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## Developing the “Control Imaginary”: *TIME* Magazine’s Symbolic Construction of Digital Technologies

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This article discusses the shifting representations of control over and via ICTs on the cover of *TIME* magazine (1950–2017). We focus on the subject positions and forms of agency the magazine ascribes to different social actors and on the solutions advanced for remaining in control of technological change. Informed by discourse analysis methodology, our analysis of the corpus ( $N = 81$  covers) identifies four central themes: the configuration of the relationship between humanity and technology; the construction of youth as both potentially powerful and vulnerable “others”; the identification of technocapitalists and creative visionaries as the ultimately powerful drivers of innovation and progress; and the disruptive effects of virtuality. Through these discourses, the magazine legitimizes an entrepreneurial approach to ICTs as the means to retain agency against the “inevitable” technological development, while also positioning the technocapitalist elite as the drivers of our common future.

*Keywords: control, magazines, ICTs, discourse, symbolic construction*

This article discusses the shifting representations of ICTs on the cover of *TIME* magazine from 1950 to 2017. These representations speak to the wider discursive normalization of the “control imaginary”—a shared horizon of meanings of ICTs as a means of control over one’s life and future. *TIME*’s coverage of ICTs articulates for its readers what it means to live and be successful in a world marked by digital technologies. In turn, these articulations craft a vision of individual agency as enabled by acceptance and integration of technology in everyday life. This constructs the individual as responsible for his or her own adaptation to an otherwise inevitable technological progress, advancing the myth that agency will be available only to those actively riding the rapid wave of technological change.

ICTs are deeply implicated in the engineering of the social body, seamlessly merging the steering of the machine to that of human behavior (Beniger, 1986). Reclaiming the right and the opportunity to question their development in terms of the (new) risks they create, as well as in terms of the forms (and moral ends) of the control they legitimize, remains an important and urgent endeavor.

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This article contributes to this endeavor by foregrounding the representation of ICTs promoted by one of the landmark cultural producers, *TIME* magazine. A historical presence in the U.S. landscape, *TIME* has successfully developed a global reach and influence. Whereas newspapers focus on the quotidian and the factual, Peterson argued that magazines are a “medium of instruction and interpretation for the leisurely, critical reader” (cited in Johnson, 2007, p. 525). In that sense, magazines reflect not only social reality but also produce it by introducing norms and values, creating cultural trends, and eliciting some type of action from their audiences (Abrahamson, 2007; Iqani, 2012; Jenkins & Tandoc, 2017). *TIME*’s covers—which constitute the empirical data for this article—have been described as an “index for larger issues in U.S. society” (Cantrell-Rosas-Moreno, Harp, & Bachmann, 2013, p. 3). Covers remain the “most powerful visual and verbal tools a magazine can use” (Spiker, 2015, p. 386), encapsulating a magazine’s editorial policy and constructing the magazine as a brand (Iqani, 2012). In fact, *TIME* magazine has been credited for inventing the cover story, usually in the form of “an individual as metaphor for what was or should be happening” (Baughman, 2004, para. 15).

This study’s focus on the control imaginary makes a contribution to a hardly tackled problematic in the study of new media and society (for an exception, see Schulte, 2013). Most of the previous studies have suggested that media coverage of ICTs (primarily personal computers and subsequently the Internet) often adopts a technologically deterministic lens, anthropomorphizing technology and presenting it as “magical” (Ricci, 2010; Stahl, 1995; Wyatt, 2004). Furthermore, magazines such as *TIME* have tied technological development to the idea of a competitive advantage on the free market (Wyatt, 2004). Yet these studies do not show how such representations of ICTs craft subject positions for readers, participating in the wider “culture of control” of modernization and progress (Levin, 2000). These subject positions are important, for media coverage often makes technologies meaningful and inserts them into everyday life as objects of desire (Kitalong, 2000; Schulte, 2013). Mapping and deconstructing these representations can reveal not only how we are invited to understand technology but also how we are invited to imagine its future and our role in it (Wyatt, 2004). This article focuses on the forms of agency the magazine legitimizes for technology, economic actors, and individuals, as well as on the solutions it proposes for coping with the dialectic of risk and control introduced by these technologies. We find that ICTs are constructed as simultaneously disruptive and (increasingly) routine dimensions of daily life, and as tools both of liberation and domination. We conclude by reflecting on the significance of this paradoxical aspect of digital technologies for the rearticulation of agency and social order in a time of incessant digitalization.

### **Control, ICTs, and Media Representations**

Our approach draws from three theoretical sources: the social imaginary, governmentality, and the control revolution.

#### ***From the Social Imaginary to Power as Control***

The social imaginary remains a somewhat elusive analytical notion. Mapping an imaginary’s contents or origins, tracing its boundaries, and identifying its manifestations in actual social interactions remains almost impossible. Taylor (2002) defines the imaginary as a shared background for understanding (including norms and expectations of social life) that “makes possible common practices and a widely shared

sense of legitimacy" (p. 106). The control imaginary refers here to the creation of intersubjective understandings of ICTs as a means of control over one's life and future, but also over the existence and future of the social body as a whole.

Importantly, social imaginaries both reflect existing forms of power and participate in their legitimation and transformation. Governmentality (Foucault, 2003) offers a theoretical lens for understanding these modern forms of power. In modernity, the state had taken up the role of managing the population, inserting individuals into a given social order. Government thus became

the way in which the conduct of individuals and groups may be directed—the government of children, of souls, of communities, of the sick. . . . To govern, in this sense, is to control the possible field of action of others. (Foucault, 1982, p. 790)

To a large extent, this was accomplished by generating specific forms of knowledge of the social body and using this knowledge to further develop public policies geared toward molding individuals.

Mass media participate in this form of power by providing and amplifying interpretations of the world around us. Magazines, in particular, claim to offer their readers practical and useful strategies for living a "good life." By setting trends and spreading (new) norms and values, such strategies are also an indirect form of steering the social body (Abrahamson, 2007; Evans, Rutberg, Sather, & Turner, 1991; Iqani, 2012; Winship, 1992). They recommend technologies of the self (Foucault, 1988) or techniques through which individuals turn themselves into "good" members of society. Technologies of the self draw from dominant ways of thinking, which provide end goals, moral frameworks, and specific forms of action on the self through which the individual is asked to conceptualize his or her own existence and relation to social order.

Magazines also participate in the construction and maintenance of a culture of self-care and self-management through consumption, addressing the individual in the context of his or her everyday life. They promise that consumption—of the magazine itself, as well as of the products or topics it addresses—will appease contemporary existential anxieties and empower the individual (Iqani, 2012; Winship, 1992). In this way, the steering of the social body filters down to the individual level. This makes magazines suitable for capturing the broad trends through which this steering takes place (Frau-Megis, 2000). In our study, we read *TIME*'s representations of ICTs as recommending specific technologies of the self for living a "good" life in the digital society.

### ***Control and ICTs***

The relationship between ICTs and control has been longstanding in the Western world (Levin, 2000). Not only are media representations involved in the (re)production of the control imaginary, but their object (i.e., ICTs) has complex connotations evoking desires and fears associated with mastery of the world. More than any other technology, computers have been conceptualized as artificial intelligence and "thinking

machines,<sup>1</sup> evoking anxieties caused by the “belief that somehow technology has gotten out of control and follows its own course, independent of human direction” (Winner, 1978, p. 13).

Importantly, control undergoes several semantic transformations, from verification and optimization to mastery over something/someone. The Enlightenment legitimized reason as the enabler of human control over nature and of other human beings. From the 19th century onward, machines and industrialization started to be conceptualized as the new expressions of reason and the new forms of control over the social body (Levin, 2000). Yet industrialization also induced a crisis of control in the capitalist economic cycle, as the mechanization of production and distribution created larger, complex technosocial systems (such as the railroad system), where humans and machines were increasingly interdependent. It is precisely this interdependence that led to the control crisis that cybernetics and the information theories of the 1950s and 1960s were trying to solve (Beniger, 1986; Kline, 2006). Computers in particular were touted as a solution that would involve a “man-computer symbiosis, in which machines would aid people in real-time work of thinking” (Mindell, 2002, p. 4). With the marriage of computers (as decision-making systems) and of communication (as the transmission of information to and from the surrounding environment), control of technosocial systems was placed in the hands of engineers. By going back to the 1950s and reading the representations of ICTs in a longitudinal manner, our study captures some of the contemporary semantic changes in the idea of control via technology.

### **Media Representations**

Mass media have traditionally been a major contributor to the development of imaginaries of (technological) control (Stahl, 1995). We use the plural of the term to signal that different imaginaries can coexist, and their contents can change with time.

Scholarship on media representations of ICTs confirms a polarization between utopian and dystopian imaginaries of these technologies, often resting on technological deterministic arguments (Carey & Burkell, 2007). Overall, however, media seem to produce a positive image of these technologies as revolutionary drivers of social change (e.g., Bulfin, Pangrazio, & Selwyn, 2014; Cukier, Ngwenyama, Bauer, & Middleton, 2009; Frau-Meigs, 2000; Kelly, 2009; Rössler, 2001; Wyatt, 2004).

In contrast, the coverage of politically sensitive practices such as security (e.g., hacking) or of topics traditionally associated with moral panics (e.g., children and teenagers) portrays technology as dangerous (Alper, 2014; Stern & Odland, 2017). Yet, even in such cases, the technologically deterministic lens of the stories reinforces technology as “magnificent” and “marvelous” (Ricci, 2010; Stahl, 1999). This is a form of technological mysticism (Davis, 1998; Stahl, 1995) furthered by advertising and popular culture offering visions of ICTs as “unprecedented, seemingly magical opportunities” (Kitalong, 2000, p. 290).

Although mass media are neither a homogeneous institution nor the only contributors to social imaginaries, magazines are of particular interest as texts that not only reflect but also actively transform these

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<sup>1</sup> “The Thinking Machine” was the title of a 1961 CBS episode of the *Tomorrow* series focused on the presentation of computers and artificial intelligence (CBS, 1961).

imaginaries (Abrahamson, 2007; Duffy, 2013; Evans et al., 1991; Iqani, 2012). Women's magazines, for example, claim to be "for 'active doers,'" resorting to a utilitarian frame to provide "useful and practical knowledge" (Winship, 1992, p. 95) to their readers. Yet, the provision of such knowledge also prompts readers to constantly monitor and improve themselves by aspiring toward an ideal of the "good life." As such, the magazines "provoke a regime of self-examination and consumption-oriented subjectivity" (Iqani, 2012, p. 140) consistent with the Foucauldian description of the operation of power via technologies of the self.

*TIME* magazine has historically positioned itself as entertaining, yet serious interpreter of current events. Technology has also been an ongoing locus of interest: As *TIME*'s managing editor, Walter Isaacson, explained, the magazine had always been interested in the "explosion of scientific and technological knowledge that unveiled the mysteries of the universe and helped secure triumph of freedom by unleashing the power of free minds and free markets" (cited in Grainge, 2002, pp. 202–203). *TIME* did not promise its readers tips and recipes for improving their appearance or their habits, but for understanding contemporary events and their social and cultural contexts (Baughman, 2004, para. 15). This form of self-improvement suited the magazine's target audience: the younger and more educated middle class (Baughman, 2004, para. 3), who tend to regard knowledge as power. In particular, the magazine has favored role models and guidelines premised on the idea of "great men making history" and on enthusiastic support for capitalism (Grainge, 2002).

Any examination of media texts needs to acknowledge the gap between production and consumption. Studying media texts can say something about their intended meaning, but not much about their appropriation by audiences. Thus, we position our analysis as an effort to capture and map the shifts in the representation of ICTs since the 1950s with the understanding that our interpretations are specific. Regardless of how specific representations could be interpreted, they have entered the larger "control imaginary," and, as such, we can recognize their intended chain of signification.

### Methodology

Our research design consists of a discourse analysis of a corpus of 81 *TIME* covers<sup>2</sup> published in North America between 1950 and 2017. Since its launch in 1923, the magazine has gained an "iconic global status and recognition" (Meisner & Takahashi, 2013, p. 256) and, at least in the U.S., has become a go-to source for keeping abreast of current social issues (Cantrell-Rosas-Moreno et al., 2013). The magazine has maintained its focus on the educated upper middle class, with the average income of its global reader around \$490K ("*TIME* Everywhere," 2018). *TIME*'s present print circulation is around 3 million copies (Alliance for Audited Media, 2018) and the magazine has secured a large online readership (Matsa, 2013).

Because covers have the dual function of persuading readers to purchase while also building the magazine's brand identity, they tend to be carefully crafted and to communicate the essence of the magazine's position on the issue (Popp & Mendelsson, 2010; Spiker, 2015). We manually selected the covers by using *TIME*'s online vault (<https://time.com/vault/>) and adopted a broad definition of ICTs that included hardware

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<sup>2</sup> A complete list of the covers in the corpus can be accessed at <https://surfdrive.surf.nl/files/index.php/s/4ZnudhmbuOzKqRo>

(e.g., computers), software and applications (e.g., MS Office, Twitter), networks (e.g., the World Wide Web), associated devices (e.g., CD-ROMs), and associated concepts and terminology (e.g., sharing economy).

We subjected the covers to a two-stage analysis. First, we recorded the visual and textual elements of each cover, undertaking a semiotic-informed analysis of the signification process (by recording connotations, intertextual references, figures of speech, modes of address, order of elements, and emphasis). This enabled us to identify recurrent compositional elements, such as the use of direct mode of address, of action verbs, and of questions. Second, we grouped the covers thematically by topic. Working in an inductive manner, we came up with the following themes: (1) the relationship between humanity and technology; (2) youth and technology; (3) technocapitalists and creative visionaries; (4) disruption. Covers that fitted multiple themes were included and counted in the analysis of each relevant theme. Each theme was submitted to a discourse analysis guided by the following questions:

- *What social issue is highlighted here, and which of its aspects are magnified/ silenced?*
- *What kind of reader is constructed, and what strategies for dealing with technology are recommended?*

We focused on the roles and agency ascribed to technology (lexical and visual choices); the roles and agency ascribed to subjects in the same ways; and the crafting of a subject position for readers (including the construction of rights, responsibilities, and capabilities). Within and across the themes, we also looked for transformations and contestations within the discursive articulations of ICTs. The following sections describe our findings across each of these thematic areas.

### **Humanity and Technology: From Androids to Cyborgs**

A quarter of the corpus (20 covers) deals with the relationship between humanity and computing technology. The title of this section sets out to capture the discursive shift from the early covers presenting computers as androids helping humans in their daily tasks to the increasing integration of ICTs into the human body.

#### ***The Android***

The first computer appears on a *TIME* cover in January 1950. Over the three subsequent decades, only five more covers depict computing technologies. Technology is a focus for the editorial team. Against the background of the Cold War, weapons, the aerospace industry, and cars are prominently featured on many covers. For now, computers may simply not be sexy enough. They were unattainable oddities, associated with management and administrative tasks (Kline, 2006), and were little known outside of research or sci-fi communities.

Much of the work performed by these early covers mobilizes the readers' imagination by anthropomorphizing technology (Aspray & Beaver, 1986). Mark III, the first computer featured on the cover of the magazine, is introduced to the readers with the title "Can Man Build a Superman?" Where the title opens up the possibility of technological transcendence of the human condition, Mark III is visually depicted

as a box-like head with bulbs, wires, and mechanical limbs performing rather mundane tasks such as answering the phone, pushing buttons, or writing notes. The computer, shown in a navy cap and sleeves, had been built at Harvard University for the U.S. Navy.

Four other covers (1950s–70s) rehearse similar renderings of computers as a brain or a head, with multitasking limbs (see Figure 1). The two symbolic associations—intellect and service—work together to promise a man-made future where technology’s role is to help humanity. Yet, the seed of an innovation that could surpass its own creators had been planted. In March 1996, the magazine once again rhetorically asks its readers, “Can machines think?” This time, the answer is clear, “They already do. . . . So what (if anything) is special about the human mind?” Our relationship with computing technology is thus drawn between two poles of emotion: the awe for the capacity of the human mind to constantly surpass itself and a fear that technology could overwhelm us.



**Figure 1. The multitasking android (1965).**

### ***The Cyborg***

From the 1990s onward, technology enters the human body (see Figure 2). The covers now prominently display humans, surrounded by, attached to, or implanted with, devices. Computer screens are a recurrent symbol of these new technologies, alongside headphones, eye goggles, and cables tethering the human body to the machine. This new articulation includes two related subthemes: digital technologies as prosthetics and human immersion in cyberspace.



**Figure 2. Technology enters the human body (2014).**

Just like the android, the cyborg remains marked by ambiguity, stretched between optimistic portrayals of enhancements and gloomy warnings of an impending loss. The 2006 issue entitled "Are Kids Too Wired for Their Own Good?" presents the audience with an expressionless child, earphones on, and almost wrapped in cables and new media devices. The subtitle anchors the devices as enablers of the "dangers of multitasking." But, if in the 1950s multitasking referred to office tasks, now it is all about leisure (e.g., listening to music, playing a videogame). As computers become entertainment devices, multitasking becomes dangerous, taking its toll on us and making us absentminded (a recurring element in the moral panics around children's use of technology, as we shall see next).

Several covers represent cyberspace as an alternative world to which humans are now "wired." Introduced in a 1994 issue as "The Strange World of the Internet," cyberspace is surrealistically rendered as a vast, uninhabited place. The idea paves the way to imagining the human within the computer, a possibility already captured in films and novels. In three other covers, humans are humorously depicted as living within computer monitors. These covers discuss topics such as online shopping, the do-it-yourself ethos, and Steve Jobs' latest gadgets.

The shift from the android to the cyborg parallels the growing ubiquity of ICTs in everyday life and their transformation into personal tools. The shift also captures the transition from a fascination with computers to a fascination with digitalization as a means of translating "atoms into bits" (Negroponte, 1995). This is evident in the increasing number of magazine covers featuring networked computers or peripherals from the mid-1990s onward, but also linking ICTs with mundane aspects of readers' lives. Thus, the covers in this theme mention ICTs in relation to sex, rock and roll, shopping, and so forth. In all these areas, ICTs



are depicted as agents of change, using terms and phrases such as "change," "future," "revolution," "what's next," or "just the start." The use of "cyber" and "virtual" consolidates the idea of novelty. Technology has become a transformative force in all aspects of our lives.

### **Youth and Technology: Whiz Kids Versus Zombies**

Youth play a distinct role on the magazine covers, present in 16% of the corpus (13 covers). A site of moral panic (Cohen, 1972), youth are an ambiguous group. In a culture celebrating speed and change, they are a valued source of newness and creativity. But youth also present a challenge to the status quo, which makes control of this group crucial. In the representation of youth and technology, the magazine shifts from celebratory accounts of the "whiz kids" to gloomy warnings over the zombification of youth as a result of misuse of ICTs.

### ***The Whiz Kids and Golden Geeks***

The first covers bringing children and ICTs together are celebratory. In 1982, "The Computer Generation" issue depicts the smiling face of a young boy, announcing that "a new breed of whiz kids" is in the making (see Figure 3). The whiz kids make a comeback in 1987, when they are explicitly described as "Asian-American" children marked by their intellect. More smiling young faces—including one rare instance of a girl behind a computer—position ICTs as educational tools. The reference to a "new breed" suggests technology use changes children, or it requires something different in its user. Either way, the coming generation constructed across these two covers is one marked by its fundamental difference from the readers of the magazine.



**Figure 3. The whiz kids (1982).**

By the 1990s, the phrase “whiz kids” makes way for another buzzword: the “Golden Geeks.” The shift is also tributary to the transformation of computers into personal tools and the increased popularization of the Internet. Defined by their knowledge of ICTs and their ability to monetize it, the Golden Geeks seem to come out of nowhere and to craft for themselves an unexpected path to riches. The new label brings together intellect and business success—a favorite angle of the magazine. The geeks are professionals in their 20s, distinguishing themselves through their ability to harness their extraordinary knowledge of computers to become a rather unexpected business elite. “The Golden Geeks” cover features a barefoot Marc Andreessen (25 at the time), irreverently seated on a throne. His T-shirt and jeans notwithstanding, he is the new symbol of technoeconomic success: “They invest. They start companies. And the stock market has made them instantaires. Who are they? How do they live? And what do they mean for America’s future?” (see Figure 4). More recent covers depict Shawn Fanning of Napster (October 2000), Mark Zuckerberg of Facebook (December 2010, December 2014, May 2017), and Evan Spiegel of Snapchat (March 2017).



**Figure 4. The irreverent geeks (1996).**

The “new breed” has turned out to be a casual and nonconformist challenger of the (economic) status quo. In the process, it has also been Whited and has become exclusively male. The magazine cultivates a sense of awe around the tech-proficient, business-oriented young man. For Fanning and Spiegel, the covers list their age (19 and 26, respectively) next to the name of their companies. Spiegel’s photo is customized with Snapchat’s dog-face filter—the cover is playful, contributing to the idea of irreverence and difference from the traditional image of a businessman. Yet the awe is also accompanied by a sense of eeriness, inviting dystopian readings of this seemingly untamed “new breed.” From the cover of the 2010 “Person of the Year—Mark Zuckerberg” issue, an inscrutable Zuckerberg stares at us; his blue eyes, in stark contrast with his pale complexion, reminiscent of iconic androids in popular culture (see Figure 5).



**Figure 5. The inscrutable businessman (2010).**

### ***The Zombies***

In a stern warning on what misuse of technology could bring about, five covers feature zombified young people (see Figure 6). In the U.S. context in particular, the surveillance of children and the moralization of parenting have affected the construction of youth as in need of control, feeding wider concerns of technology driving "cultural and moral pollution" (Cavanagh, 2007, p. 3). In 1995, the "Cyberporn" issue warns of how "pervasive and wild" porn is online. The cover invites the reader to take on the vantage point of a computer screen facing a stupefied young boy. The cover of the 1999 issue "Growing Up Online" rehearses the same visual representation of an invisible computer screen facing a young boy completely absorbed by what he sees. The glare of the screen and the cold, bluish shadows create a sense of eeriness. The text anchors this uncertainty: "Today's kids dwelling a world of computers and videogames. Here's how parents can help them make the right choices." Living with technology thus becomes dangerous, posing new problems for children's development. Thus, parents are advised to "protect kids," and science is invoked as a source of expertise that "tells us about the pluses—and minuses of doing everything at once." Notable here is the interchangeability of "parents" and a generic "we/us," both identifying the audience with/as parents and extending the responsibility for intervention from parents to society at large.



**Figure 6. The zombification of children (2006).**

Technology turns from a means of economic success for young people to a threat that requires proper management. In this way, other people's use of technology becomes a legitimate site of social control. Importantly, while using computers to generate economic success is a prestigious endeavor, leisurely use is placed under the banner of addiction. These articulations effectively deal with the ambivalence at the heart of technology use: To the extent that humans control and extend technology, it is positive; but when humans merely enjoy using technology, they risk becoming enslaved by it.

### **Technocapitalists and the Making of the Future**

In line with the magazine's editorial focus on the "great men" making history (Popp & Mendelson, 2010, p. 209), 37 *TIME* covers in our corpus are devoted to or reference leaders of computing businesses. Three coexisting articulations are relevant here: the tech magnates who develop new technologies and disrupt traditional institutions (embodied by Bill Gates); the creative genius, engaged in an endless pursuit of innovation (embodied by Steve Jobs); and the making of the future as a form of incessant innovation that turns disruption into the new *modus operandi*.

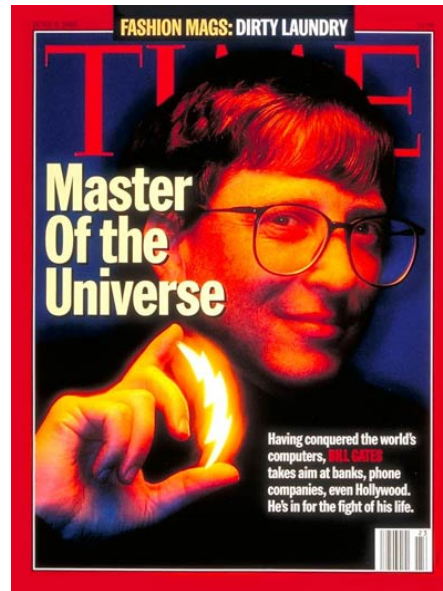
The representation of the Golden Geeks discussed in the preceding section also participates in this theme. The Golden Geeks bridge between youth and the economy. Furthermore, when it comes to the technocapitalists, the magazine no longer foregrounds the effects of technology on society. Instead, the focus is on individuals and their technoeconomic prowess.

### ***Bill Gates and the Rise of the Technocapitalist***

Technocapitalists are young, smart, and rich. Their representations combine a sense of wonder with a whiff of danger. The magazine features figures such as Thomas J. Watson, Jr. (IBM), John Opel (IBM), Bill Gates (Microsoft), Steve Jobs (Apple), Jeff Bezos (Amazon), Steve Case (AOL), and Jerry Yang (Yahoo!). Gates is an early standout in this milieu. In contrast to the early tech giants (Watson, Jr., in 1955 and Opel in 1983), Gates represents a new generation, signaled by his casual open collars and cardigans instead of buttoned-up business suits and ties. Though he predates the rest of the Golden Geeks, whose youth and meteoric economic success command attention, he is also a "new breed" marked primarily by an uncanny understanding of ICTs.

From his first cover in 1984, Gates is smiling at the camera, balancing a floppy disc on the tip of one finger. The headline reads "Computer Software. The Magic Inside the Machine." In contrast to the fear that computers could surpass their creators (see "The Android" section), Gates is the master sorcerer, able to control the mystical dimension of technology (Stahl, 1995). This status is consolidated with subsequent covers referring to him as "master of the universe" and "the man who is shaping our future." The use of verbs such as "conquer," "fight," "master," "conquest," "overwhelm," and "rule" further solidify Gates' position as the hegemon of technocapitalism.

Yet this position is also marked by ambiguity. Gates' ambition invokes dystopian scenarios of domination and control. He can control the "magic within the box," and is also a disruptor of markets. The headline of the 1995 cover explains: "Having conquered the world's computers, Bill Gates takes aim at banks, phone companies, even Hollywood. He's in for the fight of his life." To further obfuscate readers, a glowing Gates engages the reader with an enigmatic Mona Lisa-like smile. He is mysterious, powerful, and potentially aggressive (see Figure 7). In 1996, *TIME* presents Gates' smiling face at the center of a spiderweb within which the Apple, Netscape, IBM, and Java logos are trapped. The headline reads, "Whose Web Will It Be? He conquered the computer world. Now he wants the Internet. If Microsoft overwhelms Netscape, Bill Gates could rule the Information Age."



**Figure 7. The technocapitalist (1995).**

While speaking of conquests, battles, and mastery of the universe, the covers remain humorous, donning funny visuals and a smiling Gates that work to cast doubt on the potential negative consequences of having too much power. Indeed, in the new century, Gates' status gains more positive valences, as he is featured on a cover about "The New Philanthropists" in 2000. He does not appear again until 2005, when he is pictured holding the Xbox 360. The technocapitalist is older, has more silver in his hair, his face is tanned and more lined, and he looks directly at the reader. At the end of 2005, Gates, his wife, Melinda, and rock star Bono are dubbed "The Good Samaritans" and named "Persons of the Year." Though Gates remains brilliant, his economic ambition appears to have been refocused from domination and disruption to philanthropy.

The main technocapitalist has thus morphed into a benevolent patriarch of the new world right at the time when other ambitious contenders to the status of "the master of the universe" rise from among the Golden Geeks. In 2014, a broadly smiling Mark Zuckerberg is pictured, thumbs hooked into the pockets of his jeans. The headline explains: "Half the world is Not Enough: Mark Zuckerberg's Plan to Get Every Human Online."

### ***The Creative Seer***

Gates' model, however, is not the only way to imagine the creators and shapers of the technologically produced future. In its attention to Steve Jobs, the magazine provides an alternative path to technocapitalism—that of the creative seer.

In his first cover in 1982, Jobs is pictured balancing an apple (shot through with an arrow from a desktop computer monitor) on his head. The headline reads: "Striking It Rich: America's Risk Takers." Anticipating the Golden Geeks of the 1990s, but less irreverent, Jobs' first depiction ties him to the idea of

taking risks. Visually, he resembles a modern-day William Tell, the legendary character who symbolizes rebellion against tyranny, balancing an apple on his head.

Jobs is absent from the covers until 1997, when *TIME* chooses to foreground his decision to accept financial help from Gates and Microsoft to keep Apple afloat. This decision rehearses the idea of Jobs as a risk taker. On this cover, Jobs appears crouched and talking into a cellphone. The headline reads, "Bill, thank you. The world's a better place."—Steve Jobs talking to Bill Gates by cell phone last week about saving Apple." This cover not only foreshadows Gates' future status as a "Good Samaritan" but also positions Jobs as pursuing more than just money. From this moment on, the magazine ties Jobs to a creative vision, always depicting him next to his devices—the iMac, the iPod, and the iPhone (see Figure 8). In a 1999 cover, Jobs, wearing his trademark black turtleneck and donning a mischievous smile, is located in between two iMac screens out of which the *Toy Story* characters are emerging. The headline reads, "Steve's Jobs: He saved Apple with his hot new iMac. He struck gold at Pixar with digital movies like *Toy Story 2*. You'd think he'd learn to chill. Think different."



**Figure 8. The creative seer (2002).**

Alongside his devices, Jobs seems progressive and cool in a way that Gates has never been. In 2005, the same year that Gates appears in *TIME* with the Xbox 360, Jobs is on the cover holding an iPod, the wry smile in place again as if to say, "Yes, I've done it again." The headline reads, "The Man Who Always Seems to Know . . . What's Next." In 2010, we get a close-up photograph, and this time it's Jobs who has more silver in his beard. The story will be about both his work methods and the iPad: "Inside Steve's Pad." On his death in 2011, *TIME* memorialized him as a cross-legged young man with shaggy hair, holding the iconic Apple Macintosh computer like a proud father.

### ***The Making of the Future***

The future is explicitly referenced in 10 covers (four of which also portray technocapitalists) and implicitly invoked via related terms such as “change,” “problem-solving,” “revolution,” or “what’s next” across eight more covers (once again, four of these also portray technocapitalists). The early covers on computers as androids had already raised the specter of the singularity: Can computers surpass their creators? A 1998 cover titled “Computers of the Future” rehearses the trope of technological mysticism, with an illustration of microchips making up the shape of Rodin’s famous sculpture *The Thinker*. A robotic arm adding the finishing touches suggests the idea of technology building itself. Light radiating from behind the microchips creates a halo effect around the head of the techno-Thinker, evoking mystical powers.

As the technocapitalists command the magazine’s attention, the future makes a comeback not as something to imagine, but as something that is actively made by those whose technologies become economically successful. Thus, Gates becomes the “man who is shaping the future” (January 1997), whereas Jobs’ creative vision is an act of “seeing” the future (January 2002) and who is described as “the man who always seems to know . . . what’s next” (October 2005).

With the arrival of Web 2.0, there is another potential shaper of the future: the user. Like Jobs himself, the user can innovate, and, ultimately, shape the future. This idea is represented across five covers. In 2000, Stephen King is featured on the cover peering out from the computer screen, his own hand reaching out to the keyboard. The headline reads: “Do-It-Yourself.Com. If Stephen King can do it, so can you. Who needs Hollywood when you can make your own movies, books and music.” Technology remains a disruptor of traditional institutions, and the reader who can use it gets to partake in the making of the future. Indeed, in 2006, the Person of the Year is “You. Yes, you. You control the Information Age. Welcome to your world.”

Positioning individuals as creators—rather than merely consumers—of content online also makes participation an imperative (Deuze, 2006). A 2009 cover features an iPhone with the Twitter app open. The journalist’s Tweet is shown: “I’ve written this week’s *TIME* cover story about how Twitter is changing the way we live—and showing us the future of innovation. Buy a copy!” Consuming the magazine, along with new technologies it introduces, transforms the reader into a maker. This imperative of riding the wave of technological innovation is rehearsed again in the June 2000 issue, rhetorically asking readers, “The Future of Technology [. . .] Are you ready?”

### **Disruption**

Part of a wider *TIME* trend of announcing the next great technological innovation, ICTs feature on the covers alongside a message of technologically driven change. Whereas the making of the future in the previous theme is upbeat, the tone here is somber, often advancing warnings or direct interpellations prompting readers to reevaluate their technological awareness. From the 1990s onward, almost half of the covers featuring ICTs directly address the reader through the use of “you/yours” or “we/our.” Furthermore, across the entire corpus, 24 of the 81 covers depict technology as “acting”: It “blitzes” the world, it “moves in,” it “brings” a revolution, and so on. Change is recurrent, with ICTs presented as “changing your life,” “changing the world,” or, at the very least, an aspect of it.



The disruptive potential of change brings the covers discussed next together. These covers link cyberspace and the Internet to shifting boundaries, territories, and practices. In so doing, they foster new anxieties for their readers. Disruption becomes a rhetorical device to launch stern warnings about the dangers of an increasingly uncontrollable future.

### ***The Internet as a Dangerous Space***

To introduce the Internet to its readers in the mid-1990s, the magazine relied on spatial metaphors such as highways or psychedelic spaces. The first cover to feature it, "The Information Highway," heralded a "revolution in entertainment, news and communication." Subsequent issues relied on visual representations of the Internet as a magical, out-of-this-world space: orange skies and dark-blue, rough, mountainous terrains; flying computer screens that can ambiguously be perceived as both a spaceship and a road; electrical circuit boards building a path toward a mysterious source of light (see Figure 9). This space was accessible to the cyborg—the wired male, immersing himself into an alternative world through his plugged-in devices.



**Figure 9. *The dangerous space (1994).***

Increasingly, however, this place gains dangerous valences. The Internet turns into an "underground" (February 1993) and a "strange world" where battles are lurking behind the surface (July 1994). Twenty years later, this mystical and strange place has become "The Secret Web" (2013), a hidden place of threats and disasters. Furthermore, the Internet has also turned into a battleground. The metaphor of war is back again in the 2010 issue entitled "World War Zero," announcing that the Internet has transformed us, users, into the biggest challenge to law and order. We—or rather our data—are at the heart of a "global battle," where "hackers" trying to steal it turn into "arms dealers." And, by 2016, the war

appears to be almost lost, as *TIME* promises to shed light on a stark reality: “Why we’re losing the Internet to the culture of hate?”

### ***The Rise of Secrecy***

The warning that disruption has bled into loss is furthered by the emergence of another concern: secrecy. “The Death of Privacy” (1997) issue emphatically tells readers they can no longer have any secrets: “People are watching your every move.” An ominously shaded figure, peeping through a keyhole, conveys the anxiety of not being able to enjoy your privacy (see Figure 10). In 2001, the tone is more hopeful, as *TIME* promises readers 10 strategies for “keeping your vital information secure.” Yet, the regaining of control remains temporary. In 2006, we are asked whether we can “trust” Google with our secrets. While the three Google founders smile reassuringly at us from the cover, the heading informs us that Google is now a “\$100 billion empire dominating the Internet.” Readers are left to decide for themselves whether this piece of information is indeed reassuring or—much like Gates’ desire to “master the universe” and Zuckerberg’s plan to “get every human online”—a potential source of further worries. Indeed, in 2010, we find out that Facebook is “redefining privacy” by connecting millions of people in “new (and scary) ways.” In 2011, another issue rehearses the “death of privacy” theme, this time with a certain impatience with its readers’ alleged gullibility: “Everything about you is being tracked. Get over it!” The popularization of the shared economy fuels these worries: not only is our “data up for sale,” but strangers are now using your car, wearing your clothes, and crashing in your house (February 2015). Loss comes back with a 2016 issue on smart cars, this time in the form of a trade-off: technology promises “no traffic, no accidents, no death,” but asks you to “give up your right to drive.”



**Figure 10. The new fears (1997).**

Promises notwithstanding, secrecy fuels deep anxieties. It is not only a matter of loss of control over one's life, but also over the state's ability to control the flow of information. Two issues cover famous whistleblowers—Julian Assange, Edward Snowden, Aaron Swartz, and Bradley Manning—warning that the government's secrets can no longer be protected. Yet, it is unclear whether this is a good or a bad thing, as the covers entertain ambiguity over their own position on the matter. Assange, for instance, may have secrets, yet this "hasn't hurt America." On the other hand, Snowden, Swartz and Manning are called "the Informers," a term whose connotations seem more positive than negative.

Nevertheless, the social changes brought about by ICTs remain as disruptive to institutions as they are to individuals. Danger comes both from misuse and from the shielding anonymity that the Internet affords criminals. Users and states alike do not know who is behind the computer screen, what their intentions are, and what they do with our data. Ultimately, with this theme, a lack of technological knowledge means a loss of control.

### Discussion

Shaped by longstanding editorial values, *TIME's* representations of ICTs offer readers tools for living in a world marked by incessant technological change. The coexisting articulations discussed here construct a control imaginary that promises individuals that, in the digital society, retaining control over one's life is only possible by accepting one's role as a consumer within the machinery of technocapitalism.

In the hands of the technocapitalist elite, ICTs become expressions of "wizardry," commanding our appreciation and acceptance of their creations and visions. Their ability to transform technology's magical qualities into a path to economic success sets an ideal for readers to dream of and aspire to. In doing so, the magazine reinforces its two ideological constants: support for capitalism and for the "great men's views of history" (Popp & Mendelson, 2010, p. 9; Stahl, 1995). Indeed, the technocapitalists pictured are (with few exceptions) White men.

At the same time, the magazine also crafts a specific subject position from within that readers are asked to understand and use ICTs. From within the *TIME* covers, ICTs emerge as forces affecting our lives, our children, and our future. This is often couched in the idea of loss—of meaningful connection with others, trust, privacy—ultimately a loss of control. Importantly, this danger is most prominent for those of us lacking "proper" knowledge of the risks associated with these technologies as well as the protocol for their "proper" use. Yet, through formulaic titles such as "what can you do about it," "are you ready?," "how to protect," or "how to help," the magazine promise solutions that can appease these anxieties and re-empower the individual.

Our lack—we have allegedly failed to take precautions and to get ready in the face of an inevitable and unavoidable technological change—shifts agency from us to the technology. This becomes especially visible when juxtaposing the image of the cyborg with that of the zombified youth. The two feed off each other. The danger of domination might motivate us to retake control of technology, by steering ourselves toward the ideal of mastery of the future. The magazine thus anchors the problem of technology and control in knowledge of risk and practices of "good use": Those who can master technology emerge as the winners of the inevitable (social) transformation.

By drawing attention to the quasi-mythical power of its creators, the inevitability of technological change and its disruptive potential, the magazine treads down the path of the advertising cycle of anxiety production and resolution (Smythe, 1981/2006). The covers in particular play this dual role of fostering feelings of insecurity, inadequacy, or lack, while simultaneously promising that purchasing of the magazine will not only merely alleviate but also empower readers to solve them. The magazine's enthusiastic support for capitalism steers its audiences to internalize consumption as a form of agency. Both the content and its consumption (via purchasing the magazine) sell the promise of regaining agency and legitimize the technocapitalist vision of technology as commonsensical. Ultimately, the magazine legitimizes the myth that agency in the digital age can be retained only by intentionally riding the technological wave. This, then, becomes the recommended technology of the self in the control imaginary.

The article confirms previous findings warning of the hegemonic status of technological determinism in the representation of ICTs. In the case of *TIME*, the covers do almost nothing to reveal the profoundly social nature of technology design, production, and circulation. Black-boxed and seemingly invented out of nothing by sheer power of creative genius, ICTs are offered as a *fait accompli* to which readers are compelled to respond and adapt. Turning adaptation into a technology of the self effectively silences the need for imagining alternative technologies shaped by different values or (economic) goals.

The compulsion to respond to ICTs in a way that foregrounds the individual responsibility for using them correctly, responsibly, and productively ties to a neoliberal ideology of personal responsibility (Beck, 2001; Harvey, 2005). The individual must navigate and negotiate their environment and make "good" choices to secure their success and well-being. The control imaginary emerging out of *TIME*'s covers not only positions readers as the bearers of responsibility for their own responses to developments in ICTs, but also presents integration of technology—and acceptance of an incessant technological change—as the only possible way into the future. Where readers are invited to understand adaptation as a form of empowerment, the power to drive the development of technology in a broader creative sense is firmly placed in the hands of the technocapitalist elite.

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