

Digital Humanism (Draft)

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NOTE: By Digital Humanism I do not either mean neither Secular Humanism or the ethical discourse associated with this name.

Digital Humanities, while not a recent invention nor an unexpected development, seem to have become in the last couple of years a major concern for professional societies, funding agencies and ultimately the humanities disciplines themselves. While individual projects have existed for a long time, we are currently witnessing a sustained effort to assemble, organize and ultimately connect individual projects across disciplinary boundaries and cultures. This is obviously a most welcome awareness of the need to coordinate and harmonize large scale projects. The American Council of Learned Societies, after producing a report a couple of years ago on a Cyberinfrastructure for the Humanities has begun offering Fellowships in Collaborative Research. The National Endowment for the Humanities has created an Office of Digital Humanities in order to coordinate and encourage funding of Digital Humanities projects, and the Mellon Foundation is financing Project Bamboo.

These initiatives, much like their counterpart in Europe, arise from the perception of a tension if not a crisis in the humanities in the face of the changes brought about by the emergence of the digital environment. By digital environment, I mean the the infrastructure, set of tools, platforms and applications and the practices associated with them. Learned communities are notorious for their conservative nature and are especially resistant to change. In this respect, the digital environment has only heightened such an attitude, because it has brought about

radical shifts in the creation, publishing and sharing of information. Some of our most cherished models have been fragilized, from the peer review system to the organization of our disciplinary practices. Our learned communities are organized according to models inherited from the 19th century print culture and its objects, Digital Humanities would seem to be an attempt to respond to the new reality represented by the Digital Environment's quite different infrastructure, tools and practices. The bulk of current research and effort corresponds to these elements of the Digital Environment. First, on the infrastructure level, we have a set of hybrid efforts combining networks, library resources and archives, exchange protocols, data formats, interoperability concerns, etc. Second, the tools: they are more complex, more difficult to summarize yet they are particularly useful to provide a snapshot of current views of the nature of relations between the Digital Environment and the Humanities. Third, the practices: we have tools that seek to mimic current and established practices in a digital format. Or others that aim at preserving some normative aspects of scholarship in the digital world while incorporating some of its most innovative practices. Others still seek to take advantage of the availability of rich material online across borders and disciplines. Within such a framework, some difficult issues remain: for example, how to negotiate rights and access controls across various national traditions and legal customs. The recent launch of the World Digital Library by the UNESCO illustrates perfectly this issue: while the material is openly accessible online, the rights to specific documents remain with each institution or country (a similar structure can be found in Europeana). Concerns with Open Access are essential.

In short, and this is not in the least surprising, we are still negotiating with difficulties and problems arising from print culture.

The challenge for Digital Humanities it seems to me lies not only in overcoming the obstacles represented by the heritage of print culture but instead by imagining and implementing new tools and practices that fully take advantage of the nature of the digital object itself. Such a shift does not imply the complete abandonment of our scholarly practices, but it requires the recognition that the Digital Environment is in and of itself a culture and not merely a reflection of an evolutionary transfer of content and material from one format into another. The Digital Environment is a culture in the sense that it informs choices and shapes new perspectives. Our tools and practices mirror our negotiations with the emergence of such a culture, and Digital Humanism is precisely the acknowledgement of such a transformation. It implies the effort to think through both the epistemological and the historical dynamic between tools and practices shaping our interaction with the stuff that makes the humanities: documents, their materiality, their transmission and reception; the forms of literacy associated with the circulation of such documents and the cultural and social constructs they make possible. Digital Humanism is ultimately the erudite and learned form of digital literacy. What I am suggesting here is something we are rather familiar with, but with a twist. And my guide, if I had to choose one, would be Vico: the Vico of the *New Science* with his insistence on the necessary interconnections between the subject matter and the method, but especially the Vico of *On the Study methods of Our Time* and ultimately the Vico of the *On the Most Ancient Wisdom of the Italians Unearthed from the Origins of the Latin Language*. I hope that by the end of my presentation today you will appreciate this choice and you will tell me whether you find it appropriate or not.

The third dimension of the Digital Humanities is the emergence and the concurrent development of a set of tools. These tools are obviously essential because they shape and

inform our access and interaction with both the material we are studying as well as our exchange with colleagues and readers. In this context, three basic trends appear to dominate: one, derived from an earlier format grounded in a search culture has evolved into a richer and more complex pattern matching set of APIs and tools. A second, anchored in the nature of the document it presents, provides a wide array for manipulating and in some cases visualizing associated information. And finally we have newer and promising environments that try to foster collaborative research and develop online variations on established scholarly models. If there is one characteristic that emerges from this rather simplistic representation it is the increased emphasis on the collaborative and the social. In a sense, this is perfectly natural since most of our work, at least historically, has been a solitary exercise, but which was always written with an imagined community in mind. The emergence of digital sociability, its influence on the design and structure of tools, its exploitation of the participatory model, complexify and problematize our reception of its platforms as a potential model for scholarly communication. It is indeed the case that the appeal of this sociability is undeniable but I wonder whether we have, as a community, thought through enough of the implications of its adoption.

Digital sociability relies, in my opinion, on a number of features that are not necessarily “natural” or “normal” within a scholarly environment. First, its popularity is intimately tied to the Cloud and its structure: thus it requires a distributed and open form of access across tools and points of access. Furthermore, its success relies on a form of transitivity: it assumes interoperable data, interoperable modes of communication and exchange and simultaneous multiple engagement with the same data stream and structure. This dimension would seem ideal for a scholarly environment: free and open access, structured engagement with data and

colleagues, a comparative framework for evaluating information and assessing analysis. Yet I think it is important also to recall that Social Networks are essentially empty platforms with relatively simple but binding structures: they derive their importance from the density of user presence and associated relations and then from the richness of contents created (and shared) by these users. Perhaps it is not as simple as it would first seem to adopt the Social networks model for a scholarly environment. For our academic environments (both research and teaching) are first and foremost content bound: they take their point of departure from the nature and the weight of their content. In this respect, it would seem, the inverse relation would apply. Furthermore, social networks are organized around clusters of relations and associated reputation frameworks. As such, they take advantage of the relative extensibility of digital identity, of its polyphonic nature and its circulation in the Cloud. Scholarly environments rely heavily on reputation as well, of course, but our frameworks are not the same as those of social networking, and, it remains to be seen whether our frameworks can function in the same manner within the Digital Environment. Our networks are heavily invested in identity persistence. I mean by this they require forms of continuity and authentication not to say verification grounded in an ongoing interplay between tradition and innovation and managed by a complex set of intersecting scholarly rules and institutional interests.

Perhaps the import of social networks lies elsewhere: in the data portability they make necessary and inevitable and in the nature and structure of relations they introduce. In this respect, it seems to me that digital sociability is the new site of digital humanism. First, because of the emergence of virtual urbanism. Virtual urbanism is the hybrid space in which we circulate between the real and the digital and one in which we have begun to create a new

architecture. If indeed humans are spatial creatures, than digital culture represents a new spatial experience (as well as temporal, but that is an altogether other question). In a sense, learning and scholarship, much like other human activities, are now inhabiting this new space. They are investing it with their history, their methods and content but they are also being shaped by its unique characteristics. Virtual urbanism is for sure a hybrid and evolving entity but it has already introduced some elements that are, at least in my opinion, of great relevance to scholarly humanities.

I will outline a few of these for the sake of our discussion. First, we find the convergence between standard formats and the mobile ones (curiously, digital books are leading the way on this front as in the case of stanza and the recent Open Format to be developed between Adobe and Lexcycle). This, it goes without saying, is crucial because the majority of Digital Humanities undertakings so far have understandably concentrated on large-scale projects (I think that we are at times driven by a form of science envy). The accumulation and aggregation of large collection of documents and materials is only natural. But it is interesting to note that these efforts are taking place at the same time we see the emergence of microformats in the larger digital environment. In a way we have not yet thought through the implications of microformats for our scholarly endeavors. Perhaps, to give a historical analogy, they can be compared to similar shifts in print culture. Paperbacks today, but more importantly Octavos and in-16s were essentially print version of microformats and they played a crucial role in advancing and propagating literacy and in bringing about significant cultural and social change in European societies. Digital microformats have a similar potential and they are already shaping new articulations of digital literacy. The question for us as humanists is how do we understand this cultural shift and what relations are there

between this format and our practices? It would seem to me that there are at least four factors to take into account in this case: the anthological dimension of microformats, the shift in reading culture and practices, the association between these two and the ontological structure of the social web (the Ontological Web has already generated a Web Science, with a component devoted to the history of the web) and finally Cloud Computing.

First, microformats by their sheer nature, accentuate the anthological dimension of the Digital Environment, and in doing so they problematize the established forms for assembling and exchanging information. In the scholarly world, they represent a further distancing from the book and to a lesser degree the essay as key formats. But beyond the question of sheer form, microformats raise potentially new difficulties for scholarly communication, at least in the traditional sense of the term (they are essentially fragments that are designed to be re-circulated, or reTweeted). And ultimately, they stand for the full emergence of digital objecthood an emergence that has not yet fully been received within our learned communities and especially within our surrounding institutions, like academic publishers and university administrations. The institutions as much as the publishers and unfortunately a significant segment of humanities scholars remain prisoners of the Enlightenment's elaboration of copyright and intellectual property, of the monumentalization of authorship within a system of disciplinary rewards and divides and legal frameworks. Such a blindness to the realities of the new digital objects, their properties and, in my opinion, their literate dimensions, have led to a conservative reaction to the emergence of the digital, a reaction that mostly tries to preserve the objects and the models of print culture into the new digital age. Whence, the prominence of the book and the essay in the efforts to transition into the new environment. A cursory look at the traditional book will I hope suffice to give an example. Most publishers,

when they accept to make available part of their catalogue online, opt for a PDF version of the texts. The choice of a format in this case is most instructive because it reveals a set of assumptions and choices that are an integral part of the current publishing situation. PDF, whether of a printed book or of a digitally produced text, implies a model of *restitution*, that is to say an archival model, a desire for an exact reproduction or a preservation of the original. It also is, at least currently, the preferred form for a rather restrictive Digital Rights Management technology that often restricts access to if not the manipulation of the document. But what is perhaps most significant is precisely the fact that the format, a digital format, actualizes a conception of the digital environment that is simply no longer valid: it ignores the evolution of the network from a site for finding and consulting documents into a space of interactivity and productivity, with its own virtual urbanism and sociability, its own literacy. While DRM may be justified by the need to protect the rights of authors and their control over their material, it nevertheless carries within it a limited conception of the book and of reading as fixed objects. It is not just limited, but limited because it ignores emerging digital formats (especially but not exclusively Microformats) and merely seeks to transport the print components into the digital. I will not go into the details, although they are fascinating; it suffices to say that the insistence of an exact cover, font, typography and pagination, only strengthens the divide between print and digital instead of allowing for a convergence. The model of preservation or restitution while ideal for print is the least optimal from the perspective of a digital reader: it is, first and foremost, in contradiction with the most common practices in the digital environment. For under the guise of the faithful reproduction of the original lurks a more problematic and dangerous, for the long term future of scholarly publishing, desire: the will to control the digital object, well beyond its printed version. While the printed book and the essay are relatively fixed, their digital equivalents

cannot and in my opinion should not be mirrors or reflections of the originals, an archive of the print. Instead, they have to be able to function within an environment where the norm is interactivity through complex manipulations of documents that have become digital objects in their own right. The dominant is no longer preservation of the original, it is rather the exchange of newly generated information and its transmission in endlessly convertible but not equivalent formats.

In a way, scholarly texts, whether books or essays, have become, within institutional contexts, fetish objects and objects of resistance. Fetish objects, because in large measure they are the site of a conflict between the print and the digital, a conflict that is firmly grounded in the perceived necessity of the fixity of the book and its associated form of authorship (we might discuss later, if you like, scientific authorship and the re-emergence of a collective form of authoring that has many echoes in forgotten ancient models). This conflict is embodied particularly in the status granted the book not only as a valued measure of achievement but as lacking any significant equivalent in the digital environment. The book is also unfortunately the last *pièce de résistance* of our model for the production, dissemination and recognition of knowledge within the humanities. It is a monument to the figure of authorship and its everlasting institutional powers. But such powers come at a price: they are also the space of another conflict, one between the two literacies, print and digital.

Scholarship in its modern form has relied, as much as publishers, on literacy in order to evolve and especially to produce value. If scholarship, at least in the humanities, resists and ignores digital literacy, it will inevitably contribute to its own impoverishment and decline. By digital literacy, I obviously do not mean only the knowledge required to access and manipulate the basic tools of the digital environment. Instead, digital literacy is the sum of evolving practices that are essentially cultural. In short, the selection of format stands for a

larger choice that represents also an instance of a growing digital divide, not the divide between those who have access and those who do not, nor the one between, shall we say, every day users and “nerds”, but instead a divide grounded in the politics of digital formats, their implications for activity in the digital environment and their ultimately economic consequences, including within our own increasingly economically strapped fragile academic institutions.

Digital culture has its objects and these objects, while at times they resemble those we are familiar with, whether from print or other media, come with their own properties and territories. They bring with them new realities that often disturb our comfort zones and challenge some of the most basic concepts we work with. First, the weakened distinction between author and reader is the direct consequence of the nature of the digital object itself. Second, the redeployment of the author-reader couple into the digital environment derives from the specificity of code itself, especially of literate code (think of the contemporary extensions of Knuth’s *Literate Programming*). Literate programming insists on the necessity of legible code, that is to say code accompanied by commentary that explains the intention and the method adopted by programmers, thus making it easier to reuse or modify existing code thanks to the convention of a readerly community. Circulation of code objects thus follows the path of a generalized economy of *scholia*. It is no coincidence that all the cultural wars occasioned by the digital environment have been conflicts started over a format (DVD CSS, etc.).

But Microformats further the development and the consolidation of what is essentially an assembly model of authorship, most visible in the major Web 2.0 platforms and the Cloud.

The model prescribes *assembly* in the sense of a *collection*, a grouping that is defined by an initial selection but one that is also open to modification and adaptation. Ultimately then, the model yields an anthology (or, if you prefer, a montage) that is tailored at once to the current tools and to available content and current taste and interests. It is this anthological turn that highlights both the literary dimension of many of the digital norms currently in vogue that are shaping both the technological development as well as the economic models underlying the deployment of the latest generation of large scale web hubs (and thus also influencing our Digital Humanities projects). The current success and popularity of social networking relies on such an anthological extensibility of all available material online. This extensibility covers selected and edited data, personal identity related information (for example the generation of contacts from previously available information on the desktop or in the Cloud, or the use of OpenId or similar technologies on all major social networking and Cloud platforms).

Whether the anthology is initially put together by a single individual or researcher or by a group of disparate individuals, the anthological model makes it possible to transform available or collected items into a dynamic and open publication of potentially new knowledge and to present them in their extensibility. This anthological sharing is, in my opinion, a surreptitious selection and dissemination of apparently unrelated snippets or fragments as meaningful collections, where meaning is largely derived from an apparently arbitrary association of content controlled by users and the diversity of their web presences. It is not necessarily, then, a meaning tied restrictively to authors, to their identity, history or intent. The emergence and success of Tagging as a new paradigm has only increased the importance of this anthological turn, strengthening an already visible departure from the hierarchical search structure constrained by ordered meaning and grounded in a pre-established set of values and norms. Ultimately. Microformats have the potential to create a

another new digital divide: one between searching as we have known it, based on key words and relevance, and another grounded in the need to access and query the flux of exchanged information at the very moment it is happening. (This can already be seen in the development of XMPP, XML Pull Parsing.) But also new search models are emerging, such as the one developed by Wolfram [WolframAlpha], that seek to abstract, to represent in computational terms all “actual human knowledge” in order to generate new forms of knowledge. It is meant to provide an expert access to available information with much of the organizing and structuring taking place behind the scenes. Or the new Hunch, which combines the most productive aspects of social networking with artificial intelligence algorithms. The model here is how do we move from what we know (which is what conventional Search engines allows us to access) into something we do not know?

While anthologies, at least in their classical forms (as in the Renaissance CommonPlace books), were always sites for the expression of individual tastes and opinions reflected by the organization, order and selection of assembled fragments as well as the use of commonly available and shared sources, the increasingly digital anthological practice accentuates the inherent tendency of the anthology to minimize if not collapse the differences between authors and readers. If the anthology silently marks the ‘incestuous’ links between readership and authorship, the digital anthological phenomenon celebrates the unbound potential for reading to modify, manipulate, redefine and appropriate content. But, in this instance, both authorship and reading have been if not reinvented at least displaced and remodeled. First, the new anthological turn has been extended to new media, most notably images and videos, thus allowing for a more complex interaction with content that in the past had kept the reader or the spectator at a distance, or at least, in a relatively passive position of receptivity. The

current anthological practice is immensely successful owing to the ways in which it exploits the interface between the technological (easy access, authoring tools, tagging, etc.) and an individualistic drive to distinction (Twitter Followers, Google Juice, etc.). It also illustrates some of the literate features of the new digital environment and the ways in which it recuperates and appropriates established print culture models. It also points out, in practice, some of the difficulties that will face scholarly practices in the Digital Environment and the need to rethink the models and the ways in which we will be able to share and publish within the new environment. Without necessarily completely abandoning institutional authorship, what is needed is a thoughtful hybrid structure that can allow for subtle negotiations between the needs of the scholarly and the uses and expectations of the digital. As I suggested before, the format of a digital book cannot be simply a closed and protected PDF that will allow no interaction between the reader and the text. While the integrity of the initial document is essential, its digital manipulability is equally significant if we are to avoid creating inaccessible islands of information (which is what we have at this point within the rights-controlled and access managed limits of institutional repositories), islands that will only attract intrusion and threats to the integrity of the archived material. Microformats are intimately tied to problems of not only sharing and publishing but also of structuring information for the scholarly as well as the broader social environment.

A further dimension of Microformats and their aggregation (RSS) lies in what may be best described as a form of digital *alienation* characterized by a diminished form of interaction between readers and sites, shifting the interaction into the social networking hubs and tools, the sites of the anthological par excellence. Digital alienation also imposes the need to revisit web and interface design in order to take into account the growing importance of the

digital tools that are not exclusively passive but instead ones that encourage the particular forms of authoring currently prevalent online. This alienation goes hand in hand with the Ontological dimension of Cloud computing and the emerging digital sociability. For the humanities, the coming ontologies are a digital variation on the learned societies of the Renaissance and the Early Modern period. An ontology is a set of relations, definitions and properties that represent, for example, scholarship. It can distinguish between different levels of objects (primary and critical) and the relations between them. While ontologies can now describe and structure access to documents, that is to say their type, provenance, history, or relationship to other documents, they can also describe, but only with the participation of scholars -- and I emphasize this --, the more critical dimensions of humanities research. We can produce philosophical ontologies representing various schools and theories, literary ontologies reproducing the varieties of reading methods, but most importantly, we can bring about the digitization of scholarship in its own terms and not according to partial and often reductive representations imagined by outsiders. For the humanities, the coming ontologies are a digital variation on the learned societies of the Renaissance and the Early Modern period. Within such an environment, without abandoning the earlier Republic of Letters scholarly research takes on a new role and a new function. It can serve as the mediator between the traditional, the current and the new; it can also, if it chooses to, reinvent itself beyond the simple print-on demand or the modest adventures into limited digital editions of our current Digital Humanities projects. Scholarly publishing does not have to abandon scholarship as we know it; it needs to accompany it into the digital age. If its main purpose remains the dissemination of knowledge then it is only logical for it to adopt and adapt to the new environment, rather than merely trying to dissociate itself from its history. Some publishers have adapted to the new sciences, although the scientists seem to have migrated to

their own self-managed digital form of publication. The humanities and some in the Social Sciences have resisted such change, in large part out of either indifference or ignorance or the lack of a full appreciation of the new digital literacy and its implications. It certainly is true that the utilitarian functions of the University have become more assertive, but the part of the institutions that stands for learning and the advancement of knowledge needs to shed its modesty in the face of the digital and claim its rightful position. If it does not do so, it risks being reduced to an insignificant side show, a museum piece or a marginal activity. Let me give you an example of what I mean: If scientists and programmers produce digital code, the humanities are the disciplines that can best describe, understand and engage with the uses and practices those codes make possible. For code without users, especially literate and social users, is nothing but an empty computational exercise.

Or, to return to an issue I mentioned earlier: that a new virtual urbanism has emerged that is endowing the Digital Environment with a new human geography. It has virtual cities and landscapes, a new economy and new forms of property, and even new objects. These objects are real in a different way, with their materiality, but yet they are divisible and convertible. they are abstractions animated by networked interactivity. Artists have been at the forefront of the exploitation of the new digital landscapes and their implications for the body and the mind, to use an old-fashioned expression. So have writers and poets. Ultimately, it seems to me that alongside the debates concerning archives, or the institutional implications of digital scholarly practices and publishing, it is crucial that humanities scholars, institutions, funding agencies and scholarly publishers take seriously the digital objects within their environments and not consider them merely as reflections of past activities.

Perhaps we should take a clue from some well versed preachers. Not long ago appeared an essay in the *La Civiltà Cattolica* (a Jesuit publication) devoted to religion in Second Life. The author concludes that his order should begin missionary work in the virtual world. If anything, such a case reveals the importance of this new virtual urbanism and its cultural potential. While I will not myself venture into a corresponding undertaking in the name of a secular humanism, please allow me to present a few observations from what I consider to be a possible iteration of a digital humanist perspective on the emerging digital sociability. As I said earlier, this new landscape is characterized by the shift of the Web from being initially a simple locus of the storage of and access to fixed objects, into a space of associated interactivity. In this fashion, the virtual landscape's development and evolution is driven by a set of processes of assimilation: assimilation of content, of categories, of concepts, of symbols and of their relations to exchanged information. This dimension is important because it explains the current nature of platform development: popular usage and associated practices shape platform conception and deployment to the same degree that coding these platforms inform potential practices. In essence, this seems to me to be the current pattern of change and innovation in the converging paradigm between the mobile and the Cloud. But clouds are also remarkable travelers: they are agents of meteorological change that often enough, modify the landscape they traverse. The digital cloud also modifies: other and very different things, such as the image, friendship, two subjects of study central to the humanities but also to the current practices of digital sociability and its supporting platforms.

Let us begin with the first object, the digital image. The image is so overwhelming in the digital environment that we often forget that it has become essentially a condensation, or, more accurately, a miniaturization (is this perhaps a sign of our nano future?). Social

networking, much as have microformats and aggregation technologies, has put into place a seemingly new economy of the image. The network, in this instance, is the site of the image in its multiple manifestations, torn between on the one hand movement and projection and, on the other, the traps of appearance. Miniaturized, the image has become a condensation of the Digital Environment itself: a space of interactivity and of passage, an entry point into various forms of textuality, a representation of selfhood and of otherness. It is here that our vocabulary is perhaps most eloquent. Within social networks, what is the status of the image? Is it an icon, an emblem or a simple representation (but then we know that there are rarely ever simple representations)? If it is an icon, then we are invited to reflect on the theological dimension of its efficacy in the virtual worlds. It suffices here to recall the traditional relations between resemblance and incarnation, between a portrait and the real presence, between the *prosopon* and *homoousis*. Am I exaggerating? I think not. It is no coincidence that this particular function of the image in the Digital Environment is carried by the omnipresent Avatars (or the Gravatars), the term that originally described the descent of the divine into human form, and one that animated Roger Zelazny's superb novel *Lord of Light* and its early premonition of complex interactions between incarnations and virtuality. The theological dimension of the iconic digital image is also reinforced by the development of transhumanist discourses seeking to articulate an ethics for the long awaited Singularity (Von Neumann and Kurzwei), the convergence between man and machine. In other words, within this philosophical and theological context, the image is also the locus of important debates about the relations between the living and the intelligent, between the digital and the human. Is an Avatar an incarnation under the guise of an animated digital identity? What happens when Avatars die or are replaced by newer ones? If so, then our earlier Jesuit's argument (but also the Mormon's, and others') for an engagement with it is also an invitation for a

humanistic iconanalysis and appreciation of its circulation, one that is informed by the history and the traditions of visual representations and their diverse contexts. Are we witnessing a new secularization or instead a new return of the religious in the virtual?

But the digital image is also an emblem, and as such, as is the case with the traditional emblem of the early modern era, it entertains a specific relation with texts. An invitation elsewhere, a teaser or a trap (as in much of advertising), the image functions as a key operator within the Digital Environment. The emblematic structure is informative precisely because it combines the textual and the visual. Its new status also calls into question some of our assumptions about visual representation: Is the user a mere spectator? Surely not. How do we understand the emergence of opposite tendencies in the virtual world? One trend, mostly prevalent in Second Life, exhibits impressive flights of fancy and imaginative creations of Avatars that echo many a science-fiction novel. Others, are concerned with a stark and almost obsessive realism: the need to reproduce real objects of all sorts into their virtual incarnations. In the world of games, to take one last example, the image (of players, tools, weapons and landscapes) circulates in a structured and formalized environment. But in both instances, the Avatar is not a passive representation: it moves around in lived spaces, inhabited by others and ones in which it can learn, evolve and change. As such, even the realism is virtual because it is active within a new ecosystem. Ultimately, and within what are seen often as essentially closed communities, the Avatar roams a new world and functions within a new economy (let us not forget that *economy* is a theological term, one that is closely associated with the problematic of the icon and incarnation, at least in its Greek and Byzantine heritage). It would be interesting to study the movement of the image within the Digital Environment from a perspective informed by the issues associated with various

artistic schools and their meditations on the relations, to take only one example, between the image and identity.

But ultimately, if indeed it is true that we humans are basically “spatial creatures” creatures who do and build things in space, then a digital humanist perspective would investigate and study this new and emerging form of “making”, poetic and otherwise. For after all, virtual urbanism already has its literature, its poetry, its cinema, etc. Finally, perhaps no coincidence that “architecture” is the term used to describe the languages that create and structure this urbanism. Computer architecture is not only a formal set of languages and algorithms that make possible the creation of tools; it also enables a spatial and temporal creation of real and material worlds, populated by our images, icons and Avatars and inhabited by our conversations and the information we produce and exchange.

And thus we encounter our second traditional humanistic category, that of friendship.

Friendship is at the heart of social networking. While some platforms allow for a hierarchy of relations, from Contact to Friend and Family, others recognize only one form of connection with others: friendship. In all cases, it is a matter of creating relations based on some shared grounds. For our purposes today, I would like to simply point out the epistemological relations between current usages of friendship and the Classical discourse on the subject. If I do so, it is not because of a desire to re-inscribe current practices within familiar and shall we say conservative humanist perspectives, nor is it because of an exaggerated view of the importance of the Ancients. On the contrary, it is to point out how the contemporary digital practices in social networks in effect manipulate the same objects and the same representations, albeit in a new and enlarged context and ultimately semi-public environment. Friendship of old was predominantly private: in the new virtual worlds, it is public, or at least

it animates a new public sphere. Conversation and dialogue are the essence of friendship, and we have transferred and generalized such a model into the global network. But beyond these rather obvious similarities and extensions, it seems to me that if Friendship possesses an important set of features from the Classical to the Digital that have to do with discursive representations of selfhood, the structure of the image and the narratives productive of identity (which deserve their own study).

Classical discourses on Friendship present at least two aspects that are of relevance here: first, the role played by the image, especially of the open or unfolding image (the Ciceronian *Apertum pectus*, and its later adaptations and modulations both by the Church Fathers and later by the Humanists). Within that tradition friendship is a discourse motivated by the desire but more likely the need to show and to make visible what in essence or in principle lies outside the realm of visibility. A gesture of opening that while seemingly inviting the spectator or the friend to peek into the most intimate, ultimately produces a public display. If words were the only tool to do so for the classical humanist, nowadays, thanks to the Digital Environment, we have perhaps a richer selection. But the principle remains the same: a private dialogue that generates a public spectacle. It seems to me that this is a valid description of Social networks in at least their current form.

Second issue, an elementary yet it would seem unavoidable form of calculus. The "calculation" of friendship is a simple form of arithmetic of self and other, but in a context characterized by sharing. Bacon's formulation is the most succinct: friendship makes it possible to double one's joys and to diminish one's sorrows by half. This, simply put, is the ancient metrics of friendship. But what about its digital social forms? Some humanists decry

the public “compulsion to confess”, the transformation if not the loss of the intimate and the private. In my opinion, digital friendship as it is embodied by social networks today, has introduced a new variation of intersubjective temporality, one that circulates within a virtual present, with its own contextual autonomy and efficacy. But the most interesting dimension of this friendship lies in its own metrics: the hierarchies native to the Digital Environment and the *habitus* they make possible, are at one with its own mechanism of exclusion. The social bond is here transformed into fragmentary and fragmented exchange according to frail contractual forms of reciprocity. For the Ancients, friendship was also a key protection against the dangers of unuttered words that circulate within and can wound the body from the inside. It remains to be seen whether such a function, is operative or not within the new sociability. What is clear, however, is that the digital friendship has already made possible a new space that is modifying the real and the virtual. It does so in large part thanks to a generalized economy of sharing.

You will have guessed by now that I am a philologist roaming in the emerging digital landscape. And so we return to the author I called upon as my emblem at the beginning of today's discussion. Vico, in his essay on the *Ancient Wisdom of the Italians*, traced the evolution of key terms and words, thus detailing the important cultural and social changes he was witnessing (He also wrote again mathematization, the predecessor to our numeracy.). It seems to me that a Digital Humanist can certainly follow this example, as well as the one laid out by other philologists (after all Leopardi and Nietzsche were philologists). Digital Humanities need both kinds of projects (structural and analytic), and they need to be intertwined. On the one hand, we of course need to continue what we are currently doing by developing tools and platforms and by populating our online access points with richer

materials. Yet, on the other hand, we must engage in a reflection on the history of and the implications for our approaches that takes into account the intimate links between our established methods and our digital times.