At the Edge (Always): An Interview with Jeffrey Schnapp

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Abstract: In this interview, Jeffrey Schnapp conceptualizes Digital Humanities, Knowledge Design and Experimental Humanities, seen as innovative frameworks, aimed at propitiating a radically new understanding of the current challenges of the contemporary world. The overwhelming presence of digital media and artificial intelligence is scrutinized by Schnapp in order to produce theory literally at the edge.

Keywords: Digital Humanities, Knowledge Design, Curatorship, Experimental Humanities

Guest Editor's Remarks

Jeffrey Schnapp is a rare type of scholar; Max Weber could certainly not fit his achievements in any ideal type. An unusual combination of a highly sophisticated theoretician, defined by a gaze which is always innovative and cutting edge, with a top athlete, who has for years performed as a motorcycle racer in national championships. Retired from official competitions, Schnapp is becoming a well-known practitioner of long-distance cycling. This merge of body and mind, this fusion between brain and hand, this anti-Cartesian mode of being in the world, in sum, this overlapping of seemingly opposite poles has shaped Jeffrey Schnapp's career.

Schnapp started as a medievalist, specialized in the work of Dante Alighieri. This is a circumstance that proved to be decisive to his future endeavors. Indeed, in the 1980s, medieval studies implied a fundamental challenge to literary studies, in general, and literary theory, in particular. The complexity of the material support of the medieval poetics, to recall Paul Zumthor's groundbreaking reflections, that is, the body of the poet and the bodies of his listeners, in close contact, could not be reduced to a set of concepts and a theoretical framework primarily developed to a different materiality, namely, the printed book. The outcome of this structural contradiction was the development of new concepts and approaches, as well as the inclusion of previously neglected

objects of study, a movement which broadened widely the scope of literary studies.

This avant-gardist drive has remained the defining feature of Schnapp's career. Indeed, his role was instrumental in the creation, at the Dartmouth College, of a then unheard-of database project: Dartmouth Dante Project (DDP). Later, at Stanford University, Schnapp was one the founders and directors of the Stanford Humanities Lab; an experiment radicalized with the creation of metaLab, founded by him and housed at Harvard University, where he holds the Carl A. Pescosolido Chair in Romance Languages and Comparative Literature.

As a public intellectual, with a relevant and growing presence in the contemporary scene, Jeffrey Schnapp has diversified in an unprecedented manner the ways in which he conducts his researches and above all how he presents them. Earlier in his career he experimented with computer programs, databases and soon engaged himself in the world of curatorship, having become a renowned curator, acclaimed all over the world. Recently, he launched an exhibition on Futurism at the *Tsinghua University* Art Museum, in China. Moreover, the object book, in his hands and imagination, becomes a thought-provoking form, both an aesthetic fruition and a *Gedankenexperiment*. In this interview, Schnapp introduces the reader to the uniqueness of his work in progress—at the edge (always).

JFLC: How do you conceptualize Digital Humanities?

Schnapp: Two initial answers:

A) as a moving target—yesterday's Digital Humanities (DH), as conventionally understood, might have equaled corpus linguistics, text encoding initiatives, or the building up a reference databases; today's might equal software studies, database storytelling, and cultural historical applications of machine learning ("Digital Humanities" web). Tomorrow's DH … who knows? DH is neither a bounded "thing" nor a "discipline" in my view.

B) as 21st century humanities *tout court*. To speak of "digital biology" or "digital physics" today would be to fall prey to an anachronism. The "digital" in these cases, as in the humanities, is simply the air that 21st century thinkers, researchers, makers, and creators breathe, the tools, methodologies, and channels of dissemination that are fundamental to contemporary knowledge production.

To be clear, I do occasionally make use of the phrase for purposes of convenience. But I do not particularly care for the phrase "digital humanities." In my collaborative book *Digital_Humanities*, the result of over nearly 20 years of experimentation in the field, the point was not conjoining the words "digital" and "humanities": rather, it was the *underscore* (_) that runs between them.[1] That sign marks the bidirectional flows from the human sciences into digital technologies and from digital technologies back into the human sciences. For me and my collaborators that is the point and, indeed, the core argument of the book. Contrary to the objections of a few commentators, that underscore is not about "updating" the humanities disciplines so "they don't get left behind" (whatever that might conceivably mean): it is about opening up a space of experimentation with new modes and scales of humanistic inquiry and communication, both analog and digital.[2]

I do not like the word "digital" qua adjective because it implies that digital technologies are

somehow driving the agenda of cutting-edge work in the human sciences today. That is not the case. The agenda of what I prefer to designate as *experimental humanities* or *knowledge design*—the labels I prefer—extends beyond the confines of new or emergent technologies (Schnapp web). It posits an expanded conception of what counts as humanistic inquiry, explores new media, new scholarly formats and forms, and experiments with altered scales of argument and storytelling. It rethinks the relationship between hand and mind, making and thinking. It contests the narrow reliance of 20th century scholarly communities upon such genres as the essay and the monograph, and wants to playfully rethink, remix, and reinvent everything from the essay to the analog book (see the metaLABprojects publication series with Harvard University Press and, now, MIT Press, as a case in point).[3] Digital tools and technologies may be integral to this dilated compass of experimentation, but they don't dictate or determine it.

I am not keen on the word "humanities" for a different reason. Once one becomes deeply engaged in working critically and creatively with data, once one begins to master data analytics and argumentative and interpretive tools like data visualization, it doesn't much matter whether the data in question are a corpus of 18th and 19th century European seafaring novels, an archive of tens of millions of tweets, five years of sensor data from a set of coral reefs, or a million-object collection of Western artworks. What matters are the research questions that you bring to those data; how the data were architected—data are not given (as the Latin root word *datum* falsely implies) but rather constructed; the analytical, expressive, and critical frameworks one embraces in the process of digging into the data; and the appropriate outputs, potential impact, and desired audience. In short, *knowledge design*.

My own lab at Harvard has worked on projects involving the balloon mapping of an arboretum, the Twitter archives of the #metoo movement, court sentencing records, and the collections databases of entire art museums. Is this work in the "humanities"? Certainly, it is rooted in certain critical traditions and forms of attention as well as argument that have a long tradition in the humanities. Whether the research questions they involve fall squarely within the "humanities" is of little concern to us; what is of concern are the core research questions, matters of audience and social impact: what story could or should the data tell? Can we expose and express their insights as well as blind spots? How might an experience of them be shaped and crafted?

JFLC: Your work was pioneer in the field of Digital Humanities. From Stanford to Harvard, you have created Laboratories as well as have innovated in the form of presentation of your own research. Since your trajectory helped to define the field, could you summarize it?

Schnapp: I will do my best without getting too deep into the weeds.

Already in high school I was a bit of a geeky humanist when I dabbled a bit in mainframe computing. (That was back in the era of dinosaurs when workstations didn't even have display screens). These early experiences were channeled towards creative practice. After completing an undergraduate degree in Romance philology with a minor in Studio Art, I worked for three years (1975-1978) as a visual artist in Nice, France though my day job was as a lecteur d'anglais at the Université de Nice; there I continued to study languages (ancient Greek, Latin, Russian)

and literatures (French, Italian), eventually choosing to return to the US and pursue a PhD in Comparative Literature at Stanford.

Arriving at Stanford in 1978, I found myself at the center of the explosion not only of the Silicon Valley innovation economy but also of the first wave of experimentation with digital cultural forms within San Francisco's creative community, of which I was a part. My loyalties remained divided. I did some coding and played with early graphical interfaces. At Stanford I studied medieval European literature with the likes of John Freccero (the late Dante scholar) and modern literature with likes of Ian Watt. But I also served as the art director and member of the *Tabloid: A Review of Mass Culture and Everyday Life* collective, led by the renowned Latin-Americanist Jean Franco.[4] By the end of 1982, I delivered to the Stanford registrar the first doctoral dissertation in a humanities field entirely word processed on a computer.

Between 1983-1985, working with the Dante scholar Robert Hollander, I helped to establish and lead the Dartmouth Dante Project: the first database project funded by the National Endowment for the Humanities.[5] The DDP was a large-scale reference work but, however interesting the technical challenges that it posed at the time—we taught then-state-of-the-art Kurzweil Data Entry Machines to read 18th and 19th century Dante commentaries—it did not quite satisfy my interest in bringing together the horizons of critical and creative scholarly practice. So, it was not until some fourteen years later, after many publications in both the medieval and modern field, finding myself once again at Stanford (but a Stanford now in the midst of a second wave of digital transformation), that I founded the Stanford Humanities Lab.[6] My intention was to build a platform for experimentation between the School of Humanities and Sciences and the Faculty of Engineering and it was no less than Condoleeza Rice, then Stanford's Provost, who found the funding to support this venture.

The dot-com bubble was in full swing and this was the moment in which the label "digital humanities" first began to appear on the West Coast in order to capture a major transformation: the emergence of the World Wide Web as the defining public, civic, cultural, social space of our era and the shift from mainframe to personal computing. The convergence/collision between computational methods and the human sciences was, of course, hardly new; it dated back to the immediate post-WWII period when, starting in 1949, the Jesuit scholar Roberto Busa (who was friends with Thomas J. Watson, the chairman of IBM) collaborated with Big Blue on the production of the first systematic concordance of the works of Thomas Aquinas. But the ground shifted dramatically from what was then called (successively) "Computing in the Humanities," "Computational Humanities," or "Humanities Informatics" to "Digital Humanities" when, as a 1990s ad campaign put it, "computing got *personal*."

The Stanford Humanities Lab endured for a decade (1999-2009) and was followed, after my departure for Harvard in 2009 by the foundation of metaLAB (at) Harvard at the beginning of 2011.[7] metaLAB defines itself as "an idea foundry, knowledge design laboratory, and production studio experimenting in the networked arts and humanities." This implies the following:

metaLAB is an *idea foundry* in the sense that it is committed to ideation, debate, speculation, and theorization across the disciplinary grid.

metaLAB is *a knowledge design lab* inasmuch as it consists of a portfolio of projects that translate ideas into practical expressions, from experimental books and pamphlets to museum installations to software platforms and data visualizations to participatory events.

metaLAB is *a production studio* because it is committed to bringing together the mind and the hand, thinking and making. It tests out hypotheses and ideas by developing and delivering a wide array of outputs including database documentaries, software platforms, artworks, exhibitions, studio courses and workshops, data visualizations, and curatorial projects.

JFLC: The traditional notion of Humanities, understood as *Geisteswissenchaften*, has been under attack over the past decades. What may be the contribution of Digital Humanities in this context?

Schnapp: By "traditional" I take it you mean, "traditional" from a second-half-of-the-20th-century standpoint when, in the wake of the work of Wilhelm Dilthey and others, the study of *Geisteswissenchaft* gradually became decoupled from *Naturwissenschaft*; the decoupling codified by C. P. Snow in his famous 1959 *The Two Cultures* lecture. I am not sure that many 18th or 19th century scholars would have understood this distinction any more than they would have understood the notion of a radical disjunction between quantitative and qualitative methods, disciplines, or academic fields.

If *Geisteswissenchaft* is understood as the study of consecrated masterworks qua crystallizations of the spirit of a people or age, then it is true that the core DNA of what has come to be referred to since the late 1990s as "Digital Humanities" tends to point elsewhere: towards an expansion of the scale and compass of humanistic inquiry aligned with modes of cultural historiography (not unlike those championed by the Annales school) that either grapple with long duration phenomena or phenomena of such breadth that they disrupt once normative cultural-historiographic narratives (think the work of Franco Moretti). This said, there is nothing *inherent* to DH modes of inquiry that predisposes them to support or contradict traditional methods of humanistic historiography or argumentation. Tools are just tools and text mining tools, to cite but one example, can be employed to study individual works or the *opera omnia* of single authors just as well as extensive literary corpora. But … and this is a big caveat, they tend to add far greater value when they achieve scale.

Just like a hammer sees everything in the world as a nail, data have their own distinctive ontology, their own pre-wired affordances, just as oral performances or handwritten codices or print artifacts have theirs. So, the investigative and expressive tools that are best suited to work with data tend to share these self-same attributes. I hasten to add that, even when one makes this leap to macro scales of inquiry, standard, "artisanal" interpretive and critical practices remain the foundation on which one necessarily builds. There is no real *aut aut* here, in my opinion: analog vs. digital humanities is ultimately a false dichotomy.

It is perhaps worth making a distinction here between infrastructure building projects and analytical/interpretive/critical/creative DH projects. The former, like the Dartmouth Dante Project, build "scientific" knowledge repositories that not only support conventional practices of reading and interpretation but also democratize them; now anybody in the world with an internet connection

can read the *Commedia* in the company of 700 years of commentary with a higher degree of rigor and expertise than any Dante expert could have done until the 1990s. The latter seek to produce new arguments, objects of experience, or forms of knowledge. Take as a case in point *A Flitting Atlas of the Human Gaze*, executed during 2020 with my collaborators Kevin Brewster, Todd Linkner, and Dietmar Offenhuber, presented at the *Ars Electronica* festival in September 2020, and installed at the Harvard Art Museum in 2022 as part of a series of metaLAB experiments entitled *Curatorial A(i)gents*.[8]

A Flitting Atlas of the Human Gaze tests out an art historical proposition: that looking at looking, particularly on an expanded scale, can tell us something meaningful about the history of human image-making. The experiment is built through the AI-based extraction and analysis, fine-tuned via human supervision, of pairs of eyes from the museum's photograph, painting, print, sculpture, and coin collections that have then been analyzed and mapped from the standpoint of the directionality of the depicted human subject's gaze.[9] The aggregate data has been transformed into an interactive experience which allows the visitor to navigate either the collection as a whole or media-based subcollections by moving the focal point of many thousands of pairs of eyes via a cursor (in the web version of the project) but via a choreographic interface installed within the museum gallery. For centuries visitors to art museums have navigated collections on the basis of culture, chronology, genre, and medium; to those conventional forms of exploration, *A Flitting Atlas of the Human Gaze* adds a modality based on the distribution of looking conventions across media and time. Was the project a piece of art historical research? An experiment in AI and machine learning? A promissory note for a future comprehensive portrait of portraiture across the history of art? An artwork in its own right? It is all of the above.

As the above implies, I see the resumption of a more active and sustained dialogue between *Geisteswissenchaften* and *Naturwissenschaften* as a win-win proposition.

JFLC: In your work you have curated several exhibitions all over the world. Recently, you were the curator of an exhibition at the *Tsinghua University* Art Museum. Could you tell something about this exhibition and in a more general note on your concern with the creation of new forms and materials not only to present but also to produce your research?

Schnapp: Soon after I founded the Stanford Humanities Lab in 1999, curatorial work began to assume a key place in my scholarly life. In pursuing augmented modes of scholarly inquiry and expanded audiences for expert knowledge, partnerships with public-facing institutions like archives, libraries, and museums, particularly university-based ones, became second nature to me. This is not only because making arguments and telling stories with physical objects is such a natural extension of what I understand as humanist inquiry, but also because objects tell (multimedial/multisensorial) stories that enrich and expand the compass of scholarly writing. I have curated exhibitions on topics ranging from Giuseppe Terragni's monuments (*In cima*: Centro Palladio, Vicenza) to the iconography of popular sovereignty (*Revolutionary Tides*: Cantor Center for the Arts, Palo Alto; Wolfsonian-FIU, Miami) to a centenary (non-)celebration of Futurism (*Speed Limits*: Canadian Center for Architecture, Montreal). In 2008 I also led the transformation of two former highway

tunnels at the entrance to the city of Trento in northern Italy into an experimental history museum (Le gallerie di Piedicastello) and curated three of the initial exhibitions there (*I Trentini e la grade guerra, Storicamente ABC*, and *Ski Past*). The show at the *Tsinghua University* Museum in Beijing is a revised version of *Universo Futurista / Futurist Universe*, an exhibition developed in 2018 for the Fondazione Sonia e Massimo Cirulli in Bologna (with whom I have a long-term collaboration).

Futurist Universe is the first exhibition in China of works associated with Italian Futurism.[10] It explores the copious nature of Futurist creation as well as its impact upon contemporary culture and politics during the movement's heyday. Rather than reconstructing Futurism's evolution in linear fashion, charting the development of a single master theme (like speed or dynamism), or limiting its scope to a single period (WWI) or to a small nucleus of defining figures (like Giacomo Balla or Umberto Boccioni), the show probes the center, middle, and the periphery of a unique collection: the Fondazione Cirulli collection. The collection in question is unique because it includes not just works of unquestioned significance by the likes of Boccioni, Prampolini, Balla, and Thayaht, but also distinctive holdings in the field of advertising, print ephemera, design, the decorative arts, industry, and material culture. It cuts a broad swathe across media, extending from painting and sculpture to photography and ceramics to posters and home furnishings to the jetsam and flotsam of everyday life in the 1910s through 1950s. In short, the exhibition includes everything from oil-on-canvas masterpieces to candy wrappers and ashtrays.

As already hinted, I have a deep scholarly interest in (and a weak spot for) physical things. I study them, I collect them (Olivetti calculators, counterculture periodicals, mid-century educational toys), and I like to try to make them "talk" in my critical writings as well as my curatorial work. It is probably worth noting in this regard a long-standing affinity with aspects of the new materialism and contemporary object-oriented ontologies (Graham Harman) and with the work of the late Bruno Latour.

JFLC: How would Digital Humanities potentially impact the curriculum in the so-called Human Sciences, including Literary Studies?

Schnapp: That impact is, in my view, not potential but actual. DH (at least as I interpret it) summons us back to a more comprehensive understanding of literary studies. The Latin word *literatura*, after all, refers not to poems, novels, or essays, but, rather, to modes of inscription, from runes to codices to printing to notebook scribblings to recording technologies, software coding, and data. When data ceased to be the stuff of institutions and corporations and instead became our marble and clay, the air that we breathe, the stuff of selfhood and personal experiences, C. P. Snow's "two" cultures began to again look like one.

Libraries exponentially greater in size than the Library of Alexandria that were once the exclusive preserve of social and scholarly elites are now at the fingertips of a worldwide audience. The same goes for collections of sounds, images, and various categories of cultural archives and remains. In some cases, APIs (Application Programming Interfaces) allow researchers to actively engage with and across these resources on once unimaginable scales but only if researchers embrace and master the tools of today, not just the tools of the pre-digital era. The impact of such a

turn is not just quantitative; it is also qualitative; quantity and quality have always been intimately intertwined when it comes both to culture and knowledge production.

A more concrete example. I began my scholarly career as a literary medievalist with a special interest in high medieval Italian manuscript culture: the textual system that surrounded Dante, Petrarch, and Boccaccio.[11] Working with codices was arduous then. Every manuscript is an unicum. You had to travel far and wide to experience it, live with it, attain the rudiments of understanding of its graphical conventions, its conditions of production, its meaning. Rarely, if ever, could you study codices side by side with other codices, not to mention to raise these operations of comparison to the scale of tens or even hundreds of such artifacts. Thanks to the digitization of ever more significant corpora of medieval manuscripts such a scaling procedure is now routine. This implies that scholars can study these objects better. But it also implies that they can also *teach* these once rare materials in ways that would have been unimaginable a generation or two ago. When one adds to these altered conditions of access, the bubbling up of an array of new AI-based tools of transcription, analysis, and comparison, traditional forms of paleographic and codicological analysis (which remain the foundation on which contemporary forms of scholarship necessarily build) have been greatly enhanced.

It goes without saying that a long road lies ahead. Humanity's cultural heritage remains far from having been exhaustively digitized or democratized, not to mention digitized or democratized (or analyzed) in a manner that does not reflect the gross socio-economic asymmetries and injustices of the contemporary world. Much of this first/second/third world history stagnates in file cabinets, basements, warehouses, and storage facilities; some of it has even been buried, suppressed, or erased. Sometimes it is a question of establishing the foundations of knowledge in young or emergent fields with the most traditional of methods. But, above and beyond these asymmetries and injustices, looms a higher challenge for the contemporary human sciences: that of shaping a humanism stripped of the anthropocentrism that has informed humanism and, by extension, the humanities, from Pico della Mirandola's *Oratio de hominis dignitate* to the recent past; a (post-, neo-, alter-) humanism capable of experiencing the world on non-human scales and capable of absorbing non-human perspectives into a worldview that focuses our collective energies on the sole transcendent issue of the present epoch—climate change.

Interviewed by João Cezar de Castro Rocha

Notes

1. Jeffrey Schnapp, et al. *Digtal_Humanities*. The MIT Press, 2012.
2. For an abridged version of the project, see *A Short Guide to Digital_Humanities*: "Digital Humanities refers to new modes of scholarship and institutional units for collaborative, transdisciplinary, and computationally engaged research, teaching, and publication. Digital Humanities is less a unified field than an array of convergent practices that explore a universe in which print is no longer the primary medium in which knowledge is produced and disseminated" (Schnapp et al. 2).
3. "The metaLABprojects series is a product of HUP's partnership with metaLAB, a research and teaching unit at Harvard University dedicated to exploring and expanding the frontiers of networked culture in the arts and humanities. Institutionally housed within the Berkman Center for Internet and Society, its projects span the globe." Available at www.hup.harvard.edu/collection.php?cpk=2006.

4.   For a brief description of the project, see interferencearchive.org/tabloid-a-review-of-mass-culture-and-everyday-life/ and the anthology *Mass Culture and Everyday Life*, edited by Peter Gibian, Routledge, 1997.

5.   See dante.dartmouth.edu/about.php.

6.   A short and useful account of the enterprise may be found at web.stanford.edu/~mshanks/MichaelShanks/34.html.

7.   metaLAB: mlml.io/.

8.   "When the Harvard Art Museum collection looks back at us, which direction does it look? Do particular media or cultural traditions correlate with preferences regarding the directionality of the human gaze?". *A Flitting Atlas of the Human Gaze*, metalabharvard.github.io/ars-flittingatlasofthegaze/.

9.   A version of this experiment can be experienced online at metalabharvard.github.io/ars-flittingatlasofthegaze/.

10.   The site of the Tsinghua University Art Museum has a compelling display of the exhibition: www.artmuseum.tsinghua.edu.cn/en/cpsj_english/zlxx/zzzl/lszl/202209/t20220901_17593.shtml.

11.   See, among many books, *The Transfiguration of History at the Center of Dante's Paradise*, Princeton UP, 1986; Jeffrey Schnapp and Rachel Jacoff, editors, *The Poetry of Allusion: Virgil and Ovid in Dante's Comedy*, Stanford UP, 1991.

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