

# POWER RELATIONS IN CROSS-ORGANIZATIONAL ONLINE NETWORKS: A NEW DEMOCRATIZING EFFECT OF COMMUNICATION TECHNOLOGIES

*Research paper*

Cunha, Joao, IÉSEG School of Management (LEM-CNRS 9221), Lille, France,  
j.cunha@ieseg.fr

## Abstract

*I present new democratizing effect of communication technology on change. Research has stipulated that communication technology has a democratizing effect on change because employees participate in online conversations to develop a shared interpretation of change. I develop a new democratizing effect of communication technology by explaining how employees use networks from different organizations to try to impose their own reactions to change by appropriating the interpretations that others propose, and actions that others enact with communication technology, instead of coming up with new interpretations and new actions of their own. I further explain how this new democratizing effect of communication technologies on change lays the foundation for a theory of differences among IT practices. This new theory complements the preference for theories based the similarities among employees' use of technology when explaining the effect of IT on organizations.*

*Keywords: Change management, Online communities, Qualitative research.*

## 1 Introduction

In the study presented next, I explore the effect of differences among the reactions to change in online conversations at work carried across two different social forums. I do so to specify a new democratic effect of communication technology and outline a theory of the organizational consequences of differences among employees' IT practices. This new theory complements the preference for theories based on the similarities among employees' IT practices which is frequent in research on IT-led change (e.g. Lapointe and Rivard, 2005).

### 1.1 The first democratizing effect of computer-mediated conversations on change

Research shows that employees make sense of, and decide how to deal with change by talking to one another (Czarniawska 1997). Ford and Ford (1999, p. 496) explained that:

*It is possible to consider organizations as networks constituted in and by conversations. Accordingly, producing and managing change involves shifting that network of conversations by intentionally bringing into existence and sustaining 'new' conversations while completing (and removing) current conversations. Rather than being simply a tool, conversations are the target, medium, and product of organizational change.*

In this view, employees talk to one another to express their own interpretations of change and to listen to those of others. Each conversation about change is an act of participative inquiry. The employees that take part in these conversations incorporate some of the meanings from each other's interpretations into their own view of change. Together, all of these conversations link the interpretations of each employee into a set of shared meanings about change. In time, this network of conversations

spreads and reinforces shared interpretations of change which integrate individual reactions into collective responses to change.

Research shows that communication technologies affect organizational change because of their “democratizing effect” on conversations at work (Sproull and Kiesler 1991). Communication technologies have a democratizing effect because they allow more employees to speak in conversations about change. Communication technologies open conversations about change to people who cannot join in face-to-face interactions (Kleineberg and Boguñá 2016). Moreover, communication technologies such as electronic mail create “an illusion of closeness” (Romm and Pliskin 1998, p. 385). Romm and Pliskin (1998, p. 385) showed how during a strike, this illusion of closeness improved conversations beyond the possibilities offered by face-to-face interaction:

*[B]y creating an illusion of closeness, email frees subscribers, particularly those at the bottom of the organization hierarchy, from status related constraints [... T]he illusion of closeness fostered by email allowed strikers to debate strategies, disagree and even discredit their leaders. It also allowed them to provide their leaders and other fellow strikers with continuing feedback and support.*

Communication technologies also have a democratizing effect because they allow more employees to listen to conversations about change. Computer-mediated conversations may affect those who read, as much as those who talk online. People who read from, but do not post into online conversations also use in the interpretations that emerge in these conversations to make sense of change (e.g. Schlosser 2005). Communication technologies can also be used to react to change directly. These technologies can coordinate the actions of many people across a wide range of locations (Van Laer and Van Aelst 2010).

Specified thus, communication technologies broaden, but do not alter how people respond to change. Much like face-to-face conversations, computer-mediated conversations help people develop shared interpretations of change and coordinate collective responses to change. This view of the effect of communication technologies on change may overestimate the similarities, but underestimate the variations among people’s reactions to change. Employees may have different, and even opposite interpretations of change (Morgan and Ogbonna 2008). Employees may also engage in different and incompatible responses to change (Oreg 2003). The possibility of differences in employees’ reactions to change suggest a second democratizing effect of communication technology.

## **1.2 An alternative democratizing effect of communication technologies?**

Research on framing contests in organizations shows how it is possible to substitute advocacy for inquiry when theorizing the democratizing effect of communication technologies on conversations about change. Research on framing contests is a reaction against the presumption of shared interpretations of social experience. Sniderman and Theriault (2004, pp. 141-142) argue that studies on collective action:

*[...] have neglected the fact that frames are themselves contestable. They have instead restricted attention to situations in which citizens are artificially sequestered, restricted to hearing only one way of thinking about a political issue.*

Research on framing contests seeks to “understan[d] of how opinion formation works in competitive mass communication (framing) environments” (Chong and Druckman 2007).

A few studies have applied research on framing contests to organizations. Kaplan (2008, p. 730) has shown that when managers develop strategy:

*Actors attempt to transform their own cognitive frames into the organization’s predominant collective frames through their daily interactions. Where frames about a decision are not congruent, actors engage in framing practices in an attempt to make their frame resonate and mobilize action in their favor. Competing frames are selected through a voting process whereby, “how one frame [comes] to predominate is akin to [the] notion of an implicit vote in the organization, [...] how people “vot[e]” at any one point in time [is] influenced by the frames mobilized by coalitions engaged in [...] framing practices” (Kaplan 2008, p. 738).*

This evidence suggests that communication technologies have more than one democratizing effect on conversations about change. Research has emphasized how communication technologies democratize change by bringing the democratic process of participation to conversations about change (Ford and Ford 1999 p. 496; Sproull and Kiesler 1991). Research on framing contests adds that communication technologies can also have a democratizing effect because they introduce voting into conversations about change. Voting is a democratic process where people choose among the opposing views and actions advocated by different proponents. In communication technologies, this democratic process includes two sets of practices. One set of practices consists of posting competing views of change. The other set of practices consists of choosing among these different views of change. In online conversations, people vote by adopting one of the views that others have voiced online when deciding how to react to change.

This second democratizing effect introduces advocacy to online conversations about change. However, this is a limited view of disputes in online conversations about change. Research on framing contests at work assumes that people are content to comply with the most popular response to change once it has gathered enough support. However, other studies (e.g. Ravishankar and Pan 2011) suggest that a full model of the impact of communication technology on change needs to incorporate the possibility of an iterative sequence of arguments and counter-arguments (and actions and counter-actions) as people use communication technologies to decide their response to changes at work.

Next, I develop this new specification of the democratizing effect of communication technologies on change. I draw on a qualitative study of a large European company to address the following research question:

How do employees use communication technologies to affect each other's reaction to change?

The answer improves the model of the effect of communication technologies on change by explaining the many ways in which people can appropriate the messages that others post online to impose their own reactions to change. The broader contribution for research is to uncover a sequential model of the effect of technology on organizations by explaining how people moderate the effect of each other's IT practices.

## 2 Methods

The research presented next looks at how employees at Epsilon, a large European oil company, used an internal and an external online forum to deal with change (all names of people and companies are pseudonyms). At the time of data collection, Epsilon implemented a 4-year change process. In the first two years, Epsilon was led by Anthony Smith. He was responsible for improving the company's operations to cut costs and to prepare for a merger with Omicron. In the last two years, Epsilon was led by Paul Jones. He led the merger between the two companies.

Just before Smith joined the company, the communications department at Epsilon set up an online forum in the company's intranet. Employees appropriated this online forum to cope with all the changes that these two CEOs implemented in the company. During Jones's tenure, employees came to fear posting in their company's forum. They moved to an online forum set up by a weekly newspaper. People used the sub-forum that allowed comments on a news report about their company to discuss the changes that Jones was implementing at Epsilon.

I collected secondary and primary data on online communication at Epsilon. The data on people's experience of change and on the messages in the company's internal online forum are secondary data. They come from a study published by Cunha and Orlikowski (2008). Data on the messages in the newspaper's online forum are primary data. They were collected three years after the last message was posted there. Data were analyzed by specifying communication genres and classifying them into genre systems (cf. Yates and Orlikowski 2002). Table 1 below outlines the genre systems that I surfaced from my analysis (the two genre systems explained below are in bold).

Genre system	Sequence of genres	Purpose	Number of threads
<u>Genre systems in the Epsilon's internal forum</u>			
<b>Posting and reading individual criticisms of change</b>	1. Announcements by order of appearance in the results section; 2. Peterson's postings; 3. Printed Peterson postings.	Advocate interpretations of change.	10
Expressing solidarity	1. Initial expression of solidarity; 2.. Repeated expressions of solidarity.	Enact collective reactions to change.	3
<u>Genre systems in the newspaper's forum</u>			
Exposing and complaining about change	1. Denouncing management decisions; 2.(A). Insulting managers; OR 2.(B). Call to expel the CEO; OR 2.(C). Praising employees.	Contribute to a collective interpretation of change	9
Growing resistance	1. Denouncing management decisions; 2.(A). Inciting resistance; OR 2.(B). Organizing resistance; 3. Validating resistance.	Turn interpretations of change into collective responses to change.	2
<b>Debating resistance</b>	1.(A). Denouncing management decisions; OR 1.(B). Spreading rumors; 2.(A). Insulting managers; OR 2.(B). Inciting resistance; 3. Debating resistance; 4. Organizing resistance; 5. Validating resistance.	Use interpretations of change to impose one's own response to change.	2

Table 1. Genre systems in Epsilon's online forum and in the newspaper forum

### 3 Coping online with change at Epsilon

Epsilon employees enacted two genre systems with their company's online forum to cope with what they interpreted to be threatening organizational change. In this section, I contrast two of those genre systems to explain how employees use communication technologies to affect each other's reaction to change.

#### 3.1 Posting and reading individual criticisms of change in the company's online forum

One genre system consisted of framing change in messages that criticized and even mocked managerial decisions. This was a sequence of three different genres. The first genre consisted of the messages that managers sent to all employees announcing changes to policies and procedures and reporting on the progress of changes that were being implemented. The second genre consisted of messages that appropriated these e-mail messages sent by managers. Managers' statements were appropriated to write messages that presented managers as incompetent and insensitive, and employees as capable and committed. These messages were all posted by a single employee called Mark Peterson. One of these messages criticized Epsilon CEO's description of the changes in the company as an attempt to make Epsilon as competitive as Sigma, one of the leaders in Epsilon's industry (Cunha and Orlikowski 2008, pp. 145):

I am not tired or unmotivated, man! I think I can still give a hand in order for this Company to be Greater. Look, Greater than Sigma, man! [...] Epsilon is in the genes of many of the people that work here. We have second and third generation workers. People who laid the foundation for this company, and built it by hand, to whom Epsilon is often blurred with Family. Respect that, man! I made myself a Professional at Epsilon and you cannot take that Pride and Value away from me. I even fell in love and met my Son's mother at Epsilon. Imagine that, man!

The third genre in this genre system was enacted outside the company's online forum. It consisted of face-to-face conversations where employees used Peterson's messages to make sense of change. An employee explained:

[We all] talked about and distributed [Peterson's] postings, because at that time a lot of people did not go to the company's online forum and printouts circulated and a lot of people made copies and distributed them through their colleagues (Cunha and Orlikowski 2008, p. 146).

By appropriating Peterson's messages thus, Epsilon employees strengthened the effect of the meanings in Peterson's messages in employees' interpretations of their own experience of change. However, they weakened Peterson's attempts at using the company forum as a medium for computer-mediated conversations about change by turning it into a vessel to receive Peterson's messages which they used to build their own interpretations of change offline.

### 3.2 Debating resistance to change in a newspaper's online forum

Peterson was suspended from Epsilon because of the messages that he posted in the company's online forum criticizing and mocking management. A large European newspaper ran a story about Peterson, his postings and his suspension. A message in the newspaper's online forum stated that the decision to fire Peterson created "a climate of fear:"

*[We] have to bring the game to them [to managers]. We cannot be silent, even if we need to endure the humiliation of anonymity [by using pseudonyms]. But we have no alternative. [If we do] otherwise we'll be put on a shelf [ie. be fired] and we have children to support...*

Employees began to use an online forum in this website and stopped using their company's forum. People enacted three genre systems to use the newspaper's forum to cope with the changes that they experienced at work, including Peterson's suspension.

One of the three genre systems that people enacted with the newspaper forum consisted of organizing specific acts of resistance which emerged from people's attempts to counter each other's efforts to impose specific reactions to change. This genre system linked seven different genres. The initial messages in these two threads that followed this genre were in the 'denouncing' genre and in the 'spreading rumors' genre. The denouncing genre consisted of messages that denounced management's decisions by publicly declaring them to be wrong or evil. In one thread, people discussed Peterson's lawsuit. This thread started with a message mocking the lack of an announcement about Peterson's dismissal:

*After Peterson was fired, did the CEO made any official announcement? If he did send anything it was probably a revisionist version of the events, in the vein of "George Orwell's 1984."*

This and other messages in the 'denouncing' genre substituted for managers' statements as a source of information about changes. Each of these messages complained about individual changes to bring them to the attention of people who read the newspaper's forum.

The initial messages providing information about Peterson's lawsuit and many of the initial messages about employees' experience of change were in the 'spreading rumors' genre. These were messages that listed hearsay about managers' actions and decisions. One message stated:

*Is it true or not that all the witnesses that have helped Peterson's defense have either suffered pressure to quit? [...] Is it true or not that there were never so many workers calling in sick as now? It must be because of the atmosphere in the company.*

Messages in the 'denouncing' and in the 'spreading rumors' genres provided the material and the opportunity for people to make sense of change. There were two reactions to messages posting fact and

hearsay about Peterson's lawsuit and changes at Epsilon. One was a string of messages where people vented their anger at their managers' attempts to implement threatening changes. The other was a dispute about the propriety of resistance to change which built up to specific offline actions that were afterwards used to argue for the merits of resistance.

People vented their anger at their managers' attempts at implementing threatening changes by posting messages in the 'insulting' genre. These messages consisted of offensive comments about managers. One which was posted in the thread about Peterson's lawsuit read thus:

*Epsilon's workers have passed sentence on Jones [the CEO]. Verdict: guilty of being a dictator, arrogant, corrupt, inapt to lead one of the biggest companies in the country. [...]. [Jones] must leave Epsilon. [...] In a few years, Jones may look more like a human being and less like a terrorist. And without Jones, his cronies will wither away. After a while, they will denounce Jones. They will even tell all who care to hear that Jones was the only one to blame.*

The second genre that followed messages in the 'denouncing' and 'spreading rumor' genres consisted of messages in the 'inciting resistance' genre. These messages advocated resistance to change. One message sought to motivate people to resist change by linking managers' attempts to dismiss Peterson with the rhetoric and practices that managers used to implement change:

*How can we deal with the serious wounds cause by daily humiliation, psychological terror and disrespect, resulting from demotion, [...] being moved from one department to another without any explanation and with no apparent reason, putting us under managers who know very little about us and that make one mistake after another, who despise our motivations and expectations, while we see our company being assaulted by Jones's cronies? [...] We will only save our great company from this chaos if we are able to stand together in all the battles that we have to fight. This war can only be won with collective answers [...]*

Messages 'insulting managers' and 'inciting resistance' strengthened the role of the newspaper forum as a medium to impose reactions to change. Message in the 'insulting managers' and in the 'inciting resistance' genres did not reproduce the information and interpretations in the messages that preceded them. Messages denouncing change and spreading rumors were only occasions to react to change. Messages inciting resistance prompted a debate about whether employees should resist change. The first message in this 'disputing resistance' genre in the thread where people discussed their everyday experience at work read thus:

*It seems that according to a statement issued by [Epsilon's Worker Union], management is finally acting with common sense. There was an improvement in the attitude of the management representatives in the meeting they held to announce the amendments to pay grades done in response to feedback from the unions. [...] This change in management's attitude should really be praised, I hope it continues by re-instating Peterson to his former job.*

Peterson himself also posted a message asking people to stop online hostility against Epsilon's senior management. He ended that message thus:

*I thank all those who have supported me. I am sorry that they ways they have chosen to support me have not always been the best — instead they were often regrettable and only hindered a more favorable solution. I beg you to stop posting here. There is no reason to do so anymore. [...] Anyone who continues to use this space should know that they do so against my wishes and should acknowledge that openly.*

These messages were countered by messages countering the rhetoric of reconciliation. One participant responded by posting the following:

*War is war! On the one side are the employees support Peterson. The only thing we want is that he returns immediately, with a public apology from those responsible for the heinous act of firing him. On the other side is the CEO with his arrogant stance celebrated by his shameless cronies. Do you think that peace is possible under such conditions? I don't believe it anymore.*

Some of the messages in this ‘disputing resistance’ genre discredited alternative responses to change by discrediting their authors and dismissing their interpretations through reasoned arguments. A message in the newspaper forum responded to Peterson’s message:

*The pathetic request that Peterson posted can only be explained by the following reasons: Peterson is psychologically affected - as he should be - because of the unjust treatment that he endured, and is thus not accountable for his statements, [...or] Peterson is a despicable human being. So just because “his return [to the company] is being considered,” [he] has the nerve of threatening that “anyone who continues to use this space should know that they do so against my wishes and should acknowledge that openly”?! [...] Is Peterson so self-centered that he does not see the daily humiliations to which the employees of this company are subjected [...]? We all have to dig little-by-little a grave for this leadership that we despise [...]. Peterson, out of respect for those who have supported you, please shut up!*

These and the other messages in this ‘disputing resistance’ genre appropriated preceding messages as a threat which needed to be addressed by advocating alternative interpretations and alternative reactions to change.

Messages in the ‘inciting resistance’ genre and the ‘disputing resistance’ genre were also appropriated by employees who posted messages suggesting specific offline actions to resist change. Messages in this ‘organizing resistance’ sought to induce others to participate in specific demonstrations against change. One employee called for:

*Let’s have a zeal strike to protest for the return of Peterson to his job. A zeal strike consists of “working” in a very special way: doing everything we’re told to do and following every procedure to its last detail. Everything has to be approved by a manager. Nobody improvises around any difficulty. No one does more than they are told to do. Everybody asks for managers’ instructions in writing. Everybody only does one task at a time and does not pick up the phone while working on the computer and so on. This type of strike annoys managers, but they can’t do anything about it because we’re not actually “on strike.” 27 OF SEPTEMBER: ZEAL STRIKE AT EPSILON FOR THE IMMEDIATE RETURN OF PETERSON TO EPSILON!*

Another employee replied to this message by suggesting that:

*I read the messages calling for a zeal strike on SEPTEMBER 27. I am going to join in because the Peterson situation needs to be addressed but I have an additional suggestion [...] On the 27 of September let’s do the zeal strike [...] but let’s also all wear a white shirt or any other white piece of clothing to show our support for Peterson.*

These and other messages in the ‘organizing resistance’ genre appropriated messages in the ‘inciting resistance’ and in the ‘disputing resistance’ genre to reinforce those calling for and defending resistance to change and to weaken those suggesting compliance with change. The lack of any message suggesting actions of compliance suggests that these messages weakened the role of the newspaper forum as a place to debate reactions to change. This also reinforced the role of the newspaper forum as a place to escalate from posting reports and spreading rumors about change into a place for organizing offline resistance to change.

The zeal strike and other offline acts of resistance were followed by messages in the ‘validating resistance’ genre. These messages that reported on offline acts of resistance and used them to advocate further resistance, online and offline. After the zeal strike, somebody posted:

*We must continue to demand Peterson’s return. Hundreds of us came to work yesterday wearing white to show our support toward Peterson! Let’s continue to show this support by posting more blank messages in [the company forum] like we did before. Peterson deserves it!*

This and other messages in the ‘validating resistance’ genre were similar to messages in the ‘organizing resistance’ genre because they advocated specific reactions to change. However, instead of drawing upon managers’ actions to advocate resistance to change, they drew upon the success of employees’ resistance to do so. Thus doing, these messages had the contradictory effect of reinforcing the role

of offline actions over the role of online discussions over change while, at the same time, reinforcing the role of messages in the newspaper forum as a medium to motivate offline interaction.

## **4 The appropriative model of advocacy through communication technologies**

My research at Epsilon suggests an appropriative process of advocacy. Appropriative advocacy contrasts with the argumentative process of advocacy that applies research on frame disputes to research on communication technology.

Appropriate advocacy stipulates that persuasive arguments do not ensure that others will share people's reactions to change. People can only impose their reactions to change by participating throughout the whole sequence of appropriations that link interpretations of change to responses to change. Otherwise, people risk seeing their arguments used for different, even opposite ends. Appropriative advocacy includes the four operations described next.

### **4.1 The operations of appropriative advocacy**

#### **4.1.1 Transposing**

Transposing is defined as transferring (moving) to a different place or context. In computer-mediated conversations about change, it consists of reframing interpretations in conversations and announcements in a different communication medium.

Transposition moderates the effect of communication technologies on change. Transposition specifies the power that each technology has to affect change. When people transpose messages from one medium to another, they are choosing some communication technologies over the rest for advocating their own interpretations and reactions to change. When they do so, people demote some technologies into sources of events to use for advocacy. They promote other technologies to social contexts where to make sense of change and decide how to best to react to it.

The moderating impact of transposing on the effect of communication technologies on change specifies people's ability to impose their own interpretations of, and reactions to change. Other people may transpose experiences and interpretations into a communication technology which is inaccessible (such as the company and the newspaper's forum were for managers) and even invisible (such as the conversations around the messages that employees printed were to Peterson) to some of those which have a stake in how employees interpret change and react to change. This increases the power of transposing as a process of advocacy. Transposing reduces others' control over the interpretations of what people say and do by moving those interpretations to a medium where others do not participate.

#### **4.1.2 Transforming**

Transforming is defined as making a thorough or dramatic change in the form, appearance, or character of something. In computer-mediated conversations about change, it is the process whereby people use meanings from each other's messages to impose their own interpretations of change. People transform the interpretations that others advocate by using a new communication genre to change the effect of those interpretations on change. This is a cumulative, continuous process. People can also transform the interpretations of change that others advocate by responding to those interpretations with alternative views or alternative reactions to change.

Specified thus, transformation adjudicates among the different effects that communication technologies can have on change.

Transformation affects people's ability to impose their own reactions to change. Others may appropriate people's messages to champion reactions to change which are different and even opposite to those which people advocate. When such appropriations escalate into messages organizing collective reactions to change, people may be unable to recover from the damage that such appropriations cause on



the reactions to change that they want to impose. Specified thus, transformation is a process of advocacy. It allows people to hinder reactions to change that are different from their own.

#### 4.1.3 Transmuting

Transmuting is defined as a change in form, nature or substance. In computer-mediated conversations about change, it is the process that links meanings and actions.

Transmutation can happen when employees turn messages that advocate interpretations of change into online and offline responses to change. These actions are the last step of the continuous (e.g. messages in the 'growing resistance to change' genre system) or discontinuous (e.g. messages in the 'debating resistance to change' genre system) escalation processes of transformation. Conversely, employees can use offline and online responses to change to argue for the need, and to prove the effectiveness of specific actions of resistance.

Transmutation moderates the effect of technology on change by it specifying the responses to change that communication technology generates online and offline.

Transmutation affects people's ability to impose their own reactions to change because as others are persuaded to join in specific responses to change, it may be difficult to persuade them to act differently. This advocative potential of transmutation is strengthened when people also frame others' responses to change into a set of viable coping practices.

Transposing, transforming and transmuting are all instances of a process whereby people appropriate each other's messages to impose their own interpretations of change and their own responses to change. This process can be specified into an appropriative model of advocacy through communication technologies.

Appropriative advocacy contrasts with the argumentative process of advocacy that applies research on frame disputes to research on communication technology (which I developed earlier in the section on the 'second democratizing effect of communication technology').

## 4.2 Advocacy is a sequential process of appropriation

In appropriative advocacy, the effect of each message on change depends on the messages that precede it and of the messages that follow it. There are two related tasks in appropriative advocacy. The first task is to post messages that capture the interpretations in preceding messages to support the interpretation that one wants to advocate. The second task is to ensure that subsequent messages support the reactions to change that one wants to advocate.

People can post messages that strengthen reactions advocated in preceding messages by repeating them to address similar challenges. This increases the effect on change of the communication practices appropriated thus. Repeating preceding messages increases the exposure of organizational processes to the effects of messages that follow the same genre.

People can also post messages that weaken reactions to change by providing alternative interpretations and courses of action. People can contradict preceding interpretations of change. People can appropriate some of the elements in preceding messages to advocate opposite reactions to change. When people do so, they offer employees deciding how to react to change an alternative to the interpretations and courses of actions that others have posted. People may also overtly contradict the arguments of preceding messages. Thus doing, people make preceding interpretations and courses of action into less attractive reactions to change.

More importantly, people can also post messages that modify and improve the effect of people's reactions to change. People can appropriate and recombine some of the elements of preceding messages to create new interpretations of change. People can use the meanings in preceding messages to advocate reactions to change that are different from those advocated by the messages that others have posted. These appropriations both strengthen and weaken elements of preceding interpretations of change. People reproduce the interpretations, courses of action and rhetorical ploys that support the reactions to change that they advocate. At the same time, people discard those elements of preceding messages

that hinder the reactions to change that they advocate by offering alternative interpretations and courses of action.

### **4.3 Appropriative advocacy produces only temporary effects**

When people use communication technology for appropriative advocacy, they specify the effect that each technology has on change by moderating the effect of each other's online messages. The escalating process specified in the 'growing resistance to change' genre system is an instance of such a sequence of appropriations. This genre system turned complaints about change into viable actions against change.

My research shows that it is the communication practices at the end of these sequences of appropriations that have the final say on the effect of communication technologies on change.

When people use communication technologies to enact a sequence of interpretations developed through appropriative advocacy rather than for a pool of meanings developed through collective inquiry, conversations may never resolve neither into a shared set of meanings nor into a collective response to change.

The possibility of the co-existence of divergent meanings and practices as people appropriate each other's reactions to change can lead to different and even contradictory effects on organizational change. Moreover, the power of subsequent messages to change the effects of the messages that precede them means that whatever effect that communication technologies have on change only lasts until the interpretations and actions of others are successfully appropriated for different ends.

## **5 A third democratizing effect of communication technologies**

Research on the role of communication technologies on change argues that these technologies have a democratizing effect because they allow every member of an organization to talk in, and listen to conversations about change, just like democracies allow every citizen to have a voice in public affairs (Ford and Ford 1995). In this research, democracy stands for participation. Research on framing contests suggests a second democratic effect (e.g. Chong and Druckman 2007). Communication technologies allow employees to choose alternative responses to change, just like democracies allow people to choose among alternative policies. In this research, democracy also stands for choice.

My research at Epsilon suggests a third democratic effect on change. My research shows that communication technology allows employees to modify the effects of others' reactions to change. Employees can do so by appropriating the messages that others have posted to advocate their own responses to change. This is a process similar to the adversarial advocacy in frame disputes. The difference is that this new process draws upon, rather than simply dismisses the ideas and actions that others have advocated. The contest among ideas is sequential rather than simultaneous.

This is a new democratic effect of communication technologies. Online conversations about change diverge, rather than converge. There is no definite vote on different interpretations and courses of action. Instead, there is a chain of actions and counter-actions which may never resolve into a shared response to change. Specified thus, the democratic effect of communication technology can also stand for the sequential process of whereas parties replace one another in power leading to sequential changes in policy.

This third democratic effect of communication technologies on change offers a new way to think about the relationship among people's IT practices. Ultimately, this third democratic effect offers a new perspective about how IT affects organizations.

Transposition, transformation, transmutation and transplantation are all instances of a deliberate process of moderation. This is a process of moderation whereby people attempt to change the effect of each other's use of IT on THEIR organization. This process of moderation shows that the effect of IT in organizations is an outcome of the sequence of people's different IT practices. It contrasts with (but

complements) the view that the effect of technology on organizations is an outcome of the concurrent enactment of collective IT practices (cf. Jones and Karsten 2008).

In the concurrent model, people enact IT practices by applying IT to address their conditions for action (Nan 2011). In the sequential model that I specified, people enact IT practices that apply the IT practices of others to address their conditions for action.

Specified thus, employees moderate the effect of each other's IT practices by improvising IT practices that appropriate the IT practices of others to their own ends. The goal is not to enact alternative IT practices. Instead, the goal is to enact IT practices that strengthen, weaken or modify the effects of the IT practices of others. The practices of others become a resource, rather than an obstacle in employees' attempts to shape the effect of IT on their organization.

Specified thus, the effect of IT in organizations is an outcome of people's attempts to cope with the IT practices of others that hinder, and to take advantage of the IT practices of others that help their own interests. As people do so, they specify the role, the power and the consequences of each technology, by opening possibilities which materialize into consequences as others' use people's own IT practices to do their work.

This sequential model provides a theoretical framework to collect data and to build theories that add the role of differences to the role of similarities among people's IT practices on the effects of IT on organizations.

This sequential model applied to communication technology helps managers understand how they use this type of technology to affect employees' reactions to change. My research at Epsilon suggests that managers can affect employees' reactions to change by appropriating employees' interpretations of change. Managers can use the meanings in the messages that employees post online as a resource to frame change as it is being implemented. My research also warns managers that employees' interpretations of change are only temporary. They can change quickly as individual employees appropriate the messages that others have posted online to successfully advocate new interpretations of, and new responses to change. This, however, also means that it may be possible for managers to revoke negative interpretations of change.

More broadly, the sequential model highlights that managers need to participate in the implementation of IT throughout the whole process of appropriation. I show that individual people can appropriate the practices of others to trigger quick, but significant changes in the effect of IT on organizations.

Overall, I provide a view of IT appropriation which suggests that rather than a slow sequence of metamorphoses that emerge as individual employees respond to their situated challenges, IT appropriation leads to transitory transformations that people attempt to impose upon one another by taking advantage of each other's use of IT.

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