INTERVIEW 1

At the intersection of computational methods and the traditional humanities

Johanna Drucker

> Johanna Drucker has a reputation as both a book artist as well as a pioneer of what has become known as Digital Humanities. She is well known for her studies on visual poetics and experimental typography (*The Visible Word* 1994, *Figuring the Word* 1998) but also for her investigations of visual forms of knowledge production (*Graphesis* 2014), digital aesthetics and speculative computing (*SpecLab* 2008) and *Digital_Humanities* (2012, co-authored). She has worked as a Professor in Art History (Columbia, Yale, & SUNY) and Media Studies (University of Virginia) and since 2008 is the inaugural Breslauer Professor of Bibliographical Studies in the Department of Information Studies at UCLA.

Johanna welcomes governmental regulation on the internet against 'neoliberal entrepreneurialism,' rejects new grand narratives 'reconfigured by the pseudo-authority of computation' and considers the sociality of contemporary existence an obstacle for 'interior life,' innovation, and zoophilia. She compares

Digital Humanities with the 'cook in the kitchen' and Digital Media Studies with the 'restaurant critic,' sees the platform and tool development in the Humanities as a professional, not academic track, she calls for a visual epistemology in times of Screen culture and diagrammatic knowledge production and she explains how to contaminate the world of quantitative and disambiguating underpinnings with the virtues of relativism and multi-perspectivism.

Prelude

Roberto Simanowski: What is your favored neologism of digital media culture and why?

Johanna Drucker: I'm drawn to neologisms that serve as both nouns and verbs–tweet, google, email–because they indicate a blurring of action and object in a way that embodies the fluidly unstable transience of digital media. But I also like geek, geekify, geek-out, and digerati (along with their offspring, the digeratini) used as self-identification.

RS: If you could go back in history of new media and digital culture in order to prevent something from happening or somebody from doing something, what or who would it be?

JD: I'd legislate against the violence being done to net neutrality and get the FCC to protect us against the domination by private enterprise and corporate interests. This will be the end of access to academic, scholarly, and independent thought online.

RS: What comes to mind if you hear "Digital Media Studies"?

JD: Digital Media Studies uses tools such as critical theory, cultural studies, media archaeology, bibliographical, textual, and visual studies, and a host of highly focused approaches to software, platforms, interface, networks and other technical aspects of networked environments to expose their workings. It is almost entirely a critical practice except when explicitly linked to making.

RS: If you were a minister of education, what would you do about media literacy?

JD: I'd insist that all elementary school kids learn to create and critique data sets, know some basic statistics, learn database structure, interface design, and know how to analyze search engines, be able to do some scripting/programming, and be taught how to do data wrangling and introductory digital media studies. Skill in reading texts and images for their arguments as well as their content remains essential, but across the full spectrum of media formats.

Politics and Government

RS: Web 2.0 culture seems to have tamed and commodified the wild, anarchistic Internet of the 1990s when people played with identity in IRCs and MUDs and built their own websites in idiosyncratic ways. Today, clarity and transparency are the dominating values, and for obvious reasons, since only true and honest information are valid data in the context of commerce. This shift has also changed the role of the government. While in the 1990s Internet pioneers such as John Perry Barlow declared the independence of Cyberspace from the governments of the old world, now it seems people hope for governments to intervene in the taking-over and commercialization of the Internet by huge corporations such as Google and Facebook. Thus, web activists calling for the government to pass laws to protect privacy online, and politicians suggesting expiration dates for data on social networks appear to be activist in a battle for the rights of the individual. Have tables turned to that extent? Are we, once rejecting old government, now appealing to it for help?

JD: The Internet began as a government research project, through linked cables connecting major research universities and facilities that had defense contracts. So the Net and the Web began under government jurisdiction. Concerns about regulation cut across a range of issues –protections and violations of privacy are only part of the larger landscape. The overarching disaster of our lifetime is deregulation of all aspects of social life, the

demonization of taxation, extreme income inequity, and undermining of the social contract as conceived by the 18th century polymaths who designed the Constitution of the United States.

The non-standard approaches to interface that were part of CD-Rom era electronic literature, arts, and design, like those of first generation web sites, were less constrained by convention than today's menu-drive and side-bar organized ones, and innovation does seem to have stymied in the rush to fixity, to the conventional screen display. But the design issue is separate from the ideology of individualism (mythic, in my opinion) and the kind of libertarianism that lurks under the rhetoric of certain activist movements. I'm not an anarchist. Quite the contrary, I think cultures are about negotiation of and through limits on what can and can't be tolerated, allowed, condemned. I'm far more afraid of deregulation, the end of internet neutrality, and the intersection of rhetorical assertions that combine neoliberal entrepreneurialism, with its pseudo-individualism and pro-corporate ideology, and the inequities that intensify with disbalances of economic power. I'll take government regulation over that any time, and that does not have to mean compromises to protected rights and liberties such as free speech and privacy.

Do most Internet users actually know what their rights and responsibilities are as citizens, let alone how the laws of the Interstate Commerce Commission, the Federal Communications Commission, Department of Justice, and other agencies actually regulate the Web? I doubt it. Like many people, they want the government out of their lives when it comes to taxes, accountability and responsibility but they want it in their lives to fix roads, maintain services like police and fire, and come to their aid in a major disaster—or keep the internet "there" for them. Children and adolescents have the same relationship to their parents. We have to get beyond models of government as dysfunctional family relationships and see that we are the regulating and responsible parties. No other grownups are going to appear. The internet may have begun as a government research project, but service providers are for-profit businesses and we depend on their cables, routers, servers, and infrastructure.

RS: I like very much your analogy about kids and parents. A companion and counterpart to responsibility is the entrepreneurialism you mention which makes me think of the young, energetic, and very excited startups as portrayed in the *Silicon Valley* TV series. It's a specific mixture of technophile, profit seeking and changing-the-world intent; and it is problematic in all three regards. The German philosopher Hans Jonas, in his 1979 book *The Imperative of Responsibility: In Search of an Ethics for the Technological Age*, notes that the fatality of man lies in the 'triumph of *homo faber*' that makes him into 'the compulsive executer of his capacity.' The blithe excitement about social media, cloud computing and data mining we are encountering today seems to illustrate Jonas' apprehension: 'If nothing succeeds like success, nothing also entraps like success.' The inventive entrepreneurs in Silicon Valley and elsewhere may see data mining as the great adventure of our times in which they involve themselves as in former times courageous businessmen did as they embarked in dangerous voyages. The difference: today's explorers take the entire mankind on board in their search for assets – not to make them all millionaires but to become millionaires at their expense. Petty concerns for privacy or cultural sustainability are only in the way of such spirit of discovery, just as the aged couple Philemon and Baucis in Goethe's play *Faust* stood in the way of modern business practices when they refused to give up their land for industrialization. To justify the "death" of those who stand in the way of "progress," an important part of the IT-industry business is the management of moods. The public has to be convinced of the entrepreneurs' good intentions: namely that their goal is to develop better products and to offer improved customer care. My analogies exaggerate, I admit. However, I really wonder whether we not only need more regulations of social life, as you indicate, but also against the spirit of homo faber that mercilessly changes the world regardless of any negotiations of and through limits.

JD: OMG, I have friends in SF who report with horror the overheard conversations of the opportunistic "entrepreneurs" who

are seeking any way to create a new niche in the data stream (an app, a service, a new social media mode, a filter, anything). This is similar to the way advertisers dissected bodies into “zones” to which they targeted hygiene products, and of course in the data world, the zones can be sliced infinitely, to any granularity. Data derivatives replicate endlessly, without limit. Ethics? Can they be monetized?

RS: I absolutely agree, while for some time and to some people its gift economy imperative let the Internet appear as the last resort of communism, it in fact has become a playground of coveting and ruthless neo-liberalism. In this process even an important public good such as knowledge has been centralized in the hands of a private company such as Google. On the other hand, would the US government or the European Union ever have been able to carry out something like Google’s book project? Should –and could– they run a search engine free of advertisement and with an algorithm visible to all who care?

JD: The Digital Public Library initiative, started as a visionary project by Robert Darnton, and now headed by Dan Cohen, is a perfect antidote to the problems posed by having Google control so much intellectual content as well as create so many data derivatives. Though DPLA will not deal its information, and seems to have no plans to monetize user profiles and patterns, it does offer a first and hopefully successful move towards a networked cultural heritage and access. Scientific and social-science data should also be part of this kind of repository. Private enterprise should be subject to regulation, scrutiny, and control, of course. But anyone who thought the internet was a gift economy is blind to the ways ease of consumption conceals the complexities (labor, costs, infrastructure) of production. To support digitally networked cultural heritage in any way that will carry forward more than a generation is going to require a public-private partnership at the scale of Carnegie Libraries in the early part of the 20th century. That was a hugely transformative undertaking, endowed by industrialist-turned-philanthropist Andrew Carnegie, but it coincided with tax funded support for public

education, universal literacy, a public library system, and other initiatives. A few nationally funded projects show how transformative the commitment to infrastructure can be. Australia introduced a national broadband initiative, has a vital national library and cultural heritage/preservation programs, and its archivists have been at the forefront of international discussions about the rights of diverse communities. This is all far from Google and private interests. I think we need to reconcile various mythologies that have no real bearing on contemporary issues with the reality of actual possible futures—I know it sounds shockingly un-fun, but regulation, governance, shared responsibility and accountability, taxation, distribution of wealth, caps on income and profits, all these things are essential if education, information, power distribution, and sustainable futures are going to be made possible in any realm, including digital and traditional literacy. I'm a realist, not an idealist, and escalating inequities in every area of the culture need to be recalibrated.

Algorithm and Censorship

RS: The numbers of views, likes, comments and the Klout Score – as measure of one's influence in social media– indicate the social extension of the technical paradigm of digital media: counting. The quantification of evaluation only seems to fulfill the cultural logic of computation, the dichotomy of like/dislike even to mirror the binary of its operational system. The desired effect of counting is comparison and ranking, i.e. the end of postmodern ambiguity and relativism. Does the trust in numbers in digital media bring about the technological solution to a philosophical problem? A Hollywood-like shift from the melancholia of the end of grand narratives and truth to the excitement of who or what wins the competition?

JD: Pretty pathetic as an image of our times, this return to the Roman Forum, thumbs up, thumbs down, court of public opinion and gladiatorial combat. Nishant Shah is eloquent on this topic, and has mustered vivid examples of the ways web-driven vigilantism and swarm-mob behavior can mete out injustice without any

control transferring socially mediated behavior into real world violence. As for counting as a metric, a measure of all things, it has to be balanced with statistical understanding, analytic tools from the quantitative domain, as well as with the tools of critical theory. A number is always relative, and even the first lesson in statistics—of median, mean, and mode—immediately calls attention to the *relative* value of a quantity. Combine this basic work in statistics with fundamentals in critical theory – a number is meaningful only in a scale, all scales are human-derived, based on some perceptual framework within a domain of knowledge or experience (body temperature, cycles of a day, a human lifespan, the speed of light, absolute or not, has value because it signifies a certain limit of what we imagine to be possible).

The grand narratives are all there, still, but being reconfigured by the pseudo-authority of computation, that set of mechanical exercises that passes itself off as irrefutable logic, as if it were not subject, like all logics, to a higher order of rhetoric. All statements of supposed fact are arguments about the belief system within which they gain their authority. That is simply Ideology 101, along with the other basic tenets of ideology: the more something appears to be natural, the more it is cultural; one has only to ask in whose interests it is for this "naturalness" to appear to be so to begin to unpack the power structures by which it is operating. Go back to the formulation about computational method and number and apply these basic tenets and suddenly the machinations of bureaucratic and managed culture appear unmasked, their grounds of authority revealed.

RS: No doubt that numbers too are not innocent. As book titles teach us: *"Raw Data" is an Oxymoron* (ed. Gitelman, MIT Press 2013). However, somehow the new technology (and its statistical mode) seems to promise the solution to an old political problem: to know and count the opinion of people. In fact, statistics may be considered the ideal advocate of democracy insofar as numbers avert the distortion of communication. Any utterance beyond a vote, any comment beyond a like or dislike, is a form of manipulation of the opinion, belief, feeling of others. Habermas celebrates

this communicative action as discourse ethics, Rousseau, in his *Contrat Social*, considers debates and discussion as counter intuitive to democracy, since it aims at overcoming differences by rhetoric power if not political and economic power over media. We may not be able to say whether the numerical rationality is superior to the communicative. But we may agree that statistics allows for a shift from a kind of synthetic-discursive exclusion to syndetic-additive inclusion.

JD: Indeed, the relative virtue of quantitative reasoning is, well, just that--relative. I'm contrarian enough to suggest that statistical processes *are* discursive. Numbers seem discrete, referential, and delimiting, but that does not make their authority absolute. Their value is subject to cultural conditions even if they pretend otherwise. I'm reminded of the peculiar delusion that F.T. Marinetti entertained in thinking that mathematical symbols–the plus and minus sign–should replace syntactic terms because they were more precise. But of course, they are not, they are reductive, but thus, often, ambiguous, hence the paradox. Language need not be referential, but numbers, because they represent quantities, always are—even if the value of the referent may be ambiguous. For instance, what does "one" mean—it depends on the system of metrics within which it is operating, right? Modernism's struggles with syntax of all kinds (literary, musical, visual) was an attempt to open the possibility spaces of non-representational aesthetics, or at least, open forms of discourse.

RS: The personal and cultural cost of personalization in digital media is the loss of chance encounters, the preclusion of the unfamiliar, the removal of diversity and of what we are not (yet). The algorithm is the censor people more or less approve of and even desire. This becomes problematic once people are addressed not as consumers but as citizens expected to be open to others instead of cocooning in their bubble. Hence, personalization, driven by economic force, is political. Are the actual policy makers in the digital media age those who program ego-loops, inadvertently undermining the foundation of a democratic society?

JD: These questions hark back to earlier eras, degrees of collusion between desire-producing apparatuses and the subjects interpellated into their workings. What difference does it make whether we are discussing theater, flickering shadows in the cave, or the current screens? Human beings are addicted to the Symbolic, and the illusion it gives them of being somehow connected to the Other. The screens are just that, and I think we are in the era of the Grand Object A, rather than the Petit. The transactional object, the mechanism of illusion, the point of reference to which we are cathected in our Imaginary relations to the Real, has assumed gigantic proportions. Most people would give up food before they would give up their cell phones or internet connections, even though they are really only connected to a device. No self, only its fictive illusion within constructs of subjectivity, can be confirmed in such transactions. "Self" in this construction (now or in antiquity, from paleo-consciousness to the present) is a kind of specificity, a location, a unique address and identifier—not completely fictional, but rarely as "different" as imagined. Cocooning? Citizenship? Some incentive for participation will have to appear if the broad mass of people are going to see themselves as stakeholders. In our generation, the slogan "the personal is political" was used as a rallying cry, but now the difficulty is in convincing most younger voters that the "political can be personal" in any sense. And given recent Supreme Court decisions in the US that allow private interests to determine policy to an unprecedented degree, this is understandable. When money is speech, government works in the private interest and individuals as well as communities are disenfranchised. The connections between individual illusions/delusions, the pursuit of lifestyle over knowledge or experience, and the political sphere are complicated, and also have to meet the realities of motivation and activism.

RS: Facebook portrays the sharing of as much personal information as possible as the precondition for a better world. While the economic interests behind this data worship are undoubted and certainly need to be addressed, the question remains as to why

younger generations don't seem to care about privacy but establish, using Facebook millionfold day-to-day, radical transparency as the new foundation of our culture. Is the data-exhibitionism of digital natives the contemporary version to the sexual revolution of the 1960s?

JD: I love the phrase "data worship" but I don't see the parallel with 1960s sexual revolutionary activity. We were given permission and we took it. We lived uninhibited lives without fear—remember this was pre-AIDS, and in the most permissive use of contraception. I don't use Facebook, though I have an account, it lies dormant. I like interior life, and private life, though I advise all my students to live their lives as if they are public, that way they will never have a problem. If I were to run for public office, my private life would be a field day for the news media—I/we did everything, with whomever and whatever we wanted. I once lived with a cat who wanted to have sexual relations with me. At a certain point in my conditioned resistance to his advances, I had to ask myself what my problem was with his desires? I did not give in, in the end, but it did make me think about the proscriptions in place. I was raised by a Calvinist in a Jewish household, so showing anything to anyone or being the least bit conspicuous or desirous of attention was simply not permitted. American culture is built on these kinds of deep prohibitions. I don't believe in mortifying the flesh. In a full life, one lives erotically in all dimensions of the daily encounter with the world—not screwing everything that comes along (though that's just fine by me too, if that's what someone wants to do), but living a sensually aware and fully ecstatic state of being. If only we could sustain that kind of intensity in our relation to the world. But would you want to live that way in public? What difference does it make? Notions of privacy, propriety, decorum, are all historically and culturally set. Eros is a state of body-mind. So much is shut down, put away, prohibited and circumscribed within human experience. Why?

RS: Your words first of all remind of what two older Germans said about the value of privacy. The sociologist Georg Simmel declared a century ago: 'The secret is one of man's greatest

achievements'; the writer Peter Handke admitted three decades ago: 'I live off of what the others don't know about me'. Secondly, one wonders what will be the consequences if we all live our lives in the public eye. There is the hope that if all the skeletons in the closet (and the cats under the blanket) are known, nobody will cast the first stone and what had been considered sinful will finally turn out to be a social habit. However, there is also the fear that life in the age of transparency and search engines will rather be as two younger Americans suggest: think of Marc Zuckerberg's nothing-to-hide-nothing-to-fear declaration and Eric Schmidt's warning 'If you have something that you don't want anyone to know, maybe you shouldn't be doing it in the first place.' What is your bet?

JD: I guess I think there is a difference between what can be known and what should be shown. The problem with too much exposure is aesthetic as much as moral—the banality of it makes so much information uninteresting, generic. Ask students to do a drawing of a chair and a coat and they all do something interesting, highly revealing, very personal. Ask them to show you their diaries/sketchbooks—they are shockingly similar. If every frog around the pond is speaking at night, who will listen? Time and attention, as we know, are the valuable commodities of our times. Competition for these will only grow. How many Karl Ove Knausgaard accounts do we need? How many Jenny Cams?

Art and Aesthetics

RS: Nobody today speaks of *digital* art. Does this mean that digital art has ceased to exist or does it mean all art is digital?

JD: Gosh, no, not all art is digital! Lots of fine works of sculpture, painting, installation work, performance, drawing, and musical arts exist that have nothing to do with digital production. Just that the stigma of the "digital" went away so we can just think about the works as art—are they interesting, engaging, successful. We don't talk about oil paint art or instrumental art, so why emphasize a medium or technique?

RS: Well, if a medium has a message this message may also affect how we produce and perceive art. I would hold that computation, transformation, participation, and craftsmanship are some central aspects specific for the aesthetic of art born in digital media.

JD: Oh yes, I completely agree that there is a specificity to the ways digital production engages with conceptual, material, and aesthetic dimensions of production. But only some digital work is reflecting specifically on those aspects of process. I don't analyze every poem in terms of its use of typography, because many are so conventionally composed and laid out that the poet was clearly working within an already absorbed set of instructions for composition, not working with composition as a material aspect of their work. I think aesthetic is always about *how* something is made and thought, so in that sense, again, I agree. I just don't think every artist is reflecting on these issues in and as their production.

RS: People have said that art in or of digital media must be political even if its intentions are to be utterly formalistic. If art is based on technology the focus on form draws attention to how technology works and this is already an act of reflection or education. From this perspective, one would assume that digital literature is literature that addresses the politics of digital technology. What is your experience in this regard?

JD: All art is ideological, but that is different from saying it is political. All works engage with value systems and their operation, all artistic expressions are arguments for their forms (every novel is an argument about what a novel should/could be). Claims for the "political" are usually made for the most dull and didactic art, not work that actually makes for change or effects any structural transformation of power or process. The ideas that exposing the medium, calling attention to its machinations, showing how something makes meaning or effect—these are all features of modernist belief in epistemological defamiliarization. All fine and good, but the tediousness of didactic work plays into the worst neo-Liberalist affirmations, as the work of Claire Bishop,

among others, makes very strikingly clear. Who are we kidding? The tasks of reworking the ideologies that have come to prevail since the Reagan-Thatcher era are daunting. Technology is neither a cause nor an effect, but a historically coincident formation that works on certain faultlines, exaggerating tendencies and taking advantage of affordances. But technologies have to be adopted by receptive cultural conditions and ecologies. As to the politics of digital technology, that goes right back to the points I made above, about the way ideology works to conceal its workings.

RS: I agree with your favoring of the epistemological defamiliarization over didactic ambitions; as Adorno states in his essay on commitment and art: “If art is to live on, it must elevate social criticisms to the level of form, de-emphasizing social content accordingly”. I would add, with Claire Bishop, that, on the other hand, even self-reflective art – such as the ‘cozy situation’ of a cooking-performance by Rirkrit Tiravanija – may actually pave the way for (neo-liberalist) affirmation. As for literature based on digital technology, academics have considered the option and need to navigate through a multi-linear hypertext as the replacement of the passive by the “active reader” thus implicitly praising mechanical activity over cerebral. Today electronic books and appropriate apps allow for “social reading”: bookmarks and notes can be shared with other readers of the same text and conversation can start immediately. The words used to distinguish the new reading habits from the old claim a positive connotation. What could be wrong with being *interactive* and *social*? Why, our grandchildren may wonder once, would anybody want to withdraw a book from the others instead of sharing the reading experience, as it was common until the 18th Century? There are different ways of looking at the end of the cultural technique of immersive reading. What is your perspective?

JD: The distinction between active and passive reading modes does not depend on technology any more than ‘chose your own adventure’ type fiction depended on digital media. Torah reading is always active, situated within conversation and discussion.

What is passive about that? The entire experience of the text is based on interpretation in a community. Some reading you want to do on your own. Social reading is useful for some things, but do we have to share everything? Technology that allows multiple readers to access a text simultaneously does not require shared commentary or conversation. As for combinatoric work or stories with variable endings, they were structured into the children's amusements known as *harlequinades* in the 19th century, and written into print based works, such as the exemplary Julio Cortázar work, *Hopscotch*, first published in 1963, twenty years before the wonderful *The Policeman's Beard is Half Constructured* (1984) was written by Racter, a program.

But the question of access is of course different from either interactive reception or combinatoric or hyperlinked composition. The reality that multiple copies of a work can be accessed simultaneously is great, but along with this privilege, we have to be vigilant about not losing the privileges that went with buying books—such as the right to circulate an individual copy after first sale and so on. Uniqueness doesn't always cancel circulation—the *Mona Lisa* exists in a single, unique canvas, but the original has been seen by many more people than most works created as artists' books in the spirit of the so-called "democratic multiple." Of course the whole mechanical reproduction and aura argument is relevant here too. DaVinci's portrait is a mass culture icon through its reproduction.

My point is simply that many claims for works, values, innovation, or advantages turn out to be more complicated—even contradictory—than at first glance. As for immersive reading, it is only one among many modes, but what computational techniques allow are certain processing skills that aggregate and synthesize results from corpora that are too large to go through using traditional reading modes. They point toward the places to do the close reading, as needed. The range of reading experiences may broaden, but reading as an experience remains, for now. Whether the alphabetic code will disappear as the central mode of linguistic transmission (it undergirds the internet) is another question altogether.

Media Literacy

RS: Many observers of digital culture announce the shift from deep attention to hyper attention. The French philosopher Bernard Stiegler even speaks of a threat to social and cultural development caused by the destruction of young people's ability to develop deep and critical attention to the world around them. Is this academic nightmare justified? Or is this just another reiteration of a well-known lamentation about the terrifying ramifications of all new media?

JD: I tend to agree with Bernard Stiegler, though I would add that the single most shocking feature of the way people, young ones in particular, are living their lives is that they have no interior life and no apparent need or use for it. They live entirely social existences, always connected and in an exchange, no matter how banal, about the ongoing events of daily life. Reflection, meditation, imaginative musing, these are all missing, jettisoned, discarded and disregarded. Innovation, change, invention–these have always come from individuals who broke the mold, thought differently, pulled ideas into being in form and expression. Too much sociality leads to dull normativity.

RS: The birth of conventionalism out of the spirit of participation; this is a strong statement that many of the young will not be happy to hear. But lets drive your point even further. My thesis would be: People live entirely social lives for in the age of individualism life is too big to be absorbed alone. In (post)modern society where past and future have become unreliable concepts every moment takes on an intensity that is hard to bear. One lives in the here and now and permanently feels unequipped for an appropriate reaction. Without a rich interior life, without a reflection, meditation, and imaginative musing experiences – be it Venice, Grand Canyon, Da Vinci's *Mona Lisa* or the sudden rainbow – become indigestible bits we don't know what to do with: except posting them. The unquestioned imperative of sharing is the new way to live up to important and trivial moments alike. It forwards the moment experienced to others who will "solve it" with a number of likes. Sharing is a way to mask the horror

vacui. If Blaise Pascal once, in the 17th century, stated: “all the unhappiness of men arises from one single fact, that they cannot stay quietly in their own chamber” we may add today: people cannot only not be alone in an empty room they are also unable to cope by themselves with the events they encounter.

JD: Yes, well, there it is. I spend so much of my life alone and solitude is as important to me as water and air, it is the medium in which I breathe, that I am an anomaly. I have a horror of constant contact, of being used up, absorbed, taken out of the being-ness *in* life as lived. I so prefer to watch times of day shift to watching any programmed entertainment. I’m not much of a sharer, though I like real conversation, dialogue, and enjoy consuming the endless spectacle of daily life in its direct and mediated range of poignancies and follies. The horror of the real is the cruelty of the world, of human beings to each other, which is unspeakable. Mediation is the assurance that we are not the suffering ones, because they are the enunciated subjects. Hideous indeed. What glass do we think we are on the other side of? I wonder.

RS: Digital Humanities are a keyword in the current discussion about the present and future of the Humanities. It has many facets and, as the discussion suggests, at least a dark and a bright side. However, there seems to be very different notions of what digital humanities actually are. Some reduce it to digitized corpora or to the use of networks for communication, others include digital media studies. What is your perspective?

JD: I characterize Digital Humanities as work at the intersection of computational methods and the traditional humanities. The production of digitized corpora was and is one of the outcomes of this intersection. My standard line is to say that Digital Humanities is the cook in the kitchen and that Digital Media Studies is the restaurant critic. As far as I am concerned, you have to know how to do things and make things in order to be able to think arguments into being as works in any medium, analogue or digital. I would extend this by noting that much of my work in the last ten years has been part of an overarching argument that humanities *methods* as well as humanities

content—that the humanistic approach to knowledge is fundamentally interpretative, observer-dependent, situated culturally and historically, necessarily partial, constrained by circumstances, tolerant of ambiguity.

This puts my approach at odds with computational techniques and approaches to knowledge that imagine user independent approaches, repeatable results, universal and absolute objects produced by empirical inquiry. I don't include classroom technology, online learning, or critical media studies in Digital Humanities, though these are closely related fields and each is of value. Digital Humanities has become too obsessed with definition, and is at risk of becoming a service field without intellectual content or problems. I think Andrew Prescott has pointed this out as well, asking where are the intellectual contributions of Digital Humanities now that we are almost two decades into the field? I keep insisting that until a project in Digital Humanities has produced work that has to be cited by its home discipline—American History, Classics, Romantic Poetry, etc.—for its *argument* (not just as a resource)—we cannot claim that DH has really contributed anything to scholarship.

RS: If you don't include critical media studies in Digital Humanities, I as a media theorist who considers the critical discussion of the cultural implications of new technologies as a central part of media literacy hope there will be room and funding for such digital media studies besides the trendy Digital Humanities. I am afraid the focus on the making and managing of information could eventually override the traditional characteristic of humanities to question knowledge. For many graduates in the humanities the promised land meanwhile seems to be what has been discussed as Alternative Academic Careers for Humanities Scholars. I have the feeling this direction further promotes the shift from critical media studies to affirmative media management.

JD: The #AltAc discussion has indeed introduced confusions as well. In some ways, #AltAc is a sideways step into the work that librarians and information professionals have done for years. But

it brings the design and development of platforms and project technology in the humanities into the equation. How else would we have tools like Zotero, or Neatline, or Omeka if we didn't have humanist-technologists committed to their development? But suggesting it is an alternative *academic* track sends the wrong message to the public and to administrators—it is a *professional* one, I think. The research done in an #AltAc mode is not discipline specific. The distinction is important because substantive, discipline-specific humanities research needs support. If you are working all year in an admin position, especially if you are also teaching, the research you do may be in platform and tool development but you don't have the time, hours in the day, to become an expert in the Romantic fragment and poetics, or the interpretation of the eco-political impact of the Norman conquest, or the construction of celebrity in 18th century French culture.

They are different kinds of work. I'm happy to work with my colleagues in the Library. They are dedicated professionals, but they are not "alt" anything, they are people whose work is premised on a subject specialization and on expertise in professional areas. These are essential skills. Most #AltAc advocates are not trained information professionals, they are in administrative positions trying to catch up with what MLIS programs teach, while trying to develop humanities-oriented services and platforms. That is a specific kind of research in the professional arena. Either path is consuming. Domain-specific research takes a lifetime of accumulated knowledge and dedication, continued attention to developments in the field, among peers, and it produces new knowledge. It cannot be done around the edges of full-time administrative work. Research into platforms, protocols, data management, design—these are also legitimate, but they belong to the information domain, not the humanities. Creating the impression that humanities research can be done on "one's own time" around the edges of full-time work plays right into the current diminishment of respect for the humanities. This is not in the interest of Digital Humanities or anyone else. We need Digital Humanities professionals, not diminished academics.

RS: Against the 'default position that the humanities are in "crisis",' in the 2012 book *Digital_Humanities* you and your coauthors Anne Burdick, Peter Lunefeld, Todd Presner, and Jeffrey Schnapp portray the computational turn in Humanities as an opportunity of bringing the 'values, representational and interpretative practices, meaning-making strategies, complexities, and ambiguities of being human into every realm of experience and knowledge of the world.' As one of those values, you suggest 'thinking beyond received positions and claims to absolute authority' supporting 'a genuine multiverse in which no single point of view can claim the center.' How do you bring relativism and multi-perspectivism into a world of quantifying methods and algorithmic analysis? What obstacles do you see?

JD: A simple demonstration to show the multiverse is to imagine a faceted interface that allows us to see a collection of artifacts from a variety of perspectives. Consider an online museum displayed through a set of filters that organize and select objects according to different criteria: the knowledge of an original collector, a scheme of standard metadata from a western perspective, in accord with a classification scheme from an indigenous community, and so on. Each structuring organization offers a different argument, different set of hierarchies and values in its presentation. The quantitative or disambiguating underpinnings don't have to determine what happens at the level of display, and the parallax of comparative views into data or organizations structured into data take apart the singularity that is the usual perspective of a monograph. Imagine a view into a spatial representation of Rome—show it to me as Augustus saw it, as Michaelangelo saw it, as Mussolini saw it—think about the spatialization of power and its connection to point of view, daily routines, routes, events. The city stops being a given. It stops being a singularity, and turns into a multiplicity of perspectives, each of which is experiential.

For more than a decade, I've been working on using digital techniques for modelling temporalities, and that work has investigated highly subjective models of experiential time, referential

time (from documents), relative time, and other modes that can't be expressed in timelines borrowed from the empirical sciences. Most recently I've been working on the graphical expression of irreconcilable chronologies in the history of writing and the alphabet, particularly in the late 18th century, just on the cusp of geological reckoning with the ages of the world, its formation, and evolution. This is a time when biblical chronologies and Olympiads were the two stable reference systems for any historical event, but historical records and actual chronologies also existed. Prehistory was a mystery, unfathomable, though controversies reigned about whether people existed before Adam. This is half a century before geological discoveries and evolution upset the entire belief system. When you think that within a hundred years, theories of the birth of the universe, big bang, galaxy formation, and the understanding of the millions of years through which the earth and its species formed would all be articulated, it is mind-boggling. So how do we model these knowledge systems, show their distinctions and differences, not as errors, but as rhetorics, as argument structures?

These are tasks well-suited to the mutable conditions of display within a digital environment, I think, though we will have to let go of the attachment to easy, reductive eye-candy that has been the stuff of information visualizations as they have been inherited from the natural sciences and brought into the digital humanities. The intellectual and epistemological problems in using visualizations are many, beginning with a fundamental fallacy about representation—that an image can "be" in a relation of equivalence or identity with that which it claims to represent. Many other fallacies follow from this, but we went through decades of deconstruction and post-structuralism and seem to have forgotten all of the lessons we learned as we (humanists) rush to uncritical engagement with methods from other fields. When you realize that language has many modalities—interrogative and conditional, for instance—but that images are almost always declarative, you begin to see the problems of representation inherent in information visualizations. They are statements, representations (i.e. highly complex constructions and

mediations) that offer themselves as presentation (self-evident statements). This is an error of epistemology, not an error of judgment or method.

RS: The unlearning of deconstruction and post-modernism, this is what I meant above when portraying the quantitative turn as the epistemological happy end that overcomes the relativism and ambiguity of postmodernism. As for the difference between language and images you point out, the book also states that Digital Humanities 'necessarily partakes and contributes to the "screen culture" of the 21ST century' – which you already stated in your project *Wittgenstein's Gallery* in which you take qualities specific to images and see how they could work in texts, and vice versa. *Digital_Humanities* admits to the tension between the visual and the textual, but doesn't accept an either/or approach nor the subordination of the one to the other. However, as you just stated it, the visual and the textual are two very different systems of signification and communication. To quote yourself at a symposium on Digital Humanities in Hong Kong in 2014: a word doesn't cast a shadow and an image can't be conjugated. You have extensively worked on the visual of the textual, as it were. How do you see the collaboration of both in this context? What role should visual studies or rather the study of visual communication play in Digital Humanities?

JD: I was at a dinner party this year with a very senior and rightfully esteemed scholar of visuality, an equally senior literary critic, and a younger poet who suggested that images and texts are 'now the same', because they both appeared on the screen display as pixels. I was appalled by the stupidity of this remark. Might as well say that images and texts printed in ink on newsprint are the same order of thing because they are produced in the same medium. Text and image are processed in different parts of our brains and by different means. More than 50% of primate cerebral cortex activity is given to visual experience, and this is dramatic by contrast to that of other animals. What is striking to me is that we do not have a field called visual epistemology, no dedicated discipline.

Visual studies was its own thing, a rejection of art history's hegemonic attachment to high art, an attempt to expand the social and cultural parameters of what was allowed to be looked at and how. But visual studies, perversely, was little concerned with visuality, and very concerned with politics, social practices, economics, ideology and so on. This left visual epistemology undeveloped. We do not have a good language for critical discussion of graphics, or of graphical principles of organization and argument. What, for instance, is the difference between hierarchy and proximity in terms of the creation of meaningful spatialized relationships in graphic design? Huge. But do we teach these principles? Communicate them? And yet, now, in the world of screen-based communication exchange and continual transactions, the need for critical engagement with the workings of graphical form could not be greater. My new book, *Graphesis: Visual Forms of Knowledge Production*, which was just published by Harvard University Press, is an attempt to outline the foundations of a broad-based approach grounded in the history of graphical knowledge and its practice. Sadly (perversely), for a book about visual forms of knowledge, it is badly designed, on poor paper, and dismally printed, with images that are way too small and a layout that has none of the exquisite elegance that Emily McVarish brought to our *Graphic Design History: A Critical Guide*. But so be it. The content of the book, will, I hope still be of some use in the larger conversation.

RS: The poet you meet over dinner should have known better since poetry, though it works with images, does so in language. What he or she should have brought up is that the word in digital culture is in decay, since new technologies more and more shift communication from the linguistic to the visual mode. Take an app such as Snapchat which, through the promised ephemeral character of its images, invites users to document rather than describe. No need to voice how one is doing if one can send a snapshot of sitting in front of the TV legs on the table beer in hand. It is faster and it requires less cognitive effort. The exciting aspect of such form of communication is its increased ambiguity and semantic surplus: It is up to the perceiver what specific

aspect of the photograph she responds to with an image that again says more than thousand words and hence leaves it to the perceiver to what of those 'words' she wants to respond. So, if Digital Humanities moves to visual forms of knowledge production this may be the academic equivalent to the development in digital culture.

JD: Absolutely! Hence my call for visual epistemology as an essential and emerging field. In what does knowledge consist when it is encoded in visual, graphical, diagrammatic, schematic, and other forms we process through vision? I do not believe, along with the rest of my other poet friends, that we remediate all visual experience into language. Visuality is a primary mode of perception, representation, mediation, processing, and cognition. For years, every time I went to an art history theory conference, the conversation turned to the question of how to develop a visual mode of criticality—enacted in and through visual means. Look at Robert Frank and the sequencing of the *The Americans*. Juxtaposition is a critical move, one that operates across a divide that prevents closure into singularity. This can happen within an image. Winslow Homer's amazing painting of confederate soldiers as prisoners is a masterwork of juxtaposition and difference operating within visual codes. You never exhaust the looking and comparing and the way the differentiation and specificity of each individual is produced by and across these rifts.

RS: UCLA is one of the rather few universities that has a Digital Humanities center. What is your experience in this center regarding student expectations and faculty collaboration?

JD: Just to be clear, the Center for Digital Humanities does not offer any degrees, graduate or undergraduate, it is a research and teaching support unit, and actually does more of the latter than the former. Our research infrastructure is as fragile as anyone else's, I think. But we did mount an undergraduate minor and a graduate certificate as an interdisciplinary effort across schools and departments. We are thinking about a Master's Degree that would be a stand-alone two-year degree with a subject specialization or a three-year combination with MLIS. This

is all fluid, and we may look at other options as well, but we are trying to think about how to best prepare our students for jobs in private and public enterprises, cultural institutions, media and business, academic and non-academic positions.

The needs for data wrangling and production, critical understanding of databases, analysis, visualization, data mining in text and image, mapping, network analysis, and the techniques of digital publishing are all pressing. My goal is to provide students with the skills they need to work in digital, networked environments while also having an understanding of history, theory, culture, and some humanistic discipline in which they have a passion and feel like a stakeholder. If you love something and want it to be valued, understood, passed on to a broad public now and for generations to come, that makes your motivation very different than if you are only trying to perform a task efficiently. The students have been terrific, and they are living evidence of the viability of our approach. In our first group of graduating minors, the reports on how their classes got them jobs, next steps, an edge for graduate school or for work in some governmental, non-governmental, or other sector have been legion. It's been gratifying. We'll have to see how the graduates do, but they are an enthusiastic bunch.

Getting an in-depth specialization in Digital Humanities while learning the general landscape of tools and possibilities is important as well. We need someone who can teach coding. You can do a lot without knowing any Java Script, for instance, but being able to write code is a crucial skill for digital work. I would argue that structured data is the primary feature of digital platforms, and manipulating data comes after that, but knowing how to read code, understand how it works, how its syntax and specialized vocabulary function, provides real insight. I won't swap it for literature, for poetry, or for art, but I will allow that it is its own form of writing, an expression whose rules and features are integral to our culture's operations. But like so many things, I distinguish between having a reading knowledge and a working skills—even if I can read code and understand how it works, I'm not going to get good enough to make it make sense for me to be

my own programmer. Life is too short. I drive a car without having built one, use paints without creating my own pigments, print with lead type without have designed a set of punches or cast my own fonts. I think it is important to distinguish between what you need to know and what you need to do individualy, what your skills and strengths are, and where you are in the ecosystem. I'm a better coach and mentor than practitioner in many arts, and that seems appropriate. I can think things that I don't believe others do, and that is my contribution. Contrarian thought. It's my niche.

Reading back through my answers, I realize I sound cranky, critical, and a bit despairing about the state of world and the fate of the humanities. But I actually believe that the only way we can change the course on which we are currently is to engage with those values and methods that are central to humanistic thought and to incorporate the interpretative rhetorics of the humanities into the work we do, not just the analysis of work done. Humanistic methods, with their emphasis on situatedness of knowledge, of the partial and incomplete understanding of the world and its workings, and a commitment to imaginative and speculative thought, may open possibility spaces as yet not manifest within our current sphere of understanding. These are very early days for Digital Humanities, but my hope is that as the future unfolds, it will be the humanistic dimensions that gain more traction in the field—not just as content, but as methods of knowledge, analysis, and argument.