Interview

“Old Media Don’t Go Away, They Mutate”: An Interview with Jeffrey Schnapp

CARMEN BIRKLE and BIRGIT ĐAWESE

Carmen Birkle & Birgit Đawares (B&D):
The Berkman Klein Center for Internet & Society at Harvard is an interdisciplinary research center that has developed into a unique institution over the past twenty years. Could you tell us more about the Center, the benefits of its interdisciplinary organization, and your role there?

Jeffrey Schnapp (JS):
The Berkman Klein Center for Internet & Society was born at the Harvard Law School in 1998, when awareness of the World Wide Web’s emergence as one of the defining social and civic spaces of our era was still in its infancy. The Center matured and, in the late 2000s, it became a university-wide center, accommodating scholars not just from Law but also from such fields as International Relations, Communications, Sociology, Computer Science, and Government as well as expanding its community of on-site and off-site fellows (which encompasses activists as well as scholars).

When I arrived from Stanford in 2009, fresh from a decade during which I had served as founder-director of the Stanford Humanities Lab, I became a Berkman fellow and soon came to consider the Center my Harvard academic home. Harvard can sometimes feel a bit centripetal, but the Berkman Center is an exception. It’s a porous, multidisciplinary community with strong connections to MIT, Boston University, Northeastern, and institutions worldwide. And it’s one that spans all disciplines, not to mention leading a global network of centers of internet and society. When I joined the Harvard faculty one year and a half later, I became one of the Center’s faculty co-directors, the first from a humanities field. Like other co-directors, I am part of the leadership brain trust, participate in planning and grant writing, as well as project development and oversight. I chose to locate metaLAB within the Berkman Klein Center for the above reasons.
B&D:  
According to your website, metaLAB is “an idea foundry, knowledge-design lab, and production studio experimenting in the networked arts and humanities.” How would you describe the major contributions of the lab to the fields of education and cultural studies? Is it a benefit to have been trained in the fields of Comparative Literature and Romance Studies?

JS:  
metaLAB is an experimental platform that seeks to model new forms of cultural communication, creative practice, and scientific knowledge production, but ones that dialogue constantly with venerable and consecrated disciplinary practices, even ones that have fallen out of fashion. Integral to that mission is an experimental / experiential model of pedagogy that brings together the seminar and the design studio, the mind and the hand, thinking and making. This implies a classroom where no one is entirely “at home” from a disciplinary standpoint … and that includes the professor. Typically, such courses work on unsolved problems, unprocessed archives, or involve design practice. The deliverables, however, are always concrete. Above and beyond research papers, they sometimes include video documentaries, pieces of software, data visualizations, curatorial projects, and pieces of exhibitions. Of course, I teach conventional courses as well (and deeply believe in their value and importance), but I tend to mix a pedagogy based upon “knowledge design” questions even into the most traditional of seminars. In other words, every time you pose a research question in one of my seminars, you must also pose a design question regarding the procedures, forms, and formats that such research could accommodate or requires.

metaLAB works in a wide range of fields, including non-humanities ones, so it’s not easy to answer a question regarding specific contributions to “Cultural Studies” (however understood). I suppose I could single out a couple of representative projects as significant: the metaLAB projects publication series, the Lightbox Gallery at the Harvard Art Museums, and Curricle, our course discovery and exploration platform.

The metaLAB project series—originally with Harvard University Press, now with MIT Press—represents an effort to reimagine the scholarly book. It’s a design-driven approach—we do the art direction in-house—in which books are written with a design template in mind. They combine traditional long-form argument with shorter forms (so-called windows), tightly woven together into a colorful verbal-visual mesh. A number of the books in the series, Johanna Drucker’s *Graphesis* (2014), Matthew Battles’s and my *The Library beyond the Book* (2014), and Tara MacPherson’s *Feminist in the Software Lab* (2018), have proven influential. The first traces a twentieth-century history of visual argument
from antiquity to the present; the second provides a comprehensive account of what libraries have been, are, and may become in the twenty-first century; the third explores the gendered coding of software within the laboratory of the digital humanities and beyond. In each, typography, color, and visual documentation are integral to a scholarly argument that speaks to a broad transdisciplinary audience in a language that sometimes spills over into websites, database documentaries, card decks, and other extra-codicological supports.

When the Harvard Art Museums reopened in their current Renzo-Piano-designed home, metaLAB developed an experimental gallery: the Lightbox Gallery. The gallery is located on the fifth floor; it’s the very last space traversed by visitors as they move up through the five floors of the building. As they enter it, they are greeted by a monitor wall displaying thumbnails of every one of the 1,803 objects on exhibit in the galleries below: 1,803 objects, in other words, that they have already experienced face to face. When the visitor points an air mouse at any item on the wall, the object is summoned up as a wall-sized overlay: not as digital surrogate but rather as a database record on any of whose fields—provenance, date, place of creation, material, medium, color balance, category, size, online popularity, etc.—the visitor can click, triggering a bank of projectors that flash a data visualization on the opposing wall that shows where this object is positioned with respect to the other 1,802. In the Lightbox Gallery every object is treated as a network of relationships that can be looked at from a multiplicity of (otherwise invisible) angles. The project is an answer to how the experience of a database can add value to the experience of a corpus of artworks.

Third but not least, I should mention Curricile: a revolutionary new course selection and management platform to empower students, faculty, and university leaders with dynamic, data-driven tools to navigate the course landscape. Despite rapid technological change and increasing access to data, course registration platforms have remained much as they were during the era of printed course catalogues. Curricile leverages search and exploration capacities and data visualization to expand the set of entry points through which students can access the curriculum and drive a path toward a unique education. Curricile’s suite of visualizations approach the discovery process through reflecting how courses are taught and how students learn best, leveraging networks of connections between professors to surface otherwise invisible links, and finding the points of intersection between diverse fields of interest. Curricile additionally provides calendar tools for sequencing courses strategically, as well as social features for reflecting on decisions along the way, and sharing them with friends, family, and advisors. Curricile is the first course navigation product that enables a discovery process in which students can explore and define their areas of interest dynamically over their college careers, serving faculty and academic leaders in the process as they shape and lead today’s institutions of higher learning.
B&D:
In a recent publication on *The Digital Turn in Higher Education* (2018), David Kergel and Birte Heidkamp have emphasized that the “digital turn” is not so much a “force of nature” as “a cultural manifestation” that should be analyzed and approached as such. From the point of view of cultural analysis, or of the humanities at large: What are the greatest challenges and opportunities with regard to the contemporary changes in our landscape of media and technology?

JS:
I’m afraid that I haven’t read the Kergel / Heidkamp book, but I suspect that my views fall somewhere in between the two poles. There are many challenges (and opportunities) but I think I would single out one in particular: a potential shift in the scale of the kinds of phenomena that we study as humanists, the stories that we tell, the knowledge that we produce, and the languages that knowledge speaks. The human record is largely written on the human scale—that’s usually what we mean when we talk about “stories” or “storytelling”—but our expanded toolkit allows us to grapple with a vastly expanded field of cultural objects and to interweave narratives on an enormous scale with many other sorts of scales: to design zooming experiences, that is, from macro to micro and back through the more familiar middle layer.

B&D:
From your experience at the Stanford Humanities Lab and the Harvard metaLAB: what are the major possibilities of our current moment in time, especially with regard to education? Have any of these changed since the late 1990s? In what ways?

JS:
The list is long: democratization of access to knowledge resources, a less text-centric understanding of learning, the classroom as *laboratorium* in the active sense that ties together critical thinking and critical making (*labor*), a reconjunction of scientific / scholarly practice, the design and building of archives, and curatorial activity … to name only a few. Some of these are conditioned by shifts in technology and the media ecosphere, but only in part.

I don’t believe that tools, digital or not, determine these changes; they mostly facilitate them and prompt something that was always already there: an urge, a critique, a need, an inchoate inspiration, a social aspiration. I am deeply engaged by digital culture, but most of my models of inspiration aren’t digital at all. They reach back instead to the laboratories of the avant-gardes, to the Bauhaus and Black Mountain.
College; to various threads of pedagogical experimentalism from the second half of the nineteenth century to the counterculture of the Sixties to the present.

**B&D:**

If we read your CV correctly, you’re originally a medievalist. How would you evaluate the development of technological revolutions—and human reactions to them—through history? In the context of our contemporary digital turn, is there a lesson to be learned from historical examples?

**JS:**

Yes, I was trained as a medievalist with a focus on Dante and thirteenth-to fourteenth-century Italian literature and manuscript culture, though I always cultivated a strong interest in the early twentieth century: in the history of the avant-gardes in particular. I continue to teach the Middle Ages, even if my scholarly focus long ago shifted to the twentieth and twenty-first centuries. As indicated in a prior response, I’m skeptical regarding techno-determinist explanations. Technologies are products of a given culture and they take on meaning within a dense fabric of social, institutional, demographic, and material factors, and that includes today’s technologies.

Today’s transitions and transformations are not unlike transitions and transformations from the past: like that from late medieval manuscript culture to print. No medium of record suddenly displaces another. Instead, a dynamic realignment takes place. New hybridities are forged. Newly specialized functions are assigned to old media channels. But it is synchrony that prevails in cultural history. Old media don’t go away: they mutate. As the first centuries of books roll off the presses, scriptoria move from churning out lecture notes to crafting luxury pocket editions of multicolor illuminated prayer books. Microforms flourish alongside industrial-era books. Moleskine notebooks proliferate alongside laptops. Since the advent of the World Wide Web, more books continue to be printed than ever during the pre-internet era (and many of these are self-published books, a direct product of the democratization of access to publishing platforms).

**B&D:**

According to your Harvard colleague Werner Sollors (in this issue), the Enlightenment idea of a publicly negotiated “volonté générale” has been almost entirely replaced by forms of expression through social media that are “shrill and violent, encouraging exaggerations and coarseness.” In the current political climate, this new style of communication may be aligned with specific ideologies or policies in harmful ways. Since we
cannot ask our children, pupils, and students to refrain entirely from the use of social media, what are the most important skills or knowledge factors that education can provide them with, especially in light of fake news?

JS:
I have great respect for my distinguished colleague in the English department (and, naturally, haven’t read his contribution to the present issue). But I’ll confess that I am skeptical of invocations of a general will. Who gets to say what is “general” or non-“general”? Who gets to determine which voices are too shrill or too coarse or too hyperbolic to be welcome within the public sphere?

B&D:
The threat that social media pose is that news or so-called news are not only spread immediately, worldwide, and to millions of users, but the user behavior also generates filters or news bubbles that determine how we think by only offering algorithm-generated information that we expect to get because of the position and opinion that we have voiced so far. Do you see this as a potential danger in educational and general politics? How can we avoid being part of such a news bubble which prevents us from receiving balanced news?

JS:
However distinctive their present form, news bubbles and filters are hardly the creation of social media. They may operate on vaster scales, churn more quickly, and be characterized by an accelerated “virality,” but the news ecosphere that preceded them (extending back to the early twentieth century and beyond) wasn’t more democratic or pluralistic or enlightened. It was slower, to be sure, and far more centralized, in the hands of a small circle of far-from-illuminated elites. Who would you prefer as your news gatekeeper: William Randolph Hearst, Axel Springer, Rupert Murdoch, or an algorithm? Of the four, I’d probably choose the algorithm. It’s easier to disrupt, manipulate, and it can be rewritten.

Likewise, the notion of fake news spreading like wildfire is a venerable theme. It was already a source of panic in Greco-Roman political theory’s routine denunciations of rumor and the mob (the turba); the panic recurs in the critiques of image thinking and sensationalism articulated by the founding fathers of collective psychology (Gabriel Tarde, Scipio Sighele, Gustave Le Bon, etc.). Social networks have their own distinctive dynamics (high speed, constant connectivity, uncertain authorship) and language (memes, showboating, click baiting) but, like it or not, they are expressions of democratization.
Again, the challenge for educational institutions is to slow things down, to complexify, to contextualize: to expose our students to the depth dimensions of writing, thinking, critical reasoning, imagining, history .... As educators we need to lead by example, to intervene, to critique, to model, to nurture thoughtfulness, to do battle with presentism, small- and simple-mindedness, stupidity, and prejudice; and, of course, to expand society’s knowledge base and understanding. I consider this a doable task and, in my view, it’s one that needs to be undertaken both within and outside digital platforms, tools, and channels.

B&D:
Along similar lines: frequently, so-called digital natives argue that they have revolutionized the classroom by offering students the material and facts / information on a digital platform to prepare at home and then come to class prepared, ask questions, and discuss topics. The teacher would be a coach, as they say. What is actually different from a traditional seminar? The students read the text / book / an article at home and come to class prepared? Have we not worked in this way since antiquity? How much technology is adequate and profitable to use in teaching and what is too much? We, and many of our readers, would call ourselves digital immigrants. How can we teach digital natives? What does this discrepancy imply for the use of methods and contents?

JS:
I believe that there’s too much agency being granted in the question to the digital in the place of grounding questions like: “what kind of society do we want to live in?” or “what are the cognitive abilities and skills that we consider to be essential in confronting society’s future challenges?”

First of all, I'm not entirely sure that I believe that there is any such thing as a “digital native” who can be clearly differentiated from an “analogue native.” Both are equipped with the same core set of cognitive affordances that humans have had since homo sapiens first walked the surface of the earth (and, far from unique to humans, most of these affordances are shared with other animal species). In my mind, the existence of 24/7 data flows dependent upon electrical grids or even battery-powered chips under our skin don't alter this basic equation any more than the rise of telegraphy in the second half of the nineteenth century or television did in the 1960s.

Models of teaching are built upon the distinctive cognitive affordances of human beings, and technology—whether in the remote past or in the present—has only slightly altered these capacities. The architecture of classrooms; support devices from wax tablets to codices to laptops; differing institutional frameworks, social needs, and expecta-
tions; structured academic programs and models of pedagogy … all may vary from century to century and place to place, but learning remains the same situated, embodied, socially inflected process. Can it be reshaped? Of course. Is reshaping inherently good? Not necessarily so. There will always be metrics required, metrics that depend upon socially agreed-upon objectives. Just as magic lantern lectures altered science education in the late nineteenth century and recording-tape-based language laboratories altered the teaching of foreign languages in the early postwar, so the space of classrooms can and should be reimagined under present conditions. But it isn’t tools or devices that determine the solution. Dialectic, lectio and disputatio remain just as valuable pedagogies today as they were in distant predigital worlds. Socrates was a brilliant thinking coach: why not continue to practice the Socratic method both offline and online?

In my view, online education is transformative for certain educational tasks (especially bite-sized, bounded or skill-based ones). If I need to learn a coding trick in Javascript or Photoshop, or I want to fix my sink or door, YouTube will do fine. MOOCs have the potential to democratize higher education but not to replace it. They struggle to replicate the richness of the sorts of high-touch, face-to-face, group-based learning experiences that, in the long run, prove enduring and meaningful. There’s no real equivalency between these modes; each does something different. Which means that they could productively intersect. Should we experiment? Of course we should experiment (just as our predecessors in the era of Melvil Dewey, Maria Montessori, and John Dewey did). There’s no reason why industrial-era models of teaching and training should dictate today’s information age solutions.

B&D:

People who distrust digitalization often paint images of a disastrous apocalypse in contrast to those who see digitalization as a means of redemption. Where would you locate yourself in between these two extreme perceptions of digitalization?

JS:

Again, there’s too much religion on either side of this divide for my personal tastes (and I’m an atheist who doesn’t even believe in the analogue / digital divide, not to mention God). Anyone who has ever gotten their hands dirty using digital tools on an arduous real-world task like crafting an expressive data visualization or a meaningful museum interactive knows just how alternately magical and clunky digital tools actually are … (as was the case with prior tools and technologies from the chisel to the typewriter). The chiliasts and techno-utopians seem to me equally blinded.
Again, I'm opposed to overly sharp delineations of any digital / analogue opposition; they miss the mark no less than does the standard cliché that attributes immateriality to the digital and materiality to the analogue. In a deep sense, the digital is always ultimately about the analogue which is to say the human. If it is about anything, it is about how we work, communicate, share, go about our day, play, have fun, and interact with the world. It isn’t some kind of magical or monstrous self-propelling force driving civilization over a cliff or towards the Singularity.

B&D:

Will digitalization in teaching change the complexity of the human mind and of the world and humanity in general because machines often work with binary algorithms?

JS:

No. The human mind is always already complex and evolving: it was such before the digital era and remains such today. And the world has always been excessive in scale and compass with respect to the limits of human consciousness. Irrespective of the tools that support and extend its activities, the human mind will always seek to reduce the complexity and superabundance of the world to human-sized chunks of information: to human-scale and human-centric images and stories.

B&D:

Many critics, in order to tone down the possible dangers of digitalization, talk about a digital humanism that neither transforms human beings into machines nor, in turn, attempts to read or consider machines as human beings. Rather, they say that this form of humanism upholds the specificity of humanity and its characteristics and abilities and uses digital technologies to enhance rather than limit these abilities. Would you also use the term “digital humanism” in this sense or is it not rather a contradictio in adjecto? What do you think about people’s fear of cyborgs and transhumanism? About neuroenhancement? About augmented-reality tools? Generally, about enhancing human abilities?

JS:

I have always nurtured a critical view of humanism, so I don’t feel inclined to embrace a digital variant, even though I do view technologies as extensions and enhancements of human capabilities (like antennae are for insects). This said, I would reject any claim that the digital represents a fundamental break with the pre-digital past. I view the digital as only one particular iteration of human self-extension and one that
has both destructive potentialities and the potential, when used critically and creatively, to remedy social injustices and perhaps even to push humanity beyond the anthropocentrism that informed humanism in the first place—the very anthropocentrism that, for instance, has contributed to environmental devastation.

**B&D:**

Computers and robots often take the shape of cute beings that people have fun with just because they look like small children that deserve people’s love. Of course, this is a well-calculated movement on the side of the producers to more easily sell their products. What they also provoke in the onlooker is the impression of robots having, like human beings, emotions, a sense of injustice, and, generally, mental abilities, which they, to put it rationally, do not have. Why do (some) people believe in the humanity of robots? What do you think about “Sophia,” a robot who received Saudi-Arabian citizenship in October 2016, ironically in a country where women have considerably fewer civil rights than men? An often-discussed scenario is also the fear that computers / robots will replace teachers in the classroom. What is your reaction to this fear?

**JS:**

Sophia is an animatronic toy designed to stoke the appetites of hype-minded journalists (n.b. its developer, Hanson Robotics, is in the toy business). The fact that the Saudi authorities conferred citizenship upon such a device speaks ill of their technical knowledge and ethical judgment. Two years ago, I was on stage alongside Sophia at the United Nations testifying before a committee on the future of technology. The experience was embarrassing. Sophia didn’t transport me to the “uncanny valley” (where life-like robots are supposed to transport us humans).

Mind you, I don’t just think about robots. For over five years, I have been directly involved in their design, development, and production as cofounder and leader of a Boston-based robotics firm, Piaggio Fast Forward. Our gita™ robotic mobile cargo carrier has been on the U.S. market since late 2019. Gita is a non-humanoid “follow me” sidewalk vehicle that encourages the citizens of twenty-first-century cities to walk instead of reaching for the keys to the car: a product but also the embodiment of a vision of future pedestrian-centric (and car-free) cities.

So, allow me to say a few things about what’s wrong with the public conversation regarding robotics. Let’s start with some cultural-historical background. Since the era of Hero of Alexandria (first century AD) through Al-Jazari’s automata (twelfth century) through eighteenth-century digesting ducks and Mechanical Turks to, finally, Karel Čapek whose RUR serves as the basis for the word *robot*, an anthropomimetic premise has shaped the societal conversation regarding robots and robotics. It’s a
premise still shared by many engineers and entrepreneurs and storytellers and humanists alike: namely, that robots are about humans—i.e., that they are destined to be our doubles (be they enemies or friends); destined to be measured by human metrics; destined to replicate human cognition, emotions, gestures. Such a premise may make for compelling sci-fi fantasies but I believe that it leads to misunderstandings not to mention to serial technical and business failures. As cases in point, your readers might want to look into the slew of humanoid “companion robot” startups that have failed over the past decade—Gibo, Kuri, etc.—precisely as the only vocally humanoid Alexa and Google Home have succeeded.

Humanoid robots, cute or not, are not the true face of the expressions of robotics that have been transforming everything from factory floors to distribution centers for over a decade. Industrial robots like Kuka, warehousing robots like those made by Kiva Systems, warehouse sorting and picking robots perform complex tasks with a precision and speed and on a scale that is well beyond the human. It is at these sorts of well-bounded precision tasks that robots excel, not at giving hugs or shaking hands or feigning a sense of injustice. Even with recent advances in machine learning and AI, I do not believe that this situation is going to change in a fundamental way. The dream of a transcendental AI that is going to take over the world with its superhuman intelligence is just that: a dream, or, depending on your tastes, a nightmare.

**B&D:**

Because of massive deliberate interference with information on the internet and the social media (also through hacking), it is hard to know what to believe. Is fact-checking enough to get reliable information? Is removing material from the net that is considered harmful to others not a form of censorship that can easily go too far?

**JS:**

It has always been hard to know what to believe, whether you were listening to an orator in the Athenian agora twenty centuries ago or are reading a Facebook feed. Some sources are better vetted than others, as always. Print didn’t guarantee a reliably or meticulously fact-checked infosphere any more than did radio or television in their heydays. Every information ecology implies challenges as well as opportunities. I’m not against the removal of material, but I prefer grassroots, “community standards” methods rather than ones that place governments in the role of arbiter and judge.

**B&D:**

Miriam Meckel in her recent book publication, *Mein Kopf gehört mir: Eine Reise durch die schöne neue Welt des Brainhacking* (2018), talks about neuro-
capitalism, the business that makes money with and depends on human beings’ desire to reach perfection, to increase productivity by overcoming the limitations of the physical, (often weak) biological body. We know this phenomenon from coffee during the night before an exam. But in the world of neuro-capitalism, this phenomenon reaches never before-seen or even imagined dimensions. Would you say that brainhacking and neuro-capitalism are indeed our (dystopian) future? How can we find a balance between the freedom to experiment with and shape our own bodies and the responsibilities that come with this freedom?

**JS:**

I’m unfamiliar with Meckel’s book, so I fear that I may unfairly caricature its argument. But it sounds as if I would disagree inasmuch as I imagine that she’s making this sort of “brainhacking” argument not on the basis of caffeination (or psychedelics) but rather on recent work on the brain and neural networks. If so, I worry about any tendency to overlap the divide that separates human brains from computers inasmuch as the very same cognitive neuroscience that has been exploring speculative human/machine couplings has time and again shown just how deeply reliant the brain is on the entire human body to “think.” In other words, the brain is no plug-and-play calculating machine. This said, I would be inclined to argue that the whole prior history of human invention, capitalist and pre-capitalist, digital and pre-digital, technical and socio-cultural, strives to overcome the limitations of the physical body, prompting neural transformations and specialization of precisely the same kind that digital devices are prompting in our time. To call them “hacking” may be satisfying as a form of technocritique, but sounds potentially misleading. I’m particularly skeptical of these sorts of claims about the contemporary: a) because I’m a cultural historian who is congenitally distrustful about “the now is unprecedented” type of arguments; and b) because of my daily work with technologies that are being hyped unrecognizably beyond their actual capabilities and effects, whether in the press or in futurist circles, leading to an overvaluation of their impact.

**B&D:**

When we think of recent dystopian young adult fiction, such as Veronica Roth’s *Divergent* trilogy (2011-2013), we are faced with a form of neuroenhancement that takes away people’s capacity to make independent decisions. The Dauntless are programmed to kill without any ethical concerns but suffer from the knowledge of what they have done when the serum loses its effectivity. Would you say that this is our future? Perhaps also a future in the classroom? What do you think about the human brain communicating with a machine as an enhancement of the human body, also called “conscious engineering”? Could that poten-
tially help the process of inclusion of people with physical impairments into a regular class setting? What is your attitude about the impact of neuro- or self-enhancement both physical and neurological on human identity? Meckel even uses the terms “self-tracking” and “self-hacking.” What do you think the consequences for the classroom would or should be for scholarship? Of course, Stephen Hawking would be the perfect example of a successful physical enhancement.

JS:

Again, I’m going to diverge from the premise that we are about to cross some sort of epochal frontier between the human and the computational. To have a chip implanted inside your body to monitor blood sugars or prompt your heart to pump, to use a vocalizer à la Stephen Hawking, to walk about thanks to a hip replacement (I’ve had one since a 2006 motorcycle accident), or to rely upon cochlear implants to hear doesn’t fundamentally alter human nature any more than does the domestication of horses or the advent of telephony. There’s no question that some of these prostheses and enhancements are transformative from the standpoint of life extension and social inclusiveness; perhaps they may someday also be so from the standpoint of human consciousness (but psychedelics are a better bet).

The phrase “consciousness engineering,” on the other hand, makes me uneasy to the degree that it seems to imply, as do the dystopian deeds of the Dauntless, the existence of a master manipulator: a deus ex machina capable of engineering the real. Phrases of this kind first became commonplace in the 1950s and 1960s, associated in particular with the marketing and advertising industries that arose alongside post-war consumer culture. As Vance Packard set out to show in The Hidden Persuaders (1957), the Mad Men’s methodology was “scientific”; they had cracked the eternal laws of the human psyche, and developed an irresistible language of overt and hidden persuaders. Some even suggested that these techniques be applied in the classroom.

If self-tracking means a learner-centered, self-paced approach to education, that seems unobjectionable enough. If it means self-surveillance, well then welcome to the world in which all of us carry 24/7 tracking devices in our pockets.

B&D:

The Chinese government has invested enormous resources in a social credit system (社会信用体系), through which all citizens’ economic and social reputations are steered, monitored, and made publicly available. The system is scheduled for official institution next year. Remarkably, a recent study of the Free University Berlin has shown that 80% of the Chinese population have expressed a positive attitude toward this sys-
tem, and a large number of people has already volunteered to participate. We’d be interested in your thoughts about this connection between state government, social media, and surveillance technologies.

JS:

The rise of the surveillance state, whether in countries like China or in the West is, of course, of deep concern. It sets the stage for new models of mobilization and resistance: from hacking to malware to the deployment of anonymization tools (like Tor—I’m a user).

This said, Western norms regarding privacy and individual freedom are fragile cultural-historical constructs. We may consider them universals, but history suggests otherwise. Even within our Western societies, they weren’t firmly established in the early modern or pre-modern eras. And they are shifting as we speak under pressure from the culture of constant connectivity, online services, and data tracking.

The Chinese case is conditioned by a number of particulars: seventy years of communist rule; the state’s near total stranglehold on the media; certain Confucian habits of mind. But it wasn’t the rise of digital communications networks or smart phones or facial recognition systems per se that determined the advent of a social credit state. Rather, the Chinese state devoted half a century to building up a surveillance and control bureaucracy, employing, in the process, every tool and technology to which it had access; the social credit toolkit is just the latest.

B&D:

What do you think about the statement that the twenty-first century will be the century of the human brain, as some scholars proclaim? What would this development do to teaching and research? What would be the position of Artificial Intelligence in teaching?

JS:

For several decades now brain research has been entering a golden age thanks to advanced imaging techniques. I’m excited about such work and read it with interest. But I don’t see much evidence that the gap between thinking machines and human brains is about to be sundered.

In this regard, let me state something a bit bluntly, but I think it’s important for literary scholars to hear (I’m paraphrasing a major researcher in the AI field): Artificial Intelligence isn’t “intelligence” in the capacious sense in which it is usually understood; “neural networks” are not the digital doubles of the neurons in our brains (much as we might desire or fear such a fusion); “Deep Learning” is neither “deep” nor “learning” in any of the ways we use those terms.
So, AI in the classroom? Why not? But to teach students how to understand the powers and limits of AI and how to make use of it critically, creatively, appropriately, and ethically. AI for research purposes: absolutely. At metaLAB this spring we have been experimenting with a suite of machine-learning tools to study museum print collections.

**B&D:**
The GAAS, to come to an issue more specifically related to our new form of journal publication, has finally decided to publish its journal as an open-access quarterly. As you can imagine, this was not an easy decision to make, and it has taken some time to convince some of our members of this new format. Others have readily lauded the new approach. Would you have any thoughts or advice in general on open-access publications?

**JS:**
I can imagine.

I believe in open access in the name of the democratization of access to expert knowledge in all domains. But I also firmly believe in the future of print as a medium: not print as it was practiced during the industrial era, but reimagined for today. That implies reimagining the codex as a knowledge object (see my earlier comments on the metaLAB projects); experimenting with formulae that combine print with online publication in ways that exploit the media specificity, temporality, and different audience dynamics of each of these channels; and letting books that are little more than printed PDFs go digital. Like it or not, the latter usually implies lower costs and larger audiences. One-to-one replication of print and online editions has always struck me as a weak, even if practical, solution.

The economics of open access are, of course, challenging, but so are / were the economics of limited access. Scholarly publishing has never been a mere business, and universities will need to adjust their promotion and appointment standards in accordance with the shifting landscape. I already see that happening, probably not quickly enough.

**Works Cited**

