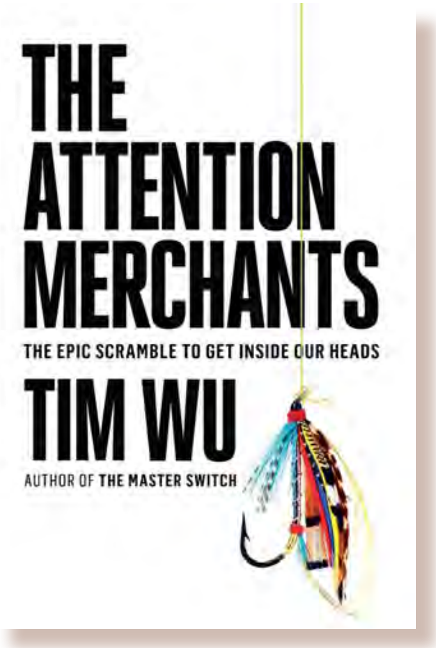
Le Libellio d' AEGIS
Vol. 13, n° 1 – Printemps 2017
pp. 21-29

Information empires, attention masters, and the public sphere

A review of *The Attention Merchants: The Epic Scramble to Get Inside Our Heads*, by Tim Wu

Paul Duguid
UC Berkeley School of Information



"It was the best of times. It was the worst of times" (Dickens, 1910, p. 341). Charles Dickens's celebrated opening to his novel about the French Revolution anticipates many accounts of our "information" revolution. Much like Dickens's divided population, modern commentators tend to assume that, riding on the back of new technology, either "We were all going direct to heaven" or that "We were all going direct the other way" (ibid). Either way, the accounts tend to be linear. Thus Timothy Wu, a professor of law at Columbia University in New York, provides a refreshing perspective with what are essentially cyclical accounts. His earlier book, *The Master Switch: The Rise and Fall of Information Empires* (2010), as the subtitle indicates, provides such an account of the information age. Wu argues that the "empires" he tracks, the great telephone, radio, and television companies of the United States, including in particular AT&T and NBC, (though they may have intimations of cumulative progress) moved back and forth between being "open" to competitive, dynamic market forces and being "closed" anti-competitive and monopolistic. His intention is to explain why and ultimately to explore whether, given the radical changes associated with the internet and the information age, we should expect these cycles to continue indefinitely into the future.

Wu is widely recognized for coining the term "net neutrality" to describe the ideal conditions for an "open" internet, independent of either corporate or government interests. This notion became the rallying cry for a movement that successfully pushed the U.S. Federal Communication Commission to prevent companies that run cable networks from discriminating among the traffic they carry (the companies sought to delay network traffic unless they received a fee). *The Master Switch* relies on a related idea of openness as a measure to appraise not merely companies, but more emphatically governments and their tendencies, when not restrained by law and public opinion, to intervene in markets, not to preserve neutrality, but rather to sanction monopolies. Such interventions appear particularly troubling in communication sectors, where businesses may not merely discriminate among users, but also grant governments access to the communications that they transmit or store in exchange for invaluable state-sanctioned protection that may allow those businesses, as Wu sees it, to "stave off industrial death" that open competition would bring (2010, p. 28). It is from this perspective, Wu proposes, that we should understand the action of the enduring and resurgent communications monopoly AT&T when it gave the U.S. National Security Agency unimpeded access to internet and telephone traffic passing through its networks in San Francisco. While Wu traces such government-corporate alliances back to the nineteenth century, they have a far longer history. Centuries before AT&T, the English government ceded monopolistic control over printing to the Stationers Company, which in return for a Royal Charter in 1557, made sure that what its members published did not offend the government, knowing that if the Company failed to exercise such censorship, the government might break its lucrative monopoly.

Deploying Schumpeter, whose "cycle of industrial life and death" Wu acknowledges as "an inspiration for this book" (2010, p. 10), *The Master Switch* portrays the driving force of these cycles as innovation. He begins his account with Alexander Graham Bell and the telephone, crediting Bell not so much with the invention (pointing out that Elisha Grey and others were working on similar devices at the same time) as with the ability to see the disruptive potential of the new device. In Wu's account, Bell saw how the telephone could circumvent Western Union's telegraph monopoly, despite the latter's political alliance with the president of the day, Rutherford B. Hayes, for whom, during the election campaign of 1876, Western Union had provided access to the telegraph messages of Hayes's political opponents. Bell's new technology thus pushed a corrupt and "closed" political-commercial alliance into an "open", competitive market. Wu goes on to examine the later rise of subsequent "information empires" built on radio, on film, and on television. In each case new inventions broke prior, "closed" monopolies and created "open" competition before monopolistic closure cycled back round through the power that accrues to such disruptive inventions which allowed new monopolies to form, often out of the wreckage of the old. Hence Wu's journey through successive cycles ends back with AT&T, the direct descendent of Bell's startup, still around after 150 years and long-protected by government indulgence.

While Wu's claim about Bell's insight sets up his argument nicely, it suggests rather oversimplified history, as some, like Amy Friedlander (1995), doubt that Bell himself did see the potential of the telephone clearly; he may originally have planned it more as a broadcasting device. (In such cases, it is always wise to remember the admonishment of Theuth to the mythical inventor of writing, Thamus, in Plato's *Phaedrus*: "the discoverer of an art is not the best judge of the good or harm which will accrue to those who practice it", 1973, p. 96). But Wu's history serves principally to give context to an account of the present, and the book ends with a view of the internet portrayed in the light of Wu's cycles, which helps to question common assumptions that with the internet everything has changed. If the internet is the disruptive technology often claimed, it should be able to disrupt not merely particular cycles, but the cycles in general.

Thus the last and, one suspects, to its author the most important section of *The Master Switch* provides a detailed account of the development of the commercial internet. Wu follows the rise of AOL (America Online), a subscription service which became the dominant means of public access to the internet in the United States in the 1990s, and its subsequent collapse in a famous, ill-fated merger with the old television company, Time-Warner, which failed to prevent the subscription-only enclosure AOL had built from being bypassed by the "open" structures of new internet ventures like Wikipedia and Google, which were accessible and "free" to all. This new world was not entirely "open", from Wu's perspective, however. Among the "closed" villains Wu deplores is Apple, which as an upstart had helped to undermine the monopolistic tendencies of IBM, but then in the hands of Steve Jobs, by Wu's account, went from an "open" architecture supported by Jobs's early partner Steve Wozniak, to a "closed" business with monopolistic tendencies that implicitly lent support to companion enclosures such as Microsoft.

While Apple and Microsoft may be among the villains Wu denounces in his final section, the book proposes throughout that the arch villain of the story is government, repeatedly supporting monopolies against the interests of "open" markets. The book thus has a strong tinge of the anti-government, libertarian ethos that, as Fred Turner showed in *From Counterculture to Cyberculture* (2006), helped shape popular understanding of new technology and the information age. Championing markets and denouncing government intervention, however, Wu overlooks the problematic character of "information" that has given its name to the revolution, empires, society, and economy that he seeks to explore. Non-rivalrous and non-excludable, information makes an awkward commodity, notoriously hard to market without government intervention of some sort. As a commodity, information challenges economic assumptions about the "perfect", "complete", or merely "symmetrical" information economists posit as external conditions for the sort of open markets to avoid "failure". Governments, as the example of England's Stationers' Company indicates, have been involved since early days of information commodification, but they have also had to play roles in preventing information from being controlled and thereby reducing commodities to "lemons" (Akerlof, 1970) or markets to monopolies. While the Stationers exemplify one kind of information monopoly, copyright, patents, and trademarks exemplify another more pervasive set of government-sanctioned, commodifying, monopolistic property rights—"natural" monopolies that the U.S. Constitution excuses in order to encourage Wu and Schumpeter's champion force, innovation, in "Science and the useful Arts" (*U.S. Constitution*, Article 1, section 8). While the exact role governments should play remains problematic and contested, to cast them primarily as a villain should they intervene is redolent of the innocence of that arch libertarian Stuart Brand's famous claim that "information wants to be free", which assumes that information is capable of being so.

Wu's new book, *The Attention Merchants: The Epic Scramble to Get Inside Our Heads*, offers a companion to this first account; the two together, in Wu's view, explore the "influence of economic ambition and power on how we experience our lives" (2016, p. 6). A companion, not a sequel, the book tracks a similar history, starting again in the nineteenth century, but with the modern newspaper rather than the telephone, and ending once again with the internet. Like the earlier book, *The Attention Merchants* also offers a cyclical account, as both news and new media try to lure the attention of an interested audience, and, if they succeed, to then sell that attention to advertisers. Wu begins with Benjamin Day, a printer who introduced a tradition of newspapers that cost 1¢ and rivaled the established press that normally cost 6¢. As the audience of this "penny press" grew, drawn by the cheap cost and sensational news, their owners made up for income lost from cutting the price by bulking up with advertising that was often similarly sensational. Horace Greeley, editor of the *New York Tribune*, described the business model succinctly 175 years ago: "We lose money on our circulation by itself considered, but with 20,000 subscribers we can command such Advertising and such prices for it as will render our enterprise a remunerating one" (*New York Tribune*, May 3, 1841).

From newspapers Wu takes us again to radio, television, each producing new innovations to break holds that prior innovations had enabled, but within each period, these cycles are driven less by innovation than by consumer resistance as the audience turns away from content, particularly advertising, that now fails to capture their attention, or from related practices that seem excessively manipulative. Wu sees such cycles in the rise of the television mass audience in the 1950s and 1960s and, as that audience turned away from generic TV, in the development of "countercultural" television programming in the 1970s.

As in the earlier book, Wu ends once again with the internet looking at the advertising empires of Google and Facebook and the rise of such things as sensational tweets and other forms of "clickbait". Wu quotes well-known U.S. commentators like Larry Lessig and Clay Shirky, who predicted that the internet would disable communications monopolisation as both design and use became "open" and free to all. Their visions of this new, open democratic forum where "information" is freely shared are countered by comments from Tim Cook, Apple's CEO, who noted how "users of Internet services began to realize that when an online service is free, you're not the customer. You're the product" (Wu, 2016, 335; Cook's is not the first, but in the context of online advertising, probably the most significant use of this notion of consumer as product). Indeed, in the world of the "open" internet, modern attention masters went beyond harvesting our attention, Wu's central concern, to harvesting our "data"—names, locations, interests, contacts, etc.—which are now surreptitiously exchanged for the advertisements that we are enticed to click on and used to develop new forms of enticement. Hence the sad and oft-quoted insight of Jeff Hammerbacher, a former employee of Facebook, that rather than building a great, global, democratic forum of the sort envisaged by Lessig and Shirky, "the best minds of my generation are thinking about how to make people click on ads" (Vance, 2011). Ideas of "free" and "freedom", but also of Wu's "openness", now all come, as Cook points out, at a hidden but significant cost.

Surprisingly, Google, master of advertising, championed in Wu's former book, remains a champion in this one, though Facebook is thoroughly condemned. Wu fails to show that Google does much very different from Facebook, but Google apparently retains Wu's faith because of the distinct intentions of its founders. Where Mark Zuckerberg, founder of Facebook, has been open about his intention of thriving on advertising and appropriation of user data, the Google founders, by contrast, early on condemned the "black arts" of advertising and their effects on search. This secures Wu's enduring support, so that when he reports that one of Google's founders, Larry

Page, began "to feel that AdWords [the Google advertising system] was a good and just innovation", Wu (2016, p. 265) seems willing to agree. On the other hand, Wu continues to condemn Apple even though it does not depended on advertising, collects and manipulates comparatively limited information about its users, and was an early supporter of "ad blocking" technology that has put significant constraints on the contemporary "attention merchants" at both Facebook and Google. Similarly, where the earlier book denounced AOL for its "closed" subscription model, the later one celebrates companies like Netflix that have eschewed advertising for a subscription model. In all, Wu's argument is not as clear or coherent as it might at first seem.

While there is much of interest in the second book, as in the first, both are limited in their historical and theoretical vision. Both assume that the story they want to tell can be told within the confines of U.S. history. They are not alone in doing so. Alfred Chandler's influential work assumes that business history can mostly be told within the United States and mostly in the wake of the "Second Industrial Revolution". Drawing on Chandler but turning to information industries, the sociologist James Beniger's *Control Revolution: Technological and Economic Origins of the Information Society* (1986) bravely challenged many of his contemporaries by claiming that the topic of his subtitle required looking back beyond contemporary society, where many accounts were happy to stop, to Chandler's starting point, but he felt no need to look further or to look beyond the United States. Later histories influenced by Beniger and Chandler, including James Cortada's *All the Facts* (2016), a general history of information, spans the same period and remains within the United States. Wu fits within the same arc and while, like Beniger, pushing against those who feel such stories can be told without looking back at all, nonetheless eschews antecedents or other countries. (Britain and Germany merit some attention for their prowess in government propaganda, while France gets acknowledged for its coloured advertising posters.) Limiting the account in this way endorses Wu claim that the traits he describes and the "merchants" behind them "barely existed a century ago" (2016, p. 5). Yet not only advertising but resistance to it and so the cycles around it go back at least to the early days of the still-published *London Gazette*, which 350 years ago in the face of pressure from the attention masters of its day felt it wise to "declare once and for all" that the *Gazette* would not carry advertising (1666, June 28th, p. 2). Moreover, in keeping with Wu's thesis, the cycle swung around and the *Gazette* soon capitulated.

In an account of the development of the "science" of advertising, Wu notes that Claude Hopkins, one of the early masters of the U.S. advertising industry, had declared in 1928 that advertising had little more to learn as "Human nature does not change" (2016, p. 70). In taking this as a seminal moment in advertising awareness, Wu appears unaware that the great essayist and lexicographer Samuel Johnson had almost 170 years earlier similarly declared that advertising was "so near to perfection that it is not easy to propose an improvement". In his claim, Johnson anticipates Wu's cycle, acknowledging, on the one hand, the prowess of these "masters of the public ear" (not too dissimilar from Wu's "attention masters"), but worrying, on the other hand as many did at the time, "Whether they do not play too wantonly with our passions" and should be resisted (1761, p. 226). Like Wu at times, Johnson was particularly worried by the marketing of medicines, but such concern were not even new with Johnson, going back at least a further half-century to essayists like Richard Steele (1712), who similarly denounced the inescapable advertising of "quack" physicians that lined both the newspapers and the walls of London cafés in his day, while the first advertisement to break the *Gazette's* resolve promised to cure "deformed Bodies, crooked Legs and Feet, [and] wry Necks" (1668, June 1st, p. 2). Indeed, ties between the publishing and pharmaceutical professions go back to the seventeenth century, when almanacs that could command audiences quite as big as Greeley's were owned by drug companies very much seeking to be "attention masters" (Curth, 2005).

Portrait de Samuel Johnson lisant, Joshua Reynolds (1775)

Looking back at the eighteenth century suggests that the limits of Wu's analysis are not merely historical. Reading Johnson's *Dictionary* (1755-6), we discover advertisement defined as "information" much as his contemporary John Wesley in his *Dictionary* (1777) defined *to advertise* as "to inform". The word *advertise* thus extended beyond commercial relations to encapsulate the growing political notion of an "informed public". Johnson's was clearly concerned about the clashing yet fiscally interdependent informational goals of the newspaper––a concern that stretches across history from the *Gazette* to Facebook. Thus he talks of the "man who first took advantage of the general curiosity that was excited by a Siege or a Battle, to betray the Readers of News into the knowledge of the Shop where the best Puffs and Powder were to be sold" (1761, p. 224). On the one hand the press seeks to inform; on the other, to "betray".

These debates bring us back to the role of information in democratic society, a topic Wu tends to set aside in his focus on the consumer. In regard to the latter, Wu offers two accounts of how his "attention merchants" "get in side our heads", as his subtitle puts it. At times, he portrays information as the content of conscious, commercial decision-making that "cannot be acted upon without attention and thus attention capture and information are essential to a functioning market" (2016, p. 77). Such arguments capture the naivety of the economists George Stigler and Gary Becker (both Nobel laureates), who claim "it is neither necessary nor useful to attribute to advertising the function of changing tastes… advertising affects consumption not by changing tastes, but by changing price" (1977, p. 84). Such claims might help keep models clean but they hardly address the challenges of the real world and the work done in the marketplace to "get inside our heads". Thus, at other times, Wu regards information as the stuff that "every second, our senses transmit an estimated 11 million bits of" (2016, p. 77). In the former role, information demands our attention; in the latter it appears to bypass attention. For both markets and democracies, understanding the relationship between the two is important. Unlike the Nobel economists, Walter Benjamin tried in his "Work of Art in the Age of Mechanical Production", where he discussed the issue in historical terms, proposing that when the mechanical forms are compared to their predecessors, we see that "unconsciously penetrated space is substituted for a space consciously explored" (1968, p. 236). In his *Ways of Seeing*, John Berger (1972) pursues implications of Benjamin's insight for a world where politics, art, and advertising mingle (cycling, in the process, back to Johnson's concerns). Neither is acknowledged here, nor is there much discussion of surreptitious advertising that sits between the conscious and unconscious such as "product placement" of the sort whereby Sylvester Stallone was paid half-a-million dollars to smoke a particular brand of cigarettes in his films (Oreskes & Conway, 2011, p. 139).

In the former case, when information is the subject of explicit reflection, as Johnson's Dictionary intimates, we associate it not only with markets, but also with public opinion and democratic societies. Here we might expect a book on attention merchandizing to turn to Jürgen Habermas. Wu does acknowledge Habermas: "Large numbers of people taking in daily news gave rise to what Jürgen Habermas has called a 'public sphere'—a more quotidian term for this effect is 'public opinion'" (2016 p. 15). That comment intimates that Wu probably overlooked Habermas's own, extensive discussion of "public opinion" in the book Wu cites *The Structural Transformation of the Public Sphere* (see Section VII "On the Concept of Public Opinion", 2016, pp. 236-250). Habermas locates the origins of the public sphere not so much in the Wu's nineteenth century as in the eighteenth, when some, such as Steele, were worried about advertising in cafés, the fulcrum of Habermas's public sphere; others, such as Johnson, were pondering over the porous boundary between advertisements and information in the newspapers; yet others, such as Tom Paine and Thomas Jefferson, were pondering the relationship between information and democracy; and by extension governments, even monarchies like Great Britain, were considering their responsibility towards public opinion. In these contexts, Habermas realises that "'Public opinion' takes on a different meaning depending on whether it is brought into play as a critical authority in connection with the normative mandate that the exercise of political and social power be subject to publicity or as the object to be molded in connection with a staged display of, and manipulative propagation of, publicity in the service of persons and institutions, consumer goods, and programs" (1989, p. 236). Habermas's "molded" there recapitulates Johnson's wanton "play".

This clash between informing and advertising, between the "public sphere" of democracy and the "private sphere" of the marketplace, and between communication and manipulation, takes us back once more to that question of the roles of government, questions that Wu generally avoids in his enthusiasm for free, open, and neutral markets. Trying to avoid, as well, a gloomy conclusion, he maintains that, in adjudicating "not how the attention merchant should conduct business, but where and when", he sees room for future action because "society has been woefully negligent about what in other contexts we would call the rules of zoning, the regulation of commercial activity" (2016, p. 341, italics in original). That use of the rather nebulous term "society" reflects, I suspect, Wu's enduring reluctance to discuss a positive role for government. In passing, he does give examples of, but barely discusses directly, the significance of this role. He shows how the Food and Drugs Act of 1906 curtailed the more extravagant claims of patent medicine sales—something that Steele had been concerned about in 1712. Later he alludes in passing to the Federal Communication Commission, which also put constraints on broadcasters. Similarly, though he applauds subscription models like Netflix's (but not AOL's), he barely acknowledges and does not discuss state-owned models of broadcast that also manage without advertising while providing high-quality programming and reputable news and remaining by most accounts decidedly "open".

In all, while Wu's cyclical discussion of the information sector's "empires" and his later, related account of the rise and fall of advertising's "attention merchants" both raise topics that deserve the sort of historical setting and theoretical analysis that Wu attempts, his limited history, his unwillingness to address the central concept of "information", and his reluctance to engage with the complex relation between government and information restricts the potential of both books. On the last point, the United States and Europe often seem divided by the former's relatively strong trust in corporations and deep suspicion of government and the Europeans contrasting relative trust in government and suspicion of corporations. This has led to quite different regulations involving "information empires" and "attention merchants" and, in the internet era, their increasing use and manipulation of information about consumers. Wu is right that we should be concerned about collusion between the two, as, for example, when Google, Facebook, or Twitter readily surrender information on their users to government. Such concern does not entail, however, that we can construct a model of "information neutrality" in which government has no role any more than we can construct one in which the marketplace has no role. After all, even "net neutrality" in the United States, which Wu so admirably championed, has been achieved, for now, through the intervention in the marketplace of a government agency, the Federal Communications Commission. Moreover, having a government in place at the moment that seems suspicious, like Wu, of all government intervention, it seems likely that "net neutrality" is seriously under threat ■

References

Akerlof George A. (1970) "The Market for 'Lemons': Quality, Uncertainty, and the Market Mechanism", *The Quarterly Journal of Economics*, vol. 84, n° 3, pp. 488-500.

Beniger James R. (1986) *The Control Revolution: Technological and Economic Origins of the Information Society*, Cambridge (MA), Harvard University Press.

Benjamin Walter (1968) "The Work of Art in the Age of Mechanical Reproduction", *in* Arendt Hannah [ed] *Illuminations: Essays and Reflection*, New York, Schocken Books, pp. 217-251.

Berger John (1972) *Ways of Seeing*, Harmondsworth (UK), Penguin Books.

Brin Sergey & Page Lawrence (2000) "The Anatomy of a Large-Scale Hypertextual Web Search Engine", Stanford, Stanford University, Computer Science Department. http://infolab.stanford.edu/~backrub/google.html

Cortada James (2016) *All the Facts: A History of Information in the U.S. Since 1870*, New York, Oxford University Press.

Curth Louise Hill (2005) "The Medical Content of English Almanacs, 1640-1700", *Journal of the History of Medicine and Allied Sciences*, vol. 60, n° 3, pp. 255-282.

Dickens Charles (1910) *The Adventures of Oliver Twist and A Tale of Two Cities*, London, Chapman Hall.

Friedlander Amy (1995) *Natural Monopoly and Universal Service: Telephones and Telegraphs in the U.S. Communications Infrastructure, 1837-1940*, Reston (VA), Corporation for National Research Initiatives.

Habermas Jürgen (1989) *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society*, Cambridge (MA), MIT Press.

Johnson Samuel (1755) A Dictionary of the English Language (2 vols), London, printed by W. Strahan.

Johnson Samuel (1761) "On Advertising", *The Idler*, n° 40 (Jan 20th), pp. 224-229.

Oreskes Naomi & Conway Erik M. (2011) *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming*, New York, Bloomsbury.

Plato (1973) *Phaedrus, and, The Seventh and Eighth Letters*, Walter Hamilton, trans., Harmondsworth (UK), Penguin Books.

Steele Richard (1712) "An Essay on Quacks", *The Spectator*, n° 572 (July 26th), pp. 68-72.

Stigler George J. & Becker Gary S. (1977) "De Gustibus Non Est Disputandum", *The American Economic Review*, vol. 67, n° 2, pp. 76-90.

Turner Fred (2006) *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism*, Chicago, University of Chicago Press.

Vance Ashlee (2011) “This Tech Bubble is Different” *Bloomberg Business Week*, April 14. https://www.bloomberg.com/news/articles/2011-04-14/this-tech-bubble-is-different.

Wesley John (1777) *The Complete English Dictionary*, London, printed by R. Hawes.

Wu Tim (2010) *The Master Switch: The Rise and Fall of Information Empires*, New York, Knopf.

Wu Tim (2016) *The Attention Masters: The Epic Scramble to Get Inside Our Heads*, New York, Knopf.