1 Introduction

1. "PowerPoint" and Powerpoint

In April 2010, the journalist Elisabeth Bumiller (2010) published an article in *The New York Times*, entitled "We Have Met the Enemy and He Is PowerPoint."

> Like an insurgency, PowerPoint has crept into the daily lives of military commanders and reached the level of near obsession. The amount of time expended on PowerPoint, the Microsoft presentation program of computer-generated charts, graphs and bullet points, has made it a running joke in the Pentagon and in Iraq and Afghanistan. "PowerPoint makes us stupid.…" Commanders say that behind all the PowerPoint jokes are serious concerns that the program stifles discussion, critical thinking and thoughtful decision-making. Not least, it ties up junior officers – referred to as PowerPoint Rangers – in the daily preparation of slides, be it for a Joint Staff meeting in Washington or for a platoon leader's pre-mission combat briefing in a remote pocket of Afghanistan. … Despite such tales, "death by PowerPoint," the phrase used to describe the numbing sensation that accompanies a 30-slide briefing, seems here to stay. Defense Secretary Robert M. Gates reviews printed-out PowerPoint slides at his morning staff meeting, although he insists on getting them the night before so he can read ahead and cut back the briefing time. … President Obama was shown PowerPoint slides, mostly maps and charts, in the White House Situation Room during the Afghan strategy review last fall.

The article makes a series of general claims and assumptions that extend beyond the specific military context on which it is focusing. Because they reflect the general knowledge of PowerPoint that forms the background of this study, let me highlight some of these general claims and assumptions. First of all, the article clearly assumes that everyone knows "PowerPoint"

and that it does not require any definition or clarification. It seems as if there is a shared general knowledge of what PowerPoint is (although this is quite equivocal). The shared knowledge is related to the major explicit observation: PowerPoint is ubiquitous, at least in the U.S. Army. The general knowledge of PowerPoint seems to be due to its incredibly wide distribution, which extends, in this article, not only to any branch of the army but even to the president. Third, and also explicitly, PowerPoint is evaluated morally – and this evaluation is strikingly poor, as it is blamed for shortcomings, it is deemed "notorious," and it is even called "the devil."

The ubiquity of PowerPoint assumed in the article is, indeed, one of the starting points of this study. When I first considered doing research on PowerPoint around 2002, I was overwhelmed by the speed with which the frequency of PowerPoint use had increased in seminars, in lectures, and at conferences, well before most professors, students, and young teaching personnel would take in their computers and demand that projectors (which until then had been quite rare) be provided. Since then, pupils in schools and even in kindergarten use PowerPoint, and even I have acquired some competence at doing reasonable presentations. As PowerPoint becomes a routine for more and more users and recipients, this routine becomes an issue for the sociologist, who has to ask how and why something became so taken for granted. Why is PowerPoint everywhere?

This question is even more urgent in the face of public debates on this topic that occasionally tend toward strong negative judgments. Quite often the fear is voiced that PowerPoint is responsible for wasting life time and working time or for making us stupid. And, as in the article, the diffusion of PowerPoint is often described as a contamination of hitherto "clean" communication. What used to be rational discourse now becomes distorted or, at least, superficial. As moral judgments are weapons in the social machinery, they are part of the subject matter of sociology. (In Switzerland, the issue even became political when an "Anti PowerPoint Party" was founded by Matthias Poehm, who also initiated an international Anti-PowerPoint movement.) As a sociologist, therefore, I want to ask how and why such a technology as PowerPoint, which seems so "innocent," is the target of so much moral condemnation.

This question is, as we shall see, part of a much larger issue that is linked to the phenomenon itself. Indeed, before we ask the question of how PowerPoint became so taken for granted and why it is perceived as morally contaminated, we have, first, to question what it is we are talking about. What is it that everyone seems to know about? Is what we talk about, the discourse, the same as what we do, the performance of action? This

book, however, is not focused only on the knowledge and discourse about PowerPoint and its moral condemnation. Nor is it about the technology of PowerPoint. It is, instead, focused on the way PowerPoint has affected society. PowerPoint is a social phenomenon, and as society is constructed by meaningful social actions, it is also a cultural phenomenon. The book is, therefore, about the ways PowerPoint enters into our many meaningful social actions, both as producers and as recipients of PowerPoint slides and presentations. Therefore the analysis of these meaningful social actions using PowerPoint forms the most pertinent empirical data.

The sociological perspective on the use of PowerPoint in what I call, more precisely, communicative action throws a particular light on PowerPoint that is often ignored. This also becomes apparent in the article quoted. It not only presupposes "PowerPoint" as general knowledge, it also mixes two meanings of the word. On the one hand, PowerPoint refers to the presentation software, which is called "PowerPoint." At this stage one should note that, to the degree that the presentation software owned by Microsoft, "PowerPoint," was diffused throughout society, the trademark of its presentation software also became tantamount to a reference to presentations software in general. People use the word "PowerPoint" even if the presentations they refer to have been made by means of other software, such as Adobe Acrobat, Apple Keynote, Apple Works, Star Point, or Smart Suite, and even many researchers who study "PowerPoint" software and slides do not check whether the slides they analyze are in fact made by means of "PowerPoint." Because "PowerPoint" has become synonymous with all computer supported presentations (in the most diverse languages), throughout the book I will use "powerpoint" as a category of general knowledge referring to any presentation software, and "PowerPoint" only if I am referring specifically to Microsoft's software.

The preference for this different spelling is also due to the second aspect of the meaning of powerpoint, which is assumed to be so much part of the general knowledge. Whereas "PowerPoint" refers to the software including the "slides" produced by it and saved in their format (.ppt, .pptx, or other formats) as well as their transformations into "objects" that can be "passed on" (as the article says, as paper printouts, e-mail attachments, or Internet pages), "powerpoint," on the other hand, refers to something else: the projection of the slides by means of computer software while talking to a live audience in situ. In this second sense, powerpoint is not restricted to an "object" but refers to what I shall call an "event": a communicative action by a presenter, attended by an audience, involving technologies, such as a computer screen, a projector, or a slide, as well as activities performed

in relation to both audiences and technologies. This aspect of powerpoint shall be addressed by the notion of "presentation as event." As opposed to many studies on "PowerPoint," this study focuses on the "powerpoint presentation as event" because it includes the software, the technology, and the slides.

The focus on powerpoint as an event means that I am not particularly concerned with studying the software or technology, and all its intricacies, and this is therefore not a study of a technology, of the cognition required for its use, or of its "social uses." As valuable as, for example, science and technology studies are for various parts of this analysis, they are not used here to focus on the technology. Undoubtedly, when looking at powerpoint presentations, technology plays an important role. It seems to me, however, utterly simplistic to equate this "role" with that of an isolated actor and to describe "powerpoint" as if it performed an "action."[1] Although technology "undeniably has effects in the world," these effects are always and immediately part of a meaningful social context. Therefore Pinch and Bijker (1987) are quite right to assume that the meaning of technology needs to be interpreted. I would, however, extend this argument even further: In addition to being interpreted, the "effects" of technology are social inasmuch as they are embedded into meaningful social action. Inasmuch as these actions are at least expressed by these effects, I refer to them as communicative actions. In fact, it will be one of the major empirical tasks to show how the "effect" of technology is tuned into other aspects of communicative action in the case of powerpoint presentations. Because of this embeddedness in communicative action, powerpoint will not be studied as a technology but rather as a form of communication, that is, a communicative genre.

2. Communication Culture

The distinction between "PowerPoint" and "powerpoint" has already been proposed earlier in the chapter and runs throughout the book. There are various other conceptual distinctions based on empirical findings that must first be introduced here to prevent misunderstandings as they so often occur in the literature on powerpoint. One of these is the focus on powerpoint as a form of real-life communication in presentations.

Although sociology, the other social sciences, and the humanities have devoted much energy to the analysis of "texts," "discourse," and "communication," attempting to scrutinize events such as the powerpoint presentation is still quite uncommon. Almost all studies on powerpoint and presentations in general seem to assume that the empirical process of

communication can be considered like a black box that can be deduced from an analysis of its products, that is, the slides or the participants' "cognition." In opposition to this view, I want to approach powerpoint presentations as a form of communicative action, that is, as communicative genre. That is to say that I want to look at powerpoint as something that is done by embodied actors in time and supported by objects and technologies. Much of the book is devoted to this task, for in observing and analyzing powerpoint presentations as they are bodily and situationally performed in space, time, and social setting, the study pursues the basic goal of any interpretive social science. This goal consists of trying to understand the meaning of social action, which in our context means to understand what a powerpoint presentation is in the course of the social actions performed. The detailed analysis of communicative actions or, as one might phrase it, "doing powerpoint presentations," appears to some to be a futile description of no explanatory value for sociology or of no relevance to "society." However, by using the notion of communicative genre and culture, I want to correct this view, for whatever "powerpoint" may mean to whatever expert (software, information design, rhetorical form, etc.), it is the factual way that people are really using powerpoint that is at stake here. As an empirical analysis of their real communicative action allows for an understanding by the researcher, it warrants the claims of catching the meaning of powerpoint for the actors. Finally, their communicative form facilitates the chance for giving evidence for both, the understanding of the action as well as its meaning for the actors.

The task of an interpretive social science thus consists in identifying the actors' meanings (realized in communicative action). These "first order constructs" (Schutz 1962) are the only valid and legitimate reason for sociology as a science of social reality.[2] Basing the analysis on data representing how powerpoint is "really used" in communicative action – at least "real" in terms of the everyday life we share, as Schutz and Luckmann (1989) call it – warrants social scientific analysis of powerpoint.[3] In doing so it looks beyond preconceptions, at normative expectations, legitimations, or only aspects of the phenomenon.

The focus on the particulars of communicative action is intended to identify empirically the ways that social reality is constructed by way of communicative action, that is, how powerpoint presentations are constructed by the concerted activities of the participants. The analysis does not end with the identification of these methods of "doing powerpoint presentations" but tries to identify general features of these presentations in terms of communicative genre. The notion of communicative genre indicates

forms of actions produced and expectations held by actors. Moreover, it constitutes a bridge between the communicative actions in the situation of presentations and the culture of a society constructed by these actions. In this way, the analysis of communicative actions and communicative genres not only serves a descriptive goal, but helps to illuminate how powerpoint presentations contribute to the social construction of society, and how, as a result of their specific forms, they contribute to the social construction of certain aspects of society. (Powerpoint draws in particular on those aspects of society that are referred to as the "information" and "knowledge society," as we shall see.) The analysis of powerpoint presentations as a communicative genre will, therefore, be the basis for the explanation of their ubiquitous role in contemporary society. By explanation I do not mean to identify causal conditions but the ways that those aspects of society that can be described as structures can be traced back to aspects of (communicative) actions. In the empirical sections I try to specify those aspects from which I draw in the concluding sections.

As the meaningful aspects of society often ignored by the focus on structures have been referred to as culture, communicative culture is what is constituted by communicative action (Knoblauch 1995). Correspondingly, as culture is made up of shared meanings, shared objectivations of meanings, and shared patterns of action, communicative culture refers to the communicative action in which objectivated meanings are enacted socially. It is by way of communicative action that we fill our time with others or are oriented to others, even when we are alone. Social life consists of communication, and it is through communicative action that we bestow meaning on it and experience it as meaningful. Communicative action, thus, links social actions via their embodied performance with objectivations, such as objects, signs, and technologies. Communicative culture is constituted by the forms of communicative action, their patterns, and communicative genres. By "communicative culture" I refer to the ways in which we produce and practice communication, in which we talk to friends, to relatives, and to foreigners, and the ways in which we speak, write, and read. Communicative culture, therefore, does not merely consist of signs, technologies, and objects. Thus, powerpoint slides, for example, a medium consisting of signs (letters, diagrams, etc.), technologies (software, electronics, etc.), and objects (monitors, printouts, etc.), do not "just" make sense but are often rendered meaningful in the presentation as event It is the enactment or performance of all these objects, signs, and technologies that renders social life meaningful in action. We know well that the ways we communicate

depend on what objects we use for communication: reading books is still a different form of action from reading an Internet homepage, participating in a conversation is a different form of action from talking via a mobile phone, and watching movies is something different from listening to a joke told by a friend. As varied as the different forms of action are, we usually depend on certain forms of action of "genres" guiding our expectations, our courses of action, and our interactive coordination. Communicative genres form the core of our communicative culture acting as the meaningful cosmos constructed by our communicative actions and the things to which they relate.

There is no doubt that powerpoint figures in quite a variety of communicative actions. When tinkering about with a presentation in private, possibly making notes on a piece of paper; when designing single slides on a computer or discussing the order of slides with colleagues, powerpoint forms part of our communicative action. Although they are of some relevance to the presentation of powerpoint, we only refer to them at a few points in this study (for example, when discussing the "rhetoric" of powerpoint as communicative action or the preparatory phase of presentations). As the title makes clear, the powerpoint presentation is the focus of this study, and my theses are mainly related to this phenomenon. My first claim is, therefore, that powerpoint presentations are a communicative genre. This means that they exhibit a certain common form that allows us to recognize and reproduce them. Powerpoint presentation is a temporally and spatially performed communicative genre constituted by this common form of communicative actions. It is this communicative genre to which we orient ourselves when preparing slides on the computer, when giving the presentation, or when watching it. Consequently, this study analyzes powerpoint presentation as a communicative genre built on action, actors, and objects. By detailing the particular and specific features of powerpoint presentations as communicative genre, I try to explain why and to what degree powerpoint has become a ubiquitous and indispensable part of our society and how it affects modern society in general and its different institutional branches – not only the military but also science, business, and other societal subsystems.

Both goals are intrinsically connected since, as we shall see, the immense success of powerpoint in the last two decades is due to features of the communicative genre itself. Or, to put it in other words, the forms of powerpoint presentations as a communicative genre are the reasons for their success. It is not merely by means of the diffusion of technology that powerpoint affects society; nor is it by virtue of organizational transformations that

powerpoint became so ubiquitous. Powerpoint became inserted into society as a communicative form, that is, powerpoint presentations, and it is through this form that society – and its communicative culture – was transformed into a "knowledge society" or "information society."

The reference to these two aspects of contemporary society (and societal legitimations) is related to one of the major findings of the analysis: that as a communicative genre, powerpoint presentations are characterized by a triadic structure. This triadic structure consists of objects and technologies, human actors as presenters, and live audiences, in which, as I want to show, these three elements are synchronized, coordinated, and orchestrated in the social situation. Although the presentation is defined by its "liveness," it is in many senses a "hybrid" event depending on prior "organization," preparatory actions, and postprocessing, as well as on objects and technologies. In this sense, powerpoint presentation is a communicative genre that combines technologically mediated communication (i.e., "presentation as document") and local face-to-face communication (i.e., "presentation as event"). Powerpoint is most essentially a mediated genre since both aspects of the genre are mediating and mediated at the same time. The face-to-face presentation is mediated by technologies and institutionalized organizations that enter as mediating structures, that is, as objects, technologies, and social, temporal and spatial orders into the presentation. On the other hand, powerpoint builds on large technological infrastructures, networks, and organizations with more or less standardized codes and a set of available objects such as computers, projectors, and software programs. While all these elements figure in what has come to be called "information," these information technologies and organizations are mediated in that they take the form of social events in which something is communicated. Powerpoint presentations are particularly effective in objectivating these "communicative things" through a range of methods, including visual representations, text, speech, gestures, or technologies. As these "things" are what presentations are about, they are characterized as being the "knowledge" presented, the "knowledge" of presenters, and the knowledge to be gained by the audiences. As knowledge is whatever is communicated by an actor, in powerpoint presentations, "knowledge" is asserted as knowledge by someone, which is simultaneously objectified by information systems available and accessible, in principle, to everyone. Like things, they seem to persist in time and can be referred to and claimed, while they always remain dependent on the situation of communication.

While the situative aspect of presentations shall be called the "presentation as event," "presentation as document" refers to the "information" that can be stored on digital devices and communicated by means of information technologies. Because this communicative genre consists of the situative "exchange of knowledge" or "cognition," the description of the knowledge society constitutes another background for its analysis. From this perspective, the presentation as event is a process in which knowledge is seen to be exchanged between people and organizations. Powerpoint presentation links both: it uses the digital format within the "immediacy" of the situation of face-to-face interaction (which is, thence, simultaneously mediated), and it is a genre that "stores" the information of such presentations and their presenters digitally and allows them to be transferred by means of these technical communication media.

Although powerpoint presentations can build on various predecessors, the merging if the various elements into a communicative genre may be considered as a communicative innovation. Mead and Byers (1968) have coined the notion of "communicative innovation" with respect to the "small conference," a scientific equivalent of a meeting that began in the 1960s. Like powerpoint presentations, small conferences are a type of communicative event, which has its own patterns, forms, and courses of action (analyzed later in detail). They, thus, constitute not only a distinct element in the communicative culture but one that is disseminated with incredible speed into society on an almost global scale. In order to understand and explain this societal relevance, we need to refer to an extensive wider debate that has a bearing on the relevance of this new genre.

3. Information and Knowledge Society

The triadic structure of powerpoint as a communicative genre thus refers to and relies on large scale social developments that have been debated widely in sociology as well as in other social sciences: while the notion of information has come to be associated with the informatization of society or "information society," "knowledge" has been considered constitutive of the "knowledge economy" and even the "knowledge society." As powerpoint presentations link information and knowledge, the diffusion of powerpoint presentations can be seen as indicative of a knowledge society and an information society, their differences, and their close connection. Because of their relevance to the structure of powerpoint and the explanation of its success, I want to sketch briefly what is meant by "information

society" and "knowledge society." (The reference to a knowledge society in the title of the book is an abbreviation for "information and knowledge society.")

Before doing so, I wish to clarify that these two categories for macrosocietal developments of the last decades should not be considered as the "reasons," "causes," or even "background" factors for the explanation of powerpoint. Instead of being related causally or intentionally to powerpoint, the "knowledge society" and the "information society" should be seen as a result of the very processes of the social construction of reality that yielded the rise of powerpoint. Or, in other words, powerpoint is one product of the social coconstruction of information and knowledge societies, and therefore constitutes a paradigmatic example for its analysis.

The reference to the notion of social construction (Berger and Luckmann 1966) indicates that neither a "knowledge society" nor an "information society" is considered as assured fact or mere ontological reality. Instead, they are more or less reflected descriptions of societies mirrored in and sometimes even initiated by theories about the "information society" and "knowledge society." These theories have been important parts of discourses legitimating the factual social construction of technological infrastructures, public policies, and organization. Governments, cities, and institutions of the most varied kinds (including, of course, technology companies) have for decades invested billions of dollars in order to produce what they considered to be the various aspects of the "information society" and, somewhat later, of the "knowledge society."

As we shall see, the legitimations of both characterizations of society are quite different; whereas the former is built on a technodeterminism, the latter highlights the role of the human actor. As different as the two legitimations are, both have affected major societal actors and have been turned into self-fulfilling prophecies. Indeed, as Hornidge (2007) has shown, the discourse about knowledge society supersedes the discourse about the information society, as aspects of the latter often are implied in the discourses of the former. In this book I cannot reconstruct the whole process of the social construction of the information and knowledge society (for one attempt cf. Knoblauch 2005, chapter IIIB). However, since I want to focus this study on the empirical analysis of a phenomenon that integrates both information technology and knowledge, I shall restrict myself here to a short sketch of the theories of knowledge society and of information society, which allow one to highlight the features relevant to and coproduced by powerpoint.