

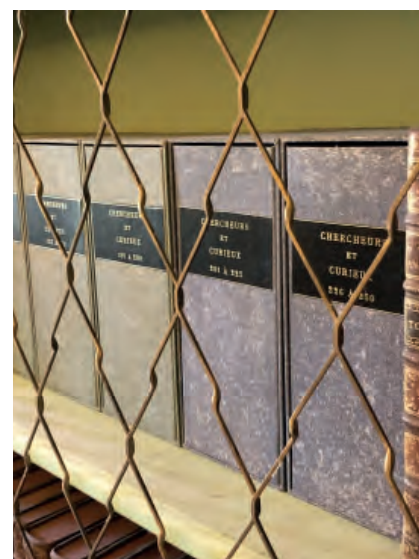
The Anti-Social Life of Information

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rattachement

It is a great honour to join in the celebration of Le Libellio's anniversary. For twenty years this journal has provided a remarkable source of thoughtful essays, intriguing insights into the "rubrique du chercheur geek", and, always, fascinating photographs.

This year I must acknowledge another anniversary. In 2000, *The Social Life of Information*, a book I co-authored with John Seely Brown, was published. At that time, when they heard the name of the book, people tended to ask, "what has social got to do with information?" In the twenty-five years since, with the remarkable rise of "social media", the connection between social and information has seemed obvious. Looking back, however, and setting social media in the context of the book, it seems more appropriate, as I shall attempt to show here, to consider the anti-social life of information.

The book used its investigation of the social and such things as "communities of practice" to push against the inherent individualism in most accounts of information and its technology. The technology, for example, was usually portrayed as the product of individual entrepreneurs—Steve Jobs, Bill Gates, Mark Andreessen, and similar. These geeks were often seen as mapping the future, building devices that we, as its users, would, one by one, individually and obediently follow. This view is neatly summed up by the cover of Bill Gates's book, *The Road Ahead*. This shows Gates standing in the foreground, like a gatekeeper, and behind him runs a long, completely straight, utterly empty road for the reader to travel. In reading the book, and in using Gates's digital tools, it seems, we were expected to pursue a direct route into the future, without doubts, deviations, choices, or dilemmas. *The Social Life of Information* sought to resist such simple, individualistic, and deterministic assumptions. It argued instead that innovation and its application involved complex social relations, and as a result the road ahead would be less linear, less predictable, and much less vacuous than Gates's image suggested.



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The Road Behind

In many ways, while they sought to portray a new world that was a product of the information revolution and its transformative technologies, Gates's cover (and book) and its implications in fact reflect a long history. As I found in teaching a course called "The History of Information", exploring aspects of that history, as I shall

try to do in brief in this essay, can help us better understand many of the bland assumptions that circle around such things as social media and the world that many assume it will create.

Those assumptions include optimistic claims about how individual, autonomous decision-making can lead us to a stable democracy and a free market. This overall vision promotes ideas that the circulation of information, shared by technologies like those Gates promoted, is the critical route to that road straight ahead. Such assumptions are not new and can be heard in earlier claims about new technology “producing harmony among men and nations”, developing a “great chain that will bring [...] nations into instantaneous communication with each other, [...] most effective in breaking down the barriers of evil prejudices ... that interfere with the universal exchange of commodities” (quoted in Du Boff, 1984, p. 571). This vision of the road ahead from political and economic perspectives circulated in the 1840s. The technology under discussion was the telegraph. That new technology, it was claimed by another enthusiast of that time who contemplated the spread of information (or, as was said at the time “intelligence”), “being alike open to all puts the whole community upon a par, and will thus ‘head off’ the most adroit speculators, because they will not have the power to monopolize intelligence” (quoted in Du Boff, 1984, p. 572). This anti-monopolistic claim, presented in another newspaper report from the middle of the nineteenth century, is particularly interesting because the emerging telegraph company discussed would become AT&T, which in the United States formed a powerful, nation-wide monopoly for over a century, despite government attempts to break it up. And, despite repeated idealizations of its role in fostering the uncompromised circulation of information over that time, AT&T was revealed in 2015 to have been collecting people’s private communications and passing some along to the U.S. government’s National Security Agency.

This is only one example of ways in which enthusiasm for the circulation of information, encouraged by the businesses that advanced that circulation, usually overlooks the extraordinary power that such companies accrue. In the 1980s, the communications theorist Richard Beniger wrote a highly influential book, *The Control Revolution*. In this, he argued that the developing information society was taking us from the chaos that new industrial developments had initially produced to a new stage of control over production and, as a result, the stable circulation of both information and goods. In conclusion, Beniger argues, this revolution “has exposed the centrality of information processing, communication, and control to all aspects of human society and social behavior” (Beniger, 1986, p. 436). In essence, Beniger’s argument celebrates the control over the new world that the revolution has provided us. Yet, it ignores the potential such a revolution has created for businesses and technologies to practice control over us. As that control of the few over the many expanded through the technologies Beniger celebrates, figures like Cédric Durand and Yanis Varoufakis (2024) have pointed us not down a clear, straight road ahead, but rather further back down a road behind to the old days of feudalism, which they see re-emerging as “techno-feudalism”, unleashed as Durand cogently argues by Silicon Valley.

Information theory

Summing up his discussion of the control revolution, Beniger claims that “formal information theory has exposed the centrality of information processing,

communication, and control to all aspects of human society and social behavior” (Beniger, 1986, p. 436). Here Beniger is referring to a highly influential (though little-known) essay called “The Mathematical Theory of Communication”, published in 1948. Its author, Claude Shannon, had worked in Bell Labs, the research centre of AT&T, helping the company understand how it could make phone wires carry more information. During World War II, Shannon also worked on the encryption of messages. He developed his theory (now usually referred to as the mathematical theory of information) at that time, but for security reasons it was not published until after the war, when it appeared in *The Bell Systems Technical Journal*. In essence, the theory took information to be modular in such a way that it could be extracted from a source, encoded for transmission, circulated across networks, and then decoded on reception. From this perspective, the amount of information carried could be measured mathematically. (For a long time, people had talked about the “amount of information” in books, newspapers, and the like. But, other than counting words, there was no way to measure.) In Shannon’s theory, the amount of information that a signal conveyed was a measure of the extent to which it reduced the “uncertainty” of the recipient. Thus, a message the recipient knows already carries no information; something that the recipient might guess carries a moderate amount; whereas something completely unexpected carries the maximum amount, which Shannon’s theory measured in “bits”.

Shannon’s theory had a profound effect in areas that sought to evaluate the quantity of information. It advanced the development of computers and helped to advance research into cybernetics and artificial intelligence. In particular, it promoted understanding of the computer not just as a calculating device, but also as a communication technology. Vannevar Bush, a colleague of Shannon’s who had developed elaborate calculating machines, explored this potential in theorizing a machine he called “Memex” that could extract, store, and circulate information, in a way that anticipated the design of the World Wide Web.

The theory’s influence was not limited to computers. As Colin Cherry, a cognitive scientist and early champion of Shannon’s theory, noted, these ideas of information brought together “physiology, the central nervous system and the operation of the brain, and even certain problems in economics” (Cherry, 1951, p. 389). Economists were particularly enthusiastic about this approach to information. Economics was a field that focused increasingly on formal, mathematical models. Being subject to mathematical theory allowed information to be incorporated into such models. This led to what the economist Joseph Stiglitz saw as a “revolution.” The field had been interested in information, he noted, but lacked “formal models” (Stiglitz, 2017, p. 3). Shannon’s theory, as Stiglitz (and Beniger) noted, put information at the centre of a transformative branch of economics, leading to numerous “information economists” (Stiglitz among them) winning the Nobel Memorial Prize. Core economic ideas going back to Adam Smith’s notion of the “invisible hand” and market stability or “equilibrium” could be explained and mathematized in terms of information.

The influence of information in the field can be seen in the work of another Nobel prize-winning economist, Friedrich Hayek. Hayek saw the market as a product of individuals making choices to pursue their preferences. Individual decision-making would lead to market equilibrium. Hayek claimed that “the concept of equilibrium [...] [has] a clear meaning only when confined to the analysis of the action of a single person” (Hayek, 1937, p. 5). Hayek used this focus on the individual and dismissal of

the social to resist, among other things, the intervention of governments in markets, arguing that regulators were unable to assimilate the information relating all the participants in a market.

In this work, developed in the 1930s and 40s, Hayek focused on knowledge, and such things as “the use of knowledge in society” and the problem of the “division of knowledge”. But, from the beginning, he makes comments about “what bits of information the different persons must possess” to make equilibrium-producing decisions (Hayek, 1937, p. 49). In answering the question of how much (or little) a person needs to know to make the right decision, he focuses on the price of goods, concluding that in the price “all the relevant information is concentrated” so that for market equilibrium “the essential information is passed on” by prices (Hayek, 1945, p. 526). Such observations became critical to the work of Hayek and the field more generally. With the help of Shannon’s work, information could be shown—via mathematical models of the sort critical to economics—to structure markets and lead to market equilibrium via individual preference maximization. Looking back in the 1980s, and leaving the complex epistemological challenges of knowledge behind, Hayek confessed that it took him a long time to eventually “state my theory of the dispersal of information, from which follows my conclusions about the superiority of spontaneous formations to central direction” (Hayek, 1988, p. 88). And it was such a focus on information in isolation that led to Hayek’s Nobel prize (and others who drew on his work) and to the spread of information through the field.



*Retable, XV^e siècle, maison
du roi, Bruxelles
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In making such arguments, the field of economics became highly mathematical and individualistic. At least it did in the United Kingdom and United States. (Hayek was an Austrian, but he developed his work at first in England and then in the United States.) Economists in these countries had little use for sociology or history. Thus, when Thomas Piketty, the French economist, was hired by an American University, he reported that, despite his initial excitement, he soon “wanted to return to France” because US economists showed no interest in historical or social data, but tended to offer “purely theoretical results without knowing what facts needed to be explained”. This “childish passion for mathematics” made the field notably insular. By contrast, in Europe economists, Piketty felt were “interested in persuading historians and sociologists” as well as “people outside the academic world” (Piketty, 2014, p. 41).

But the Hayekian view had enormous influence, focussing as it did on individuals and championing the spread of information. These two alone, it has widely been held, explain economic and, by extension, political stability. Malfunction in these areas can then be explained in terms of what another Nobel economist, George Akerlof, called “information asymmetry”,

suggesting that market essential symmetry is achieved by improving the circulation of information. Such ideas were particularly attractive in a world that information technology was transforming. More technology would circulate more information which, it was easy to assume, could only lead to greater symmetry. In this period, the Silicon Valley technologist George Moore came up with “Moore’s Law”. This suggested that the power of computers would double every couple of years, thus

problems of asymmetry would be easier and easier to resolve. Yet another Nobel economist, Paul Romer, took such assumptions to address the problem of global inequality. Such inequality had endured, Romer argued, because poor countries did not have access to the material objects that had driven industrial economies. These objects were “not easily transported” (Romer, 1993, p. 552), leading to a significant gap between rich and poor economies. But, in the information age, global inequality now reflected not the division of objects but the division of ideas. As these ideas could circulate through the new information technology that was emerging, it seemed plausible to suggest that the inequality gap would soon be overcome. Technology was a simple, irresistible solution.

Curiously, the early theorists of information did not share the enthusiasm of the economists. In fact, they directly dismissed it. Shannon, shocked by how his theory was being used, noted that “It is not necessarily relevant to such fields as ... economics” (Shannon, 1956, p. 3). While Norbert Wiener, a major early information theorist who developed the feedback theory of “cybernetics” that helped underpin economists’ ideas of homeostasis and equilibrium, dismissed the essence of the Hayekian model, denouncing the “official article of faith in the United States, that free competition ... a homeostatic process [...] individual selfishness [...] will result in the end in a stable dynamic” and so assumptions “that the entrepreneur, in seeking to forward his own interest, is [...] a public benefactor” (Wiener, 1948, p. 185).

Info-triumphalism

Despite the resistance of such information theorists, the Hayekian model held, both in the world of economics and more broadly in related political arguments. The communications theorist Fred Turner showed how individualist, libertarian views made technology that had long been seen as the tool of governments and military forces popular with the “counterculture”. A central figure in this account was Stuart Brand, a radical individualist, influenced by the libertarian ideas of Ayn Rand, who promoted notions of egoism and meritocracy. Embracing the computer from a libertarian perspective, Brand almost sounded like an apostle of Romer’s views of globalization, establishing The Whole Earth Catalog, The Global Business Network, and the WELL (or Whole Earth Electronic Access). The last was a precursor of the internet, connecting computers primarily around northern California, but in theory around the “whole earth”. (As a highly individualist, countercultural network, the WELL drew significant publicity, while government sponsored systems like MINITEL, though much more widely used, were, comparatively, mostly ignored.) As the business theorist Yaelle Amsellem has shown, Brand and his followers spurred the emergence among digital enthusiasts of the “scientific entrepreneur”, a heroic figure assumed to be leading us into the future, without making concessions to society or government.

As the internet was opened to all in the 1990s and early examples of social media began to spread, enthusiastic views of this new world became less countercultural. In 2006, Yochai Benkler, a legal scholar at Yale University, published *The Wealth of Networks*. This promoted the “radical transformation” of the information economy into a “networked information environment” (Benkler, 2006, p. 1). Such an informational network, Benkler argued, would democratize culture as part of a “technological, economic, and organizational transformation” (Benkler, 2006, p. 16). The essence of this transformation was open source systems providing

access to information for all. While this was a scholarly view, it echoed widespread confidence in the beneficial nature of the road ahead and the emergence, side by side, of open markets and political freedom. All this was leading, according to Benkler, to a “meritocratic hierarchy” (Benkler, 2006, p. 67)—the sort of structure that applauded and deferred to the scientific entrepreneur.

As social media spread over the next decade, however, enthusiasm began to wane. In 2015 Shoshana Zuboff, voicing concerns about the rise of an Orwellian “Big Brother”, published a paper called “Big Other” noting the rise of “surveillance capitalism” (the title of a book she published three years later) as the informational network allowed companies like Facebook and Google to gather increasing amounts of information about people. A sociologist, Zuboff put the social at the heart of her work, a concept that had been missing for some time in writing about the internet.

As the criticism voiced in these and similar accounts began to circulate, Mark Zuckerberg, the head of Facebook, published an open letter on his Facebook page addressed to “our community” and committing the company to go beyond “connecting friends and families” to “develop the social infrastructure to give people the power to build a global community”. Yet, as Facebook actual practices were revealed in a series of scandals, the company’s attempt to appear as an admirable community builder through information circulation seemed less and less benign and increasingly anti-social. In particular, a series of reports revealed how a tendentious political consultancy, Cambridge Analytica, which took credit for the Brexit victory in the UK and the Trump victory of 2016 in the U.S., had built its massive database of voters by extracting data that Facebook had collected from its users. Around the same time, it was revealed by Amnesty International and others, Facebook’s algorithms and thoroughly inadequate policing of hateful content had incited the military and non-Muslim population of Myanmar to drive the Muslim-based Rohingya population out of the country. Facebook had been reassuring its users that it would protect their privacy, serve their interests, and build community, while in practice it was feeding their data to various other companies and governing bodies who were profoundly divisive.

Economic modification

These examples—and of course there are many more concerning not only Facebook, but also other social media companies—indicate enduring naivety about the circulation of information. Facebook’s implicit claim that it merely connects “friends and families”, suggests that its services are only providing information and cannot be held responsible for harms that might result. (Though social media companies are always willing to claim credit when their role is seen as beneficial.) “The Politics of Platforms”, an important paper by the communications theorist Tarleton Gillespie (2010), examines how companies such as YouTube, in calling themselves “platforms”, portray themselves as merely innocent transmitters of information. The content they transmit is not theirs and thus they should not be held responsible for any antisocial effects it might have. Gillespie shows, however, how choices these companies make about what information circulates and how it circulates, “are all real and substantive interventions into the contours of public discourse” (Gillespie, 2010, p. 358), interventions that tend to serve the commercial and political interests of the companies and not those of the “communities” they claim to build and serve.

The “platform” mystique still plays a major role in contemporary political discourse. It also does in market practices. In the United States, “platforms” like Uber and DoorDash have helped to build technologically mediated markets and a “Gig Economy”. So doing, such platforms might seem to play into the Akerlof ideal, allowing information to circulate in such a way that symmetry can easily be achieved. In fact, an increasing body of work has shown how these “platforms” use the information that they gather about users—gig workers at one end and consumers at the other—to manipulate behaviour and decision-making to serve the interests of the companies. Thus, rather than succumbing to Akerlofian idealism, it seems more appropriate to see these devices as deftly feeding the asymmetry of information to promote their developers’ interests and monopolies.

As noted above, Stiglitz talked optimistically about the “revolution” in economics, but he had cautioned that if “firms can decide whether to hide or disclose information” then equilibrium cannot “be sustained” (Stiglitz, 2017, p. 13). The platform problem, however, is not only about hiding or disclosing information, but as is now widely recognized, about amassing, commodifying, and manipulating it in ways that allow supposed platforms to then manipulate their consumers. In examining the “revolution of information economics”, Stiglitz, echoing Piketty (though he doesn’t cite him), conceded that “increase in market power across many important sectors of the US economy and persistent higher rates of return to capital [...] may, in turn, play an important role in the country’s growing inequality” (Stiglitz, 2017, p. 2).

Facing such doubts about information-driven market equilibrium, economists increasingly branched off the conventional road of information and individual decision making laid out above. Those assumptions, seeming to be products of our age of information, in fact echoed the eighteenth-century essayist Vicesimus Knox, who had optimistically asserted that if people were given “fair and full information [...] they will do the thing that is right in consequence of it” (Knox, 1821, p. 27). (This optimism prompted Knox to assert, in 1778, that his age was the “age of information” – Knox, 1778, p. 157). Such an assumption underlies the informational work of Hayek and Akerlof and many other.

Stiglitz, as we have seen, also supported such ideas. But in 2002, he noted a “change in the paradigm” of economics. “For more than 100 years”, he argued, “economics had focused on models in which information was assumed to be perfect”. But now, he noted, “even a small amount of information imperfection could have a profound effect on the nature of the equilibrium” (Stiglitz, 2002, p. 461). Such thoughts about problems of information led Stiglitz to conclude that “among the greatest legacies of information economics is its contribution to the growth of behavioural economics” (Stiglitz, 2017, p. 19). Moving beyond analysis of individual behaviour, Stiglitz, in a co-authored paper, argued that this new approach brought with it “important insights into human behavior not just from psychology, but also from sociology and anthropology” (Hoff & Stiglitz, 2016, p. 25).

From this perspective, the rational actor at the heart of earlier theory, homo economicus, metamorphosed into the “enculturated actor”. The view of individuals making decisions in their own best interest and satisfying (or at least satisficing) personal preferences gave way to new understandings of those decisions in a social context. And pushing further away from Hayek, who had denounced attempts, particularly by governments, to influence these decisions, Hoff and Stiglitz recognize

that “insights into these determinants of behavior can be used to shape it: individuals can be nudged to take one action or another” (Hoff & Stiglitz, 2016, p. 25).

Emerging arguments moved from denouncing such nudging as acts of manipulation to accepting them as acts that helped the individual make the right decision. The Harvard Law scholar Cass Sunstein cast even Hayek in this light, saying that there was no doubt that Hayek was “endorsing a kind of nudging” (Sunstein, 2023, p. 176). Quite what that “kind” is Sunstein fails to show. But he is confident that the right kind have “significant advantages” and that they can “promote autonomy in addition to welfare” (Sunstein, 2014, p. 4). While he wants to keep such nudging distinct from the “unacceptably manipulative [...] cases that cross the line into deception” (Sunstein, 2014, 19), Sunstein gives little attention to what does cross the line. In this way, behavioural economics echoes remarkable innocence in work of the earlier information economists about advertising. Hayek saw this as a critical tool in economic decision making and scorned those who showed “blindness to the role played in real life by advertising”. That role, he argues, is merely “to communicate knowledge” (Hayek, 1937, p. 53). Here, he anticipates the innocent (or deceptive) claims of many social media businesses suggesting that their role in marketing to users is “merely” to circulate information and thereby build community. Those businesses developing powerful algorithmic tools for social media to determine what advertising to show to whom are no doubt happy to have these manipulative profit maximizing tools portrayed in this innocent light.

Certainly, we all do need help in making the complex decisions we constantly face in the world around us. This has long been recognized. Indeed, Hayek’s concerns in the 1930s, noted above, were closely anticipated by an author in the 1920s who wrote:

if all men had to study [...] the abstruse economic, political, and ethical data involved in every question they would find it impossible. (Bernays, 1928, p. 10)

In theory, everybody buys the best and cheapest commodities offered him on the market. In practice, if everyone went around pricing, and chemically testing before purchasing, the dozens of soaps or fabrics or brands of bread ... economic life would become hopelessly jammed. (Bernays, 1928, p. 11)

This argument is made in a book called *Propaganda* written by Edward Bernays (1928), who is seen by many as the founder of modern public relations [PR]. (Bernays was the nephew of Sigmund Freud, and many have traced to Freud the ideas of subconscious nudging in Bernays’ work.) Throughout his life, Bernays sought to justify PR firms’ activity, suggesting, as Hayek did about advertising, a degree of blindness or malevolence in those who criticise PR for its manipulating activities. In contrast, it is intriguing to see Benkler echoing Bernays’ title as he retreats from his early idealism about networked information. His co-authored book *Network Propaganda: Manipulation, Disinformation, and Radicalization in American Politics* (Benkler et al., 2018) puts Facebook’s “microtargeted behavioral marketing” under deep scrutiny, but most of the argument could apply to social media more generally. (Sunstein, by contrast, doesn’t address social media at all.)

As behaviourism emerged, concerns about its manipulative potential developed in response. In 1958, the German political philosopher Hannah Arendt surveyed the emerging theories and expressed deep concern that “The trouble with modern theories of behaviorism is not that they are wrong but that they could be true” (Arendt, 1998/1958, p. 322). Yet in many ways, they do seem to be coming true, pushed by

central figures of social media, like Zuckerberg at Facebook and Elon Musk at Twitter (now “X”), who, like Bernays before them, seem to feel that is their right and even their duty as superior technologists to help guide us all.

Technocratic nudging

In this regard, we might think of them as the latest generations of technocrats. In 1919, William Henry Smyth, an English civil engineer working in Berkeley, California, and contemplating how the world could wrestle with the complex scientific innovations spurred by World War I, proposed a “new form of government” that would lead to “national coordination of Science and Technology” through the “self-imposed, self-control Leadership of ... rationalized Industrial Democracy”. This required, he argued, a political system managed by technologists that he called a “technocracy”. With the rise of social media firms and their various kinds of intervention in government (in the U.S. significantly driven by their financial donations to political parties) technocracy has spread.

Smyth’s technocratic vision was an extreme form of behaviourism, with the superior technocrats shaping the behaviour of inferior peoples. Significant among these groups were women, who, Smyth believed, should be pushed out of the workforce. This idea he shared with a significant admirer of his work and correspondent, Benito Mussolini, the dictatorial leader of Italy at the time. Similar ideas have spread into the modern technocratic world. In 2017, James Damore, a Google technician, circulated a memo within the firm called “Google’s Ideological Echo Chamber”. Resembling Trump, Damore attacked the firm’s push for diversity and inclusion, in particular the hiring of women, which reflected, in Damore’s view, the firm’s prejudices, including its “Compassion for the weak”. One of the weaknesses of women, the memo suggests, is “affective empathy—feeling another’s pain”. Empathy, in Damore’s view, is primarily a feminine trait that has no place in devising technology or, by extension, running society. In a similar vein, Musk, who like Smyth and Mussolini, believes that a women’s main role should be breeding, recently denounced empathy as the “fundamental weakness of Western civilization”. It therefore seems appropriate in the context of these views that the social psychologist Sherry Turkle, author of the important analysis of social media *Alone Together*, understandably sees social media as the “anti-empathy machine” (Turkle, 2012, p. 22) and so, in my view, disturbingly anti-social.

With social media, we are seeing increasing attempts by technocrats to use information to control our behaviour. Some take it a further step. In 1968, the director of the MIT Media Lab, Nicholas Negroponte, foresaw the implanting of computer chips into brains. In the language of other information technologists of the time, he predicted that this would lead to a “collective consciousness [...] that transcends all the individuals”. A colleague added that “in 20 years computers will be embedded by bioengineers in our bodies”. That prediction has been brought into reality by Musk’s company Neuralink, which in 2024 implanted a brain-computer interface into a human. The company was set up with the goal of



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“mesh[ing] human brains with artificial intelligence” (quoted in Maguire & McGee, 1999, p. 9).

To the extent that such communication systems inherently avoid the conscious intervention of recipients when information is put into their brains, they echo concerns raised by earlier analysts of deterministic accounts of information. From Knox’s “information age” in the eighteenth century, people worried that information, rather than supporting their conscious decision-making, was in fact circumventing their choice, tastes, and preferences and simply wiring them into action in someone else’s interest. The eighteenth-century English philosopher David Hartley in his *Observations on Man* outlined this view of information. When he contemplated its worrying effects of mechanizing the human mind and was unable to think of a way to resist such informational-determinism, he reconciled himself by assuming that “God [...] should give us the right information” (quoted in Duguid, 2015, pp. 357-8). Our modern technocrats have put themselves into this god-like role and made the users of their technologies, in particular users of social media, dependent on their devices for information, which they seem to be trying to nudge evermore towards a preordained determinism.

Such remarkable empowerment of the media that carry information make those of us who cannot invoke God in our defence responsible at the very least to try to make public its anti-social characteristics, while hoping at the same to reassure us all that information can, in the right circumstances, such as in publications like *Le Libellio*, still have a positive social life ■

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