process. And that this in turn further contributes to substantiating the theoretical notion, offered in ACT I, of online communication as collaboration. This act is co-authored by Sine N. Just.

ACT V – The (never-) End(-ing) Story

Finally, in ACT V the spectacle presents the end story, or more accurately, the never-ending story. This act functions as the conclusion of the dissertation and is therefore structured differently than the four that precede it. ACT V takes off where ACT IV landed, in a discussion of the challenges of doing process studies, questioning if it is possible to say anything about a communicative process without stepping outside the process and as such inevitably coming to treat the process as a collection of stable entities or utterances that can be observed and analysed. The answer is no, but it is argued that rather than being a scientific shortcoming, this dilemma says something fundamental about processes; they do not exist independently of their contents and can only be seen in and through these. Following a conclusion is offered, an answer to the main research question: How is the communication about the Danish pharmaceutical company Novo Nordisk organized on online communication platforms; how are meanings about the organization constructed online in collaboration between the organization and its stakeholders. The conclusion offered is that the meaning formation process between the organization and its stakeholders is organized as a collaborative networked bricolage, where individual texts, pictures, videos, links, like's and dislike's are remixed and reassembled by the different actors, both individually and collectively, in ways they at any given time 'see fit'. And furthermore, that this collaborative remixing and reassembling is contingent on the participants' position in regards to the current communication regulations and their intertwinement with the communication platforms' technology. As such, individual contributions become a collective story about what and who the organization is. Not because the individual contributions always directly relate to each other, nor because they reflect the same attitude or sentiment, but because they are all concerned with the same matter – Novo Nordisk. On an individual level the communicative process may seem fragmented and disparate, but on a collective level, a network level, they converge. The communicative process does not, in other words, play out like a chain of events, but as a networked process. The act ends in presenting the theoretical and methodological contributions this PhD dissertation has to offer, and in detailing what implications its inferences could have on future research and for ‘non-academic’ networks.

A final note

Even though the spectacle plays out on five platforms, in two of the acts the action is reported from only four. In ACT II the communication platform Flickr is not included in the investigation, while in ACT III New York Times is not included. Writing a paper-based dissertation, hence directing the different papers at specific journals, also means that one has to comply with restrictions on the length of the manuscript. In two of the four articles it was therefore my choice to exclude one platform due to limits of space. Though a tough choice to make, it was made easier by the fact that in ACT II, Flickr produced the same results as YouTube, meaning no significant findings were excluded. The same was the case with ACT III, where New York Times during the analysis showed the same tendencies as observed with Wikipedia. In the former case the overlapping results may not come across as surprising since they both are platforms communicating through visual means. The latter might seem odd, as the two platforms are rather different in their technological infrastructure, but regarding how regulations come to organize the communicative process concerned with constructing meanings about Novo Nordisk, the communicative processes on these two semi-mediated platforms played out in similar ways.

And, dear reader, there will occur repetitions of certain segments throughout the five acts. This especially concerns the repeated accounts of the methods applied and the theoretical framework presented in ACT I. I cannot promise that the repetitions will provide the same pleasures as a well-composed *leitmotif*, I can only warn you, and avow that recurrences are unavoidable in an article-based dissertation where the individual papers all stem from the same theoretic concept and the same mixed method study.

ACT I
THE COLLABORATIVE PARADIGM

INTRODUCTION

During the wave of uprisings that swept over the Middle East in the first months of 2011, Facebook was identified as being instrumental to the success of the protesters (Giglio, 2011); the upheaval following the Iranian presidential election in 2009 was named a Twitter revolution (Keller, 2010); and during the 2008 presidential campaign in the US, 55 percent of the voting-age population used the internet to connect to the political process (Smith, 2009). In other words, online communication has become a central form of political communication. Similarly, commercial communication is going online; in 2008 internet sales represented 9.8 percent of the value of all sales of UK non-financial sector businesses – the value of these sales being £222.9bn, an increase of 36.6 percent compared to 2007 (Office of National Statistics, 2008). Even friendships and professional networking are moving online; more than 600 million people are friends on Facebook (Carlson, 2011) and over 100 million professionals network are using LinkedIn (Parr, 2011). The Internet, in little more than 10 years, has gone from a static showcase to a bustling town square, due to a wave of innovation in Internet communication technology that makes interactions between clients and servers more dynamic, webpage displays and applications more engaging, interactive and participative, and user-to-user interactions more direct (Harrison and Barthel, 2009). Technologies like AJAX and XML have enabled users to construct, share and link their own media and information products, regardless of their technical expertise, and consequently made the Internet into an exceedingly powerful tool for anyone with communication needs. These developments lead to the central question of this commentary: how are we to understand the communication taking place in the new global town square, how are we to conceptualize online communication?

In tackling this question, many possible theoretical starting points present themselves, but most existing explorations of online communication may be placed in one of two opposite groups: seeing the internet as either well-charted or unknown territory – that is, 'we should understand online communication as we understand other types of communication' (see *inter alia* Gurak, 1997; Marshall, 2004; Warnick, 2007) – or 'we need new models and theories to understand this completely new form of communication' (see *inter alia* Dean, 2003; Murray, 1997). We will argue, however, that choosing either of these strategies is limiting, since the first results in uncritical continuation of old theories and the latter implies a naive disregard of earlier discoveries. Instead, we suggest that the field of online communication needs to reconnect with some basic ideas of communication, and at the same time discontinue other modes of thinking. We will put forward the claim that online communication is processual and collaborative, and in so doing we will be drawing on an understanding of communication as process that is somewhat familiar to communication scholars, yet surprisingly unexplored.

In the following, we first identify the field of online communication research and place our contribution within it. Then we present five distinct empirical features that we believe are determining of online communication: features that point to the need for both theoretical discontinuity and reconnection. The article then goes on to address the question of how online communication can be understood. We propose that this form of communication may most fruitfully be understood in terms of a collaborative paradigm, in which communication is explained as an ongoing process that is determined by the willingness to participate in and the ability to invite to collaboration. Finally, we look into the implications that the collaborative approach to online communication may have for future research and practice.

NAMING AND REVIEWING THE FIELD

Discussions of the implications that new information and communication technologies (ICTs) might have on communication studies are often preceded by a meditation on what the communication in question should be called: new media, computer-mediated communication, web 2.0, social media, digital communication, online communication, etc. New media is perhaps the most encompassing term referring to the host of ICTs that began appearing in the 1960's and continues to be launched at an impressive rate (McQuail, 2010: 39). The computer, of course, is absolutely central to this development; a fact that is reflected in the frequent use of the term computer-mediated communication (CMC) to describe the field of research. While CMC is both a broad and quite neutral term, it is not, in our opinion, broad enough. As mentioned, the computer is an obvious focus, but it is not the only technology that should be studied; mobile phones, for instance, are becoming increasingly hard to ignore. New media, to the contrary, is too broad a concept. The main problem is determining which media are new and which are not (Scolari, 2009); the computer is the archetypical new medium, but it has already become integrated into social life to such an extent that the label 'new' seems quite awkward. Hence, new media is too imprecise a label to serve as a delineation of our area of study.

The terms web 2.0 or social media/social software are today often used as an indication of what is 'new', and, hence, may replace new media as the designation of the current centre of attention. Web 2.0 refers to technology that facilitates online collaboration and information sharing (O'Reilly, 2005) and, as such, it points to an important field. As will be detailed below, we agree that it is important to focus on the Internet, but the indication that we are somehow dealing with a new version of the Internet is, in our opinion, problematic. The terms social media/social software are equally problematic since they contain strong connotations to a certain type of application, the social networking sites, and to acts of socialization (Bruns, 2008: 2). Therefore, it is difficult to fit all of the current developments under this label. The rise of the Google search engine as an important nodal point of the net or the use of RSS feeds to share information, for instance, do not allow for contributions in the strong sense that the invocation of 'the social' suggests. Yet they clearly have a participatory or collaborative element as users of Google play a part in establishing the sequence in which the results of a search appear and as RSS-users receive updates and pass information on to friends, colleagues and other online relations.

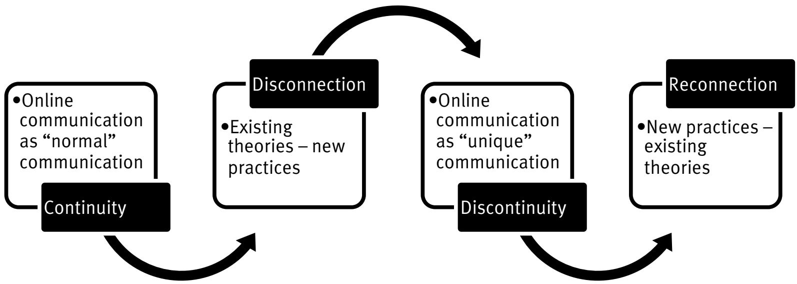
The term digital communication in a sense combines the strengths of CMC and new media; the term denotes a host of technologies, but it also contains a clear boundary. All forms of communication that work on the binary code and, hence, may converge – that is, share processes of production, distribution, and storage, thus becoming available on the same platform – are digital, the rest are not (McQuail, 2010: 138). Digital communication, then, may be an apt term to denote the field as such (see also Scolari, 2009). For present purposes, however, we wish to point to the importance of the Internet as the locus for the convergence of digital communication, and, hence, as the medium of collaboration. It is on – or through – the Internet that television broadcasts, newspaper articles, live updates, and other forms of digital communication are actually produced, shared, and distributed. Therefore, we prefer the term online communication as a designation of our area of study.

Online communication

Relevant investigations of online communication – and neighbouring fields – may be mapped according to the degree to which they define the form of communication in question as a unique phenomenon (Scolari, 2009: 949; Zappen, 2005). Carlos Alberto Scolari (2009) suggests a continuity–discontinuity axis as the organizing centrepiece of the map. At the one pole of the axis we find studies that understand online communication as just another form of communication[3], a continuation of existing developments that may be analysed with the same concepts and models that are used to study other communicative phenomena. At the other pole we find studies that view digital communication as a break with existing forms, a new communicative paradigm, for which specific theories and analytical tools must be developed (Scolari, 2009: 958–60). Taking our cue from Scolari, we argue that theorizing online communication demands reconnection as well as discontinuity – a possibility that is implied, but not fleshed out in Scolari's article. Thus, we propose an alternative map (see figure 4).

[3] Scolari speaks of digital communication rather than online communication. We situate online communication as a subfield of digital communication; therefore Scolari's discussion of the various theoretical conceptualizations pertains equally to both fields.

Figure 4: From continuity to discontinuity – and back again



The continuity approach may be exemplified by studies that apply traditional communication theories to online communication. For instance, classical rhetorical concepts are sometimes used to study strategic online communication; that is, forms of online communication that directly aim to persuade their audiences (Warnick, 2007). A typical example of this approach is the application of the classical forms of appeal – ethos, logos and pathos – in studies of the role of online debates and mailing lists in political communication as well as in marketing (Gurak, 1997; Marshall, 2004). Moving along Scolari's axis we find approaches that take the stance we label disconnection. One example of this is Susan Herring's (2004) computer-mediated discourse analysis (CMDA), which suggests that new methods are needed for the study of online communication but also maintains a fairly traditional focus on communication as text. Studies that focus on the relationship between online communication and the traditional notion of the public sphere provide other important examples of the discontinuity approach (see e.g. Dean, 2003; Gimmler, 2001; Poster, 2001). These studies begin from existing theories and discuss how well they fit the new practices of online communication. Discontinuity is the approach of investigations that begin from the notion that online communication has already transformed our reality and suggest that we need new theories and models to understand this altered reality. An early example of this approach is Janet Murray's (1997) seminal investigation of how new media are changing the ways we tell stories and make sense of our lives. Other studies that – like Murray's – take their implicit or explicit starting point in Marshall McLuhan's famous dictum that the medium is the message focus on the business end of online communication (see e.g. Li and Bernoff, 2008; Qualman, 2009; Tapscott and Williams, 2006). A final example is Ian Bogost's theory of what he calls procedural rhetoric (2007; see also Smith and Just, 2009), which aims to explain how persuasive games work. This theory is remarkable because it begins from an understanding that we are dealing with a new form of communication, thus discontinuing the routine application of old theories to new phenomena, but ends up reflexively reconnecting to existing theories (e.g. such classical rhetorical concepts such as the enthymematic structure of arguments [Bogost, 2007: 43]).

All the possible approaches to online communication have strengths and weaknesses, but we maintain that approaches that begin from the unique features of online communication hold greater explanatory potential than studies that begin from existing theories, concepts and models. Theories are positions or perspectives; they allow us to see certain things in certain ways and push other elements or possibilities out of sight (Haraway, 1995: 193). If one is using old theories, one is likely to see familiar things. The alternative – beginning from new phenomena and therefore being likely to see unfamiliar things – may be criticized for emphasizing the dissimilarities and not being able to see the many continuities. However, we believe this bias to be less damning as it is easier to rediscover – or be reminded of – a connection with existing theories if one has first sought to develop a new position, than it is to break out from an established theory if one did not set out to do so. As a consequence of this starting point we need to turn to an examination of the distinct features of online communication before engaging in the discussion of what theory might appropriately explain this form of communication.

DISTINCT FEATURES

Online communication has distinct features that separate it from more traditional modes of communication (mass and interpersonal communication). There are, of course, several different ways of looking at this and our way is not revolutionary, but we believe the sum of five distinct features to be determining for online communication. That is, we take our starting point from the observations that online communication is: (1) negotiable and uncontrolled, (2) time-space free, (3) hypertextual, (4) hyper-public and (5) two-way mass communication.

Negotiable and uncontrolled

The first feature is facilitated by the easy access that users have to using and producing online communication. Recent innovation in computer-mediated communication technology allows, and in some cases forces, users of the internet to play an active role in generating content, rather than passively consuming content created by others (Harrison and Barthel, 2009).

Furthermore, almost all online actions can be stored, deleted, replicated, edited and even retrieved (Cherny, 1999; Walther, 1996), therefore the communication is constantly 'in-the-making'. This means that online communication is an inherently negotiable type of communication that cannot be controlled by any single actor: just as a producer loses control over who listens to a radio show once it is aired, there is often little, if any, control over access and participation in online communication (Galegher et al., 1998). It is important to link the characteristics of negotiability and uncontrollability because – unlike the radio show – online communication is not only uncontrolled at the moment of reception, but also at the moment of production.

Time-space free

The second defining feature is that online communication is not dependent on, nor defined by, offline time and space (Baron, 1998; Castells, 2000; Lea, 1991; McKenna and Bragh, 2000). Except in terms of accessibility, online communication is not con- strained by offline temporal or spatial issues. Anyone can communicate online anytime anywhere – online interaction between people in the same office is indistinguishable from communication between people who are a 10-hour flight apart – a fact that creates placeless proximity (Baym, 2009). As a consequence, the notion of a linear sequence of communication, best exemplified by the sequence of action and reaction of interpersonal communication, is broken up. Online exchanges may develop rapidly and in a single context, as when friends on Facebook comment on each other's status lines, but it is just as likely that comments arise in another context, as when one blogger takes up an idea of another, or when a conversation which seemed to have ended is suddenly taken up again as a new user stumbles upon an existing comment and gives his or her opinion on the matter. Online communication, then, may be said to exist in a permanent state of combined and potential 'here and now' rather than in separate time and space continua of past–present–future and here–there, respectively.

Hypertextual

The third feature of online communication is the possibility of hypertext as best defined with reference to the practice of linking. Silvio Gaggi explains that:

> In a fully developed hypertextual system, texts to which one moves are also networked to their own references and allusions. In the end, what results is a complex, interconnected network of nodes and links. The reader enters at any node and chooses any path through and about the network. (1997: 102)

The concept of hypertext is often supplemented with the notion of hypermedia, which refers to the convergence of multimedia content – graphics, audio and video – by means of the hyperlink (Hoffman and Novak, 1996: 50). Hypertext and hypermedia, then, are overlapping concepts with similar characteristics of a break with the single authorship and linear progression of classical forms of mass communication such as the book or the TV-show. In Gaggi's words 'hypertext is a mode of textuality that encourages writerly, active reading rather than passive consumption of what has been produced by a conventionally authorial author' (1997: 104).

Hyper-public

The fourth feature is the hyper-public character of online communication. Because of the Internet, more people have faster access to more communication produced by more sources (Gerhards and Schäfer, 2010: 145). And online communication extends the realm of the public into areas that used to belong to the private sphere (Rosenberg, 2009). The private becomes public as people are increasingly publicizing all aspects of their lives on the Internet, thus putting private issues to public scrutiny and debate. This is a development that some lament (Boggs, 2000) and others applaud (Hermes, 2006), but no one wishing to understand the character of online communication can ignore. Furthermore, online communication facilitates participation; users increasingly act as prosumers and make their own content (Tapscott and Williams, 2006: 126), boundaries between citizenship and produsage are also blurring (Bruns, 2008), and people increasingly contribute to public debate as citizen-consumers (Scammell, 2000). It may be a messy and fragmented affair, but it most certainly is not a withdrawal from the public into a state of passive spectatorship. Rather, the public sphere is buzzing with activity as people are taking their personal and quotidian concerns online.

Two-way mass communication

The last, and perhaps most important, feature is that online communication is one-to-many, but not one-way. It is two-way mass communication (cf. Napoli, 2010) – the one interacts directly with the few, and indirectly with the many. Overlooking this feature has fostered the view that online communication is 'just another kind' of face-to- face communication (Baym et al., 2004) or, to the contrary, that it is many-to-many communication (Jensen, 2010). We claim, however, that online communication cannot be understood by comparing it to one-on-one, face-to-face conversations. As discussed above, the spatio-temporality of interpersonal communication is broken down online, and the hypertextuality of online communication also distances it from conversation. The alternative idea that 'many' are communicating with 'many' is also inadequate, since 'many' in this case indicates a collective agency, which we do not believe exists. Online, we appear as 'ones', individual actors (persons and organizations alike) that directly interact with a minority, and indirectly interact with the majority. For example, in the case of blogs, the blogger interacts directly with the few commenting, but both the blog posts and the comments are read by others. Even if the 'many' in this case are not (always) 'masses', indirect participants still tend to outnumber direct participants. The same is true for Facebook updates, Tweets, YouTube videos, wikis and even the more static corporate websites.

This distinct form of communication also entails a trend towards anonymous or staged selves. Web-based communities, hosted services and applications are often, but not always, created in a way that reduces social clues and creates the possibility of invisibility and secrecy (Carnevale and Probst, 1997; McKenna and Bragh, 2000), giving the participants the option of not disclosing who they are. And if the participants choose to, or are 'forced to' by the nature of the service, online communication makes it possible to present over-staged, alternative selves (Turkle, 1996) relating more or less loosely with 'reality'.

To conclude: online communication is two-way mass communication, between unknown, exaggerated selves, or digital representations of humans or organizational actors, where the private goes public in a hypertextual, uncontrolled form, unconstrained by time, space and accessibility. The five features depict a form of communication in which technologies blend, making it possible for users to play along and remix, redistribute and reconsume. Where does that description lead us in terms of conceptualization? How should we theorize online communication in a manner that takes heed of its distinctiveness?

THE COLLABORATIVE PARADIGM

When answering the question 'What is communication?' most communication scholars are quick to respond that communication is a process (Smith, 1972). In fact, this experience organizations (the object) directly, but rather comes to know organizations through the communication they utilize to explain their actions as well as the communication others use to explain the organizations (the process) (Elwood, 1995). However, the implications of this basic insight are far from clear; what kind of a process is communication more precisely and how should it be conceptualized?

For many years the dominant answer, in both academia and practice, was that the process of communication is linked to the individual communicative act and should be understood as a linear movement from sender to receiver. This answer is closely associated with classical communication research of the type that may be characterized by the metaphor of transmission. Here, a message is delivered from sender to receiver in a linear fashion (Smith, 1972: 175). Shannon and Weaver's (1949) mathematical model is, perhaps, the most famous example of this conceptualization. Another important example is

Lasswell's (1948) formula, which begins with the identification of the communicator and moves through the issues of message, medium and audience in order to arrive at effect. Although the examples of Shannon and Weaver and Lasswell represent the trans- mission model in its extreme form, the various alternative and more nuanced articulations of the paradigm, for example, models that insert multiple steps from sender to end-receiver (Katz and Lazarsfeld, 1955) or include feedback mechanisms (Westley and MacLean, 1957), contain the same strengths and weaknesses as the basic model. Thus, the conceptualization of the communicative process as transmission leads to a limited notion of process that only implies a linear movement of message from sender to receiver in specific communicative acts.

The limited understanding of process aligns the transmission paradigm with substantialist thinking within the social sciences; this understanding of social life takes its departure from the notion that nature (and society with it) consists of substances (utterances), and that these substances are the primary units for all investigations (Emirbayer, 1997: 282). The relationship between these substances are secondary to the understanding of the substance itself; an analysis begins (and often ends) with the self-subsistent entity (e.g. the utterance), and only when 'performed' or 'made use of' is its relation to other substances (e.g. a responsive utterance or targeted subject) of interest, but also then only secondary to the substance itself (e.g. the initial utterance) (Cassirer, 1953: 8) (for more on substantialist thinking see Dewey and Bentley, 1949).

We acknowledge that the transmission paradigm has its advantages in that it provides a clear picture of the social world. As its affinity with substantialist thinking shows, however, this is also the limitation of the approach: clarity comes at the price of simplicity. The specific problem is that when the communicative process is viewed as transmission, too much emphasis is placed on the individual communicative act (the substance), which leads to a faulty understanding of the process as a movement from sender to receiver. This holds little explanatory potential in regard to the unruly processes of online communication. We are by no means the first to make these observations; to the contrary, the transmission paradigm has been subject to much criticism (McQuail, 2010: 66), and alternative paradigms have been established (see e.g. Carey, 1989; Rogers and Kincaid, 1981). These alternatives notwithstanding, the transmission paradigm remains influential and seems to have a special hold on research that focuses on ICTs (Ganesh and Stohl, 2010: 55–6) – perhaps because the issue of technology invites comparison with Shannon and Weaver's classical study of the telephone. In the case of online communication, however, we believe that the ongoing disconnection from the transmission paradigm is necessary – and should even be radicalized as a clean break. The technology is no longer just a channel or conduit for communication, and theories that see it as such are overly reductive; they cannot account for any of the five features we presented above.

We suggest that, in the pursuit of an adequate understanding of online communication, we need to reconnect with the notion of process in a more radical sense than the transmission paradigm allows for and revisit the idea of communication as cacophony or bricolage. That is, communicative processes should be explained in collective, open- ended and recursive terms (Engeli, 2000; Deuze, 2006; Lévi-Strauss, 1962; for more on bricolage see also Deleuze and Guattari, 2004; Derrida, 2001). In this alternative conceptualization, the notion of communication as a process is deepened to mean that communication is constituted by its becoming, and cannot be stabilized as being (Whitehead, 1929: 34-35). This understanding of communication may be connected to a more relational approach to social life: substances (e.g. utterances) derive their meaning, significance, applicability and/or identity from the changing functional roles they play in trans-action with other substances (Emirbayer, 1997: 287). And it is this trans- action that becomes the primary unit of investigation, since the trans-action determines or establishes the substance's function. From this point of view, the social world does not consist of individual acts or interactions between fixed individuals, but is rather constituted as the sum of interrelations between transforming substances – in an ongoing process (Abbott, 2001). It follows from this view that theoretical conceptualizations of communication should not move beyond the process in order to establish artificial beginnings and ends, senders and receivers, causes and effects. Instead, it should be fully realized that communication does not exist anywhere outside process (Smith, 1972: 175).

Unit of investigation: ongoing interaction

A main implication of the conceptualization of communication as a process of cacophony/bricolage is that the unit of investigation no longer can be specific utterances, but is, instead, the dynamics of communication, the ongoing interaction. The existence of individual communicative acts is not denied altogether, but they are studied as interrelated contributions to or nodal points in the communicative flow (Biesecker-Mast, 1996), and are placed within a set of social and structural boundaries of intelligibility that constitute and constrain the process of communication (Butler, 1997: 162). It is important, however, to resist the temptation to fall back upon either or both of these more tangible levels of analysis (the interrelations between specific acts or the interrelations between acts and contexts), rather than to maintain the commitment to the more slippery processual perspective (Dawson, 2003: 6).

The conceptualization of communication as an out-and-out process implies that communication is not the work of independent actors and that it does not unfold according to the will or intention of the communicators. Informed by the post-structural decentring of the subject, this leads to a shift from an emphasis on the causal relationships between producers and consumers of communication to a concern with communication as an autonomous process that is productive of subjects as much as it is produced by them (Gaggi, 1997). Thus, intersubjective processes of meaning formation replace individual actors as loci of knowledge and understanding. Barry Brummett makes the basic point that 'people get meanings from other people through communication' (1999: 159) – not as a matter of passing on some piece of information, but as a collaborative and creative process. Meanings do not lie with the individual, but are shared and changeable, and, therefore, rely on communicative processes for their existence.

Mode of interaction: collaboration

In presenting collaboration as a central explanatory concept, we lean on the notion of co-creation, meaning an act of creation or interaction by at least two or more (Trogemann and Pelt, 2006). In addition, it is important to point out that even though collaboration may have positive connotations, we use it in a strictly descriptive and operational sense. Collaboration, as we use the term, is neither a normative concept in the sense of being an equal or egalitarian process nor in the sense that it should lead to consensus. A collaborative process can be marked by the unequal distribution of resources and it can lead to disagreement as well as agreement. However, both the notions of equality/inequality and agreement/disagreement imply that collaboration is a stable process – or can be stabilized – and that it has a result or a goal. We seek to counter these implications by stressing that the collaborative process is open-ended and continuous. Some meanings may become consensual at some points in time, but common understandings are as dependent upon the collective communicative process for their existence as are the points upon which people disagree. That is, both positions of power and of deprivation and both consensus and disagreement must be repeated to exist; the process does not stop. We may experience social positions and consensual meanings as objective or natural, but this has to do with their conventional form and ritualized repetition rather than with any independence they might have from the communicative process (Hall, 2001: 126; Vatz, 1999: 230). Thus, normative valuations of collaboration as equal/unequal and resulting in agreement/disagreement are, in our opinion, misleading as to what collaboration is actually about.

Enablers: ability to invite and willingness to participate

In online communication there remain ethical restrictions and technological limitations to what can be uttered where and when. People continue to act with intention and attempt to persuade each other. And conflicts of interests and attempts at domination persist. But as our review of the five features indicates, no one has control or absolute power online. When considering the empirical fact that everyone has the opportunity to share their points of view and when taking the theoretical stance that communication is a never-ending process, it is evident that persuading/commanding people through single utterances seldom succeeds online. The only thing online communicators, for example organizations, can do is to invite others to collaborate in communicating about them or their services – and hope that the invitation is taken up, that participation in the collaborative creation of meaning is facilitated.

An invitation is a subject position taken on by the inviter, a position used to invite others to take up another position, another identity (Black, 1970). In invitations, there- fore, both parties have agency in the sense of potential for action as well as specific ability to act (Campbell, 2005: 3). An invitation, in this sense, is also an address that 'constitutes the being within the possible circuit of recognition' (Butler, 1997: 5). Here, the relationship between invitation and participation becomes a major concern, since it is clear that how users are invited to participate may condition their actual participation – not in the sense of determining the participation, but by creating the framework or path that one may either follow or go up against (Just, 2008). At the same time, however, any specific invitation is conditioned by already existing participation – any invitation is also a response.

In addition, it is important to understand that invitations are not only textual, but have aesthetic and technological dimensions. Jennifer Stromer-Galley and Rosa Martey (2009) argue that understanding the influence of spatial information is crucial to understanding online social interaction, because online behaviour is structured via norms established through visual contexts. How a website is designed, or a video on YouTube staged, is just as important a part of the invitation as the written or performed text. At the technological level, the use of RSS, folksonomies, ratings or any other application are ways of inviting collaboration (and technological products of collaboration).

Viewing online communication from this perspective implies that the process is enabled by the willingness to participate in and the ability to invite to collaboration. Online communication should be understood as a process in which meaning is collectively created – a form of communication in which there is no end-product, only attempts at inviting people to collaborate, and where the collaboration cannot be separated from the answer to the question 'What is communication?' Online communication is collaboration, a process of mass meaning creation. It is a broad flow of events, an on-going process, where any attempt at fixation, be it for academic or professional purposes, will fail.

CONCLUSION

Communication in an environment where power over the message is lost, and where meaning is created in collaboration demands, we have argued, the (re)introduction of the collaborative paradigm. We propose that a disconnection with old theories in order to focus on the distinctiveness of new forms of communication is necessary before a possible reconnection to existing theories can take place. Taking this approach, we have argued that the distinct features of online communication call for a radically processual explanatory framework. Online communication must be explained in terms of its dynamic fluidity; a theory that is able to grasp the communicative process as process is needed. Such a theory, we believe, may explain online communication as a form of communication that is determined by the ability to invite to collaboration and the willingness to participate in collaboration. In taking process seriously, we restrain ourselves from locating or stabilizing communication anywhere outside the process. This creates an interesting challenge for communication researchers since the question of how one may analyse an ongoing process arises. There is, from our point of view, only one answer: to admit that what one is conducting is an analysis of a construct, a snapshot of a collaborative process, depicting how, at a specific and subjectively chosen point in time, two-way mass communication is unfolding online. One must choose a here-now to stand in for the constantly moving heres and nows of online communication. Methodologically speaking, we hold that the snapshot should contain both qualitative and quantitative data. As stated earlier, we do not believe that the investigation of single utterances, nor single online technologies for that matter, alone can depict online communication in collaborative terms. Nor do we believe that counting the number of web-based communities, hosted services and applications of organizations and other communicators say much about the communicators' online communication. By using mixed data, however, the analysis could handle the complex reality of online communication (Hausman, 2000). This, we suggest, is the way forward for the study of online communication as understood from the perspective of the collaborative paradigm.

ACT II

OFFLINE REGULATION OF ONLINE COMMUNICATION

INTRODUCTION

> 'This page is not intended for a US audience.'

The above quote is a disclaimer found at the top of the Danish pharmaceutical company Novo Nordisk's Facebook profile. In clear text it says that whatever is shared and posted on this US-developed and US-run social networking site, where the US alone has more than three times as many active users (158.034.920 users) compared to the second most active population (Brazil, 49.944.820 users), is not for at an American audience. Not only does this statement come across as rather absurd, I also doubt it keeps any US audience away. But what the disclaimer does do is point to the discrepancy that currently exists between the communication regulations the pharmaceutical industry must operate under and the conditions for online communication. The latter is defined as two-way collaborative supranational digital meaning-creation (ACT I/Gulbrandsen and Just, 2011); while the first, as will be detailed later, is bound by national borders and limited in scope to one-way offline print and broadcast promotion. By attempting to shield off American users from its global social networking profile, the organization has come to display the contradiction between the unruly and uncontrolled typography of online communication and the communicative process the regulations describe: a linear, cause-effect centred understanding of communication as a transmission from a sender to a passive receiver. A question thus arises; how does this discrepancy play out? How does the offline regulation come to organize the online communication?

Parallel to the liberalization and individualization of contemporary society, there have in recent years been an increasing number of issues that have given rise to concerns and demands for governments to protect a 'public interest' through regulations within areas like health, environment and finance (Cuilenburg and McQuail, 2003). And in the context of communication, these new issues of regulation are emerging at the same time as the internet is becoming a converging and collaborative public space, where humans and technology interplay and intertwine, and as such challenge former communication structures and power balances (Harrison and Barthel, 2009; Jenkins, 2006). Communicating online has become a hyper-public act where the boundaries between what is private and what is public are blurred (Poster, 2001; Rosenberg, 2009). And at the heart of the online sphere is interaction – intersubjective meaning-creation. As a consequence of the rise of the Internet, organizations have within the last decade started utilizing different online communication platforms in their outreach activities and stakeholder relations (Voorveld et. al., 2009). A practice that is intensified by the fact that organizations of the twenty-first century are network organizations, or 'network firms' (Bar and Simard, 2006), operating in electronically processed information networks (Castells, 2000).

Within these electronically processed information networks the pharmaceutical industry is operating under several regulations, ranging from production to communication. But what is particular for the pharmaceutical industry's online communication is that it is constrained by communication regulations that are intended for offline promotional activities and not online collaborative interaction. Governments and other regulatory bodies have not been able or willing to update and supplement the current regulations to deal with online communication. Instead they have insisted that the industry must comply with the 'old' regulations, on new communication outlets. In 2010, for instance, the Division of Drug Marketing, Advertising, and Communications (DDMAC) at the Federal Drug Administration (FDA) in the US issued a notice of violation letter to the pharmaceutical company Novartis indicating that communication created by a social media sharing widget on one of their websites violated the Federal Food, Drug, and Cosmetic Act and FDA regulations (FDA, online). The letter stated that a Facebook sharing feature on the website generated communication that was in violation of the regulations because it failed to provide adequate risk information to the stakeholders. In short, the industry is expected (and forced) to act online based on offline principles.

Despite the importance of understanding how these offline anchored regulations come to organize online communicative processes, the topic has been sparsely addressed to date. There exists theoretical discussion on the potential consequences the regulations might have on digital meaning creation and online branding (see e.g. Alkhateeb, 2008; Butler, 2002; Schiavo, 2008), but no empirical studies have been identified. The objective of this article is, therefore, to add to the existing literature on communication regulations and online organizational communication demonstrating the empirical implications of the offline regulation of online communication. This is done through a mixed method single case study of the online communication about the Danish pharmaceutical company Novo Nordisk, in a period stretching from the last quarter of 2004 to the second quarter of 2011, on the communication platforms[4] Facebook.com, YouTube.com, Flicker.com and Wikipedia.com.

The paper is structured in three parts. First I will identify the argued discrepancy between the current communication regulations the pharmaceutical industry operates under and the theoretically established and empirically described typography of online communication. Second, the investigation's mixed methodology, sample and measurement will be addressed. Third, the findings will be presented, highlighting how the regulations come to organize a paradoxical communication process. The paper concludes that even though there might be other explanations for why the communicative process is played out the way it is, the incongruity of the process is most likely tied to the discrepancy between offline rules and online behaviour. Following, the paper raises the question of whether or not the regulations that were put in place to protect the stakeholders come to, in an online context, put them at risk due to the unsolicited and uncontrolled exchange of product information that may take place between the stakeholders in a process where the organization is semi-silenced.

OFFLINE REGULATION OF ONLINE COMMUNICATION

As part of what has been termed 'New Capitalism' (Chiapello and Fairclough, 2002), there has been in recent years a move away from a 'command-and-control' aim when formulating regulations, to a 'public-facing' style that seeks a unified and 'principled' approach to risk-based regulation (Black et al. 2005;

[4] By communication platform I mean applications and technologies used to communicate, e.g. social-networking sites, video-sharing sites, wikis, blogs, folksonomies, ratings etc.

Chapman et al. 2003; Lunt et al. 2006). The new regulatory style repositions the public at the centre of a 'risk society' (Beck, 1992), where the political aim has become democratization of power and renewed importance to civil society, and the economic aim has become deregulation of global markets (Habermas, 1997; Jessop, 2002). This implies a shift from government to governance, advocating transparency, consultation, accountability, individual empowerment and choice (Lunt et al., 2005; Needham, 2003). In line with this trend, it can be argued that contemporary communications regulations pursue five recurring policy objectives (Nakahata, 2002): First, regulations attempt to promote market competition by limiting the leeway for market dominance. Second, regulations aim at protecting consumers against monopolitisctic practices and perceived marketplace abuses that go beyond simple pricing, e.g. through anti-slamming rules, privacy rules, and labelling requirements. Third, regulations seek to promote communicative polyphony, e.g. by prohibiting carriers to deny transmission of messages based on their content. Fourth, communications regulations pursue universal service, meaning universal access to information. And fifth, regulations uphold societal objectives such as ensuring that people with disabilities can use communications services.

Most consumers/publics/users are not aware of the implications of this regulatory framework. 'We' enjoy that our public interest is ensured, but probably take little notice of how this interest is protected. Both offline and online. For organizations within the pharmaceutical industry on the other hand, the protection of a public interest the regulations, stipulate an extensive framework within which they must operate, ranging from drug development to communication, the latter of which is the concern of this article. When dealing with the communication of and about pharmaceutical companies, it can be argued that it is in the public interest to ensure a fair, accurate and balanced information exchange between all stakeholders, and perhaps most importantly to empower patients by protecting them from unwanted and uncontrolled pressure from companies selling drugs they are dependent on (Calfee, 2002). This protection is upheld through a number of regulations, understood as rules of conduct and jurisdiction formulated by governments and industry associations that have regulatory power over the industry. In the following sections these regulations will be reviewed. Due to limits of space and the fact that most other countries have regulations equivalent to the EU or US, only regulations from the EU and US are reviewed. See table 2 for all documents included.

Offline promotion and absence of Internet

In the review of the documents, three significant conditions for communication within the pharmaceutical industry emerge: 1) the predominant focus on direct-to-consumer advertising, 2) the restriction on interaction and report requirements, and 3) the absence of Internet as a means of communication. First, the promotion of drugs and direct-to-consumer-advertising (DTCA) is at the core of both the communication regulations and industry guidelines. And since regulations are policies formulated and governed by and within a territorially defined state or international union (e.g. The European Union); there can be significant national and regional differences. In the US, DTCA (and promotion to health professionals) is allowed, but only following FDA approval of all communicative material. In addition the industry is obliged to inform of both the risks and benefits of the promoted drug in a language that is clear and in no way persuasive (Code of Federal Regulations, Title 21, part 201). No comparison with other drugs or claims of results from use not proved (and approved by the FDA) is allowed. The regulation does not limit itself to language, but encompasses restrictions to how imagery may be applied as well (cf. Code of Federal Regulations, Title 21, part 200).

Within the EU on the other hand, DTCA on prescription drugs is prohibited (Directive 2001/83/EC, par. 44), though companies are allowed to promote, under strict rules of engagement, their products to health professionals (c.f. ibid, par. 47; EFPIA, article 2). In the case of non-prescriptive drugs the industry is obliged to inform of both the risks and benefits of the promoted drug (Directive 2001/83/EC, par. 39-41), much like in the US. Even though DTCA generally is considered one of many components of a wide range of efforts to present a product and/or company, the regulations under which the industry operates focus on the promotion of products and not other forms of communication (Rosenthal et al., 2002). Hence, nationally formulated regulation of DTCA becomes the guiding principle for all communication efforts, even cross-national non-promotional activities. This focus on DTCA is of course tightly linked to the fact that the industry is product focused (and perceived): Viagra has become a household name, but few know that Pfizer is the company behind it, as with Prozac (Eli Lilly and Company) and Vicodin (Abbott). Communication about the products therefore becomes an important part of the communicative process, since the organization's stakeholders are likely to have a closer relationship to the product name compared to the company name.

Table 2: Regulatory bodies and reviewed documents

Regulatory body:	**Documents reviewed:**
Food and Drug Administration (FDA) - the governmental body that controls and regulates the pharmaceutical industry in the US.	Federal Food, Drug and Cosmetic Act Chapter II - Definitions Chapter III - Prohibited Acts and Penalties Chapter V - Drugs and Devices
FDA	Code of Federal Regulations 21 CFR 99 - Dissemination of Information on Unapproved/New Uses for Marketed Drugs, Biologics, and Devices 21 CFR 200 - General 21 CFR 201 - Labelling 21 CFR 202 - Prescription Drug Advertising
FDA	Guidance for Industry Consumer-Directed Broadcast Advertisements
European Medicines Agency (EMA) - the governmental body that controls and regulates the pharmaceutical industry in the EU.	Directive 2001/83/EC (Consolidated version: 05/10/2009)
EMA	Directive 2010/84/EU
EMA	Council Regulation (EEC) No 2309/93
EMA	EMEA post-authorisation guidance, Human Medicinal Products
The Pharmaceutical Research and Manufacturers of America (PhRMA) - the industry association of pharmaceutical companies in the US.	PhRMA Guiding Principles Direct to Consumer Advertisements About Prescription Medicines
PhRMA	PhRMA Code on Interactions with Healthcare Professionals
European Federation of Pharmaceutical Industries and Associations (EFPIA) - the industry association of pharmaceutical companies in the EU.	EFPIA Code of Practice on relationships between the pharmaceutical industry and patient organisations
EFPIA	Code of Practice on the promotion of prescription-only medicines to, and interactions with, healthcare professionals

Second, interaction between the organization and its stakeholders is restricted in both the EU and US, restrictions that include sharing of information, drug development and support (see e.g. Directive 2001/83/EC, par. 49-50; PhRMA, Code on Interactions with Healthcare Professionals). In the EU healthcare professionals may give advice/serve as consultants during drug development and partake in more or less loosely subject-related conferences/continuing medical education (CME) with all expenses paid (see e.g. EFPIA, article 9 and 10). In the US, to the contrary, there is a 'no gift policy' – meaning the company may not sponsor any health professionals, all conference- and CME-activities are subject to strict codes of conduct, as are interactions with the intent of consulting (PhRMA, Code on Interactions with Healthcare Professionals, par. 10). In addition, the organization is required to report any adverse event (AE), also referred to as pharmacovigilance. This is equally emphasised in both the US and EU legislation (cf. Directive 2001/83/EC, par. 54-58, see also Alkhateeb, 2008; Heutschi et. al., 2003). This means that should the company, after the release of a drug, detect any side effects e.g. in their interaction with stakeholders, it must be reported to the authorities, and if the AE is found sufficiently severe, the drug can be called back at the cost of the company. Failure to report the AE is seen as a felony, and the company is thus subject to penalties, or in the worst case the authorities report it as a criminal violation which is, if no agreement is found, followed by a trial (see e.g. Federal Food, Drug and Cosmetic Act, chapter III).

Third, and finally, common for all the documents reviewed is that Internet (and sister concepts like social media, new media and computer mediated communication) is very rarely mentioned, meaning that the industry will have to follow offline regulations when interacting on online communication platforms (as the example with Novartis in the introduction also confirms). In those cases where digital platforms or digital means are referred to, they are only seen as tools to enhance offline efforts or as platforms to be treated like a printed advertisement. One example of this is found in the FDA's Guidance for Industry Consumer-Directed Broadcast Advertisements (pp. 2-3) where internet is suggested as a source the companies may use as a platform to offer stakeholders further information about products, but no guidelines for how to communicate this information online are given (internet is even referred to as 'sophisticated technology' (p. 3). Another example is EFPIA's Code of Practice (pp. 22-24) where a guideline for websites is provided, but the guideline takes its departure in a static website, again much like a printed ad.

The review reveals that the regulations are both nationally formulated and diverging. Focused on promotion and DTCA, these regulations entail restrictions on interaction and requirements to reports AE's, and provide sparse details on how to communicate on the internet besides equating online meaning-making with offline communicative modes. But as this paper suggests, this is in contrast with the topography of online communication, hence creating a discrepancy between the regulations Novo Nordisk and its industry fellows must follow when communicating online and the actual features of online communication.

A collaborative process

I would argue that online communication is distinct from other forms of communication (see e.g. Bogost, 2007; Deuze, 2006; Engeli, 2000; Murray, 1997; Scolari, 2009), hence also should be studied and regulated from a different perspective. Seeing that online communication shares elements of both mass communication and interpersonal communication, it should not be approached in any way that overlooks its basic topography: it is negotiable and uncontrolled, time-space free, hypertextual, hyper-public and two-way mass collaboration (ACT I/Gulbrandsen and Just, 2011). It is digital co-production of meaning, an open-ended and spatiotemporal unconstrained process that is 'determined by the [participants'] ability to invite to collaboration and the [participants'] willingness to participate in collaboration' (ACT I: 98/Gulbrandsen and Just, 2011: 1104). This entails that both the production and perception of meanings become two mutually inclusive and circular parts of the continuous communicative process. Not only does this imply that online communication is constituted by its becoming, but also that its meaning is found in the relation between actors – in the on-going interaction, the interrelations, and not artificial beginnings and ends, senders and receivers, causes and effects (Emirbayer, 1997; Whitehead, 1929). This should not be interpreted as a denial of the importance of the individual contributions to the process, but rather that they ought to be understood as interrelated contributions to or nodal points in the communicative process placed within a set of social and structural boundaries that constitute and constrain the process of communication.

The notion that an organization's and its stakeholders' online communication is played out as a collaborative processes is supported by a number of scholars, like DiStaso and Messner's (2010) study on how organizational stories are collaboratively created on Wikipedia, Cho and Huh's (2010) study on the utilization of blogs in communicative efforts with stakeholders, Booth and Matics' (2011) study on how online opinion leaders influence the general perception of organizations through the collaborative creation of meaning and finally Rolland and Bazzoni's (2009) study of the online greening of organizational identity. Specifically addressing the issue of pharmaceutical companies, several studies suggest the same (see e.g. Alkhateeb, 2008; Butler, 2002; Pesse, 2006; Schiavo, 2008), but these studies often lack empirical evidence to support their claims. While all these studies shed light on the collaborative aspect of online communication, both in general and specifically within the pharmaceutical industry, they do not pay sufficient attention to the discrepancy between the regulations and the features of online communication and how this incongruity may come to organize the collaborative process empirically. Regulations are, as earlier mentioned, put in place to protect a public interest, and even though this pubic interest may be vague, the repercussions for not abiding by the rules formulated to protect it, can be extremely costly for the organization both in terms of money and reputation. And despite their potential effect on the communicative process, they have been given too little attention. This article aims to contribute to the field by closing this gap, by answering the question: How is the organization's and its stakeholders' participation in the online communication process about Novo Nordisk organized by communication regulations?

METHOD

In the pursuit to answer the question a mixed method single case study (Denzin and Lincoln, 2005; Flyvbjerg, 2011; Johnson and Onwuegbuzie, 2004) has been conducted. Doing a mixed method study allows me to include the context and the voices of the actors involved, while at the same time heighten the study's generalizability and reduce the risk of researcher bias and manipulation (Miller et. al., 2011). And by choosing one single case I will be able to go into depth with the communicative process (Yin, 2009), with the aim at investigating the concrete ways in which regulations are organizing for the process. The investigation started with a qualitative search of relevant communication platforms. By manually entering a wide range of online communication platforms – on some looking up the profile of the organization (if the platform was constructed in a way that meant that such profiles existed), on others searching for posts tagged with 'Novo Nordisk' – I identified four platforms as relevant due to substantive communication about the case organization. The selection was also informed by the web information company Alexa and their statistics on the most popular communication platforms worldwide (www.alexa.com). The chosen platforms are:

1) www.facebook.com (a social networking site)
2) www.youtube.com (a video sharing site)
3) www.flickr.com (a picture sharing site)
4) www.wikipedia.com (an information gathering site)

The selection reflects a wish to have a broad spectrum of sites providing the organization and its stakeholders with different opportunities. From the possibility to create a company profile mediated by the organization (e.g. on Facebook) to more open platforms (e.g. Wikipedia) and platforms that predominantly communicated through visuals (e.g. YouTube and Flickr). Finally it was important to only include publicly accessible platforms, as this study is concerned with public meaning creation, and not closed online communities.

Following the qualitative search and selection, a quantitative study of all communicative contributions linked to the organization on the four platforms from the fourth quarter of 2004 to the second quarter of 2011 was conducted. The contributions were identified by either entering the distinct platforms' page about the organization Novo Nordisk (as with Facebook and Wikipedia) or by searching for contributions tagged with 'Novo Nordisk' (as with YouTube and Flickr).

Sample, measurement and coding

The sample was collected during the third quarter of 2011, and represents a total number of 1770 communicative contributions (100 % of the total sample). Of this Facebook counts for 843 contributions (47,6 % of the total), YouTube for 158 (8,9 %), Flicker for 521 (29,4 %), and Wikipedia for 248 (14 %). Since a large portion of online communication is composed of 'likes' and 'dislikes', and since all text can be edited (especially on Wikipedia), the sample was broken into major and minor contributions. This was done during the collection in order to give a more nuanced depiction of the collaborative process. When all minor contributions (likes, dislikes, spelling corrections etc.) were removed from the sample, the total number of contributions is 987. Of this Facebook counts for 194 contributions (19,7 % of the total), YouTube for 139 (14,1 %), Flicker for 518 (52,5 %) and Wikipedia for 136 (13,8 %).

According to Edwards a 'measure is an observed score gathered through self-report, interview, observation, or some other means' (2003: 313), and for this study the measurement was created using a systematic coding scheme developed highly inspired by previous literature on content analysis of online communication (Cho and Huh, 2010; McMillan, 2000). The data was coded by me, the investigator, using a coding scheme and the software SPSS, and a written guideline, applying two measurements: 1) Contributor, and 2) Major/minor contribution.

During the coding a contributor was defined as the source of the utterance and coded as a) Organization, b) Stakeholder, c) Unknown. In the instances where the communicator was clearly identifiable as the voice of the organization (e.g. when using the onscreen name 'Novo Nordisk' on the company-controlled Facebook page) the contribution was coded as 'Organization' while 'Stakeholder' was used in the instances where the communicator was identifiable, but not as the organization. Because web-based communities, hosted services and applications often are created in a way that reduces social clues and creates possibility for anonymity or alternative selves (Carnevale and Prost, 1997; McKenna and Bragh, 2000), it is in most instances impossible to distinguish the different stakeholders from each other. This is one of the good-bad qualities of online communication platforms, a quality that is hard to ignore and circumvent. In my opinion it would be extremely speculative to embark on the quest to create a more nuanced measurement of the online stakeholders, since this would entail a close-reading of each individual post, followed by a more or less qualified guess on what kind of stakeholder it might be (patient, interest group, investor, relatives etc.). At least in regards to the platforms investigated in this study, a more nuanced measurement was not obtainable. Nor was it necessary in order to investigate how offline regulations come to organize the online communication. Finally, the category 'Unknown' was only used when the identity of the communicator was not provided, e.g. the identity of who used the 'like' or 'dislike' options on YouTube and Flickr. It is important to note that identity here only refers to online identity, and not the contributors' offline identity. The offline identity of the contributors is of no interest in this study, as it is solely the online collaborative meaning creation that is studied.

'Major/minor contribution' was coded as a) Major or b) Minor. A minor contribution was defined as using the like/dislike option or correcting mistakes in hyperlink addresses or text. An example is when the user '131.155.36.15' on October 6, 2005 corrected the year when Nordisk Insulinlaboratorium was established from 1922 till 1923 on Wikipedia. All other contributions were coded as major contribution.

Analysing online communication introduces many challenges to the qualitative content analysis process, one being that the scope of material may be too large and hence make an in-depth analysis convoluted (McMillan, 2000). To avoid losing the qualitative level of the analysis, this part of the investigation was not coded in SPSS. Instead all major contributions where close read with the intent of determining the 'message content and message handling' (Budd, Thorp, and Donohew, 1967). The material was then carefully mapped to identify the general tendencies relevant to this investigation: the degree to which the contributions directly or indirectly referred to the regulations or Novo Nordisk's products, as the latter is the main focus of the regulations.

FINDINGS

There are strong indications in the findings of a connection between the regulations and the collaborative process, meaning that the regulations might be a source of explanation for why the communication taking place online about Novo Nordisk plays out the way it does. Not that I see the regulations as the sole organizing principle of the process, another is e.g. the intertwinement of the material affordances of the communication platforms and the actors' social practice (Orlikowski, 2002; see also ACT III), but, as will be detailed, for large parts of the process, the regulations appear to be a major structuring device.

Participation

A main condition for online communication is that there is willingness to participate in the collaboration and as table 3 shows there is. On the four platforms there was observed over 1700 contributions about Novo Nordisk, which I interpret as a sign that there is interest in creating meanings about the organization.

Table 3: Number of contributions

	Number of contributions	**%**	**Number of major contributions**	**%**
Facebook	843	47,6	194	19,7
YouTube	158	8,9	139	14,1
Flickr	521	29,4	518	52,5
Wikipedia	248	14	136	13,8
Total	**1770**	**100**	**987**	**100**

Overall, when including all contributions, Facebook has the most participation, representing 47.6 % of all the communication included in the sample. When the minor contributions are removed Flickr is by far the platform with the most activity at 52.5 %. This suggests that the contributors are more likely to engage on Facebook through "like's", as over 600 of the 843 contributions coded from Facebook are minor contributions. Flickr on the other hand, which also has the option of "like", proves, in this sample, to be a platform where the contributors are less focused on liking each others posts, and more focused on uploading own material. This is important to acknowledge, as it could suggest that Facebook has a larger audience than Flickr, despite being low on major contributions. Facebook could therefore also be seen as a more central platform for the communication about Novo Nordisk. YouTube and Wikipedia have the lowest number of contributions, both in regards to major and minor contributions.

By dividing the data up further, the level of participation between the different contributors becomes evident. With both major and minor contributions included, the organization accounts for 3.3 %, the stakeholders 88.4 % and unknowns for 8.2 %. As Table 4 shows, this gap also exists when the minor contributions are excluded from the sample. Note that the category 'Unknown' is not included in Table 4, as there were no major contributions made by unknowns.

Table 4: Contributors (major contributions)

Source	Number of contributions	%	Organization	%	Stakeholder	%
Facebook	194	19,7	39	68,4	155	16,7
YouTube	139	14,1	6	10,5	133	14,3
Flickr	518	52,5	12	21,1	506	54,4
Wikipedia	136	13,8	0	0	136	14,6
Total	**987**	**100**	**57**	**5.8**	**930**	**94.2**

The organization accounts for 5.8 % of all major posts, while the stakeholders account for 94.2 %: in order words, the communicative process is driven predominantly by the stakeholders. But by looking behind the numbers and at individual contributors rather than groups, the online identity 'Novo Nordisk', the organization, has the most contributions at 57. Most of these were, as visible in table 4, made on the company-controlled Facebook page. The second-most active contributor is 'MiDiabetes' at 47 contributions, all of which are on YouTube. And 'Sigvart' makes the third-most contributions at 31 on Wikipedia. Both 'MiDiabetes' and 'Sigvart' are from the stakeholder group, two out of 1445 different identities active on the platforms. The 1445 distinct user names, however, do not necessarily represent 1445 different offline individuals, since some may have used different online identities on both the same and different platforms. What these numbers imply is that divided into groups the organization is the least active, while divided into online individuals the organization is the most active. And by looking at the platforms, the organization is most active on Facebook (68.4 %), totally absent, at least by name, on Wikipedia, while the stakeholders are active on all four.

Why are they not more active? With the strict rules of engagement stipulated by the regulations in mind, a feasible answer could be that they are inclined to be less active out of concern that their participation might breach the regulations. At least it is evident that the organization is far more active and present on a platform they can control the content on (Facebook), compared to platforms where they have less manoeuvre room in regards to ensuring that they are not caught in improper information exchange and meaning making (Wikipedia). The discrepancy between the offline regulations and the online narration process can therefore be suggested as organizing the communication about Novo Nordisk in an unlevelled way, where the organization is active only where 'message-control' is possible leaving the stakeholders to dominate the process. By looking at the data from the quantitative study, the finding suggest that the organization only participates on platforms that are the closest at (though still rather far from) providing an opportunity to uphold a linear, cause-effect centred understanding of communication as a transmission from a sender to a passive receiver.

This becomes more evident when considering the specific invitational utterances made by the different actors on the different platforms. In the following, I will present some of the main findings from the qualitative analysis that investigated the particular contributions to the process. I have chosen to present them grouped by platforms, starting with the platform where there the organization is most active and ending with the platform they are absent from – moving from the organization's attempts at control of the collaboration (Facebook) to the organization's absence in the collaboration (Wikipedia).

Facebook

As shown in the introduction, a disclaimer on Novo Nordisk's Facebook profile[5] states:

> This page is not intended for a US audience.

It is posted by the organization itself, and permanently visible at the top of the timeline. In this sentence it becomes clear that the regulations organize the communication utilized by the organization in a contradictory way. Given that Facebook is a US-developed and -run social networking site, and that the US alone accounts for more than 158 million out of 901 million users[6], the statement comes across as rather absurd. And since it is equally absurd to think that the disclaimer would keep any American audience away, it can only be interpreted as an attempt by Novo Nordisk to on one side capitalize on the supranational popularity and penetration of Facebook, while on the other avoid being 'caught' by the strict rules of engagement that the US regulations stipulate. The disclaimer stands as a clear sign of the discrepancy advocated for throughout this paper. From an invitational point of view, the organization is first excluding US citizens from participating in the process, and secondly sending a rather absurd signal to other potential non-US participants, as they would probably find the exclusion not only illogical, but also impossible to uphold. The most likely explanation for the statement is that they need to officially make clear that the meaning making taking place does not have US citizens as a target group and by doing so they can comply with the regulations in principle, but circumvent them in practice. Because once the organization is active on an open platform like Facebook, they have no chance of controlling who both directly and indirectly participates and gets informed by the

[5] http://www.facebook.com/novonordisk
[6] http://newsroom.fb.com/content/default.aspx?NewsAreaId=22

meanings and information shared. But since the regulations are territorially defined and have different constraints on the interactions the organization may have with its stakeholders, this is the only way they can be active. They have to act in a contradictory way, since the relation between the current regulations and the topography of online life is contradictory.

But the organization seems to use this contradiction to its own good. First by using disclaimers officially to deny their intent to reach an American audience, while at the same time being present where there is a large American audience; and secondly, and perhaps most interestingly, by using the regulations as a reason for removal of critical posts made on their Facebook page, in other words for strategic communication. The need for control stipulated by the regulations is used actively by the organization to control the direction of the communicative process. This becomes clear on the 'About' page on Novo Nordisk's Facebook profile where it reads:

> This page is not intended for dicussions [sic] about products made by Novo Nordisk A/S. As such, postings or comments that contain product discussions may be removed. Please keep in mind that Novo Nordisk A/S and its subsidiaries work within a highly regulated industries [sic]. Therefore, comments that pertain to legal matters or regulatory issues may be removed.

Due to the technological affordances of Facebook, the owner of the profile may delete posts made by others on their timeline. And besides the unclear meaning behind 'legal matters' and 'regulatory issues', the statement above makes it clear that Novo Nordisk intends to exercise this affordance. In the statement the removal of contributions is justified with reference to the regulations, but by looking at the data analysed for this investigation it seems like the organization might use it as a way to remove unflattering contributions as well, that is contributions that would not be breaking any regulations, but that would put the organization in a bad light. As the profile presented itself at the end of the data collection period in June 2011 (and still do today), no posts by any contributor has any direct mention of products; instead they are concerned with what a great work-place Novo Nordisk is or commenting and liking the organization's posts about Novo Nordisk's engagement The World Diabetes Day for example. Most notably, no post utters negative meanings about the organization. All the contributions made on the organization's Facebook profile are positive. But as previous research has shown (see ACT III/Gulbrandsen, forthcoming), several negative contributions, e.g. about Novo Nordisk pulling out their products from Greece due to the finical crisis, have 'disappeared' from the profile, which would suggest that the organization uses the regulations as a means of censoring the collaboration.

Beyond that they also make sure that any utterance they may have let slip through their 'censorship', is not tied to them. They write:

> Comments contained on this site come from members of the public, and do not necessarily reflect the views of Novo Nordisk A/S. Novo Nordisk A/S does not endorse or approve any content added by other Facebook users.

Using a vague language, saying that comments made by others may 'not necessarily' reflect the views of the organization, Novo Nordisk puts themselves in a position where others' contributions may or may not be something the organization agrees with. They point out that the organization does not endorse nor approve any contributions made by others, and they, as shown above, make it clear that they will remove any comments that do not comply with the regulations (or are not to their benefit). A direct consequence should therefore be that no post on the profile is illegal (or controversial or of damage to the organization). But, when looking through the profile pictures, one contribution made by 'Frank Müller' on April 16, 2011 has been allowed to remain, despite the fact that it shows one of Novo Nordisk's main products NovoPen, an insulin delivery pen.

The organization obviously considers the picture of the pen to be within the regulations, even though it is not accompanied by a statement detailing the risks and benefits of using the pen (or the drug). But when including the comments, one could ask if Novo Nordisk in this case is 'working on' the brim of the legislation. In the comments to the picture, 'Frank Müller' writes:

> Hier ein Foro [sic] von meinem NovoPen Echo. Bereits mit einem Skin beklebt.
>
> [Translation: Here is a photo of my NovoPen Echo. Already covered with a skin]
>
> Some weeks later on June 11, 2011 'Myriam Lucas' contributes with another comment:

> Genau denselben Froschi-Skin hab ich auch! Ein echt guter Einfall, so wirken die Pens nicht mehr so trist!
>
> [Translation: Exactly the same frog skin I have! A great idea. This way the pens no longer seem so sad]

Not only does the picture clearly depict a NovoPen, one of the organizations main products, the comments are also very positive to how this pen looks in an indirect comparison with others. By looking even closer at the last comment, the question of whether or not this is within the regulatory framework becomes more pressing. The comment praises the idea with providing a 'skin' to the pen because it makes the pen look less 'sad', meaning less like a boring insulin pen and more like a fun accessory. It reads like a commercial: 'why let the pen that will be with you day in and day be a sad reminder of your sickness, when you instead could have an exciting lifestyle prop?' The regulations put strict constraints on the sharing of product information, constraints the organization confirms in their disclaimers, yet, to me, this comes across as a rather product-focused promotional contribution. But the post is not removed by the organization, which can be interpreted as a sign of the earlier mentioned strategic use of the regulations in censoring their stakeholders' contributions – this post is beneficial to the organization, thus it gets to stay.

On Facebook, the discrepancy between the regulations and online communication results in a communicative process where the organization states that it is not partaking in collaborative meaning creations with an American audience and that it will not allow any posts that might be in breach of the regulatory framework, yet the organization has no way of controlling the American audience's access to the platform and allows product-related posts to remain on the profile. The process is, in short, organized by the regulations in a direction where the organization uses the regulations as an excuse to take control and actively censor the communication about themselves. And where the stakeholder, whom the regulations are formulated to protect from unwanted market powers, is left to accept the organization's agenda and adhere to their rules.

YouTube

The discrepancy between the regulations and online narrative processes is also visible on other platforms like YouTube, where Novo Nordisk is active through its YouTube profile 'NovoNordiskDevice'. And much like on Facebook, its contributions and invitations to the collaborative process are contradictory. One example is a video uploaded on February 11, 2011 detailing how to use the already mentioned NovoPen, seen by 21.000 people[7].

In the description below the video, it reads:

> This is the official Quick Guide from Novo Nordisk on how to give insulin injections using NovoPen® 4. Learn everything you need to get started using NovoPen® 4.

---

[7] http://www.youtube.com/watch?v=Tw_PX13xClc

The video starts with a disclaimer much like the one cited from Facebook saying that this video is not intended for US patients or US healthcare professionals, and that it is a video for educational purposes. Though the video is educational (it instructs the viewer on how to use the NovoPen), it is hard to ignore the parallel to product-placement in movies when seeing it. It lingers long over the brand name, it makes the use of the product seem effortless and it ends in a story about how you can personalize the pen, referring to the 'skin' also mentioned on Facebook. Not only is it absurd to post this video on YouTube with disclaimers about the US audience, given that the US represents over 20% of the YouTube visitors[8], almost three times as many as the following country (India, 7 %). It is also interesting to see how the offline regulations about promotion, are circumvented by calling it an educational video utilizing product-placement techniques. Again a sign that the organization might be using the regulations as a means to make content not normally allowed in the US available to US consumers.

The findings also suggest that the organizational control that was expressed on Facebook, also finds its way to YouTube. The comment function under the video, a vital part of the YouTube platform, has on all videos posted by 'NovoNordiskDevice' been disabled. Again it becomes visible that Novo Nordisk is using the platform as a one-way communication channel. It is hard to tell if this comes as a result of the organization's wish to comply with the regulations or their wish to strategically control the communicative process. But most likely it is, as with Facebook, both. Displaying their products without any mention of the risks and benefits, prohibiting their stakeholders from participating in the communicative process with comments, and accompanying

[8] http://www.alexa.com/siteinfo/youtube.com

the contribution with disclaimers about intended audience, at least speaks to that interpretation. Exactly the same tendencies are found in another video posted by 'NovoNordiskDevice' entitled 'Celebrating 25 years of Novo Nordisk Insulin Pen' uploaded on March 21, 2011.[9]

In the description below the video, it reads:

> For 25 years, Novo Nordisk has been offering patients with diabetes a variety of insulin pens and other Novo Nordisk products to help them manage their diabetes. Novo Nordisk is committed to changing diabetes by taking an innovative approach to addressing diabetes treatment.

Again one is met with the 'Not for a US audience' disclaimer and an even more perfected product-placement technique. With energetic music, smooth and dynamic graphics filled with slogans like 'the world's number 1 durable pen,' 'Novo Nordisk insulin pens are trusted by 7.5 million users' and 'Celebrating 25 years of trust' it looks nothing short of a promotional video. But there is no mention of the product, and no possibility to comment. There are no listing of the risks and benefits associated with using the drug.

[9] http://www.youtube.com/watch?v=wWt5nQXer4w

Compared to Facebook, the stakeholders are freer to contribute, as they like. And as table 3 shows, the number of minor contributions on YouTube, meaning e.g. comments, is very low which could be interpreted to mean that instead of directly interacting with others' videos, they are more inclined to post their own. When analysing the videos, this becomes evident in the number of videos copying the educational videos made by Novo Nordisk. Of all the videos included in the sample, educational or 'how to use' contributions are a prevailing trend. One example is a video uploaded by 'andrew041488' on September 1, 2008[10], seen by over 35.000 visitors. In the post the contributor is describing how to use an insulin pen from Novo Nordisk and the effect of the usage. The video is clearly not produced by a professional; it is far less smooth and cool compared to the ones described, it has more of a do-it-yourself aesthetic with handheld camera and bad lighting. But perhaps most importantly, it does not linger over the brand name of the product, nor does a disclaimer about any US audience accompany it. What the description below the video does say, though, is:

> PLEASE NOTE: This video is for entertainment purposes ONLY!

The key word being 'entertainment', as it seems like that the large group of contributions that 'andrew041488' represents are participating in the communicative process by copying Novo Nordisk's educational videos. The videos become paraphrases over the genre of video the organization is utilizing, educational videos, and as such also become responses to the organization's posts. Unlike the organization, who emphasize its brand, its accomplishments etc., the stakeholders' contributions are more low key, and more focused in the actual use. Interestingly, they are often, as the video posted by 'andrew041488' accompanied by disclaimers stating that they are

[10] http://www.youtube.com/watch?v=FlS7RenFJUk

for ‘entertainment purposes’ or ‘not endorsed by the company’. This is interesting because since the stakeholders are not obliged to follow any regulations, these disclaimers are either signs of self-justice or ridicule. Self-justice in the sense that they too feel they should comply with the regulations, hence the regulations also come to directly have effect on and organize their contribution. Ridicule in the sense that the disclaimers could also be read as ironic statements, as paraphrases, over the sometimes absurd use of disclaimers by the organization. Bottom line is that the regulations come to play a part in how the process is played out also on YouTube in that the organization provides statements and prohibit comments by others in order to shield them off from possible regulatory grey zones, while the stakeholders in reality are free to do as they want, either complying with the regulations as well or ridiculing the organization’s attempt at complying by referencing the disclaimers in their own home made video contributions.

Flickr

Continuing with another communication platform that is primarily visual, Flickr, a picture-sharing site, is dominated by two trends: First, there is a large group of stakeholders that share pictures from offline happenings, such as sports events that Novo Nordisk is sponsoring or its employees are participating in and employee-events held by Novo Nordisk. Second, and most interestingly in this context, is the tendency to feature products as part of the communication. But unlike YouTube none of these are contributions made by the organization; instead the stakeholders solely make the product-related posts. One telling example is a picture by ‘.:[Melissa]:.’, uploaded on October 30, 2007, and viewed over 1700 times.

The Gift of Life

Called ‘The Gift of Life’, it is a display of two insulin bottles from Novo Nordisk, and a syringe (probably used to inject the product). The combination of Novo Nordisk’s products and title ‘The Gift of Life’ is a striking parallel to the Facebook picture mentioned earlier: a stakeholder post that on the surface is intended to be artful, but indirectly becomes a promotional picture. And just like on Facebook, the picture is followed by a description and comments.

> The Gift of Life
>
> These insulins [sic] are what give me the Gift of Life, every day. They help me to live a long and healthy life.
>
> The comments under the picture says:
>
> Serialist
>
> what a great shot .. i liked the light and shade in it ;)
> i wish you a healthy and happy life :)
>
> .:[Melissa]:.
>
> Thank you so much, GNTL BOYA! :o)
>
> blueskydesert
>
> For some reason the syringe looks larger than what I use for my son. Thanks for sharing your photo with us in the diabetes art group.

.:[Melissa]:.

Thanks, blueskydesert, and you're welcome! :o) Yea, it probably is bigger. That's a BD 1cc [100u] syringe. I normally use the Reli-On Brand 0.3cc [30u] short needle syringes, since the most I take at any one time is 15u [NPH]. They were out of those, in the short needles, had the long needles, but I don't like those! All they had was the BD Brand, so I asked if they had a small bag of short needle syringes I could use to "get me by". All they had of those were the 1CC size, so I took them. I wasn't about to spend $28 [I think it is] for a box of 100 of those!! LOL My Reli-On's cost me less than $13 per box of 100!!!

The picture is well received, and the indirect story of Novo Nordisk's products being a gift of life is confirmed. But perhaps the most noteworthy part in this context is the last comment by '.:[Melissa]:.'. As a response to 'blueskydesert' she describes in detail her use of syringes and the dosage of insulin. Going back to how the regulations prohibits the organization from sharing information about their products without including both risks and benefits, this is a good example of how this information gets shared anyway. But not with the participation of the organization, and not including the risk and benefits of using insulin or syringes. In one single post Novo Nordisk is indirectly hailed as a lifesaver, and opinions about the use of its products are shared unsolicited.

This post is not unique. It represents a large part of the data included in the analysis, and as such provides useful insight on how the communicative process on this platform is mainly run by the stakeholders. In contrast the only contributions by the organization are pictures of the Novo Nordisk headquarters and bikes they have acquired with their logo plastered on.

Compared to the posts on Facebook and YouTube, posts on Flickr show little, if any, sign of reference to the regulations. Here the collaborative and uncontrolled topography of online communication becomes visible to full effect – mostly due to the technological affordances hindering anyone to censor or edit others' posts, but perhaps also due to the absence of the organization. The findings suggest that with the organization not really present, meaning creation about subjects the organization itself is prohibited in partaking in can happen without any interference. Product-related information may be shared regardless of any public interest the regulations are set to protect, since the majority of the participants do not answer to the legislation. On Flickr in other words, the regulations seem to have no organizing effect on the communicative process. The process is allowed to develop independently from rules and codes of conduct pertaining to the pharmaceutical industry, except for the organization in question. The minimal activity by Novo Nordisk on Flickr could of course be explained as being a strategic decision to delimit their online activities to certain platforms, but I would suggest, seeing that they indeed have made few contributions, that with platforms where they are least able to control the interaction, they stay away to avoid any regulatory problems.

Wikipedia

Both YouTube and Flickr find their opposite in Wikipedia. Though also mentioning products, in addition to other activities concerned with Novo Nordisk, communication about these products is far more sober or objective. As the main page about Novo Nordisk presented itself at the end of the data collection period (third quarter of 2011), and still does today (second quarter of 2012), most of the organization's products are mentioned, but not in a direct or indirect promotional manner. Rather, by looking at the entry history of Wikipedia it becomes clear that attempts at coloring the product story are deleted or changed. One example of this is how a contribution by 'Jondiego' on January 24, 2008 posting a link to a website where Novo Nordisk products can be bought, is removed only minutes later by 'Ohnoitsjamie'. The same 'self-justice' is also evident when viewing the entry history about NovoRapid, a product by Novo Nordisk. On March 28, 2005 'Twthmoses' contributes with

> 2001 NovoRapid® FlexPen® and Insulatard® (NPH) FlexPen® are marketed. FlexPen® is a new prefilled pen, designed to be easy and discreet to use.

The pen is here described as easy and discreet – a rather positive attitude to the product. But not long after '167.206.144.30' edits the post (emphasis added)

> 2001 NovoRapid/Novolog FlexPen and Insulatard (NPH) FlexPen are marketed. FlexPen is a new *disposable, prefilled insulin pen dosage device*.

A change of words, making the story about the NovoRapid less positive, and more neutral. So even though Wikipedia is just as open and free as YouTube and Flickr and not under organizational control (including the risk of censorship) like Facebook, the findings suggest a practice of self-justice among the contributors. Again it is hard to tell whether this self-justice is caused by the regulations or by the social contract that in encyclopaedias one does not promote, but convey in an objective fashion. The main point is that only the organization is bound by the regulations, leaving most of the online meaning creation process up to the stakeholders. The organization might attempt to both comply and use the regulations strategically, but it does not remove the fact that they are, comparatively, rather inactive.

In sum, the analysis shows that there is participation, but that the ability to invite to the collaborative process is unevenly distributed between the stakeholders and the organization. The organization is partly constrained as is visible by the multiple disclaimers, while the stakeholders on some platforms create meaning without any regards to the regulations. They do not have to comply with regulations, as these do not directly concern what the stakeholders may or may not utter. Instead, the regulations are directly concerned with making sure that they are not, from the organization, exposed to unbalanced information. The stakeholders thus may contribute to the communicative process with homemade remakes of educational videos and obvious praises of products, while the organization is left with absurd repudiations of the intent behind their communication.

CONCLUSION AND DISCUSSION

The article started out by asking how regulations written for offline communication come to organize the online process of creating meanings about pharmaceutical companies, exemplified by the case of Novo Nordisk. The statistics presented suggested that the offline regulations might cause a low and very focused online participation by the organization – low compared to the stakeholder group, and concentrated on one platform, while the stakeholders are active across the board, though predominantly through minor contributions e.g. by using the 'like' and 'dislike' option. The qualitative analysis suggested that the online communication process is organized in a paradoxical way, perfectly exemplified by the disclaimer made by Novo Nordisk on its Facebook profile: 'This page is not intended for a US audience'. The organization's participation is arguably organized in terms of disclaimers and hidden promotion aimed at either adhering to the regulations or circumventing them. The stakeholders' participation on the other hand, is organized as a 'free-for-all' – which sometimes, as was exemplified with Wikipedia, creates self-justice, while on other platforms, as with Flickr, creates unconcealed product discussions with no regards to the risks and benefits of the product. The findings presented above suggest, the regulations might be used by the organization as a strategic tool to censor the collaborative process taking place on platforms the organization to some extent can control, while they are almost absent on the platforms the organization have less control over, leaving it to the stakeholders to fill the void in the process, including product-related information-exchange. In short, offline regulations come to dictate online participation. Novo Nordisk is both partly silenced in the process and provided a strategic tool to silence critical, or off topic, stakeholders. The stakeholders, whom are not under regulation, are left to play by their own rules in a state of anarchy, except on Facebook, where Novo Nordisk exercises dictatorship.

Communication regulations are put in place in order to protect the stakeholders from unwanted and uncontrolled pressure. This is obtained by putting constraints on what kinds of dialogue a pharmaceutical company can partake in. Though none of the regulations force Novo Nordisk to stay offline, they do require the organization to be extremely cautious about how it participates in the communicative process about themselves. And as the study demonstrates the organization is relatively inactive in the communication process, accounting for only 3.3% of all the communication included in the sample, of which most was on the company-controlled Facebook page. This semi-silencing of Novo Nordisk is empowering to the stakeholders: they are able to collaboratively communicate more freely than the organization itself.

But this freedom also gives the stakeholders uncontrolled opportunity to share product information outside the regulations, an exchange that takes place without any reassurance that the information is fair and accurate (as becomes clear in the cited examples where Novo Nordisk's products are praised). In my view, this freedom could be problematic, since the regulations, which were meant to ensure fair information, might indeed encourage the opposite: an influx of biased or incorrect product information from the stakeholder participants.

This is not a direct problem for the organization; they even seem to use the regulations strategically in order to control the process and to find ways to circumvent them. Rather it points out the two possibly conflicting stakeholder roles in the communication process: a) the role as regulators, empowering themselves, and constraining the industry in the name of a 'public interest', b) the role as individuals in need and demand of direct interaction with the industry. Most importantly it points to the absurdity of having regulations that do not address the Internet or any digital means of communicating, despite the prominence of these platforms in the digitally networked 21st century.

There is little doubt that the regulations are ripe for reform (Ryan, 2009), but the question is if the global digital village has come to put the concept of regulations under pressure? Is it losing its meaning? If regulations are put in place to protect stakeholders, but are also used by the industry as a tool to censor the same stakeholders or as meaningless disclaimers to circumvent the rules, who is in the end protected? The same question could be asked the other way around, if the regulations prohibit the organization from participating in the meaning creation process, leaving most of the communicative process about e.g. products up to the stakeholders that are not obliged to neither act neutral nor provide warnings about use etc., who is protected? And, regarding the organizations, should they be kept from interacting online, just because governments have not been able to update the regulations or to come up with a different concept to ensure the ‘public interest’ in a digitally networked society? The consequences of the discrepancy between the communication regulations pharmaceutical companies operate under and the collaborative topography of online communication outlined in this paper at least deserve more attention than it has received till date.

ACT III
SOCIO-TECHNICAL ORGANIZATION OF ONLINE COMMUNICATION

INTRODUCTION

'Language matters. Discourse matters. Culture matters. But there is an important sense in which the only thing that does not seem to matter anymore is matter' (2003: 801), the 'matter' being technology and how it is entangled with the social. Beginning from this lament, Karen Barad and like-minded scholars advocate a return to matter, and that has led to a wide range of research investigating, and thus acknowledging, for instance how communication technology and organizations both arise at the intersection of social and material phenomena (see e.g. Barley, 1990; Mohr, 1971; Orlikowski, 2002; Thompson and Bates, 1957; Schatzki, 2005; Scott, 1998); investigations highly inspired by actor-network theory arguing for symmetry between human action and the actions of technology (see e.g. Callon, 1986; Latour, 1987; Law, 1987). But as Contractor et. al. point out (2011), although the socio-technical approach is appealing at the ontological level, it is a great challenge and still in need of more empirical exploration.

This article aims to contribute to the continued development of the empirical understanding of the intertwinement of the social and the technical; specifically how the intertwinement comes to organize the communication about organizations online. I seek to do this through a mixed method content analysis of the online communication about the Danish pharmaceutical company Novo Nordisk, a market leader in diabetes care with 60.78 billion DKK in revenue in 2010 (Novo Nordisk, 2011). Being part of the pharmaceutical industry, the organization will, like its industry fellows, within a few years see several patents on blockbuster drugs expire, and with fewer new 'super drugs' in the pipeline the competition for customers has become more aggressive.

Novo Nordisk's main competitors are Sanofi-Aventis and Eli Lilly & Company, and in an effort to secure future revenues, the organization has begun tapping into the internet for direct access to its stakeholders. And it is this 'tapping', this interaction between the organization and its stakeholders conducted on online communication platforms, I will investigate.

As has been argued extensively elsewhere and hence will not be sought 'proved' in this article, online communication is collaboration – a co-creative two-way bricolage, that is hypertextual, hyperpublic, negotiable and unconstrained by offline time and space (see e.g. ACT I/Gulbrandsen and Just; 2011, Scolari, 2009; Jenkins, 2006). It is in its nature a collaborative process that is as productive of actors (humans and non-humans) as it is produced by them (Gaggi, 1997, Callon, 1986). As such, it serves as a perfect empirical field for the investigation of socio-technical entanglement. And in the quest to contribute to the field with empirical data and analysis on this entanglement, this article will first address the notion of a socio-technical understanding of communication. This is done through a discussion of the relationship between the social and the technical, and by proposing a frame for an empirical analysis. This is followed by a presentation of the methods employed in this investigation. Third, the paper's findings are offered; highlighting how the communicative process becomes organized in different degrees of fragmentation/coherence, how the socio-technical intertwinement comes to dis-/organize the meaning formation about Novo Nordisk. Fourth, the paper concludes with asserting that the entanglement creates different conditions for the level of possible fragmentation/coherence in the process – the more potential or possibilities the human actor is provided in the communicative process, the more fragmented or chaotic the process becomes.

SOCIO-TECHNICAL ONLINE COMMUNICATION

A socio-technical approach to communication suggests that communicative processes and technologies are indistinguishable phenomena (Baptista, 2009). As such, technology becomes

> '...integral to organizing, positing that the social and the material are constitutively entangled in everyday life. A position of constitutive entanglement does not privilege either humans or technology (in one-way interactions), nor does it link them through a form of mutual reciprocation (in two-way interactions). Instead, the social and the material are considered to be inextricably related—there is no social that is not also material, and no material that is not also social' (Orlikowski 2007: 1437).

The approach is highly indebted to Anthony Giddens' (1984) theory of structuration (Jones and Karsten, 2003) and to actor-network theory (Contractor et. al. 2011). In the case of the first, with one of its key elements being the recursive nature of agency and structure, where neither agency nor structure is primary, but mutually constitutive, the correspondence with a socio-technical approach is evident. According to Giddens', agency produces and reproduces structure; structure constrains and enables agency (1984), consequently

> 'rather than starting with the technology and examining how actors appropriate its embodied structures, this view starts with human action and examines how it enacts emergent structures through recurrent interaction with the technology at hand' (Orlikowski, 2000: 407).

In other words, this conceptualization entails that technologies can simultaneously form and be formed by the social structures into which they are presented. In regards to the latter, actor-network theory (ANT), the relation is apparent in the parallel claim of symmetry between human action and the actions of technology (see e.g. Latour, 1987; Law, 1987). ANT theorists argue that communication involves both people and technologies; that the material features of a technology are developed and used in a system of social relationships (c.f. Callon, 1986). By refusing to distinguish the social from the technical, they position the actions of humans and non-humans as parts of a single network that is, in itself, an actor, an 'actor-network'. It assumes that nothing lies outside the network, and, consequently, that there is no difference in the capacity of technology and humans to shape the communicative process (Latour, 2005).

Although many scholars argue that the social and the technical are equally important, most eventually favour the social (Leonardi and Bailey, 2008). This is evident in the vast amount of research done on how people *use* information technologies to organize and communicate (see e.g. Arnold, 2003; Fulk, 1993; Leonardi, 2003; Markus, 1994) compared to research on how people and technologies are intertwined. According to Stephen Barley (1998) this tendency can be explained by the conflation of two important, but separate, philosophical distinctions: the difference between determinism and voluntarism on the one hand, and the distinction between materialism and idealism on the other. From this viewpoint, materialism implies determinism, and idealism implies voluntarism, a distinction Barley describes as a faulty route; by not acknowledging the interrelationship between humans/organizations and technology those who privilege the social come to ignore the evident constraints and affordances of technologies, while those who emphasize the material become blind to the role that people play in bringing about technological effects on communication. As Contractor et. al. argue (2011), however, the investigation of this entanglement, the intertwinement of the technological and the social, sounds intriguing theoretically, but is more convoluted to conduct empirically. This difficulty ensues because while technologies and communicative acts can be seen, theoretically, as intertwined, they are relatively easy to distinguish empirically (Edmondson et. al. 2001; Pentland and Feldman, 2008), due to significant differences between them in practice (Leonardi, 2011). When one for instance asks a friend for information about an organization, and the next day acquires the same information using a technology (e.g. Wikipedia), it is unlikely that one would think of Wikipedia as a friend and as such consider both sources equal. Although the socio-technical approach offers an appealing way of thinking about technologies as parts of networks (as opposed to entities that exist independent of social networks), the approach does not, following Contractor et. al. (2011), provide much guidance in specifying how to depict these socio-technical relations empirically in ways that recognize these differences. Hence one is, as a researcher, faced with the challenge of creating a framework for the analysis of this intertwinement. In my case, a framework that allows me to investigate how the online communication about a pharmaceutical company is organized by the entanglement of the social and the technological.

A way forward

Taking my cue from Leonardi who argues that,

> 'technologies are as much social as they are material (in the sense that material features were chosen and retained through social interaction) and [communicative actions] are as much material as they are social (in the sense that social interactions are enabled and constrained by material properties)' (2009: 299),

I propose that a way forward is to focus on (1) the technological affordances that make (2) the polyphonic communication process and its (3) inherent struggles possible.

James Gibson defines affordance as a property of whatever an actor interacts with, a property that interacts with a property of an agent in such a way that an activity, an interaction, can be supported (Gibson, 1954; Greeno, 1994). Or put differently, a technological affordance is the relationship between a human actor and a technological actor, a potential for (inter)action, but not the (inter)action itself. In this context, the technological affordance becomes pivotal, since it creates potential for interaction, a potential offered by the technology (which in turn is generated through social interaction) that human actors may utilize (meaning they can chose to interact with the technology) in order to contribute to the communicative process.

An inherent consequence of this potential to interact is the potential for processual polyphony, since different interactions between different actors will produce different inputs to the communicative process. Bakhtin introduced the notion of polyphony in his literary theory (1984), referring to a less authoritative author position that gives room to various voices within the text, famously exemplified by his analyses of Dostoyevsky's novels. Translated into the context of online communication, the term is useful to describe the polyphony that marks the process of constructing meanings about the organization in question, how the assembling of a broader flow of events is played out. Unlike Bakhtin, referring to several voices within the novel, the concept of polyphony in online communication describes the multiple authors of the ‘novel’, the numerous participants in the communicative process. On online communication platforms like Facebook, Wikipedia, YouTube and New York Times, the technology allows for more than one voice to be heard, since they in varying degrees are open and interactive, as opposed to closed and merely observable. This becomes evident on for instance YouTube were ‘the meaning’ about an organization is composed of videos from a vast array of actors. The technological affordances and the practices of the stakeholders with a vested interest in the organization come to co-produce meaning. Communication is not a product, told, performed or written by one authoritative actor, instead it is a polyphonic process in that it consists of and is constructed by the various voices of the multiple authors/actors utilizing the different technological affordances.

Where there is polyphony, there is bound to be occurrences of heteroglossia, because, as Bakhtin argues, actors that make up the polyphony cannot be presumed to be a uniform group, wherefore their use and interpretation of language, symbols and actions will be dissimilar (1981). Hence, seeing that the actors, e.g. the organization’s stakeholders, those that make up the online polyphony, are not a homogenous group, they are bound to have different takes on what the ‘meaning’ about the organization is (c.f. Laine & Vaara, 2007). This will inevitably cause clashes in the process between competing accounts of what the organization is and where it is going, creating meaning struggles. This is easily detectable by looking at the submission history on Wikipedia where different accounts of the same topic are proposed repeatedly over time at the cost of contrasting accounts. The unanswered question in this case becomes whether these competing accounts may coexist, are negotiated or simply censored, dependent on the interplay between the social practices of the actors and the technological affordances.

In sum, aiming to contribute with an empirical study of the intertwinement of the technological and social in online communication processes, I suggest focusing the analysis on how affordances create potential for polyphony, which in turn create potential for meaning struggles. This way, the analysis will be able to capture the process and how the socio-technical entanglement organizes it, without disregarding the (purposeful) differences between the different actors.

DESIGN AND METHODOLOGY

In the pursuit to answer how the socio-technical intertwinement come to organize the online communication about the Danish pharmaceutical company Novo Nordisk, a mixed method content analysis was conducted (Budd, Thorp and Donohew, 1967; Denzin and Lincoln 2005; Johnson and Onwuegbuzie 2004). This methodological choice allowed me include the context and the voices of the actors involved, while at the same time heighten the study's generalizability and reduce the risk of researcher bias and manipulation (Miller et. al. 2011).

The investigation started with a qualitative search of relevant communication platforms. By manually entering a wide range of online communication platforms, on some looking up the profile of the organization (if the platform was constructed that such existed), on others searching for posts tagged with

'Novo Nordisk', I identified four platforms as relevant to this investigation due to substantive communication the case organization. The platforms chosen are:

1) www.facebook.com (a social networking site)
2) www.youtube.com (a video sharing site)
3) www.wikipedia.com (an information gathering site)
4) www.thenewyorktimes.com (a news gathering site)

The selection reflects a wish to have a broad spectrum of sites providing the organization and its stakeholders with different opportunities. From the possibility to create a company profile mediated by the organization (e.g. on Facebook) to platforms mediated by opinion leaders (e.g. on New York Times), with less organization and opinion leader mediated sites in between (e.g. Wikipedia). It was also a priority to include communication platforms that predominantly communicated through visuals (e.g. YouTube and Flicker), as visuals are an important side of online communication and often a means for convergence across the platforms. Finally it was important to only include publicly accessible platforms, as this study is concerned with the public meaning creation, and not closed online communities.

Sample

Following the qualitative search and selection, a sample collection of all communicative contributions linked to the organization on the four platforms from the fourth quarter of 2004 to the second quarter of 2011, was conducted during the third quarter of 2011.

As visible in table 5, the total number of communicative contributions included in the sample is 3.724 (100 % of the total sample). Of this Facebook counted for 843 contributions (22.6 % of the total), YouTube for 158 (4.2 %), Wikipedia for 248 (6.7 %) and The New York Times for 2,475 (66.5 %). The New York Times is by far the platform with most interaction, while YouTube has the least. But as pointed out above a large portion of online communication is composed of minor contributions (likes, dislikes, spelling corrections etc.), and when these are removed, the picture changes: the total number of contributions (major) falls to 648, and the platforms have almost equal amounts of contributions to the process.

Table 5: Contributions – platforms, major and minor.

	Total	**%**	**Major**	**%**	**Minor**	**%**
Facebook	843	22,6	194	29,9	649	21,1
YouTube	*158*	4,2	139	21,5	19	0,6
Wikipedia	248	6,7	136	21,0	112	3,6
NYTimes	2475	66,5	179	27,6	2296	74,6
Total	**3724**	**100**	**648**	**100**	**3076**	**100**

Measurement and coding

According to Edwards a 'measure is an observed score gathered through self-report, interview, observation, or some other means' (2003: 313), and for this study the measurement was created using a systematic coding scheme developed based on previous literature on socio-technicality and content analysis of online communication (Cho and Huh, 2010; McMillan, 2000). The sample was coded by me, the investigator, using a coding scheme and the software SPSS, and a written guideline, applying three measurements: 1) Contributor, 2) Type of contribution, and 3) Major/minor contribution.

During the coding a 'Contributor' was defined as the source of the utterance and coded as a) Organization, b) Stakeholder and c) Unknown. In the instances where the communicator was clearly identifiable as the voice of the organization (e.g. when using the onscreen name 'Novo Nordisk' on the company-controlled Facebook page) was the contribution coded as 'Organization', while 'Stakeholder' was used in the instances where the communicator was identifiable, but not as the organization. Because web-based communities, hosted services and applications often are created in a way that reduces social clues and creates possibility for anonymity or alternative selves (Carnevale and Prost 1997; McKenna and Bragh 2000), it is in most instances impossible to distinguish the different stakeholders from each other. This is one of the good-bad qualities of online communication platforms, a quality that is hard to ignore and circumvent. In our opinion it would extremely suggestive to embarked on the quest to create a more nuanced measurement of the online stakeholders, since this would entail a close-reading of each individual post, followed by a more or less qualified guess on what kind of stakeholder it might be (patient, interest group, investor, relatives etc.). At least in regards to the platforms investigated in this study, a more nuanced measurement was not obtainable. Finally, the category 'Unknown' was only used when the identity of the communicator was not provided, e.g. the identity of who used the 'like' or 'dislike' options on YouTube. It is important to note is that 'identity' here only refers to online identity, and not the contributors' offline identity. The offline identity of the contributors' is of no interest in this study, as it is solely the online collaborative meaning creation that is of interest. The measurement 'Type of contribution' was coded as a) Text, b) Video, c) Picture, d) Like and e) Dislike. In the cases where the contribution was a combination of these, an individual assessment was made in order to clarify which was the dominant. Major/minor contribution was coded as a) Major or b) Minor. A minor contribution was defined as using the like/dislike option or correcting mistakes in hyperlink addresses or text. An example is when '131.155.36.15' on October 6, 2005 corrected the year when Nordisk Insulinlaboratorium was established from 1922 till 1923 on Wikipedia. All other contributions were coded as major contribution.

Analysing online communication introduces many challenges to the content analysis process, one being that the scope of material may be too large and hence make an in-depth analysis convoluted (McMillan, 2000). To avoid losing the qualitative level of the analysis, this part of the investigation was not coded in SPSS. Instead all major contributions where close read with the intent of determining the "message content and message handling" (Budd, Thorp, and Donohew, 1967). The material was then carefully mapped to identify the general tendencies relevant to this investigation: the degree to which they display polyphony, meaning struggles and interaction between the technological affordances and social practices.

FINDINGS

The first step in the analysis was to determine to what degree technological affordances come to determine the social practice and vice versa. Social practice here meaning the utilization of the potential to interact by the human actors. Subsequently, the analysis sought to investigate what possibility the actors had to manoeuvre the social practice in the communication process. One could expect the two to overlap, meaning that the least constrained platform would create the most potential to manoeuvre social practice, but as the findings show this is not entirely the case (see Table 6), underscoring how important it is to acknowledge the intertwinement of the social and the material to depict the process in a right manner.

Table 6: Technological affordances and social practice manoeuvres

	New York Times	**Wikipedia**	**YouTube**	**Facebook**
Material affordances	Comment and like the newspaper's, own and others' contribution.	Submit own and edit others' contribution.	Submit, comment, tag and like own and others' contribution and control others' access to own contribution.	Submit, delete, comment, like own and others' contribution and control others' ability to access own profile.
The actor's potential to manoeuvre the social practice	Newspaper determines what subject the individual may comment on.	The collective determines the validity of the individual contribution.	The individual determines on his/her own.	Profile owner determines what technical possibilities and content are available for others.

In the following the findings from each distinct platform will be presented first, followed by a conclusion where the findings are added and a possible answer to how the technical and the social come to organize the online communication about Novo Nordisk. In the first part, illustrative examples will be given in order to best convey the general tendency of the platform.

New York Times

New York Times, an online newspaper, proved to be the most constrained platform, where actors are only allowed to comment on articles provided by the newspaper, in addition to 'like' articles and own or other's comments. Being an online newspaper, the platform is from the start biased in the sense that it automatically privileges certain authors: the newspaper has through social interaction with technology created where certain actors are more privileged in the process than others, e.g. journalists writing articles. But it opens up for the mass (the readers) to comment on the articles and they can 'like' what they read (both the articles and the comments). In the specific case of Novo Nordisk, New York Times is a platform for mediated meanings about Novo Nordisk that the organization's stakeholders may engage with as less privileged contributors. The consequence this has for the social practice is that the actor is force to relate to meanings proposed by the privileged author, but in how it chooses to relate, it is free to contribute with whatever.

This becomes evident in the case of 'Are you buying illegal drugs?', an op-ed by Katherine Eban and J. Aaron Graham, published March 31, 2010. In the article the authors write about how the pharmaceutical industry often experiences theft – drugs are stolen during transportation and sold on the black market. Being part of this industry, Novo Nordisk is mentioned in the article as one of the companies that experience this:

> (...) Last June, after 129,000 vials of Novo Nordisk's long-acting insulin were stolen from a parked truck in North Carolina, the Food and Drug Administration warned diabetes patients not to take drugs with the stolen lot numbers. But it was too late. The vials turned up in a Texas medical center. Because the insulin had not been refrigerated, patients who used it

> developed unsafe blood-sugar levels. The authorities have recovered only 2 percent of the missing vials. (…)

But due to the affordances provided by the technology, the meaning about the industry, and indirectly Novo Nordisk, becomes contested. As one of many actors, on April 1, 2010, 'markroc', utilizes the potential provided to act, by writing:

> (…) What gives? Even the writers of this column have gotten together with the medical industry to scare people. What is the point of this article? Scare people out of buying somewhat affordable medicine? Or limit our options and outlets to buy reasonably priced medicine? Or blatantly excuse the pharmaceuticals of their outright fraudulent practices?

Not only is an opposing stance on the industry and the organization suggested, claiming that the industry is indeed to be blamed, even the privileged actors in the communicative process are called into question. But the contestation does not have to be resolved, since the entanglement between the technology (providing potential to write comments in a continuous thread) and the social (making use of the potential) allow different accounts to coexist. The interaction between the material and the social does not force any consensus, contrasting the communicative process on Wikipedia.

Wikipedia

Wikipedia has more technological affordances compared to the New York Times platform, but less compared to YouTube and Facebook. Wikipedia is an online collaborative encyclopaedia, meaning a technological platform for the collaborative construction of information about different themes. The technology allows for the individual actor to submit own material and to edit others, but this also means that others can edit the actor's own. The platform is open and marked by what I would call forced collaboration, as the technology provides no potential to protect or privilege your own submission. In the specific case of Novo Nordisk the technology creates a communication platform that provides the organization's stakeholders and the organization equal opportunity to contribute with and edit m about the organization – the meaning about the organization. The consequence for the social practice is that the collective come to determine the validity of the individual actor's contribution and since different accounts cannot coexist; the communicative process is marked by negotiations. To illustrate how the technological and the social interplay on Wikipedia, I will present how changes in a paragraph on the page are made over time. Italics mark the changes in text.

The first entry on Wikipedia about Novo Nordisk was made April 7, 2006, by '212.242.204.245' and read:

> Novo Nordisk is dedicated to developing its business towards ecological, social and economic sustainability. This commitment is demonstrated through its values and its environmental and social responsibility policies also called the triple bottom-line.

But due to the technology's affordances, others may edit the contribution to the meaning formation process. This happened a year later, when '167.206.144.30' on October, 2007, wrote:

> Novo Nordisk *claims to be* dedicated to developing its business towards ecological, social and economic sustainability*. The company says this* commitment is demonstrated through its values and its environmental and social responsibility policies also called the triple bottom-line, *although some question the authenticity of this given the company's aggressive pursuit of profits.*

Here it becomes visible that the affordances give actors the ability to reorient the communication, hence constructing a new meaning: from Novo Nordisk being trusted as an organization that is dedicated, to an organization that claims to be dedicated, exhibiting how technology (the ability to edit) and social practice (the willingness to contribute) interplay. In this case the social and the material create the possibility for a critical turn of the meaning formation, a turn that continues with the following contribution by '167.206.144.30', made January 11, 2008:

> Novo Nordisk claims to be dedicated to developing its business towards ecological, social and economic sustainability. The company *claims* this commitment is demonstrated through its values and its environmental and social responsibility policies also called the *"triple bottom-line"*, although some question the *actual* authenticity of this given the company's aggressive pursuit of profits, *and its discontinuation of products that thousands once relied upon in an effort to "migrate" them towards more expensive, patented products instead.*

In this contribution the narrative about Novo Nordisk becomes even more critical through the introduction of the 'discontinuation of products'. Though shortly after this critique is softened by '87.51.208.68' who on February 7, 2008, write:

> Novo Nordisk *is* dedicated to developing its business towards ecological, social and economic sustainability. The company *says* this commitment is demonstrated through its values and its environmental and social responsibility policies also called the "triple bottom-line", although some *sources* question the actual authenticity of this given the company's aggressive pursuit of profits, and its discontinuation of products that thousands once relied upon in an effort to "migrate" them towards *better, although* more expensive, patented products instead.

As this entry shows, the meanings about Novo Nordisk continue to be negotiated through the interaction of actors (both humans and technology). On March 13, 2008, '152.73.23.1' continue the negotiation by more or less eliminating the critique contributed earlier:

> Novo Nordisk is dedicated to developing its business towards ecological, social and economic sustainability. The company says this commitment is demonstrated through its values and its environmental and social responsibility policies also called the "triple bottom-line". *Novo Nordisk founded the World Diabetes foundation to save the lives of those affected by diabetes in developing countries and were instrumental in achieving a UN resolution to fight diabetes. Making diabetes the only other disease alongside HIV AIDs to have a commintment* [sic] *to combat at a UN level. Such is diabetes present and future danger to human health on a global scale.*

Here the communicative process about Novo Nordisk takes a new positive turn, at the cost of the critical. Novo Nordisk now becomes associated with the World Diabetes foundation and the UN, instead of being an organization in 'aggressive pursuit of profits, and its discontinuation of products that thousands once relied upon'. Less than six months later, on August 14 2008, 'Lilac Soul' made the final edit (which still stands today, April 2012):

> Novo Nordisk founded the World Diabetes foundation to save the lives of those affected by diabetes in developing countries and were [sic] instrumental in achieving a UN resolution to fight diabetes. Making diabetes the only other disease alongside HIV/ AIDS to have a commintment [sic] to combat at a UN level.

What started as communicative process about Novo Nordisk's triple bottom line has through the negotiation, the meaning struggles, and by a polyphony of actors, over 2 years developed into a story about how Novo Nordisk founded the World Diabetes foundation. In many ways the story is the same as in the first entry, Novo Nordisk is an organization dedicated to more than profits, but the way the story is told, the way this meaning is conveyed, has been altered in the intersection between the technical affordances and social practice.

YouTube

The platform YouTube differs significantly from the two former, in that it is dominated by the affordance to upload videos, hence emphasis is not on textual contributions. The material constraints are few, as the actors may not only view videos, 'like' and comment on them, but also upload own videos, tag their contribution and, significantly, control others access to their contribution. The latter is possible since the platform allows for closed or private channels, only accessible for invited actors. For the present investigation though, only public videos were analysed. The ability to tag the submission is important to recognize in this context. Tagging allows the actors to relate their submission to themes they find relevant, e.g. 'beach' to indicate that the video is concerned with the topic of beaches, or names of celebrities or organizations that are in some way linked to their contribution. And since the tag in many cases may determine whether or not the contribution will appear when others search for videos concerned with whatever topic they are interested in, the act of tagging becomes entangled with the degree to which the submission becomes part of the meanings created on the platform. In the specific case of Novo Nordisk the technology creates a communication platform that gives the organization's stakeholders the opportunity to share videos that are either directly commenting on or they associate with the organization, hence contributing with meanings about what and who the organization is. The consequences this has for the social practice, the fact that the actor's submission may relate to any topic in any way the actor see fit, creates a situation where competing accounts of the same organization coexists. The meaning-struggle becomes indirect in that the only way to 'win', or dominate, is to become the most viewed, and not as the case is with New York Times and Wikipedia, the one least objected to or edited. In many ways, the individual actor is on his own in both the determining of the relevance of the submission and its content. To illustrate how the affordances and practices interplay, I present two contributions displaying how competing accounts coexists. Both are tagged with 'Novo Nordisk', both address the question of who the organization is, but their communicative contribution is quite different in sentiment.

In a video uploaded by 'indycars' on December 10, 2010, on YouTube, the story about how Novo Nordisk sponsors an IndyCar racer named Charlie Kimball is told (IndyCar refers to open-wheel auto racing in the United States). Novo Nordisk has ventured into car racing to sponsor the first diabetic 1 driver in IndyCar history.

[11]

The video is made at a press conference where the sponsorship is presented, and consists of two interviews, one with Chip Ganassi, the race president, and one with Camille Lee, vice president of diabetes marketing at Novo Nordisk. The interviews are crosscut with pictures of Kimball entering the podium in front of the waiting press. Chip Ganassi's main point is that Charlie Kimball is a living proof of how manageable diabetes is; if it was not manageable he would not be able to participate in a car race. Camille Lee supplements this in the video, by adding that diabetes becomes manageable with the right drug, indirectly hinting to Novo Nordisk's products.

The video is submitted by a third person, he is at least not identifiable as someone employed by neither the car race organization, nor Novo Nordisk. The communicative contribution by this third person, 'indycars', becomes a contribution to the meaning formation process about how Novo Nordisk, through its products, can make 'your dreams come true', as Lee says in the video. The video hails the efforts of Novo Nordisk, through the admiration of Kimball being the first diabetes 1 race car driver in the world. The contribution is representative of a large amount of the data collected for this study where

[11] http://www.youtube.com/watch?v=dAkSKtKi9iI&feature=relmfu

videos tell positive stories about how Novo Nordisk is supportive of, and in some cases the organizer or main sponsor of sport events like car racing and marathons.

But as noted, YouTube's affordances allow for competing accounts to coexist, since there is no incentive to relate the videos to each other, other than by theme, in this case Novo Nordisk. One example of a competing meaning about Novo Nordisk is a video, uploaded by 'AllieBeatty' (a diabetes blogger) on June 17, 2008.

[12]

In the video 'AllieBeatty', sitting in what appears to be her own room, tells a story about how Novo Nordisk is promoting a product to treat diabetes 2, despite current research showing that the type of product Novo Nordisk is promoting might cause more damage than help. In the video she points to the danger of what 'AllieBeatty' calls Novo Nordisk's 'catch it early' sales strategy, meaning that they promote products that might not be right for the patient in the long run, but that is secondary to mending the immediate discomfort of have diabetes 2. Compared to the video about Charlie Kimball, this

[12] http://www.youtube.com/watch?v=aZ47U9-5qQ4

communicative contribution is negative towards Novo Nordisk, making the exact opposite claim; Novo Nordisk is all about profits, and less about patient welfare.

An interesting observation, highlighting the fact that competing accounts are allowed to coexist on YouTube almost without any connection besides the theme, is that despite the material affordance of the technology to 'like', 'dislike' or comment on others contributions, these options is more or less ignored. This is unique for YouTube, because in the case of New York Times, Facebook and Wikipedia, actors related directly to the contributions of others. As visible in Table 7, 'likes' are the dominating ways of contributing on New York Times and Facebook, and above examples from Wikipedia have shown how that the intertwinement of material affordances and social practice creates a direct relation between the users' contributions. In the total sample, 'like' (and 'dislike') is the dominating style of contribution, accounting for almost 80% of the total sample included in this study. But on YouTube only 18 out of 159 contributions are 'likes' and 'dislikes'. One could expect that the critical voices 'AllieBeatty' is representative of would comment or dislike the hailing of Novo Nordisk in the first video mentioned here, but instead of a direct response to a contribution, the response, is given through new video uploads. The meaning struggles hence become indirect.

Table 7: Source and style of contribution

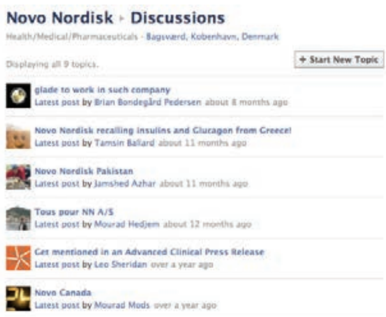
	Facebook	YouTube	Wikipedia	NYTimes	Total	%
Text	168	5	235	179	**587**	**15,76**
Video	9	134	0	0	**143**	**3,84**
Picture	18	0	13	0	**31**	**0,83**
Sound	0	1	0	0	**1**	**0,03**
Like	648	12	0	2296	**2956**	**79,38**
Dislike	0	6	0	0	**6**	**0,16**

Facebook

The last platform included is Facebook, a social networking technology that allows for actors to network, either as individuals or organizations. As with YouTube, the actor may 'like', comment and submit own contribution, but unlike any of the other platforms, Facebook also provides the affordance of controlling others access to and ability to contribute to the narration process. This comes as a consequence of the technological constraint that actors are forced to create a profile in order to access the platform. The platform hence differ substantially from the previous platforms in that the actors have the possibility to privilege themselves as profile holders by controlling what can be contributed with on their profile page. Whether or not this affordance is utilized is dependent on social practice, making the interplay between the material and the social extremely evident, since the technology itself is no more determining for the narration process than the social practice of the profile holder. This creates a situation where the actors who are not holders of the profile, are, put simply, limited to whatever the holders let them do. In the specific case of Novo Nordisk, Facebook is a communication platform that gives the organization the opportunity to create a profile and on that profile contribute with meanings about the organization, hence creating a company story, and the opportunity to control the degree to which its stakeholders may contribute with their meanings about the organization. And as the findings show, Novo Nordisk utilizes the affordance to socially control the communicative process. The first evidence of this is found in the 'About' section on the profile. It reads:

> This page is for discussions about Novo Nordisk and its subsidiaries and the initiatives and projects we are involved in. While we welcome Facebook members to make comments, we reserve the right to remove those that are off-topic, abusive or intended to spam.

Here it is evident that the organization intends to use the technological affordances to control the direction of the meaning formation process. Due to the longitudinal nature of this study, the practical exercise of this intent is easily traceable. The Novo Nordisk Facebook profile started out (in 2006) as a profile not controlled by the organization officially, but by one of its employees, and was only in 2011 officially taken over by the organization. Data collected prior to the 'take-over' compared to after, show that several critical meanings about Novo Nordisk has since then been removed.



Here is a screenshot of the discussion feature on Novo Nordisk's Facebook page in October 2010. It shows 6 discussions, one of which tells the story about how Novo Nordisk has recalled insulin from Greece due to the country's financial difficulties. In the discussion the organization is called a traitor for pulling out of the country, and leaving many diabetes patients short of their vital medications. The communication is clearly negative towards Novo Nordisk, portraying them as profit seeking and unconcerned with patient welfare. As of April 2011, after the official 'take over' by the organization, the discussion, and with it the negative communicative inputs, was removed. And by June the same year, the whole 'Discussion' feature was made obsolete.

For the regular Facebook user Novo Nordisk's social practice in utilizing the affordances is not easily traceable, since the affordances gives the holder a privileged position. The communicative process hence becomes controlled by the organization through active censorship and strategic choices of available features. And, as the findings suggest, with this control comes a meaning formation process that over time favours the organization, and not critical voices.

In sum, the analysis shows that the utilization of the potential to interact (the socio-technical entanglement), places itself on a scale from minimum to maximum (see table 6). On New York Times the non-privileged actor is forced to relate to a given meaning formation process due to the technological affordances offered. While on Facebook, the human actor is allowed to submit, comment and control others' submissions and accessibility. Facebook here becomes the extreme case of how the social and the technical interplay, in that social actions by one actor come to determine the potential for interaction for others. Hence, it becomes visible that the intertwinement creates different communicative processes, depending on both the technology and the social practises. That Novo Nordisk has taken such strong control over its Facebook page cannot be explained in any other fashion than pointing to social practices. While in the case with New York Times, the limited ability to manoeuvre is more related to the technical.

CONCLUSION

The consequences of these findings for the organization of the communicative process is that depending on how the specific material affordances gets entangled with the specific actors' social practice, the online meaning formation about Novo Nordisk gets organized in different degrees of fragmentation/coherence. On YouTube there are almost no material incentives to create coherence; hence the process becomes extremely fragmented. On Facebook the meaning formation process becomes more coherent, since the organization itself controls the profile. But due to the technological affordances, the submissions do not have to be written into one text, hence there will be semi-fragmentation, not in a positive vs. negative fashion, but rather as different positive meanings about the organization presented side by side. On New York Times the situation is almost parallel in that there is one human actor who is privileged over the others. The communication on New York Times about Novo Nordisk can therefore be said to be organized in a semi-coherent way, with one main meaning provided by the online newspaper that all the other alternative meanings relate to. Finally, on Wikipedia, the narrative is organized into a coherent meaning about Novo Nordisk through the technological constraints that force the actors to reach a valid story through negotiations.

Table 8: The organization of the communication process

	YouTube	Facebook	New York Times	Wikipedia
The organization of the communication	Fragmented – several meaning formations processes coexisting.	Semi-fragmented – several independent inputs to the process, but controlled by one actor.	Semi-coherent – one main meanings formations processes coexisting with alternative meanings.	Coherent – one meaning, reached through negotiations.

In sum, the online communication about Novo Nordisk is organized in more or less fragmented/coherent ways. This is conditioned by both the technological infrastructure created through social interaction (e.g. design and innovation of new technologies) and the social interaction the technology makes possible (e.g. by offering different potentials for interaction both with the technology and other actors). The communicative process hence becomes contingent on the nature of the relationship between the actors that make up the network; the actors that are involved in the communicative process. And what this case study shows is that the nature of this relationship is in constant flux. The various examples portray how the negotiations over meanings, the struggles, are not a matter of human vs. human, or human vs. technology, but rather human and technology vs. human and technology. Technology and humans are joined at the hip, so to say; on Facebook apparent in how the coupling in this case results in an organization-controlled communication platform, on Wikipedia in how it results in meaning-coherence, on New York Times in how authority (the journalists) can be challenged, and on YouTube in how the process becomes marked by indirect relations. This creates a communicative process where the entanglement creates different conditions for the level of possible coherence in the process. And perhaps most interestingly, this possibility is taken the least advantage of on platforms where there are less technological constraints. In other words, the more potential or possibilities the human actor is provided in the communicative process, the more fragmented or chaotic the process becomes.

I started this article out by asserting the need for more empirical research on on the socio-technicality of communication, specifically online communication. The starting point was the argument that while the socio-technical approach is theoretically attractive; it is empirically difficult to apply. By proposing to focus on (1) the technological affordances that make (2) the polyphonic communication process and its (3) inherent struggles, possible, I have attempted to operationalize the conceptualizations of socio-technicality of scholars like Orlikowski (2007). I have done so by acknowledging the practical difference between the actors, yet also by aiming to portray them as equals in the process. This is inevitably a challenge, since what one can see is the textual and visual input from the human actors, and far less so the technology. Hence this, as many other accounts, might seem to have favoured the social (the text), but the text should in cases like this not be seen as just text, but as actual artefacts or artefacts with a degree of independent agency produced by the socio-technical entanglement. As such, they are not 'proof' of any social practice; rather they are the utilization of the potential for interaction that lies between the social and the technical.

ACT IV

COLLABORATIVELY CONSTRUCTED CONTRADITORY ACCOUNTS

INTRODUCTION

Is the Internet the campfire of McLuhan's global village where we all meet to share and create our common story? Or does the rise of online communication platforms and social networks bear witness to the Lyotardian death of grand narratives? That is, should we understand current technological and communicative developments as centripetal or centrifugal forces? This question forms an important nodal point of the (academic) debate concerning the conceptualization of online communication and the understanding of the Internet more broadly (Sagawa, 1997; Poster, 1998; Ess (ed.), 2001; Dahlgren, 2005). While the two options are often perceived as mutually exclusive, we wish to re-orient the discussion by arguing that centrifugal forces may have centripetal consequences. We suggest that the myriad of 'prosumed' online micro-narratives (Toffler, 1980; Beck, 1992; Giddens and Pierson, 1998; Scammel, 2000) may, when studied independently of each other, point to the fragmentation of online meaning formation, but when emphasis is put on the interrelations between the many different stories, the contours of collaboratively constructed grand narratives appear. As such we wish to contribute to the on-going 'narrative turn' in organization studies (Fenton and Langley, 2011); that is, studies that start from the assumption that since humans use narratives to make sense of themselves and their surroundings (Cronen, Pearce and Harris, 1982), so do organizations, both in regards to how they make sense of themselves and how others approach them (Boje, 1991; Barry and Elmes, 1997; Hatch, 1996; Czarniawska, 1997; Humphreys and Brown, 2002; Rhodes and Brown, 2005).

In the following, we build the argument from the bottom up. Beginning from a case study of the online communication about Novo Nordisk, a market leader in diabetes care, we move from empirical findings to theoretical implications. We do not seek to question or 'prove' the assumption that online communication is collaborative, although we shall briefly introduce the premises that support it (see ACT I/Gulbrandsen and Just, 2011 for the full argument); instead, we take this claim as our starting point in an attempt to come to terms with what it actually means. We begin the paper with the methodological issue of how online collaboration can be studied as a process concerned with producing narratives about organizations. Next, we present the case study of the meaning formation about Novo Nordisk as it occurs on selected online communication platforms, including an account of the single case and mixed methodology employed in the investigation. We then present the empirical findings, highlighting how three collaboratively constructed contradictory narratives become linked in and productive of a meta-narrative about Novo Nordisk. In the last part of the paper, we reflect critically on the study and its possible implications for the field of online communication. First, we will argue that regardless of their internal contradictions, micro-narratives come to construct meta-narratives about the object with which they are concerned. And secondly, we 'turn on ourselves', asking whether the act of identifying micro- and meta-narratives is not, in fact, a violation of the golden rule that processes cannot be studied outside the process. Are we not, when claiming that the process has meta-narrative 'products', reducing the complex collaborative dynamics to a question of cause and effect?

STUDYING ONLINE COLLABORATIVE COMMUNICATION

The study of online collaboration, as we propose to undertake it, is undergirded by three premises: 1) Online communication is a two-way mass communicative process in which 'the one interacts directly with the few, and indirectly with the many' (ACT I: 88/Gulbrandsen and Just, 2011: 1100). This premise is grounded in the intertwinement of socio-technical affordances and social practices of online communication which allow for collaborative meaning formation; the former by providing opportunities for the sharing and co-production of meaning, the latter by utilizing or altering these opportunities through both direct action (e.g. posting comments) and indirect action (e.g. formulating and enforcing communication regulations) (ACT II and III/Gulbrandsen, forthcoming).

2) The process of online communication is driven by a willingness to participate and an ability to invite to collaboration (ACT I: 98/Gulbrandsen and Just, 2011: 1103). This premise springs from the idea that 'any concrete utterance is a link in the chain of speech communication of a particular sphere' (Bakhtin, 1986: 91). Generally speaking, meaning does not lie comfortably within any single utterance, but arises in and through the collaborative process of weaving utterances together. And in the more specific context of online communication meaning is created through the process of digital bricolage; by assembling separate materials and information at hand, by re-using existing artefacts and incorporating independent bits and pieces (Hartley, 2002: 22; see also Deuze, 2006; Derrida, 2001; Lévi-Strauss, 1962).

3) Finally, the co-production of meaning, the collaborative construction of digital bricolages, is played out as narration processes. This premise is based upon the fundamental insight that people make and present meaning through narratives; or, as Walther Fisher puts it: ‘all forms of human communication can be seen fundamentally as stories, as interpretations of aspects of the world occurring in time and shaped by history, culture and character’ (1989: 57; see also Fisher, 1985). Organizational activities can also be anticipated prospectively and understood retrospectively as narratives (Cooren, 2001: 181), because ‘organizations literally are the narratives that people concoct, share, embellish, dispute and retell in ways which maintain and objectify reality’ (Humphreys and Brown, 2002: 405). This becomes even more apparent in the case of online communication, especially considering the networked society they operate in (Castells, 2000), where organizations cannot be understood as individualist and monological (Gergen, 1995), but rather as throwaway (March, 1995), encounter-based (Gutek, 1995), communitarian and interdependent constructions (Barry and Elmes, 1997). As such, the narratives become constitutive of organizations (c.f. Fairhurst and Putnam, 2004; Taylor and Van Every, 2000). Given that these constitutive narratives are collaboratively constructed by anyone with a vested interest in the organization, both insiders and outsiders (Gioia et al., 2010; Hatch and Schultz, 1997), they are also bound to be multiple and divergent (c.f. Laine and Vaara, 2007). The existence of competing narratives, however, does not preclude the construction of an overarching meta-narrative in which the narratives so to speak become aware of themselves and each other and im- or explicitly address their participation in the collaborative process of narrating the organization as such (Fludernik, 1996; Neumann and Nünning, 2012). To the contrary, and as we will investigate

in this paper, inconsistencies and antagonisms between micro-narratives may turn out to be the very stuff out of which meta-narratives are made.

Renewed commitment to process

The main methodological implication of these premises is a renewed commitment to the study of communication as process; one that does not fall back on the lures of simplifying the process in terms of contributors (focusing only on specific actors or sites) or straightening it out in terms of contributions (focusing only on specific answers and responses). It is widely recognized that studying process *as* process is not an easy task (Dawson, 2003; Nayak, 2008; Smith, 1972), and we can only begin to undertake it by openly admitting the researcher's role as a participant in the process. What one studies is an assemblage or interpretation of the process; it is '…a construct, a snapshot of a collaborative process' (ACT I: 98/Gulbrandsen and Just, 2011: 1105). However, the quality of this snapshot – here, measured in terms of its ability to capture the 'uncapturable', to fixate without distorting – may be ensured by mixing qualitative and quantitative data (Hausman, 2000; Miller et. al., 2011).

In making this claim we are inspired by Norbert Elias' work on figuration and the 'longue durée' (Elias, 1970; 1991; 1994). Elias argues that, from the moment we are born, we enter into a complex figuration of social interdependencies that develop gradually over time. There is no simple relation between 'action' and 'outcome', or 'strategy' and 'effect'; instead, all actions must be understood as complex interdependencies, and not by 'stepping out' of them (Elias, 1994; Newton, 1999). Applying this insight to online communication means that we need to follow the shifting figurations of the communication process rather than search for ‘truth’ in single utterances, particular sites or specific moments. It becomes important to view online meaning formation in the ‘longue durée’; single events do not provide insight into the communicative process.

The snapshot, then, if we are to stay with the photographic metaphor, must be taken with a wide angle and long exposure time. It does, however, need a focus, and we propose to focus on the topic of the collaboration; that is, highlighting what the collaboration is about rather than a particular site for or actor in the collaborative process. A similar focus has been promoted within science and technology studies where network analyses or ‘maps’ of the development of issues and knowledge controversies (Marres, 2005; Horst, 2008; Whatmore, 2009) have greatly extended our understanding of such processes. We propose to apply a similar network analytic approach to online organizational narratives, but will develop a distinct method for doing so. Although methods for studying online networks do exist, for instance using the issue crawler software (Marres and Rogers, 2005; Rogers, 2010), these tend to focus on actual links between websites. We are more interested in the collaboration as such; that is, how do narratives arise through invitation and participation on and across different platforms?

THE NOVO NORDISK CASE STUDY

Following these methodological guidelines, we conducted a mixed method single case study (c.f. Denzin and Lincoln, 2005; Flyvbjerg, 2011; Johnson and Onwuegbuzie, 2004) of the online communication about the Danish pharmaceutical company Novo Nordisk. In the case study we are interested in how the online meaning formation about this organization plays out on selected communication platforms, as this may give us an empirical understanding of the 'realities' of online communication. Thus, we seek to answer the following two research questions:

- RQ1: What organizational narratives are collaboratively constructed about the Danish pharmaceutical company Novo Nordisk across selected online communication platforms?
- RQ2: What – if any – overarching online organizational meta-narrative emerges from the combined collaborations?

The first research question deals with the centrifugal forces of online communication, while the latter is about their (possible) centripetal consequences.

Method

The investigation started with a qualitative search of relevant communication platforms. By manually entering a wide range of online communication platforms – on some looking up the profile of the organization, on others searching for posts tagged with 'Novo Nordisk' – we identified five platforms as relevant due to substantive communication about the organization:

1. www.facebook.com (a social networking site)
2. www.youtube.com (a video sharing site)
3. www.flickr.com (a picture sharing site)
4. www.wikipedia.com (an information gathering site)
5. www.thenewyorktimes.com (a news gathering site)

The selection was also informed by the wish to cover a broad spectrum of sites, providing the organization and its stakeholders with different collaborative opportunities. From the possibility to create a company platform mediated by the organization (e.g. on Facebook) via platforms mediated by opinion leaders and editors (e.g. on New York Times and Wikipedia), to less mediated platforms (e.g. YouTube and Flickr). It was also a priority to include communication platforms that predominantly communicated through visuals (e.g. YouTube and Flickr), since visuals are an important dimension of online communication and often a means for convergence across the platforms (e.g. when a film or picture from YouTube or Flickr is reposted via Facebook or in the commentary thread on New York Times).

Following the qualitative search and selection, a quantitative study of all communication about the organization on the five platforms from the fourth quarter of 2004 to the second quarter of 2011 was conducted.

Sample

The sample was collected during the third quarter of 2011. The total number of communicative contributions included in the sample is 4,245 (100 % of the sample). Of these contributions Facebook accounted for 843 contributions (19.9 %), YouTube for 158 (3.7 %), Flickr for 521 (12.3 %), Wikipedia for 248 (5.8 %) and The New York Times for 2,475 (58.3 %). Since a large portion of online communication is composed of 'likes' and 'dislikes', and since all text can be edited (especially on Wikipedia), the sample was broken into major and minor contributions. This was done during the collection in order to give a more nuanced depiction of the collaborative process. When all minor contributions (likes, dislikes, spelling corrections etc.) were discounted, the number of contributions was 1,166 (see Table 9).

Table 9: Contributions – platforms, major and minor.

Source	Number of contributions	Percentage of total	No. of major contributions	Percentage only major
Facebook	843	19,9	194	16,6
YouTube	158	3,7	139	11,9
Flickr	521	12,3	518	44,4
Wikipedia	248	5,8	136	11,7
New York Times	2475	58,3	179	15,4
Total	**4245**	**100**	**1166**	**100**

Measurement and coding

A systematic coding scheme was established with inspiration from previous literature on content analysis of online communication (Cho and Huh, 2010; McMillan, 2000). During the coding four measures were applied: 1) contributor, 2) type of contribution, 3) major/minor contribution and 4) contribution sentiment.

A 'Contributor' was defined as the source of the utterance and coded as a) Organization, b) Stakeholder and c) Unknown. In the instances where the communicator was clearly identifiable as the voice of the organization (e.g. when using the onscreen name 'Novo Nordisk' on the company-controlled Facebook page) the contribution was coded as 'Organization', while

‘Stakeholder’ was used in the instances where the communicator was identifiable, but not as the organization, hence representing all other identified actors participating in the process. Finally, the category ‘Unknown’ was only used when the identity of the communicator was not provided at all, e.g. the identity of who used the ‘like’ or ‘dislike’ options on YouTube and Flickr (that is, only the number of ‘likes’ was listed, not who ‘liked’). It is important to note that ‘identity’ here only refers to online identity, and not the contributors’ offline identity. The offline identity of the contributors is of no interest in this study, as it is solely the online collaborative meaning creation that is investigated.

‘Type of contribution’ was defined as a) Text, b) Video, c) Picture and d) Like/Dislike. In the cases where the contribution was a combination of these, an individual assessment was made in order to clarify which was the dominant. Major/minor contribution was coded as a) Major or b) Minor. A minor contribution was defined as using the like/dislike option or correcting mistakes in hyperlink addresses or text. Finally, the measurement ‘Contribution sentiment’ was coded as a) Positive, b) Negative and c) Neutral. Positive was defined as contributions that expressed support for or goodwill towards the organization, e.g. praising products, working conditions and other aspects of the organization or posting pictures that had positive connotations like people smiling while wearing t-shirts with the Novo Nordisk logo. Negative was defined as expressions of unflattering sentiments about or animosity towards the organization, e.g. criticizing its products or behaviour. Neutral was used in instances where neither positive nor negative sentiments could be traced in the contribution, as when the contribution was predominantly ‘factual’, e.g. years and dates for the establishment of the organization. It should be noted that in the instances where a negative contribution was 'liked', the 'likes' where coded as negative contributions, since the 'like' must be assumed to refer to the individual contribution rather than the organization. The results from the quantitative analysis will be presented throughout the article.

Analysing online communication introduces many challenges to the qualitative content analysis process, one being that the scope of material may be too large and hence make an in-depth analysis convoluted (McMillan, 2000). To avoid losing the qualitative level of the analysis, this part of the investigation was not coded in SPSS. Instead all major contributions where close read with the intent of determining the 'message content and message handling' (Budd, Thorp, and Donohew, 1967). The material was then carefully mapped to identify the general tendencies relevant to this investigation: the degree to which an account of Novo Nordisk, a meaning about who and what it is, was continuously repeated cross platforms.

FINDINGS

The first step in answering our research questions was to determine what elements the process was made up of, asking: what contributors and what kinds of contributions does the narrative co-production consist of? The data collected reveal that the stakeholder group dominates the collaboration. Of all contributions they account for over 92%, and when only the major contributions are included they account for 83.3%. While it could be argued that the organization might participate under different and non-revealing online identities, the large percentage of stakeholders active in the collaboration still confirms that there is interaction taking place between the organization and the stakeholders.

Table 10: Contributors

	Total contributions	Percent of total	Major contributions	Percent major cont.
Organization	59	1,4	58	5,0
Stakeholders	3937	92,7	972	83,4
Unknown	249	5,9	136	11,7
Total	**4245**	**100,0**	**1166**	**100,0**

In regards to what kinds of contributions are made, the quantitative analysis reveals that of the 4,245 contributions included in the investigation, almost 70% where what we call 'minor contributions' (see Table 11), meaning that the contributors have mainly used the options of 'like' and 'dislike' compared to posting or re-posting material. This is significant because it suggests that a dominant trait of the collaborative process is the act of acknowledging, or supporting, others' communicative contributions. It confirms the notion presented above that in online communication the one interacts directly with the few, and indirectly with the many (ACT I: 59/Gulbrandsen and Just, 2011: 1100). In addition it points to the process as being more than textually driven, underscoring the argument of not focusing on specific utterances (often seen as text) but on the interaction, since the collaboration also takes place in-between the utterances, here visible in the act of liking or disliking others' utterances.

Table 11: Type of contribution

	Total contributions	Percent of total	Major contributions	Percent major cont.
Text	657	15,5	552	47,4
Video	143	3,4	143	12,3
Picture	478	11,3	470	40,3
Like/dislike	2966	69,7	0	0

The importance of looking beyond the textual level also becomes visible when all minor contributions are removed from the sample. The quantitative analysis shows that there are almost as many pictorial (40.3 %) as textual (47.4 %) major contributions (see Table 11). And if one adds the video contributions (12.3 % of all major contributions) to the pictorial contributions under a 'visual contributions' heading, over half of the online organizational narrative about Novo Nordisk is constructed through visual means (visual means is in this case not referring to design or website architecture). This is significant, since written or transcribed text often is given more emphasis and weight in organizational narrative studies, but as the data show, that might be an insufficient approach to online narration. Before answering RQ1, we have established that the collaboration is dominated by Novo Nordisk's stakeholders, it is mostly made up by minor contributions and in the major contributions visual and textual contributions are equally represented.

But what organizational narratives are these contributors collaboratively constructing with these different types of contributions about the Danish pharmaceutical company Novo Nordisk across the selected online communication platforms? Based on the initial thematic coding, the qualitative analysis of the sample suggests that three dominant narratives emerge from the online collaboration of the organization and its stakeholders: a) Novo Nordisk as socially responsible, b) Novo Nordisk as profit seeker and c) Novo Nordisk as employee heaven. The three narratives were identified by looking at the most repeated and thematically related meaning formations about the organization across the platforms included in the investigation. Or put differently, the most often repeated and highly intertextual opinions/stories/constructions of who and what Novo Nordisk is. In the following these three narratives will be presented with examples from the different platforms they are constructed on. It should be noted that all spelling errors in the contributions cited here are kept as in the original.

Novo Nordisk as socially responsible

The narrative about Novo Nordisk as socially responsible is best exemplified by the repeated contributions about the organization's ties to the World Diabetes Day (WDD), although it is also constructed in and through contributions about other specific actions and events. The WDD is an annual awareness day/campaign for diabetes held on November 14th. It was introduced in 1991 by the International Diabetes Federation and the World Health Organization – and according to a contribution on Wikipedia this was made possible by the actions of Novo Nordisk.

On September 22, 2009 '167.206.144.30' writes:

> Novo Nordisk have sponsored the International Diabetes Federation's Unite for Diabetes campaign — one of many campaigns that helped to

> successfully pass UN Resolution 61/225, making November 14 World Diabetes Day.

Not only does this post put the organization in connection with the Diabetes Day, it also points to the organization's role in passing a UN resolution that put diabetes on the UN agenda. For a company that is dependent on people having diabetes (selling them drugs is what Novo Nordisk is all about), raising awareness about the disease with the intent of reducing the number of people affected (e.g. due to mal-nutrition or lack of exercises) is a strong marker of commitment to being socially responsible. This 'socially responsible' narrative is repeated over a long period of time and on several of the platforms included in the investigation. One example is a post made on Flickr, a year later (October 25, 2010):

Novo Nordisk Headquarters, Bagsvaerd, Denmark

The contributor, 'international diabetes federation', not only participates in the collaborative meaning formation about Novo Nordisk's ties to WDD, but seeing that the contributor is one of the main figures behind the day, it also endorses Novo Nordisk's engagement and participation in the WDD. The picture shows the organization's headquarters bathed in blue light, an act organizations and public entities are encouraged to do to show support for the day and the cause (notable examples of buildings/monuments that have been bathed in blue light is the Sphinx in Egypt, the Empire State Building in New York and Acropolis in Athens). This picture is only one of many tagged ‘Novo Nordisk’ and showing the organization’s participation in WWD, hence suggesting a larger trend of contributions concerned with participating in the narration about Novo Nordisk as a socially responsible organization.

Similar contributions are found on YouTube and Facebook. One example from YouTube is a post by ‘WorldDiabetesDay2010’ made one day prior to WDD in 2010 (November 10, 2010):

[13]

Employees at Novo Nordisk in Princeton, New Jersey take to the stage for World Diabetes Day, November 14.

The video depicts the employees at Novo Nordisk’s Princeton, US office in a music video made for the WDD over the Contours’ ‘Do You Love Me’ from 1962. The video opens with a male employee mimicking ‘And here it is, the World Diabetes Day. It’s time to stand up…’, followed by an over 2 minute long music video featuring the employees miming and dancing to the tune. Only four days

[13] http://www.youtube.com/watch?v=6L1k5o83yBM

later, on November 14, 2010 the same video is re-posted on Facebook by 'Lisa Centifanti Gates', not only allowing for a continued collaboration in the making of the story about the socially engaged organization, but also tying the communication platforms together.

These four contributions are illustrative of a much larger set of data in which different collaborators over time have participated in the co-production of a narrative about Novo Nordisk as an organization that contributes to raising awareness about diabetes. A tale about how the organization is not only focused on producing the best medicine to diabetics, but also actively supports and promotes initiatives to prevent more people from being affected. These selected posts show a collaboration that has taken place over several platforms (4), with both independent contributions and re-posts from other platforms, and over several months (14).

Novo Nordisk as profit seeker

The 'socially responsible' narrative about Novo Nordisk does, however, not stand uncontested. A large amount of the data contributes to another on-going narrative process about Novo Nordisk as a ruthless profit seeker. One example is a contribution by 'pradip_rabindranath' on Flickr, posted August 31, 2007:

Killer in Life Saving Drugs ?

The title of the picture is ‘Killer in Life Saving Drugs’ and it depicts a glass piece in a bottle of insulin from Novo Nordisk. In the comment section underneath the picture, ‘pradip_rabindranath’ states:

> This insulin botlle [sic] by Nova Nordisk has a glass piece and God knows what other deadly contamination. [...] I would like to get an explaination [sic] from Novo Nordisk staff and Shareholders on what they feel about letting down it's trusting patients with this kind of acts. What about their hi-talk about Changing Diabetes Treatment for the better? [...] They are opportunists and have little comittments [sic] to their mission that they describe.

By posting this picture and comment the contributor comes to participate in the communicative process about how Novo Nordisk is making short cuts in its production, and hence potentially harming others (the short cut here being lack of quality control ensuring that their products do not contain unintended glass pieces). Another example of contributions to the ‘short cut’/profit seeking narrative is ‘USFac’s’ entry on Wikipedia in the same year (December 10, 2007), presenting another kind of short cut:

> Ragaglitazar is a novel dual peroxisome proliferator-activated receptor (PPAR) and agonist intended to restore insulin sensitivity and correct diabetic dyslipidemia, which was created by Novo Nordisk in 2001.

> During the clinical testing that took place in India, Novo Nordisk did not complete it preliminary testing of Ragaglitazar on animals before moving on to human testing. While administering the drug to humans, Novo Nordisk and its research scientists recognized urinary bladder tumors on the rats that were given Ragaglitazar during the animal test and therefore stopped all human testing and trials. [...] It is regulated by law that all preclinical or preliminary trials must be complete for the FDA to approve the drug testing to be performed on humans. Novo Nordisk failed to do this when they were developing Ragaglitazar.

The contribution tells the story of how Novo Nordisk rushed the testing of a new drug along, hence potentially harming the humans on which the drug was tested. The post becomes a piece in a bigger narrative construction about the organization's willingness to sacrifice safety in the pursuit of quicker production processes, arguably with the intent of maximizing profits by spending less on the development. Interestingly enough, less than 6 months later, this contribution was removed by '152.73.104.23' (7 April, 2008). Though the participant who removed the post was coded as 'stakeholder', it might, as mentioned earlier, just as well have been the organization itself that removed the contribution, acting under cover in an attempt to silence the narrative construction process, or at least limit the number of contributions. One of the challenges of internet research, and online communication, is that online identities may be slurred or non-existing, hence making it difficult to separate the different actors from each other (Carnevale and Prost, 1997; McKenna and Bragh, 2000).

Regardless of the removal of specific posts, and the contestation of others (more on this later), the narrative construction about Novo Nordisk as a profit seeking organization is continued. On May 29, 2010 for instance 'Stephen

Brown' writes on Facebook as a response to Novo Nordisk pulling its insulin products out of Greece due to the economic crisis of the country (and hence the fear of the Greeks being unable to pay for the costs of the drugs):

> You miserable bastards putting the health of Greek diabetics at major risk!!!

In simple text, it adds to the notion of Novo Nordisk as a careless company that will risk the wellbeing of others in pursuit of its self-interests. This narrative is also presented on NewYorkTimes.com, where Gardiner Harris and Natasha Singer write an op-ed on August 13, 2010 stating:

> Last year, Novo Nordisk, a Danish company, agreed to pay a $9 million fine to settle charges that it had paid former government officials in Iraq to obtain government contracts to provide insulin and other drugs. Novo paid the former Iraqi government about $1.4 million by inflating the price of its contracts by 10 percent before submitting them to the United Nations for approval, according to a Justice Department press release.

The quote indicates that Novo Nordisk was involved in bribing Iraqi government officials in pursuit of contracts –profits. The contribution supplements the construction of a tale about an organization willing to bypass official channels in a quest to secure profits, regardless of any concerns about being socially responsible.

Again, the contributions shown here, being representative of a large pool of the data, were made over time, across platforms, yet with a similar focus. But unlike the contributions presented in the case about WWD, these contributions do not relate to the same direct topic, but to the indirect narrative construction process about a less responsible organization. The two accounts presented so far point to two different ways of constructing; one being topic-oriented (Novo

Nordisk is connected to WWD), the other more sentiment-oriented (Novo Nordisk is evil).

Novo Nordisk as employee heaven

In the construction of the third dominant narrative, these two ways of constructing merge in creating the tale about Novo Nordisk as a heaven for employees. One example is found on Flickr where 'Tine Rugaard Møller' posts the following picture on October 1, 2007.

Ny arbejdsplads

In the comments below the picture, the contributor writes:

> Ny arbejdsplads med fine blomster
>
> [Translation: New workplace with nice flowers]

The picture shows how 'Tine Rugaard Møller' was welcomed to her new workplace with flowers on her desk. She has tagged the picture 'Novo Nordisk', wherefore we assume this is the workplace she is referring to. Being greeted at your new workplace with flowers is hard to interpret as anything but welcoming and a sign of an organization that takes good care of its new employees. This narrative is corroborated by 'Gouthamkilli' who on Wikipedia on January 28, 2009 contributes with:

> Novo Nordisk has been ranked 57 among 100 Best companies to work for 2009 by CNN Money

Though not directly concerned with being welcomed as a new employee at Novo Nordisk, nor the specific case with ’Tine Rugaard Møller’, the post is directly related to the topic of being an employee at Novo Nordisk. Given that there are thousands and thousands of companies in the world, being number 57 on the top-100 list cannot be seen as anything but good. The tale of the ‘employee heaven’ is continued, or added to, on the same platform one year later when ‘69.116.49.245’ on March 27, 2010 writes:

> Novo Nordisk has been ranked 25 among 100 Best companies to work for 2010 by Fortune.

This time the organization is number 25 out of 100, hence further strengthening the construction process by not only referring to an external (objective) source, but also by implying a climb in the ranking.

Later the same year, on April 4, 2010, the narrative is given a visual input, with ‘runeherholdt’s video on YouTube called ‘verdens bedste laboratorium’ (the world’s best laboratory). It shows employees at one of the organization’s Danish offices singing ‘We are the Champions’, directly referring to them seeing themselves as the best laboratory in the world. The video is a promotional video for ‘Firmagospel.dk’, a Danish company specializing in using gospel singing for teambuilding, but becomes a contribution to the narrative about the ‘employee heaven’: not only is Novo Nordisk the best, they even sing gospel celebrating themselves. Of course gospel and old Queen tunes may not be read as ‘heaven’ by everyone, but it is highly unlikely that anyone would mind a motivational workplace that caters to its employees.

[14]

A final example of contributions to this narrative is an entry on Facebook by 'Mariam HWaye' on August 29, 2010.

> I feel proud to be working in an organization which-besides making a good profit - does so much for humanity!
>
> Being a Danish born woman -with Pakistani roots - I am greatfull with how Novo Nordisk Denmark always support victims of disasters all over the world - and this time the victims in Pakistan! THANK YOU!

The post portrays an employee who is proud of her workplace, something probably all employees want to be – she comes to support the construction process of the heavenly organization. But she also comes to tie all the narrative processes mentioned above together, bringing the socially responsible, the profit seeking and the employee heaven organizational narratives into one. And as such, she forces us to ask the question: does an overarching online organizational meta-narrative emerging from the collaboration?

[14] http://www.youtube.com/watch?v=a4W5ucPdCk4

Is there a meta-narrative?

While we have highlighted individual examples of the three dominant narratives, we do not believe that these narratives are constructed in and through the individual contributions or by individual contributors, but in the collaboration between them. It is, for instance, not 'pradip_rabindranath's' picture of the bottle with the piece of glass that creates the narrative of Novo Nordisk as profit seeker; instead, the meaning formation in and of that picture both relies upon and contributes to this narrative. It is a link in the communicative chain, as Bakhtin would have it. Similarly, the narrative about Novo Nordisk as a socially responsible organization is co-created by the various contributions that describe how the organization contributes to raising awareness about diabetes. Here, the many and often directly interrelated contributions become powerful vehicles of the narrative in showing how the organization is not only concerned with providing better medicine to diabetics, but also actively supports and promotes initiatives that may help protect people from becoming diabetics. Finally, the story of Novo Nordisk as a great workplace is not contained in either the individual employee's experience of being well-received or the accounts of the organization's good results in workplace rankings, but arises from the interplay of these contributions. Thus, each of the three narratives are made up of a number of smaller and/or more specific narratives that do not always go uncontested and are often not wholly consistent with each other, but nevertheless come together as distinct narratives about Novo Nordisk.

The three narratives may be seen as expressions of the centrifugal forces of online communication; the splitting up of communicative processes into different strands of meaning formation. However, each strand may also be seen as a ‘pulling together’ of distinct narratives and as such be deemed centripetal. For instance, the stories of glass piece, the premature testing and the bribing in Iraq come together to form the story of the ruthless profit seeker. If the three narratives are made up of numerous smaller stories, could they also themselves be part of a larger narrative? Is it possible that the centrifugal forces of the three narratives also have centripetal consequences? Do they create a meta-narrative about Novo Nordisk?

In answering this question we find two factors to be of particular importance: First, the three narratives do not run parallel, but overlap at various junctions. Thus, one platform does not tell one story, but rather contains elements of all three, so that a particular user who encounters Novo Nordisk on, say, Wikipedia, would not only be exposed to one narrative. This is apparent in the analysed examples where Wikipedia contains contributions about Novo Nordisk’s ties to WWD, the Ragaglitazar scandal, and the organization’s work place ratings.

Second, the narratives not only coincide, but are also formative of each other in two ways: a) as collaborating or converging narratives and b) as antagonistic or competing narratives. We have already seen one conspicuous example of the former process in ‘Mariam HWaye’s’ contribution where Novo Nordisk is lauded as a great workplace because it is making profit and taking social responsibility. Here, the narratives of social responsibility and profit-seeking are both invoked in support of the narrative of the great workplace. The same tendency is more indirectly present in the example of the YouTube video with

Novo Nordisk employees that were shown to celebrate World Diabetes Day; here, the display of enthusiasm for one's work is subsumed under, and contributes to, the narrative of social responsibility, a point that becomes explicit in 'jgst516's' comment to the video: 'ABSOLUTELY AWESOME.!!!!! CONGRATULATIONS to all of you and Novo Nordisk. What a fun place to work.' The latter process of antagonistic interaction between the narratives is most explicit in the stories of Novo Nordisk as a profit seeking organization. Here, contributors often challenge the alternative story about the organization as a socially responsible company with examples of how social responsibility is being neglected in the pursuit of profit. We may, therefore, perceive the story of the profit-seeking organization as a counter-narrative to the story of the socially responsible organization – and to a lesser extent also to the narrative of Novo Nordisk as a great workplace. A counter-narrative that does not enter directly into the two other narratives, but challenges and questions the meaning and value of the organization.

In sum, and answering RQ2: yes, given the ways in which the three narratives co-exist on the various platforms, challenge each other across contributions, and converge in specific utterances, one may identify a meta-narrative about Novo Nordisk as a 'profit seeking socially responsible great work place'. Or put differently: yes, there is a continuous meaning construction about Novo Nordisk taking place online that can be interpreted as a centripetal consequence of centrifugal forces, creating a snapshot of an organizational narrative that is both positive and negative in its sentiment.

We find further support for this claim by returning to the quantitative analysis of the total data set (see Table 12). Of all the posts included 41.3% are positive, 51.2% are negative and 7.5% are neutral – meaning that there is an almost even split between negative and positive input to the narration process, and as such creating grounds for the narrative meaning formation about the socially careless, yet responsible organization.

Table 12: Sentiment of contributions

	Percentage of all contributions	**Percentage of major contributions**
Positive	41,3	61,8
Negative	51,2	17,9
Neutral	7,5	20,2
Total	**100,0**	**100,0**

Interestingly, the snapshot of the process changes if the minor posts are removed. Of the major posts 61.8% are positive, while only 17.9% are negative, and 20.2% are neutral. This implies that the participants in the process are more inclined to be negative through acknowledgments, rather than by original posting. The major negative inputs (text, pictures, comments, links etc.) are thus generated by relatively few contributors, but 'liked' by far more actors than their positive counterparts. The textual and visual contributions made are hence more likely to be positive or neutral, while the support and indirect contributions are more likely to be negative. This not only underscores the collaborative nature of the process, but also the importance of going beyond text in order to get the fullest possible picture of what happens in the process.

In conclusion, by seeing the current technological and communicative developments as both centrifugal and centripetal we have identified three dominant online narratives about Novo Nordisk that converge into one overarching meta-narrative. The meta-narrative being Novo Nordisk as the ruthlessly profit seeking socially responsible heavenly work place, constructed of the three interrelated, yet disparate tales about Novo Nordisk as 1) a socially responsible organization, engaged in society at large, and specifically the wellbeing of anyone affected by diabetes; 2) an organization primarily concerned with fulfilling its own objectives, profit maximization, at the cost of stakeholders and society; and 3) a great and employee-centred workplace. A collaboratively constructed contradictory tale about the organization – collaborative in its (constant) becoming and contradictory in its (interpreted) meaning.

DISCUSSION

Reflecting upon the case study of the online organizational narration of Novo Nordisk and its possible theoretical implications, we are first confronted with the issue that the identified narratives are hardly surprising. Is this not the story about any organization? Some love it, others hate it, and contributors to the narrative either join up with others who share their views in order to have it confirmed or they confront those who have different views in order to disconfirm these. Existing studies of the organization and its culture might have told us as much – and given further insights into the distinct narratives to boot (for three conspicuous examples of such research see Søderberg and

Holden, 2002; Morsing and Oswald, 2009; Palacios, Bader and Pirson 2010[15]). Does our focus on the collaborative process of telling the organizational narrative mean we have lost sight of what the narrative is all about, namely the organization? We are inclined to plead guilty to this charge, but hasten to argue that what we lose in terms of the detailed content of the narrative(s), we have gained in relation to an understanding of the collaborative process of online narration. The analysis shows that a common understanding or meta-narrative of the organization is constructed in and through the collaborative process in which all contributors are involved. The analytical findings concerning the content of this narrative are hardly surprising, but that is actually the point rather than a sign of analytical weakness. At the empirical level we have shown that regardless of the differences, inconsistencies, and contradictions that exist both within and across the three distinct narratives, an overarching narrative of the socially responsible, employee-centred profit seeker emerges in and through the juxtaposition, opposition and entwinement of individual contributions and distinct narratives that constitute the narrative process as such. This seems to confirm our suggestion that online collaboration should be conceptualized as a centrifugal process with centripetal consequences.

Making this assertion, however, begs the questions of whether we were not simply finding what we were looking for and, perhaps more jarringly, whether the very act of identifying narratives does not undermine the commitment to the study of process? Or, combining the two issues: is it possible to say anything about a narrative without stepping outside the narrative process and,

[15] Interestingly, the narrative of the ruthless profit seeker is far less prominent in the research on Novo Nordisk than it is in the online communication we have studied.

in fact, constructing a narrative of our own? In the methodological section of this paper we anticipated these issues somewhat by recognizing our role as co-constructors of the narrative, and we argued that taking a snapshot of the collaborative process with a wide angle and a long exposure time (that is, gathering material on several platforms and over time) was the best way of guarding against undue researcher bias. We do, therefore, assert with some confidence that the organizational narrative, we have presented, emerges in and through the collaborative process of online communication (as we have studied it). In the more specific sense of whether we would have found the process to be more disparate had we focused only on centrifugal elements or, conversely, the process to be more uniform if we had only looked for centripetal elements that would undoubtedly be the case. This fact, however, only highlights the need to understand online communication as a centrifugal process with centripetal consequences and to study both of these aspects of online communication. As a final remark on this issue we would like to stress that the centrifugal and centripetal elements of the process are in no way harmonious. Rather, the constant tension between the various narratives that form part of the collaborative narration process spur the process on; it is because the tale is contradictory that it is continually retold.

Having addressed the issue of the self-referentiality of our study, the question of whether the analytical snapshot becomes a historical anachronism the moment it is taken continues to haunt us. To the extent that the process only lives as process in the process, what have we actually 'captured'? (And doesn't this choice of words already say it all?). This is not a critique we can counter, but rather a fact of life; no matter how wide the angle or how long the exposure, when the snapshot is taken the process is frozen, and the living process has already moved elsewhere. This is, however, not so much a critique of our method as it is a fundamental condition of processes; they do not exist independently of their contents and can only be seen in and through these – if there was nothing to communicate about there would not be any communication at all and, conversely, the content of the communication would also disappear if the communicative process stopped. In studying online organizational narratives we are not privy to the process in and of itself, but to the traces it leaves behind; traces such as invitation and participation, centrifugal forces and centripetal consequences, and contradictory collaboration. By applying these concepts to the theory and practice of online communication we can continue to expand our understanding of this ever-elusive process. In doing so, theoretical conceptualizations and empirical investigations of the collaborative process of online communication must navigate the Scylla and Charybdis of saying too little and too much about the content of this process; the content must never become the point of the processual study, but it is the only trace we have of the process. We can only study the process through the meaningful content, the narratives, it leaves behind.

ACT V

THE (NEVER-) END (-ING) STORY

INTRODUCTION

According to Gustav Freytag's dramatic arc (1863) a well-made spectacle consists of an exposition, rising action, climax, falling action and dénouement; from an agenda setting opening via an escalation of conflicts to the spectacle's closure/catharsis. The purpose of the exposition is to provide the background information needed to properly understand the story, such as introducing its main issue or problem, its characters, and setting. One could perhaps claim that in this spectacle this was sought done in the *Mise-en-scène* and ACT I. Whereas the spectacle's 'rising action', where the basic internal conflict is complicated by the introduction of related secondary conflicts, was presented in ACT II and III. The basic internal conflict, how the meanings about the Danish pharmaceutical company Novo Nordisk are constructed on online communication platforms, was complicated by the questions of how the communication regulations the organization operates under and how the socio-technicality of online communication come to organize the communicative process. The climax and falling action, marking where the main conflict unravels, though during which the final outcome of the conflict is in doubt, arguably took place in ACT IV, perhaps most 'dramatic' in its questioning of its own conclusions and methods, and as such questioning the whole spectacle.

What is left, ACT V, is the spectacle's dénouement: the resolve of the story's conflicts, and where the reader should experience a sense of catharsis, or release of tension and anxiety. At least according to Freytag. It might present itself in the shape of a romantic resolution or be played out as an 'Armageddonian catastrophe'. Unfortunately, I cannot promise either. Because as the end of ACT IV already suggested, a fundamental conflict, threatening the neatly designed structure of this spectacle, is still lurking: is it possible to say anything about a communicative process without stepping outside the process and as such inevitably come to treat the process as a collection of stable entities or utterances that can be observed and analysed? And following, if so doing, am I not violating my own advocated stance about reality, scientific truth and meaning as being unstable, in flux and always becoming? By spending hours upon hours attempting to create a coherent, convincing and causal presentation of my research, even framing it as a spectacle, a story with a beginning, middle and end, have I not done what I said is not doable? Yes.

CONCLUSION AND SCIENTIFIC CONTRIBUTION

The process of assembling this dissertation has in many ways perfectly exhibited two incongruities one is faced with as a researcher. Especially a researcher taking a constructionist and processual approach. First, one is at some point required to convey one's observations, and following the logic of the 'scientific network', this must be done through carefully prepared dissemination. This forces the researcher to fixate the unfixable, since the network of scientists value a good and (fairly) closed argument over open-ended and unstable suggestions. Secondly, in doing so, one is forced to make a good and (fairly) closed argument for why what one has observed is open-ended and unstable, constantly in the making, yet made constant enough to be the subject of assertions. But as argued in ACT IV, rather than being a scientific shortcoming, this dilemma says something fundamental about processes; they do not exist independently of their contents and can only be seen in and through these. Even though the content must never become the point of a process study, it is the only trace of the process. No matter how wide the angle or how long the exposure, when the snapshot is taken the process is frozen, and the living process has already moved elsewhere. When studying online communication one is not privy to the process, but to the traces the participants in the process leave behind.

As a consequence, I have presented outcomes of the process, suggesting what meanings are co-produced about the organization, despite the fact that those meanings might not be present, or be significantly altered, by the time you read this. In addition, I have presented the online process as if it were more sorted than it really is. This has not been done with the intent of manipulating, but rather as a natural consequence of, and response to, the expectations of my surroundings: the need to, at a given point, distil and reduce complexity in order to present a clear and concise inference after three years of research. A clear and concise inference on how the communication about the Danish pharmaceutical company Novo Nordisk is organized on online communication platforms; how meanings about the organization are constructed online in collaboration between the organization and its stakeholders. And based on this carefully prepared and conducted research project, I present a three-fold dénouement to the spectacle, a three-fold conclusion and hence also my scientific contribution: 1) the online communication about Novo Nordisk between the organization itself and its stakeholders is organized as collaboration, 2) this collaboration is in turn organized as paradoxical and fragmented, and finally, 3) these paradoxes and fragments have centrifugal forces with centripetal consequences.

1: The online communication is organized as collaboration

I have theoretically conceptualized and empirically demonstrated that the online communication about Novo Nordisk is organized as collaboration. I hypothesized in ACT I, and in the following three acts sought to demonstrate, that communicating online equals a co-construction of meaning by multiple actors. In 'The Collaborative Paradigm', Just and I proposed that a discontinuation with old communication theories was necessary in order to focus on the distinctiveness of the new forms of communication. By taking this approach, it was argued that online communication is distinct in that it is two-way mass communication, between unknown, exaggerated selves, or digital representations of humans or organizational actors, where the private goes public in a hypertextual, uncontrolled form, unconstrained by offline time and space. Consequently, it was asserted, online communication must be explained in terms of its dynamic fluidity, determined by the ability to invite to and the willingness to participate in collaboration. This entails a restraint from locating or stabilizing communication anywhere outside the process, a restraint that can be handled by first admitting that what one is conducting is an analysis of a construct, a snapshot of a collaborative process, depicting how, at a specific and subjectively chosen point in time, two-way mass communication is unfolding online. And secondly, by including both qualitative and quantitative data in the snapshot, since the investigation of single utterances or single online technologies would not be able to depict online communication in processual terms. Only by using mixed data will the analysis be able to handle the complex reality of online communication.

Empirically, the willingness to participate was apparent in the number of communicative contributions made by different actors about Novo Nordisk (4,245 contributions by over 1445 different online identities), while the ability to invite was identified as contingent on regulations and the entanglement of the social and the technical (to which I will return shortly). The theoretical collaborative topography of online communication became empirically evident in for instance how different stakeholders co-produce the entry about Novo Nordisk on Wikipedia, how different stakeholders negotiate meanings about the industry in which Novo Nordisk operate on New York Times and how different stakeholders across platforms interlink events tied to the organization. The collaboration was further demonstrated both on the level of how technology and humans interact, and how this interaction produces different, yet converging narratives about Novo Nordisk.

However, the collaboration that was theoretically conceptualized in ACT I, is not on all accounts analogous to the collaboration empirically observed. In 'The Collaborative Paradigm' Just and I claimed that online communication is an inherently negotiable type of communication that cannot be controlled by any single actor (see p. 77). But as the studies presented in Act II, III and IV suggest, on some platforms one single actor may hold a privileged, controlling position compared to other participants. This was most apparent in the case of Facebook, where the organization utilized the technological affordances to control the communicative process. Both by framing the collaborative process with disclaimers stating what could and could not be shared and by actively censoring contributions by others. Another example of where the process to some extent was controlled was on New York Times, where journalists and editors were given a privileged position in regards to what topic would be central in the meaning formation process. Other contributors were not, as with Facebook, threatened with censorship by the privileged actor, but were forced to relate to the paper's agenda for the communicative process. As such, a single actor can indeed control the collaboration on certain platforms, determined by certain actors' utilization of the potential to constrain the process provided by the technological affordances. But only on certain platforms, only in parts of the collaborative process, not the collaboration in its entirety.

Furthermore, ACT I claimed that online communication is hypertextual, which was explained as a break with the single authorship and linear progression of classical forms of mass communication such as the book or the TV-show. But as the following acts suggest, this assertion needs to be expanded to include that on some platforms the collaboration may present itself as a linear story and, as just highlighted, may have privileged authors. Wikipedia is the most obvious example of this, where the collaboration behind the text about Novo Nordisk is hypertexutal and polyphonic, but where the constantly renegotiated construct at any given time presents itself as coherent and linear. This points to the importance of acknowledging the different faces of the online co-construction of meaning. Sometimes it has the traits and face of chaos, other times it mimics closed texts. Or as is the case with Facebook, it has the face of a timeline, a life story. In both cases the linearity is not a result of 'human nature' or even human intention, but rather a result of the technology's organizing effects on human input; the intertwinement of the technical and the social comes to create more coherence than the human input in itself has. Consequently, the collaborative process will on some platforms seem more causal than it is. The entanglement of humans and technology sometimes simply creates the impression of a more cogent or systematized meaning formation than actually occurred.

And finally, a similar clarification is needed in regards to the assertion that online communication is hyper-public. In ACT I it was put forward that 'the public sphere is buzzing with activity as people are taking their personal and quotidian concerns online' (p. 88). But the 'buzz' is mostly in the 'like's', and not so much in actual textual or visual contributions. As the quantitative analysis showed, a major part of the online communicative process is played out through acknowledgements, meaning participants are more likely to use the 'like' and 'dislike' options as means of communicating, compared to other ways of conveying one's input to the process. To this one should add the observers who neither post nor acknowledge, but only visit the different platforms and leave no other trace of their presence. This means that the 'buzzing' public sphere observed online is much like a day in the British Parliament: the members of Parliament show their support and disapproval to a few members' utterances by shouting 'aye' or 'no', and the rest of us watch it on TV. Despite how funny and 'uncivilized' these 'aye's' or 'no's' may come across, they should not be blown off as irrelevant and old theatrics. Both inside the House of Commons and on TV, these shouts come to strengthen or weaken the utterances to which the members react. It is an immediate declaration of support or opposition, or if the members of the House stays silent, of potential disinterest. Consequently, it has an effect on the communicative process in the House and in the sofas from which the rest of us are watching. This is the case online as well. The like's and dislike's are the active online mass way of showing interest, an interest that is likely to influence the interest of the inactive online mass. The consequence is that the one that gets the most shouts also gets the most attention – and a more prominent position in the meaning formation process. This ‘shouting’ logic is a general characteristic of the online sphere; take for instance the ranking of Google search results and how they to a large extent reflect how many visits a page has got, not necessarily how sound the page is.

Even though the theoretical conceptualization of collaboration presented in ACT I did not in every detail pre-empt what the empirics showed, I would argue that these clarifications do not diminish the theoretical contribution made, nor does it call for a reconceptualization of ‘The Collaborative Paradigm’. As Just and I stated in ACT I, and as a natural consequence of the networked society presented in the *Mise-en-scène*, a collaborative process can be marked by the unequal distribution of resources, hence positions of power and of deprivation will exist. In addition, there do remain ethical restrictions and technological limitations to what can be uttered where and when and finally, that the communicative process is indeed marked by being a two-way process where ‘the one interacts directly with the few, and indirectly with the many’ (p. 98).

2: The online collaboration is paradoxical and fragmented/coherent

I have empirically demonstrated how the collaboration is organized by offline regulations and socio-technicality. In ACT II, ‘Offline regulation of online communication’, findings from a mixed method study of how communication regulations organize the online communication about Novo Nordisk were presented. It was argued that the regulations, which are formulated for offline communication, come to organize the online communicative process in a paradoxical way, perfectly exemplified by the disclaimer made by Novo Nordisk on its Facebook profile: ‘This page is not intended for a US audience’. The disclaimer and other contributions suggest that the regulations are used by Novo Nordisk as a strategic tool to censor the collaborative process taking place on some platforms, while almost forcing them to be absent on others. As such, the organization’s participation in the communicative process is arguably organized in terms of disclaimers and hidden promotion aimed at either adhering to the regulations or circumventing them. The stakeholders’ participation on the other hand, is organized as a ‘free-for-all’ – which sometimes, as was exemplified with Wikipedia, creates self-justice, while on other platforms, as with Flickr, creates unconcealed product discussions with no regards to the risks and benefits of the product. The analysis shows that the organization accounts for only 3.3% of all the communicative contributions included in the sample, of which most is on the company-controlled Facebook page. The offline regulations hence come to dictate the online communicative process in a paradoxical direction, where the organization about which the process is concerned is on one side partly silenced, and on the other given a strategic tool to in turn silence critical or off-topic stakeholders. Whereas the stakeholders, who are not under regulation, but who the regulations claim to protect, are left to play by their own rules in a state of anarchy with the risk of being exposed to misinformation.

A surprising discovery during this investigation was the lack of regulations addressing online communication; and how this void is being ignored by regulatory authorities, demonstrated in how they insist on treating online communication in the same way as offline communication (c.f. the warning letter Novartis got based on a Facebook sharing widget, p. 102). Realizing how this lack comes to expose stakeholders not only to blatant manipulation and censorship by the organization, but also risk, was astonishing. The lack of regulations almost turns fellow participants into possible health threats, since the unbalanced product information the regulations were formulated to prevent, are not prevented, but instead shared unsolicited among laymen. And on top of this, the regulations provide the company, the stakeholders were to be protected from with a chance to manipulate and censor participants in the meaning formation process; either through poorly concealed promotion, pointless disclaimers only aimed at keeping the company's back free, or having their utterances about the company removed if the company does not approve of them. Following this, ACT II provides additional nuance to the question of control and polyphony in online communication. First, that not only is the potential for control over parts of the communicative process dependent on the specific communication platform, but also on offline social structures, such as regulations. Second, and as a consequence, that the polyphony, the two-way mass interaction, may on some communication platforms and in some situations be conditioned by the acceptance of a single actor. This brings me to ACT III, and the question of what role the socio-technicality plays.

In ACT III, 'Socio-technical Organization of Online Communication', findings from a mixed method study about how the intertwinement of the social and the technical come to organize the online communication about Novo Nordisk were presented. The act conveys that the process is organized in more or less fragmented ways, fragmentations that are conditioned by both the technological infrastructure created through social interaction (e.g. design and innovation of new technologies) and the social interaction the technology makes possible (e.g. by offering different potentials for interaction both with the technology and other actors). The communicative process hence becomes contingent on the nature of the relationship between the actors that make up the network; the actors that are involved in the communicative process. The findings demonstrate how negotiations over meanings, the struggles, are not a matter of human vs. human or human vs. technology, but rather human and technology vs. human and technology. Technology and humans are joined at the hip, so to say; on Facebook this is apparent in how the coupling results in an organization-controlled communication platform, on Wikipedia in how it results in meaning-coherence, on New York Times in how authority (the journalists) can be challenged, and on YouTube and Flickr in how the process becomes marked by indirect relations. The entanglement creates different conditions for the level of possible coherence in the process. And perhaps most interestingly, this possibility is taken the least advantage of on platforms where there are less technological constraints. In other words, the more potential or possibilities the human actor is provided in the communicative process, the more fragmented or chaotic the process becomes.

These findings substantiate the collaborative concept presented in ACT I by showing how the intertwinement of humans and technology in some cases force the process to be collaborative, as much as the intertwinement itself is a sign of collaboration. Without the joint effort of both human and non-human actors, the online communicative process would not exist. In addition, the findings supplement the assertions made in ACT II by highlighting how the intersection of the social and the technological is notably constitutive of the process, and as such pointing to the importance of recognizing other actors and factors in online communication processes beyond the utterances of humans.

3: The online collaboration is a centrifugal process with centripetal consequences

Third, Just and I empirically showed and theoretically conceptualized how the paradoxical and fragmented online meaning formation is organized as both centrifugal and centripetal narrations. In ACT IV, 'Collaboratively Constructed Contradictory Accounts', an analysis of the traces of the communicative process was conducted. It was argued that based on the concept and findings presented in the previous chapters, this collaborative, paradoxical and fragmented co-production of meaning is played out as narration processes. This assertion was based upon the fundamental insight that people make and present meaning through narratives. Informed by Walter Fisher's notion that all forms of human communication can be seen fundamentally as stories (1989: 57), we claimed that the same holds true for communication about organizations, because organizations can be seen as the narratives that people construct in ways which maintain and objectify reality (Humphreys and Brown, 2002: 405). And finally, that the process of constructing these narratives online have centrifugal forces with centripetal consequences.

Through a mixed method content analysis of the communication about Novo Nordisk, Just and I identified three dominant online meaning constructions that presented themselves as narratives about Novo Nordisk, and, further, we found that these dominant narratives seem to converge into one overarching meta-narrative. The meta-narrative identified was Novo Nordisk as the ruthlessly profit seeking socially responsible heavenly work place, a meta-narrative made up of the three interrelated, yet disparate tales about Novo Nordisk as 1) a socially responsible organization and engaged in society at large; 2) an organization primarily concerned with fulfilling its own objectives – profit maximization; and 3) a great and employee-centred workplace. It is hardly surprising that an organization is seen as both socially responsible and profit seeking. But, as we argued at the end of ACT IV, the lack of surprise is perhaps the actual point, and not a sign of analytical weakness. The reason being that the unsurprising nature of the narratives identified confirms the claim that online collaboration should be conceptualized as a centrifugal process with centripetal consequences. Per se, ACT IV demonstrated that regardless of the differences, inconsistencies, and contradictions that exist both within and across the different communicative contributions to the process, an overarching meaning about Novo Nordisk emerges in and through the juxtaposition, opposition and entwinement of the individual actors and utterances that constitute the process. Which in turn further contributes to substantiating the theoretical notion of online communication as collaboration.

So, the answer to the puzzle I presented in the *Mise-en-scène* is in short that the online communication about Novo Nordisk, the meaning formation process between the organization and its stakeholders, is organized as a collaborative networked bricolage, where individual texts, pictures, videos, links, like's and dislike's are remixed and reassembled by the participants, both individually and collectively, in ways they at any given time 'see fit'. And further more, that this collaborative remixing and reassembling is contingent on the participants' position in regards to the current communication regulations and their intertwinement with the communication platforms' technology. As such, individual contributions become a collective story about what and who the organization is. Not because the individual contributions always directly relate to each other, nor because they reflect the same attitude or sentiment, but because they are all concerned with the same topic – Novo Nordisk. On an individual level, the communicative process may seem fragmented and disparate, but on a collective level, on a network level, it converges. Because the communicative process observed in this investigation is not one that plays out like a chain of events, but rather as a networked process. As argued in the *Fabula*, with a society operating on a network logic, where actors construct networks that reflect common interests, actors with a vested interest in Novo Nordisk will also form a network. And even though the individual actor may not be aware of the magnitude of the network, its reach or its participants, by contributing to the meaning formation process about Novo Nordisk, the individual automatically becomes part of the network that in effect constitutes the organization.

Beyond the conclusion

Being situated at a business school, specifically at a department of organization, I feel enticed to suggest how this project contributes to the field of organization studies, particularly organizational identity and its twin: branding. As argued and demonstrated, networked individuals and organizations relate to each other in terms of stories, as humans naturally think and express themselves narratively rather than argumentatively or pragmatically (Woodside et al, 2008: 97-98). In the case of organizations, what is constructed is an organizational narrative; an assemblage of individual bits and pieces that the organization and its stakeholders remix, reformulate, refuse and applaud in an ever changing story about who and what the organization is (Czarniawska-Joerges, 1994: 198). But by creating a story about something, forming meanings about it, do the participants not instantly also construct identities of whatever they are forming meanings about? Could the meaning making processes I have conceptualized and exhibited in actuality also be seen as identity processes?

Yes. At least according to Ravasi and Schultz (2006) and many others (c.f. Goia and Chittappeddi, 1991). Identity is simply a residue of narrative meaning making processes (Alvesson and Willmott, 2002). If one accepts this stance, this study comes to contribute to the works of scholars who argue that identity is constructed by both insiders and outsiders (see e.g. Goia and Patvarhan, 2012, Gioia et al. 2010; Hatch & Schultz, 1997) and that organizations are more than one story, one identity, but rather a plurality of stories and story interpretations in struggle with one another (see e.g. Boje, 1991; Tsoukas and Hatch 2001). The study also implies that George Mead's separation of identity and self no longer is applicable (see Mead, 1934). First of all, all the findings presented in this dissertation point to the collaborative effort that make up the meaning formation, both by the organization itself and its stakeholders. The empirical data actually show that the process is predominantly driven by the stakeholders, meaning that the outsiders construct the identity/identities, more than the official organizational 'voice' itself. Secondly, the theoretical conceptualizations and empirical data offered, contribute to substantiating, the claim that organizations are made up by more meanings, more narratives, than one. The study confirms that narration is a centrifugal process, but adds that the process also has centripetal consequences. In other words, while it is true that the organizational narrative comes in many different and diverging shapes, it can simultaneously appear as just that, *an* organizational narrative. Singular. Finally, the investigation at hand strengthens the continuous challenging of the notion of a separation between identity and sense of self.

Not only would a separation of the two imply that there is something 'real' behind the identity, or that an organization can be something other than its identity. It also implies that there exists an organization, an entity, that is in some way coherent and able to act as an 'I' regardless of its communicative interactions. But as has been theoretically argued, and empirically established, an organization is whatever the network makes of it, whatever identity the network is in the midst of constructing. No more. No less.

METHODOLOGICAL CONTRIBUTION

The findings presented above and throughout this spectacle are all made possible by the mixed method design employed. And honestly, employing it was a daunting task, but, I would argue, also an accomplishment and contribution in and of itself. Mixed method research is not a prevalent trend in communication and organizational studies and there are still strong links to certain paradigms in the whole academic chain, from universities, departments, and funding requirements, to actual scientific procedures and methods (Howe, 1992). But as argued in the *Mise-en-scène*, combining both quantitative and qualitative methods seems adequate for this investigation (see pp. 46-49). In addition, I felt that making this choice would be most 'true' to the locus of my study – the Internet. Take for instance the act of searching for information on Google. First you type in a word or a sentence on a page with nothing but a search field. You push enter. Up pops a screen displaying a list of possibilities – a response to your specific inquiry. On the screen you can see a list of ten suggestions of where to find out more. At the top of the screen you see the number of total results your enquiry generated. And at the bottom you can choose to click to another ten or more pages, all displaying another ten specific suggestions. With just one click from an empty page, you are presented with two levels of quantitative information: the number of hits in total and the ten most relevant hits, at least according to Google's algorithms. And with just one more click, you can enter one of the hits, one of the specific suggestions to your inquiry, and as such be presented with qualitative information on your inquiry. Push the back button, and you are again at the quantitative level. This seamless transition between the quantitative and the qualitative level is equally visible on for instance Facebook: you can with one click see all your friends, and with one more click visit a specific friend's profile. Or the reversed way with for instance Wikipedia: you can with one click see one coherent page of information, and with one more see all the multiple entries that contributed to the page. As a consequence, and as a response to Miller et. al.'s (2011) call for a re-introduction of quantitative research in the field of communication studies, today dominated by qualitative methods, a mixed method study was designed and conducted.

After a thorough literature review, a qualitative search of relevant communication platforms on which the communication between Novo Nordisk and its stakeholders could be observed was conducted. Five platforms were identified as relevant due to the substantive communication that was conducted on them. In addition, these platforms are all well-known and popular, wherefore I assumed they would provide me with interesting material. A pragmatic decision about the time period of communication to be included was then made: the first communication about Novo Nordisk on any of the platforms was posted on Wikipedia on October 11, 2004, and by the end of the second quarter of 2011 I was forced to stop the collection as I needed ample time to conduct the analyses. This choice provided me with an extensive collection of data: over 4000 communicative contributions concerned with the organization, made over 5 years. Realizing that the data sample became this large was both exhilarating and frightening. Exhilarating because it meant that I would be able to make inferences based on a longitudinal study; the data reflected an actual communicative process taking place over a long time, meaning deviations, differences and developments would be traceable. Compared to doing a study where the data only reflects a tiny excerpt of a process that is never-ending, including five years of this never-ending narration about Novo Nordisk made me confident that my potential contribution would not only be based on substantial data, but also actually 'taking process seriously' (c.f. the methodological implications of The Collaborative Paradigm discussed on p. 93, see also pp. 197-200). And as such I would not only require processual seriousness in theory, but also employ it in practice. The consequence, I would assert, is that the findings this study offers are rigorous, they mirror a co-construction of meaning as it arguably plays out: over time in diverse and developing contexts.

But the magnitude of the data was also frightening. For the same reasons. It meant that over 4000 contributions needed to be coded, analysed and distilled. It also meant that I had to take 'process seriously'. Coding 4000 contributions takes considerable time, and is a challenge to both consistency and patience. And even using a coding scheme, coding software, and having a small sample test-coded by a fellow researcher to ensure consistency, it is unavoidable that the coding and analysing comes to reflect the fact that it is done by me. The process of determining the meaning of any data is subjective. Except in terms of number of contributions, their visible identity and the platform on which they were made, all other measures applied in this study required a subjective evaluation. This pertained in particular to the qualitative categorization I made during the coding, aimed at identifying and grouping common themes addressed in what I termed major contributions. I must admit that if I were to repeat the study, the categorization would be structured differently. I started out wanting to avoid losing the qualitative level of the analysis, not wanting to 'compromise', as I stated in the *Set design*. But the process of mapping the material would probably have been easier if I had employed software like NVivo[16], which would not have risked the qualitative level. As the spectacle has presented itself, the qualitative level has been given ample attention; hence my fear was, perhaps, not warranted.

In regards to taking the study of process seriously, concerns arising from this have been addressed earlier, both in ACT IV and in the opening of this ACT V. But by using the snapshot analogy, I believe that I was able to stay true to the process, while at the same time able to analyze it. Taking a social constructionist approach to science and reality, emphasizing the interaction in social relationships as conduits through which the self and reality is articulated, is a challenge. Especially online, since the socio-material interaction is only visible in the traces it leaves. This is of course not unlike historic or archival studies, as these also rely on processual residue, compared to the actual processes of which they are concerned. Doing online research does not enable you to observe the actions taken by the actors as they happen. At least in most instances. As such one does end up studying the substances the relations create. Nonetheless, these substances, the utterances, should not, and were not by me during the study, regarded as meaningful or meaning forming in and of themselves. They are inputs to the process playing out,

[16] NVivo is a qualitative data analysis computer software package by QSR International.

invitations to a continued participation in a communicative collaboration. By taking this methodological approach to a substantial data sample, I have hopefully contributed to the continued exploration of mixed methods in communication studies in general, and to the study of online communication as process in particular.

Despite the rigour of the study, it does of course have certain limitations. Claiming otherwise would be foolish. First of all it is only able to say something about the meaning formation processes about Novo Nordisk between people with access to the Internet who are willing to participate in the collaboration. As such it does not include the processes that might occur among actors who are offline or who are not actively participating in some way. This was never the aim of the study, but it is important to acknowledge that those processes, and those stakeholders, are part of the larger network that constitutes Novo Nordisk. Secondly, the study only comprises a selected few out of many possible communication platforms. Though I do not consider the platforms unique, in the sense that they would be misrepresentative of the general online population and how they communicate, the choice to include some platforms, of course entailed excluding others. And with that, the meaning formation processes taking place there.

Finally, this is a single case study about a particular organization, at a particular point in time. This 'uniqueness' is often criticized; arguing that one cannot generalize on the basis of an individual case, and as such the case study cannot contribute to scientific development (see e.g. Miles, 1979). But scholars like Bent Flyvbjerg (2006) argue that formal generalization is overvalued as a source of scientific development, whereas 'the force of example' is underestimated. Consequently, case studies should be read as narratives in their entirety, instead of looking for the summarized generalizability (Flyvbjerg, 2006). Secondly, the repeated claim that case study research contains a bias toward verification, that is, a tendency to confirm the researcher's preconceived notions, is misguided: case studies contain no greater bias toward verification of the researcher's preconceived notions than other methods of inquiry. On the contrary, the case study contains a greater bias toward falsification of preconceived notions than toward verification (Yin, 2009). In regards to the latter, I have already presented instances where my theoretical notions were proved wrong, or at least required clarifications. In other words, I have exhibited that preconceived notions were not exhaustive, and that the study provided actual new insight, and not just confirmation. In addition, as already alluded to in the *Mise-en-scène*, verification or validity will always be relative to a particular context, situation, language system, and worldview (Schwandt, 2001). Consequently this dissertation cannot be anything but my version of reality. Or, my 'force of example'. But – and now also addressing the question of generalization – with its methodological rigour this project can serve as a strong force of example. And to safeguard the strength of my example, I have sought to ensure 'inference quality' and 'inference transferability' (Teddlie and Tashakkori, 2003).

Inference quality entails design quality and interpretive rigour. Design quality denotes the methodological rigour of the mixed research study, whereas interpretive rigor pertains to the strength of conclusions. In this investigation I have aimed at obtaining both by conducting the selection of sources, collection of data and process of analysis thoroughly, based on a consistent theoretical framework and informed by previous and acclaimed studies. These steps have been further strengthened by including a diverse and substantial amount of data – large enough to lower the risk of investigator manipulation, small enough to allow for in-depth analysis.

Inference transferability designates the transferability of the population included in the study (whether or not it is transferable to other individuals, groups, or organizations) and ecological transferability (whether or not it is transferable to other contexts or settings). First and foremost, I would claim, that the inferences offered in this spectacle are transferable to online communication about organizations that are in a situation equal to Novo Nordisk, e.g. health care organizations operating under similar regulations and with a similar pool of stakeholders. In addition, the findings presented here would also be applicable to other industries and other organizations that deal with communication regulations, like the finance sector. Finally, the investigation of processes presented in this spectacle has been informed by theories and concepts with a far wider scope than the particularities of this case study. In other words, the inferences drawn from the specific communicative collaboration observed in this project have the potential of being equally relevant in the understanding of other online meaning formation processes in general. As such, I believe that the force of my example is strong, and that it provides a significant contribution beyond the realms of these pages.

IMPLICATIONS FOR FUTURE RESEARCH

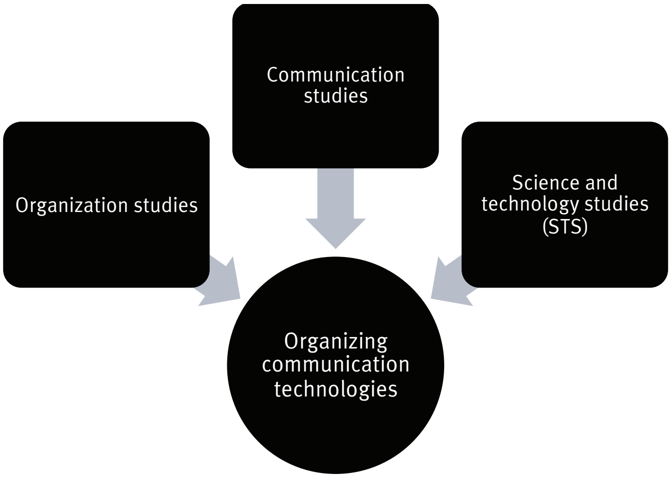
Apparent throughout this whole spectacle is the inspiration drawn from the works of scholars who view the rise of the internet as one of the main loci for understanding current societal developments (c.f. Baym, 2009; Bogost, 2007; Castells, 2000; Engeli, 2000; Gaggi, 1997; Jenkins, 2004; Murray, 1997; Scolari, 2009; Zappen, 2005). As a consequence, the key implications of this investigation pertain to the continuation of the exploration of the consequences of the advent of new communication technologies. In particular what the significance of the developments are on processes of meaning formation about organizations. Following, I would suggest that this study calls for investigations into what the offline motivations of the organizations communicated about are. Taking my cue from the earlier discussion on online process research, expanding the knowledge about the process by including the incentives behind the organizations online actions would deepen the understanding of the collaboration. In the particular case of Novo Nordisk, this could shed light on the organization's interpretations of the regulations and how this interpretation comes to organize its behaviour. It could also provide insight into why it is not more active on more platforms, if this is indeed due to regulations or a strategic decision to concentrate their online efforts.

Linked to this, but in a broader context, I would also encourage further investigations into the relationship between online and offline 'realities'. In several instances, the data used in this spectacle refers to happenings occurring offline, for instance sports events, hence establishing a connection between the two worlds. Effectively, offline happenings are being communicated about, made sense of, in an online sphere, which raises questions about what, if any, difference there is between online and offline meaning formations, and how concrete offline happenings are translated into online experiences. Research into the online-offline divide, or lack thereof, would contribute to the further development of the concept of a collaborative paradigm. Perhaps expanding the concept to include the collaboration between the digital and non-digital. If such an inquiry were to be realized, I would recommend that great attention be paid also to the aesthetics of communication, meaning the significance of design and the use of visuals in the communicative process. As introduced in ACT I, this is an important means of online meaning formation, both in terms of visual contributions, but also how design/architecture/visual infrastructure/space come to influence behaviour. Such a focus would follow up on and further the attention given to the entanglement of the social and the material in this dissertation.

As a corollary of investigating online communication processes concerned with organizations, I would finally like to propose a somewhat unusual implication for future research. This study is situated in the intersection of communication studies, organization studies, and science and technology studies (c.f. Contractor et. al., 2011; Orlikowski, 2002; Pentland and Feldman, 2008). And even though all three fields are interrelated, they still felt somewhat entrenched during the course of this study, advocating their distinct perspectives. But as I kept insisting on staying at the intersection, an insistence I share with two colleagues at CBS[17], a possible 'intersectional field' started emerging. Not necessarily utterly novel, nor conceptually revolutionary, rather an expression of a need to call the place we are standing something. We named it 'Organizing Communication Technologies'.

[17] Associate professor Ursula Plesner and PhD Fellow Anders Koed Madsen

Figure 5: Organizing Communication Technologies



The word 'organizing' here has an intentional and inseparable double meaning: used as a verb it denotes the activity of organizing communication through technologies, while used as an adjective it denotes the role that communication technologies play as organizing devices, which entails a focus on the materiality and infrastructures of these devices. The word 'communication' serves as a label of relational and processual practices concerned with forming meaning, practices that attend a dual purpose of both constituting and organizing: there is no organization, unless it is communicated about, and there is no communication, unless interaction is organized. And finally, 'technologies' entails all the tools and methods that organize the information and interaction of the meaning formation, particularly the technologies that are characterized by being digital.

If anything, this study has been concerned with organizing communication technologies. It has theoretically and empirically addressed the relational and processual practices concerned with forming meanings and how these processes are organized by and organizing digital communication technologies – how the social and the technical are entangled in communicating about organizations. As these are subjects of both current, and, possibly accelerated, future attention, I put forward this 'intersectional field', this label, for others to reuse or refuse in their own scientific spectacles.

IMPLICATIONS FOR NON-ACADEMIC NETWORKS

Without going into discussions about what is non-academic, and what *is* academic, this spectacle also carries implications for, and is of interest to, networks of actors who do not necessarily get high on long theoretical, methodological and metaphysical illuminations. These networks are plentiful, and in lack of a better label, I call them non-academic including actors such as professionals, stakeholders, regulators, journalists and alike.

First, the communication regulations that organizations like Novo Nordisk operate under are ripe for reform. This should be of interest for both the organization and its stakeholders; particularly patients and regulatory and public health care authorities. The regulations, as they are formulated today, cause a pointless and paradoxical situation; they do not address online communication, they do not allow the organization to fully participate in the meaning formation about itself, and as such they indirectly encourage using the regulations strategically. Both in terms of manipulation and censorship. The biggest losers in this are the stakeholders, who are supposedly protected by the regulations, but in actuality are manipulated and (potentially) exposed to misinformation. Stating that the regulations are ripe for reform begs the question of whether or not regulating communication is desirable or even possible. I will not go into that discussion here, as that would be a whole spectacle of its own, but a clear implication from this study is that these are issues that need to be addressed by governments, interest groups and industry associations.

Secondly, all communication is collaborative, even if not all communicators are aware of this. Every utterance is part of a process that is larger than the sum of the utterances. Particularly true of online communication. Utterances that present and perceive themselves as anything but part of a process will be less successful and potentially ignored. This does not mean, however, that the idea of strategic communication is useless. To the contrary. How you choose to formulate, textually or visually, your contribution, your invitation to collaboration, will come to affect what the network thinks of you. How you invite to the collaborative meaning formation becomes determining for how the meaning formation is played out. An ill-formulated invitation will create an ill-developing meaning formation. This was for instance noticeable in how the Crown Prince of Denmark, due to a poorly created video, during the COP 15 failed to engage YouTube users on the topic of climate change, instead making them engage on the topic of how poor the video was. The same happened with the now infamous tweet by the shoe company Kenneth Cole during the Arab Spring: 'Millions are in uproar in #Cairo. Rumor is they heard our new spring collection is now available online.' Not surprisingly, the tweet did not create the kind of online activity Kenneth Cole was alluding to.

For organizations like Novo Nordisk, this need for strategic invitations to collaboration, entails that they first of all need to be active in the online collaboration, otherwise they will find themselves on the outskirts, if not outside, of the meaning formation about themselves. They need to embed online communication as a part of their general communicative efforts, and not treat it as something separate from other means of communication. I would even go so far as to suggest that they could make online communication the centre, the hub, from which other communicative efforts are planned and implemented. As the findings show, offline events are just as much a part of online communication as interaction that only occurs on and refers to the online realm. The two are inseparable, and when offline events are brought online, they are given a longer (and sometimes permanent life), as the Internet and digital networks have become, as Stiegler claims, our second memory (1998). Further, when participating, they need to respect and react to the opinions of others, even negative ones. Censoring them will not make them go away; they will just find other outlets. As the saying goes, ‘keep your friends close, but your enemies closer’; rather have your stakeholders criticise you where you can react and respond, than on platforms you do not know of. Organizations need to interact, head on. They need to play along. They need to join the remixing and reassembling. But perhaps most importantly, they need to see and take advantage of the possibility of being a provider of actions, ideas, signs and symbols their bricoleur stakeholders can make use of in their individual online remixing and reassembling.

As for my Facebook friend. The one with the ‘idol’ company. The one who, three years ago, could not wait to start working at that Danish corporate jewel. He has been up to some remixing and reassembling himself. His profile is still full of ‘boring being’. Updates telling of birthdays, recreation and beers in the sun; pictures showing holidays, bikes and beers in the sun.

But the woman in the pictures is new.

And his current work place is no longer Novo Nordisk.

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Co-author declaration
Dansk resum

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Co-author declaration

Copenhagen
Business School
HANDELSHØJSKOLEN

Department of Business and Politics

Porcelænshaven 24
DK-2000 Frederiksberg

Tlf: +45 · 3815 3815
Fax: +45 · 3815 3830
www.cbs.dk

August 2012

Sine Nørholm Just
Associate professor, PhD
Programme director: BA in Intercultural Marketing Communication
Tlf.: +45 3815 3561
E-mail: snj.dbp@cbs.dk

I, Sine N. Just, hereby declare that Ib Tunby Gulbrandsen is the main author of the following two articles, which I have co-authored:

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Gulbrandsen IT and Just SN (under review) Collaboratively constructed contradictory accounts - on online communication about organizations, *Media, Culture & Society*

Best regards

Sine N. Just

RESUM

Baggrund

Det 21. århundredes samfund er et digitalt netværk – kendetegnet ved computerisering, fragmentering, mediering og fremmedgørelse af relationer i ad hoc virkeligheder; konstant rekonstrueret gennem netværkets changerende og muterende dynamikker, som udgør samfundets fluktuerende struktur; et netværk defineret af dets socio-materielle væren.

Mål

I dette netværkssamfund er vi kun, hvad netværket definerer os som. Vi er kun den nation, den organisation og det individ netværket kommunikativt konstituerer os som; de meninger det konstruerer om os. Eksisterende forskning har forsøgt at afdække, hvordan disse konstituerende processer udspiller sig, men der findes kun ganske få empiriske studier af, hvordan netværket 'skaber' organisationer i medicinalindustrien. Organisationer defineret af det binære forhold privat/offentlig, som opererer under strenge regulativer og stigende konkurrence. Med den danske medicinalvirksomhed Novo Nordisk som genstand, søger denne afhandling at undersøge: hvordan er kommunikationen om Novo Nordisk organiseret på digitale kommunikationsplatforme; hvordan udspiller den kollaborative digitale meningsdannelsen om virksomheden sig mellem organisationen og dens interessenter?

Teori

Til undersøgelsen af denne kommunikative meningsdannelsesproces etablerer denne afhandling 'The Collaborative Paradigm' som teoretisk rammeværk. Et rammeværk bygget på de distinkte karakteristika ved nye kommunikationsformer, fremfor en blind videreførelse af gamle kommunikationsteorier. Der bliver i afhandlingen argumenteret for, at online kommunikation er distinkt, idet den er tovejsmassekommunikation mellem ukendte, selv-iscenesatte egoer eller digitale repræsentationer af individer og organisationer, hvor det private bliver offentligt i en hypertekstuel, ukontrolleret form, ubegrænset af offline tid og sted. En kommunikativ proces hvor én taler direkte med de få, og indirekte med de mange. Som en konsekvens må online kommunikation forstås i forhold til dens dynamik, som en aldrig afsluttet eller afsluttende proces, determineret af evnen til at invitere til og villigheden til at deltage i kollaboration.

Metode

Den metodologiske implikation af dette teoretiske ståsted er en fornyet forpligtelse på at undersøge kommunikation som relationelle processer. Dette indebærer, at man må afstå fra at lokalisere eller stabilisere kommunikationen udenfor processen; en udfordring, der kan håndteres, ved først at anerkende, at det man undersøger er en konstruktion, en ansamling eller fortolkning af processen, en afbildning af hvordan tovejsmassekommunikation udspiller sig online på et subjektivt valgt og individuelt defineret tidspunkt. Og deraf følgende, hvor kvaliteten af afbildningen – målt i forhold til dens evne til at fange det 'ufangelige', fiksere uden at fordreje – opnås ved at inkludere både kvalitative og kvantitative data, da undersøgelser af enkeltstående ytringer eller enkeltstående teknologier alene ikke formår at afbilde online kommunikation som processuel og kollaborativ.

Undersøgelsen blev som en konsekvens af dette gennemført som et 'single case mixed method' studie af kommunikationen mellem Novo Nordisk og denne organisations interessenter på fem platforme (Facebook.com, YouTube.com, Flickr.com, Wikipedia.com and NewYorkTimes.com). Der blev indsamlet og kodet 4,245 kommunikative ytringer, fra sidste kvartal i 2004 til andet kvartal i 2011. Kodningsarbejdet blev baseret på en kodningsmanual og udført i databehandlingsprogrammet SPSS.

Resultater

Undersøgelsen bidrager til 1) en empirisk forståelse og udfoldelse af den kollaborative proces, som er online. Studiet viser, at kollaborationen er kendetegnet ved en asymmetrisk distribution af ressourcer, uden at dette truer kollaborationen som helhed; på enkelte platforme kan én enkelt aktør have en privilegeret og kontrollerende funktion, men denne kontrolfunktion er bundet op på platformen og lader sig ikke overføre til andre platforme. I tillæg demonstrerer afhandlingen, at størstedelen af den kollaborative proces udspilles gennem tilråb/støtte/afstemning, ved brug af 'like' og 'dislike', og ikke egentlige tekstlige eller visuelle ytringer. Endvidere finder studiet, at 2) de gældende kommunikationsregulativer organiserer den kollaborative proces i en paradoksal retning. Regulativerne, der ikke adresserer, men er gældende for online kommunikation, bliver på den ene side benyttet af organisationen som et strategisk virkemiddel til at censurere ytringer fra andre aktører på enkelte platforme, medens de på den anden side tvinger organisationen til at være inaktiv på andre platforme. Interessenterne, som regulativerne sigter mod at beskytte, er derfor både udsat for censur og overladt til sig selv, i en tilstand af anarki, med fare for at blive eksponeret for fejlinformation. Studiet viser, at denne paradoksale proces desuden organiseres af den socio-materielle kobling, der etableres på de enkelte platforme, i forskellige grader af fragmentering/kausalitet. Den teknologiske infrastruktur, som social interaktion muliggør (f.eks. innovation af nye teknologier), organiserer den sociale interaktion, som teknologien muliggør (f.eks. kommunikationsplatforme) i en mere systematiseret og kausal retning i de tilfælde, hvor ikke-teknologiske aktører har mindre handlemulighed. Med andre ord, teknologien skaber i enkelte tilfælde mere sammenhæng mellem ikke-teknologiske aktørers kommunikative ytringer end aktørerne selv.

Endelig forklarer afhandlingen, 3) hvordan denne paradoksale, fragmenterede/kausale proces er drevet af centrifugale kræfter med centripetale konsekvenser. Undersøgelsen viser, hvordan tre dominerende meningskonstruktioner om Novo Nordisk, tre narrativer om hvem og hvad organisationen er, konvergerer til ét overordnet metanarrativ om organisationen som en 'hensynsløst profitsøgende socialt ansvarlig himmelsk arbejdsplads'. Afhandlingen demonstrer at trods forskelle og modsætninger i og mellem de meningsdannelser, der sker på de forskellige platforme, så dannes en overordnet mening om Novo Nordisk via og på grund af den socio-materielle sammenkobling af aktørerne, der udgør processen. På denne måde danner individuelle, urelaterede ytringer én samlet historie om virksomheden; de skaber ikke mening separat, men som et netværk.

Konsekvenser

Afhandlingens resultater har tre primære konsekvenser. For det første bestyrker de forståelsen, og følgelig relevansen, af kommunikation som kollaboration. For det andet har de betydning for, hvordan organisationer bør interagere med deres interessenter, særligt online. Studiet peger på vigtigheden af at forstå online kommunikation som et meningssamarbejde, hvilket umuliggør en videreførelse af ideen om kommunikation som transmission; som styret af en aktør. Dette indebærer en omlægning af fokus og ressourcer i den strategiske planlægning af kommunikation; hvordan man inviterer til meningsdannelsen, og hvor villig man viser sig at være til at deltage, bliver afgørende for, hvordan processen udspiller sig. For det tredje, og sidste, antyder afhandlingen, at de gældende kommunikationsregulativer ikke tjener det tilsigtede formål og følgelig bør redefineres.

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