



Ecologies of the Imagination: Italo Calvino's six 'memes' for the Digital World¹

Paolo Granata

The word connects the visible trace with
the invisible thing, the absent thing, the
thing that is desired or feared, like a frail
emergency bridge flung over an abyss.

Italo Calvino, *Lezioni Americane*

Italo Calvino's Six Memos for the Next Millennium

An encyclopedic writer like Italo Calvino holds his own in the most varied environments, literary or otherwise, including a field, the new media, that might seem far from congenial to a man of letters. Indeed, the *new media* are merely a label, almost a tautology, since the concept of novelty is inherent in the media's very identity. Across its history, human beings have constantly renewed the tools with which they engage the world, in an attempt to transform it, thus activating a transformation in turn of themselves. Furthermore, the media, whether old or new, are more than mere tools. They define an actual environment, an always present and constantly changing ecosystem or 'media ecology' that we call the *digital world*, such an appealing a label today.

¹ This essay retrieves and updates some of the ideas expressed in Paolo Granata, *Arte, estetica e nuovi media*, Lupetti, Milano, 2009.



In all this Calvino acts as a sort of cartographer; a skilful cartographer of the digital world. His drafts have been under our eyes for thirty years. Six unpublished maps of the end-of-millennium world sketched with a fine point pencil, and an insight typical of Calvino's encyclopedism. Six discoveries, six insights that are still incredibly relevant today: his *Six Memos for the Next Millennium* [*Lezioni Americane. Sei proposte per il prossimo millennio*] (1988). Indeed, these six 'memes', and the brilliant insights they offer, are surprising as they seem to anticipate the current scene of the media ecology, precisely defined by the characters of Lightness, Exactitude, Quickness, Visibility Multiplicity, and Consistency.

For a curious coincidence, just thirty years ago, in 1984, the *annus mirabilis* for the propagation of mass information technology – the same year the personal computer was featured as “man of the year” on the cover of *Time* magazine – Calvino was officially invited by the Harvard University to deliver the celebrated Charles Eliot Norton Poetry Lectures, a series of six lectures scheduled for the following year, and previously delivered by influential intellectuals including T. S. Eliot, Igor Stravinsky, Erwin Panofsky, Jorge Luis Borges, Northrop Frye, among others. That invitation gave Calvino an opportunity to define six proposals, or *six memos*, as indicated in the original manuscript's subtitle, illustrated as six qualities, or specificities, six values and essential, not mere literary, memos, to be passed on to the new millennium that was about to start. As we all know, he only managed to write five out of the six lectures – the sixth one, about *consistency*, would remain unwritten – before death surprised him prematurely. For this reason, for right or wrong, many consider the *Six Memos* as a sort of intellectual testament of the famous author; undoubtedly they represent the highest point of his meditation on literature.

The spirit of the *Six Memos*, their rich interweaving of references, speculations and quotations, the fascinating rhetorical insights they offer, are nothing but the evocation of characters and assonances that clearly express, with a clear-headed and mature awareness, the sense of the challenge declared by Postmodernism, which is clearly recognizable in the features of the digital world. For Remo Ceserani the *Memos* represent an actual “Calvino case”, «perhaps the best descriptive map of postmodern society and culture [...]; a most refined

conceptual diagram conceived by an observer, or a *cartographer*, to penetrate the new world that surrounds us and understand its main underlying forces» (Ceserani 1997: 173). After all, the argumentative tension that animates Calvino's issues also reflects the urge to reread the past in order to find the new in the plurality, the surface, the material and cultural connections between things. As suggested by Mario Perniola, Calvino clearly adopts the strategy of *entrism* as a device to understand the complexity of the world, the instability of its fundamental structures, hiding «behind words appropriated by the society of communication» (Perniola 2004: 105) in order to overturn their meaning through the evocation of the social connection produced by aesthetic criticism.

Therefore, the six *Memos* can be viewed as conceptual couples rather than closed and univocal propositions; dualisms that can be interpreted as oppositional tensions between the label and its underside, and move in a game of roles, almost like oxymorons. For this reason, *lightness* results from a weightless weightiness, *multiplicity* emerges from the simultaneous presence of unity, and so on. Each couple reveals two inextricable levels that interweave and build upon each other. The dual nature that Calvino's critics interpreted as an existential issue is actually a constant in his thought, where «the hero of the story», in Marco Belpoliti's words, «is for Calvino the one who keeps the two opposites together and tries to reconcile them in a difficult balance» (Belpoliti 1996: 29).

Domenico Scarpa has described the six values proposed by the Italian writer as «very clear abstract notions that acquire substance in their reciprocal determination due to their style» (Scarpa 1999: 144). Following this insight, they can be seen as six aesthetic qualities that can be found in the experience of mediation of the world, in the technological facts of our time, in the cultural and social sensibility emerged from the evolution of the media system under the impulse of Postmodernism. And thus, Calvino reveals the digital world in all its *lightness, exactitude, quickness, visibility, multiplicity* and *consistency*.

Lightness

Lightness is certainly the best known, and perhaps the most appreciated meme, or quality, or specificity, among those chosen by Calvino for his six *Memos*. Here it is adopted as a guide to recognize the sensible component of the current media environment, and glimpse the aesthetic experience in the lights and shadows of the digital world.

Indeed, if there is a focus around which the entire first lecture revolves, it is precisely the idea of world; its image, its knowledge, its physical substance. Calvino's 'mundane' approach is clear from the very beginning, when lightness – as a deprivation, not a denial, of weight – is adopted as a method, a point of view, as well as an inherent requirement of a different «way of looking at the world» (Calvino 1988: 10). Therefore, to make the image lighter does not mean refusing its raw reality – it rather means capturing the dusty substance it is made of; a process that, in order to get to know the world, require the dissolution of its compactness, to perceive «all that is infinitely minute, light and mobile» (*ibid.*: 8). It is a process of deconstruction of the strong structures of thought in favor of the weak, or light, ones, without sacrificing the concept of materiality. It is the experience of the weight of things that makes it possible to appreciate their lightness, just like the metaphor of fragmentation or atomization of reality implies no refusal of the world's physical substance, and rather expresses a new way of interpreting lightness; and this clearly emerges further on when Calvino openly reveals his goal and writes that «lightness for me goes with precision and determination, not with vagueness and the haphazard» (*ibid.*: 16).

The epiphanic virtues of the *Six Memos* in relation with the current media ecology are more clearly revealed when Calvino – at a time when the personal computer has broken into mass culture – recognizes the media world as made of the new kind of energy that can act on, guide, animate the heaviness of machines: the *software* in all its lightness. The rigidity of machines, as the symbol of modernity, is thus countered by the fluidity of Postmodern sensibility. All in all, this is an acknowledgement of the social climate expressed in the terms of a «so-called post-industrial era of technology» (*ibid.*: 1), or what would be later on greeted by most as a true revolution, the 'digital' revolution.

But the interest in the flow of information that circulates as *bits* and invisible electronic impulses is indeed revealed as the result of Calvino's attempt to explore every realm of science and technology to recognize the new possibilities, tools, and ways to mediate with the world and build an image that reflects the new current needs, in a way that is resonant, or similar to the procedures used in artistic and literary fields; as a confirmation of the fact that both fields offer new «styles and forms that can change our image of the world» (*ibid.*: 12). In this sense, the myth of Perseus and the Gorgon that is evoked at the beginning of the first *Memo* almost sounds like an allegory of man's relation with the world: the reflection on Athena's shield is what saves Perseus from the Medusa's petrifying look, which means looking at the world with different eyes; achieving a visual and cognitive dissolution of the world, acquiring new knowledge tools, new ways to mediate with it.

Therefore, the insights about lightness disseminated in the lecture reveal a corollary of the idea of knowledge which «tends to dissolve the solidity of the world» (*ibid.*: 8). This is a double articulation, a double alternative that is explained through the figures of Lucretius and Ovid. If the dissolutive lightness expressed in Lucretius' *De rerum natura* is defined by the acknowledgement of the world's atomization, the uniqueness of all its parts, its endless breakdown in absolute and unchangeable bodies, intangible atoms and invisible corpuscles, in Ovid's *Metamorphoses*, lightness is rather the symptom of a pursuit of new forms and relations between things in the chaotic and atomized substance of reality, as the connective fabric of the world, the multiplicity where anything is connected to anything else can be recognized in them. In the author's words: «If the world of Lucretius is composed of immutable atoms, Ovid's world is made up of the qualities, attributes and forms that define the variety of things» (*ibid.*: 9). In both – as argued by Calvino – the idea of lightness has philosophical and scientific roots: Pythagoras' doctrines for Ovid, Epicurus' doctrines for Lucretius.

The complementarity of these two visions projects an image of the world as organized around a system, with no rigid hierarchy between the hard materiality of things and the impalpable lightness of thought that somehow animates them. Indeed, it is an approach that – like the one represented by the hardware/software couple – embraces both in a

constant orbital balance that gives the system a dynamic reciprocity. A further hint of this double systemic tension can be found in two other figures, Dante and his friend and master Cavalcanti. The former gives substance, «solidity even to the most abstract intellectual speculation» (*ibid.*: 16), while the latter, in the picturesque image evoked by Boccaccio, can take off, from the weightiness of the world – «'sì come colui che leggerissimo era', a man very light in the body» (*ibid.*: 12) – and capture «impalpable entities that move between soul and intellectual soul» (*ibid.*), by abstracting the mundane experience «as if thought were darting out of the darkness in swift lightning flashes» (*ibid.*: 16).

Again with reference to Cavalcanti's work – «as the poet of lightness» (*ibid.*: 12) –, Calvino considers it is possible to see «something marked by three characteristics: 1) it is to the highest degree light; (2) it is in motion; (3) it is a vector of information» (*ibid.*: 13) – three aspects that outline a curious figure of message-messenger, but even more the container that becomes contents, the message that becomes medium. This is another facet of the atomized approach to the substance of the world, a reflection – Perseus' bronze shield – of the abstractive and symbolizing logic of software, a symbol of the digital world: breakout of things and recognition of the – old and new – connections between them. The relevance to the world that Calvino seems to suggest – an unusual prophecy about the symbolic impact of the new media – goes beyond the mere mimetic relation with reality. Reality itself needs to be unburdened, articulated in abstracting rather than representational diagrams and processes; it is the logic of the software thought, in the writer's words, «the narration of a train of thoughts or psychological process in which subtle and imperceptible elements are at work, or any kind of description that involves a high degree of abstraction» (*ibid.*: 17).

It is more about unburdening reality, rather than getting away from it, and finding a new point of view to get to know the world – Marco Belpoliti has suggested that «indeed, all of Calvino's work is a meditation on the point of view» (Belpoliti 1996: 5) – that Calvino, following Lucretius' thought, defines in terms of an atomistic concept of the universe, «a fine dust of atoms, like everything else that goes to make up the ultimate substance of the multiplicity of things » (Calvino 1988: 20). If the true substance of the world lies in its elementary

particles, in the clusters of atoms that create its fabric, then its *Erlebnis* – or private experience, according to Husserl’s terminology – will be a combination act closer to Ovid’s thought; a constant reconfiguration or composition of its form, or even better, of its possible forms, a process that the author recognized in Cyrano de Bergerac’s atomism.

The relevance to the world as immersion in its atomized substance and the one (the atomistic dimension) belonging to the multiple (the relational forms) also suggests to downplay the hegemonic role played by the communication processes within the digital world. According to Calvino, that means unburdening communication, looking at it from another point of view, from a lighter perspective, free from the heavy and distracting procedures of the so-called media, mistakenly seen as mere channels or pipelines that convey messages. Indeed, it has become almost axiomatic to discuss the new media by calling them ‘communication technologies’. In fact communication is a possible but not exclusive condition of the practices man uses to interact with the world, or to mediate his relationship with it. The very logics of interaction with and access to a relational system of meaning underlying the social networks and the cognitive and connective dimension of the new media mean that communication is an act of immersive participation, commitment, sliding into the world’s atomization; a *being there* based on a perspective of belonging, an action, a behavior, a process, an event not necessarily limited to the transmissive concept of communication, and rather inherent to the place where such event took place, so that communication becomes a world.

Therefore, following such interpretation, we are justified to react to the hegemonic impact of communication, brought on by the mass media, with Calvino’s strategy of dissolution of the world’s compactness, hence considering Lucretius and Ovid as the expressions of two different but complementary concepts of the communicational processes made evident by today’s media ecology. Lucretius’ concept relies on the signs, on the object part, on the atomization and breakup of communication (the ‘weight’ of the message, or *what* the message communicates), while Ovid’s concept of communication rather pursues its relational content, forms and combinatory processes, in the endless transmutability of the world’s connective fabric (the medium’s

'lightness', or *how* it acts on social imagination and on the aesthetic-intellectual sphere).

Thus, between atoms and forms, between the one and the multiple, between transmission and interaction, or between Lucretian and Ovidian communication according to the above mentioned terms, we come to see the characters of that oppositional tension, the difficult balance – almost a tautology –, «the search for lightness as a reaction to the weight of living» (*ibid.*: 26) that, according to Domenico Scarpa, represents a constant principle underlying all of Calvino's work, «the creative process that informs (it) more than anything else » (Scarpa 1999: 146). And so the sense of the continuing challenge to the law of gravitation, «this drive to make the imagination exceed all bounds» (Calvino 1988: 23), offers a powerful metaphor of knowledge, the existential and archetypal function that guides man in transforming the world, in renewing his material and conceptual tools to mediate with it, thus generating in turn a transformation in himself, just like the Baron of Münchhausen, evoked at the end of the memo about *Lightness*, who finally comes down from the moon on a rope that during the descent is cut and reknotted again and again, or finds the way to pull up himself and his horse by tugging at the pigtail of his wig.

Quickness

In developing his apology of *Quickness*, Calvino seems to interpret and anticipate with conscious clarity most features of today's media environment, torn in the fluidity of the digital world, and captures the characters of density and immediacy underlying the triumph of electronic tools that would mark the turn of the millennium in the background of the *Memos* in the seduction of combinatory literature, the run for time and the game of digressions and iterations.

Certainly, the myth of speed belongs rightfully to the machine, one of the tenets of pre-modernist age's imagination, rather than to the contemporary age. For example, its glorification by Futurism is part of the exaltation of speed as an expression of progress, as it viewed the material culture of its time as an element of emancipation from the social atmosphere that produced the spirit of the *Manifesto*. The 'beauty of speed' exalted in the fourth item of the 1909 text, is therefore mostly,

although somewhat ambiguously, focused on the technological dimension of a mechanical nature – the analogical vocation of the mass media, or what could be defined as *hardware* – where the possible results of the *soft* connection with the electro-magnetic phenomena can only be glimpsed but were already beginning to emerge.

Why, then, is Calvino interested in the myth of speed, an element that had been thoroughly practiced during the entire twentieth century, and not just by the artistic avant-garde? Why does he refer to a continuing thread with the recent past, barely behind the corner? Why does he prefer to reiterate one the founding values of late modernity, rather than cutting it off, when the new millennium is about to begin? In other words, why doesn't he devise a chronological model that is closer to a postmodern sensibility rather than reaffirming quickness with all its inherent anxiety?

A closer look reveals that all of these questions are answered in the text of the lecture, and more precisely in Calvino's quotation from Leopardi's notes to the *Zibaldone* where he declared that:

Speed and conciseness of style please us because they present the mind with a rush of ideas that are simultaneous, or that follow each other so quickly they seem simultaneous, or set the mind afloat on such an abundance of thoughts or images or spiritual feelings that either it cannot embrace them all, each one fully, or it has no time to be idle and empty of feelings. (*Ibid.*: 42)

That makes clarifies that Calvino's idea of quickness does not rely on physical elements, it does not evoke the acceleration of a moving body or the mechanical dynamism celebrated by the Futurist manifestoes. Indeed, he had clarified this just before, in his quotation from a novella by Boccaccio and Thomas De Quincey's novel *The English Mail-Coach*, when he frankly stated that «the motif that interests us here is not physical speed, but the relationship between physical speed and speed of mind» (*ibid.*: 41). And so this corollary expresses the strong element of novelty included in the *Memos* – and in the toolbox to negotiate the turn of the millennium –, that can still be seen as a continuous development, rather than an abrupt turning point, of the experience of speed that is a cultural heritage of the modern age.

The *mail-coach*, the above mentioned British mailman, represents an interesting foreboding almost as a prophetic insight – Calvino wrote his *Memos* between 1984 and 1985 – of the success that electronic mail, a powerful and innovative, as well as very quick, form of correspondence, would have soon after. It is the end of the age of quick transportation, of machine-based industrialization – however quick and efficient machines may be – and the beginning of the so-called Information age, when quickness, acceleration, speed foster a new perception mode, and become powerful synonyms of a new experience of communication, that eliminates absence as it is rooted in the simultaneity of time coordinates and in the mimetic representation of physical proximity; in a word: the social media, today.

The crowd of simultaneous ideas evoked by Leopardi is therefore revealed as an all too appropriate image to describe the complexity of the new informational space – dominated by digital technologies – that would become a reality with the so-called *network society* at the end of the twentieth century, that Calvino would not be able to witness. And the very ‘crowding’, or layering, or simultaneity of symbolic objects – the powerful symbolism of the magic ring that starts the lecture (*ibid.*: 31) –, or of mental speeds, is the ultimate allegory he seems to find to illustrate the mechanisms of time continuity and discontinuity typical of narrative development (*ibid.*: 37).

Besides all this, another pillar of contemporary age appears in the pages of the *Memos* to break «an enchantment that acts on the passing of time, either contracting or dilating it» (*ibid.*: 35). It is *relativity* (*ibid.*: 37), the symbol of twentieth century scientific breakthroughs through which Calvino would seem to include the presence of Einstein’s famous formula in the values – or qualities, or peculiarities – that should be handed over to the future millennium, just like, in his mathematical and literal symbolization, it can be found in the space probes that travel to remote planets, looking for a connection with intelligent forms of life in the cosmos, to communicate the level of scientific knowledge achieved by the human community.

The parallel with space experiments aimed at establishing a hoped-for connection with hypothetical forms of alien intelligence is not accidental. Indeed, in arguing the celebration of mental quickness, Calvino relies on another tenet of the history of human thought, in this

case found in the heart of modern science: in *Dialogue Concerning the Two Chief World Systems*, between the Ptolemaic Simplicius and the Copernican Salviati, Galileo calls for the intervention of the 'lightning quick' Sagredo – a modern Theut, or Hermes, or Mercury – to achieve «an encomium of the greatest human invention, the alphabet» (*ibid.*: 44). Here, Calvino gives almost all of his game away, or to use Galileo's words quoted in this Lecture, he plays the wild card of the 'various arrangements of twenty little characters on a page':

Communication with people distant in place and time, says Galileo; but we should also add the immediate connection that writing establishes between everything existent or possible [...]. In an age when other fantastically speedy, widespread media are triumphing, and running the risk of flattening all communication onto a single, homogeneous surface, the function of literature is communication between things that are different simply because they are different, not blunting but even sharpening the differences between them, following the true bent of written language. (*Ibid.*: 45)

The author of *Cosmicomics* and *t zero* would be far from surprised or astonished by the current triumph of written communication decreed by *mobile* devices that, all in all, have substantially dominated the turn of the millennium prophesied by his *Memos*. As mentioned before, the now widespread use of the *email* almost seems to be anticipated in the late nineteenth century *server* of De Quincey's *mail-coach*; and the same is true for the «agility, mobility and ease, all qualities that go with writing where it is natural to digress, to jump from one subject to another, to loose the thread a hundred times and find it again after a hundred more twists and turns» (*ibid.*: 46), that seems precisely to describe the hyper-textual practice of online browsing, or blog-writing and the many forms of posting on the social media (Pilz 2005: 125). It is certainly possible to imagine that Calvino would have been glad to find the folktale's expressive economy, the celebration of brevity, the impact of the epigram, of the short stories – such as *t zero* and *Cosmicomics* – or the collections of «tales consisting of one sentence only, or even a single line. But so far I haven't found any

to match the one by the Guatemalan writer Augusto Monterroso: “Cuando despertó, el dinosaurio todavía estaba allí” (When I woke up, the dinosaur was still there» (*ibid.*: 51) in the 160 characters of a text, or the 140 characters of a tweet.

There is one last thing to say about Calvino's far-sighted insights, and the similar correspondences found in his second lecture about *Quickness*, which certainly appears as a further connection with the issues that will be discussed later on. In a quietly autobiographical tone, Calvino writes: «From my youth on, my personal motto has been the old Latin tag *Festina lente*, hurry slowly»; and soon afterwards he adds: «My work as a writer has from the beginning aimed at tracing the lightning flashes of the mental circuits that capture and link points distant from each other in space and time» (*ibid.*: 48). It is impossible not to read these last words as a perfect reflection of the world wide web's paradigm, a crucial element of our media environment, the expression of the material culture of our time, the symbolic correspondences of which the six *Memos* seem to be focused on revealing and anticipating. Thus, the mythology of speed offered by Calvino in his second memo (*ibid.*: 51-54) reveals the opposition in the complementarity and the seamless novelty between immediacy, instantaneity, mobility, Hermes-Mercury's wavelike nature, and the mediation, the temperament, the insight, Vulcan-Hefestus' nature as a blacksmith and manufacturer; and defines this tension as an archetypal dimension of the new media's aesthetic experience, the tension expressed in Augustus', and then Erasmus', sublime oxymoron, *Festina lente*.

Exactitude

The third Lecture elicits a general impression: Calvino seems to intentionally avoid some inherent pragmatic and circumstantial issues implied by the lecture's subject, to define instead an epistemological model, a true epistemology of Exactitude, once again developed through the strategy of bipolar couples, of the oppositional tension between a concept and its reverse, between the part and the whole, or rather between the particular and the multi-sided.

The lecture begins by evoking the idea of precision through a reference to Maat, the Egyptian goddess of scales. Calvino takes such information from a lecture by Giorgio de Santillana on the ancient civilizations' precision in observing astronomical phenomena. A first methodological hint seems to emerge: observing mainly means measuring the phenomena; to act by following a «fidelity to the idea of limits, of measure» (*ibid.*: 68), or a constant idea in Calvino's thought. As explained by Werner Heisenberg, the tools used to observe and measure, as well as the language used to describe such phenomena, are what defines the image one has of a certain phenomenon. This is the result of a logical construction developed on an instrumental and linguistic level. Therefore, tools and language are the first two issues we should put on the scales.

The three short definitions Calvino proposes for exactitude complete such concept:

To my mind exactitude means three things above all: 1) a well-defined and well-calculated plan for the work in question; 2) an evocation of clear, incisive, memorable visual images; in Italian we have an adjective that doesn't exist in English, 'icastico', from the Greek εικαστικός; 3) a language as precise as possible both in choice of words and in expression of the subtleties of thought and imagination». (*Ibid.*: 55-56)

It is quite clear that Calvino only seems to be interested in the third item, language, and leaves aside the other two, a well-defined and well-calculated plan, and clear, incisive visual images, the quality of 'icastico'. However, the semantic and conceptual impact of this last quality is precisely what underlies the entire epistemological structure of exactitude.

Following the spirit of the *Memos*, the discourse around "icasticità" is again developed on the coexistence of seemingly opposed but also complementary images, figures, suggestions. While opposed, exactitude and indeterminacy also share the same double role. It is the principle of bipolar couples, where every couple should not be considered as the result of a univocal proposition, leaning in favor of one or the other term, and therefore to the disadvantage of one or the

other, but rather as a dualism that exists in a constant dialogical tension between the label and its reverse; a developing game of roles, a procedural contingency of belonging and not of exclusion. Across the entire text, the space of tension of "icasticità" is defined by a series of conceptual couples, symbols and prototypes of Calvino's idea of exactitude, which represent the poles of the lecture's epistemological structure. There are at least a dozen, supported by related literary coordinates, such as: precision and vagueness, infinite and indefinite (Leopardi), abstract and empirical notion (Kant), exactitude and lack of definition (Robert Musil), *Mathesis singularis* and *Mathesis universalis* (Barthes), order and disorder (Mallarmé), the crystal and the flame (Chomsky, Piaget), rationality and sensibility (Marco Polo), surface and depth (Hofmannsthal), visible and invisible, presence and absence (Calvino), writing and drawing (Leonardo), which amount to a true gnosiology of Calvino's universe. As Adriano Piacentini has written, «A mental attitude as ancient as man flows on his checkerboards, which is the attitude of knowing and ordering the segments of reality, of giving them a meaning and recognizing the limit of human possibilities» (Piacentini 2002: 207).

Earlier we mentioned Calvino's "icasticità" as pursued in a double way, as a double pursuit of knowledge: on one side, the reduction of the world to abstract schemes, to geometric rules, the reliance on logical-mathematical procedures, and on the other side the world's inherent material dimension, the immediacy of senses, the sensible aspect of things.

Two divergent paths correspond to two different types of knowledge, according to Calvino:

«One path goes into the mental space of bodiless rationality, where one may trace lines that converge, projections, abstract forms, vectors of force. The other path goes through a space crammed with objects and attempts to create a verbal equivalent of that space by filling the page with words, involving a most careful, painstaking effort to adapt what is written to what is not written, to the sum of what is sayable and not sayable». (*ibid.*: 74)

In brief, this is the epistemology of exactitude defined by Calvino or, as suggested by Marco Belpoliti, the guidelines to interpret reality, as:

The two possibilities defined by the writer relate to two different maps of reality, two different atlases designed by Calvino: a totally abstract one that only shows the trajectories, the routes, the lines, the vectors' directions, while the other one represents the world as it appears, full of forms and objects, like in a photograph, albeit a photograph of the mind. (Belpoliti 1996: 48)

Once more, such projection reveals one of the *Memos*' epiphanic virtues, in terms of how *icasticità*'s double pursuit of knowledge, the constant tension between exactitude and indeterminacy seem to represent a precise and an incredibly fresh account of the universe of meaning encapsulated in one of the digital world's key expressions: the analogical/digital couple. If the insights disseminated in the first lecture about Lightness indicated the corollary of the idea of knowledge as «dissolution of the solidity of the world» (*ibid.*: 8), in the third lecture Calvino seems to go further, and brilliantly and insightfully anticipate one of the contemporary media environment's defining features, and offer the best tools to negotiate the theoretical issue of the relationship between analogical and digital, seen as two different attitudes of inherence, or exactitude.

The endemic need for 'icasticità' inherent in the representative needs evoked by Calvino's bipolar couples is indeed presented as the reflection of a double argumentative tension that enables the coexistence of abstractive, synthetic and rational schemes, the regulating and essential aspirations to reconstruct the world in precise terms (the digital attitude) with the knowledge of the sensible aspect of things, of what is expressed as density and continuity of the world (the analogical thought). Or, according to Baumgartner's aesthetics, such coexistence might relate to the double articulation between so-called *superior gnosiology* and *inferior gnosiology*. According to the principle of Calvino' epistemology of exactitude, everything is expression of a constant logical tension, a running after each other, a double logic of inherence to the world. Therefore, it seemed logical to place abstraction

in the field of the digitality and tangibility in the field of the analogical. Or in other terms, digitality would have the symbol of the flame, while analogical would have the symbol of the crystal, or – from a typically postmodern perspective – depth would have the characters of analogical, and surface the characters of digitality.

One last consideration about Leonardo, «'omo senza lettere' (an unlettered man)» (*ibid.*: 78), that Calvino refers to in the text to indicate an exemplary case of his concept of 'icasticità', or the coexistence of the double logic of inherence to the world, as a strategy for knowledge, and the foundation of the lecture's entire epistemological structure. Leonardo quite symbolizes two possible ways of representing and surveying the world that coexist in a constant tension between conception and expression – one is writing, or the symbols of abstract schemes of logical and linguistic formalization (the digital way), the other is drawing and painting, or the symbols of figurative traces, signs, fully sensible shapes (the analogical way). It is for this reason that in Leonardo's codes writing and painting, words and drawings are both present in one discourse; almost as a prophecy of the issues raised by the analogical/digital relationship that Calvino seems to evoke in his referring to the Renaissance genius. Therefore, the contemporary man should find out which linguistic and expressive tools best capture reality in crossing that «frail emergency bridge» (*ibid.*: 77) that separates him from the world.

Visibility

The lecture on *Visibility* is perhaps the one that best expresses Calvino's poetics in terms of two key concepts, fantasy and imagination, that are clearly the lecture's main subjects. The lecture openly expresses the visualism oscillating between science and art that Calvino's critics find so alluring and that, as suggested by Marco Belpoliti, is what makes Calvino «one of the most 'visual' writers in our literature» (Belpoliti 1996: XIV).

As a self-defined son of the 'civilization of the image' (*ibid.*: 91), Calvino proposes the strategy of visualism as the preliminary key to access the research of linguistic and literary expressive forms, among

others. Indeed, his *Memos* are disseminated with visual metaphors, symbols and images, in turn the result of a constant perceptive research, or even better of a constant work of translation of the sphere of imagination into the universe of sensible forms; a process that also works the other way around (Grundtvig et al. 2007). In this sense, it is Calvino himself who distinguishes «two types of imaginative process: the one that starts with the word and arrives at the visual image, and the one that starts with the visual image and arrives at its verbal expression» (Calvino 1988: 83). It is a two-way process, the result of a bipolar tension that embraces the entire poetics Calvino declares in the lecture about visibility.

There is also a double interpretation that, based on Jean Starobinski's stance, guides Calvino's argument across the lecture: on one side, imagination is a tool for knowledge, to imagine is a way of knowing; on the other side, imagination is a connection with the world, to imagine is a way of communicating, of interacting. Calvino openly confesses he has worked in both directions, but at the same time declares his preference for the second option – or imagination as «identification with the world soul» (*ibid.*: 90). Therefore, on one side there is the rational and analytical intention that is implicit in science and is closer to an idea of imagination as a tool for knowledge. On the other side, imagination becomes the expression of social memory, closer to the sphere of art practices, where styles and traditions are mixed and blurred in a common and shared «participation in the true of the world» (*ibid.*: 88); an expression of the anthropological idea of «imagination as social practice» (Appadurai 1997: 50). In this sense, things get even more interesting when Calvino, who clearly wants to overcome the initial double interpretation, indicates a further aspect of imagination, and even describes it as a «repertory of what is potential, what is hypothetical, of what does not exist and has never existed, and perhaps will never exist but might have existed» (*ibid.*: 91). And such definition proves how he captured, interpreted and, in some ways, anticipated many issues that have been raised by the advent of so-called virtual or augmented reality, the ultimate stage of imagination achieved by technological means, that seems to have found its best expressive forms in contemporary visual culture, under the undisputed domination of the digital image.

Calvino clearly admits that the strategy of visibility he proposes is the response to the bombardment of images typical of the mass society:

What will be the future of the individual imagination in what is usually called the 'civilization of the image'? Will the power of evoking images of things that are *not there* continue to develop in a human race increasingly inundated by a flood of prefabricated images? (*ibid.*: 91)

To keep us from drowning in such a deluge, Calvino suggests we choose a contrary path, a return to the ground zero of imagination, condensed in the phrase '*thinking by images*', which reflects a typically postmodern sensibility and its ability to rediscover, rehabilitate, recycle images by constantly using and adapting them to new contexts. Domenico Scarpa has compared the sense of such concept to Calvino's idea of imagination, and has defined it as «the ability to translate the stimuli the world offers us into images: so that it is mainly the look, in particular the *alienated* look that makes us see the world (inside and outside) as different from the ordinary» (Scarpa 1999: 122). Therefore, it is the ability to draw from a range of possibilities, a «gulf of potential multiplicity» (Calvino 1988: 91), that the digital image seems to have for its very nature. It represents the clearest actualization of the «mental cinema» (*ibid.*: 83) quoted by Calvino in the lecture, with its blurred boundaries between imagination and visualization. And again, when Calvino explains that imagination is «a kind of electronic machine that takes account of all possible combinations and chooses the ones that are appropriate to a particular purpose» (*ibid.*: 91), one has the impression of reading the description of the generative processes of digital images resulting from the most sophisticated software.

Calvino reveals his intention through a real apology of writing as an expressive solution that would make fantasy and imagination coexist and be independently experienced in the world's material dimension. Furthermore, as suggested by Giulio Lughì, «Calvino extends the field of literature by incorporating other ways of feeling and knowing, based on immediacy, immersive participation, and commitment» (Lughì 2006: 45-46). Therefore, the image changes and

becomes more than a mere mental fact – an actual fact that undergoes a constant and endless process of reification. The image becomes a thing that is powered by the evocative and expressive nature of signs, of language, of writing as it appears in the multiple practices of multimedia production. Thus the written word becomes «a shell of imagination» (Calvino 1988: 90), an actual feature of the *undecidable* (*ibid.*: 97); it becomes independent, it reveals itself, it opens its own trail, as a way to announce the triumph of the signifier over the signified, of form over content, a key step in the extremely contemporary meditation on the digital image. And therefore Calvino's visualism becomes an interpretation key of the self-referentiality of expressive forms typical of contemporary visual culture that seems to totally permeate the digital world in all its visibility.

Multiplicity

The last *Memo* Calvino completed is actually the result of a wider meditation he had developed across his entire literary production that expresses the notion of multiplicity as the discursive core of an articulation of the very idea of literature.

What is immediately clear is the presence – more prevalent here than in the previous memos – of a range of writers and authors, such as Gadda, Musil, Proust, Goethe, Flaubert, Queneau, Mann, Eliot, Joyce, Jarry, Valéry, Borges, Perec, all more or less consciously devoted, and in any case found to be so by Calvino himself, to multiplicity. As Marco Belpoliti wrote, it is «a gallery of hunters of the multiple that now Calvino feels to belong to by default» (Belpoliti 1996: 41). Secondly, the discursive fabric developed by Calvino offers some key concepts and notions that lead to an immediate understanding of the lecture's subject. These are, in order of apparition: encyclopedism, as a true process of knowledge pursued through the «network of connections between the events, the people, and the things of the world» (Calvino 1988: 105); systems management, or how the different parts of a system influence each other and therefore «the simultaneous presence of the most disparate elements that converge to determine every event» (*ibid.*: 106); the web, as an endless weave of self-

supporting but also interconnected elements, a «web radiating out from every object» (*ibid.*: 107), the «network that links all things» (*ibid.*: 110); cognitive plurality, or «to be capable of weaving together the various branches of knowledge, the various 'codes', into a manifold and multifaceted vision of the world» (*ibid.*: 112); incompleteness as the awareness of the impossibility of «exhausting knowledge of the world by enclosing it in a circle» (*ibid.*: 116); timelessness, or «a growing and bewildering network of divergent, convergent, and parallel forms of time» (*ibid.*: 120); and finally, the «hyper-novel», the exploration of the endless combinations, the support of «the network of possibilities», the application of «the potential multiplicity of what may be narrated» (*ibid.*).

Therefore, the long sequence of authors and issues referenced in the text implies the possibility of recognizing, as indicated by Calvino himself, a path of continuity, an evolutionary constant, a thread that connects and defines the boundaries of the gap between the system of thought that can be ascribed to so-called modernism and the more contemporary system of thought that is closer to a post-modern sensibility. The two symbols of the labyrinth and the web offer the interpretation guidelines for the path that leads from modernity to post-modernity – two continuous rather than conflicting phases in Calvino's opinion – and a connection with the contemporary age totally projected towards the new millennium, the time horizon suggested by the proposals included in the *Memos*. The passage from modernity to postmodernity necessarily implies that the modernist concept of the labyrinth is left behind and replaced by the concept of web, which is in many ways the clearest sign of Calvino's contribution to the post-modernist project. Such belief is complemented by another equally clear, although sometimes unconscious, belief in the symbolic values of the digital world. For this reason Calvino's work has been defined as the expression of a «postmodern multiplicity» (Musarra-Schröder 1996).

The insight that best expresses the postmodern character of Calvino's multiplicity is entirely in his lucky formula of the 'hyper-novel', the constitution of a sampling of what can be narrated developed through continuous efforts of expressive research. Such sampling represents the clearest expression of Calvino's need to invest in a true combinatorial art, never an end in itself, as an attempt to

adapt to the complexity of the world. And already in the second lecture about exactitude, Calvino implies that he considers the *Invisible Cities* as an action developed in concurrence with the postmodern paradigm of complexity and, as a consequence, to the very project of cybernetic city (Modena 2011: 143). After all, as observed by Adriano Piacentini, the influence of cybernetics and the theory of information on Calvino cannot be overstated (Piacentini 2002: 323).

The vocation to combinatorial art reveals a further and explicit call to postmodern sensibility that imbues the spirit of the *Memos* (Markey 1999). Indeed, Calvino's multiplicity has nothing to do with either closed encyclopedism, that aspires to «exhaust knowledge of the world by enclosing it in a circle» (*ibid.*: 116), or the expression of an archetypal instinct of knowledge as domination of the world guided by the strong-willed ordering power of reason and rational thought. For Calvino it is more of a 'weak' knowledge - in Belpoliti's words, «the boundary of the look, its true 'vanishing point'; as he seems to think there is no analytical look or synonymic articulation that might unfold the world, or a line and drawing that might circumscribe it» (Belpoliti 1996: 41); or, as Ulla Musarra-Schrøder has written, it is not «the combinatorial process in itself that represents the true challenge to the world, but the moment when the linguistic combination touches the mysteries of what cannot be said or is unconscious» (Musarra-Schrøder 1996: 31). Therefore, the multiplicity of postmodernity appears as a connection between forces that are in constant tension, never in balance; a two-handed game between the «multiplication of possibilities» and «that unicum which is the *self* of the writer» (Calvino 1988: 124), that can perhaps be solved in the utopian release from the *self*, or to «escape the limited perspective of the individual ego» to find a place in a collective *self* that can disseminate itself «in every way conceivable» (*ibid.*). Indeed, in the first lecture about lightness Calvino already declares his fascination for the contemporary man's state of complete immersion in the dust-like substance of the world, a dust-like condition that is increasingly expressed today by the massive presence of various technological devices - the multiple nodes that articulate this web - disseminated in the daily condition. It is actually the materialization, pursued through technology, of a condition in which we belong to everything, are connected to everything, a pooling - literally, a *communication* - of any subject of experience with the

multiplicity of the world. After all, this kind of connective multiplicity seems to totally permeate the current media experience. And such condition is nothing but an updated form of the perceptive and cognitive holism defined as *noosphere* by Vladimir Vernadsky in the early twentieth century; a term that would be later borrowed by others including Bergson and Le Roy, made famous by Teilhard de Chardin, amplified as a cosmic membrane or a collective nervous system by McLuhan, and amended by an array of similar theoretical-interpretative proposals developed along the discursive path that was defined by specialized literature over the last two decades of the twentieth century.

Summing all of this up, the «apologia for the novel as a vast net» (*ibid.*) seems to reveal an original interpretation key that once again shows Calvino's meditation as the effort of the written word to overcome the boundaries of the territory recognized as its own, and pursues more and more expansive expressive horizons. In this sense, multiplicity rhymes with multimedia, a foundational label of the digital world, just as the idea of hyper-novel seems to merge with and share more than the prefix with another key concept – hypertext – that inaugurates the cycle of information technology, created during the Sixties by Theodor Nelson and described as a system of «new ways of writing that reflect the writing *of what we write about*; and the readers may choose different paths that reflect their attitudes, or the course of their thoughts, in a way that was not possible before» (Nelson 1981: 3). Or, between multiplicity and hyper-novel, Calvino seems to have predicted the more widespread expression of the concept of hypertext: the World Wide Web. Internet as an expansive contemporary novel is, for example, what Alessandro Lucchini (2002) suggested in the juxtaposition between the Norton Lectures and the Web.

Therefore, the hypertext and the Web, in their symbolic and structural implications, illustrate the triumph of the postmodern symbol of the web, the «visual metaphor with which Calvino tries to capture the uncatchable world that moves in front of his eyes» (Belpoliti 1996: 16). A triumph that, as Calvino himself admitted, was predicted in *The invisible cities*:

I built up a many-faceted structure in which each brief text is close to the others in a series that does not imply logical sequence or a hierarchy, but a network in which one can follow multiple routes and draw multiple, ramified conclusions. (Calvino 1988: 71)

And so the digital world seems to adhere precisely to Calvino's idea of invisible city: a connective structure where everything is related to everything else, where the coordinates of space and time are found to be traced on staggered or layered levels. All in all, it is an idea that is similar in many ways to the kind of planetary brain, or the ultimate network of networks, the Internet, as well as a clear expression of cyberspace, the powerful label introduced by cyberpunk literature – thus the “invisible city” of the digital world.

Consistency

Consistency is the title of the missing lecture, what would have been Calvino's last lecture. When he was about to leave for the United States, he had already completed the first five lectures. He planned on writing the sixth lecture in Harvard, had death not surprised him before his time. In fact, consistency has not an entirely precise translation in Italian. Coherence, constancy and – based on the term's Latin origin – density and compactness, as well as openness are better approximations of the title chosen by Calvino per his last Norton Lecture. It should also be clear that, unlike the previous five lectures, consistency, as well as coherence, constancy, density and compactness are terms that are practically absent from the communication universe and the semantic aura of the digital world.

Calvino's critics have long pored about what he might have meant by choosing consistency as one of the not only literary values, qualities or characters that should be brought into the next millennium. Some have also explored an even more detailed interpretation (Piacentini 2002, Barengi 2007, Scrivano 2008).

About the approach I adopted here, it is enough to mention, in a preliminary way, an interesting argumentative cue from an assumption made by Domenico Scarpa, who wrote:

Calvino may have borrowed the notion of consistency from Edgar Poe, who used it as the mainstay of his treatise or cosmological prose poem *Eureka*, 1848. For Poe, consistency is the insight of universe as individuality: it is the notion of the unity of the cosmos as a totality and at the same time as articulation and mutual interdependence of all of its parts. (Scarpa 1999: 93)

Well, totality and individuality, just like singularity and multiplicity, are closely connected to identity, which is another key term of today's technological and cultural dimension. The digital world incorporates this double identity implication, that on one side emerges in the symbol of the universally known global village, conceived as connected to a totality, to a seamless multiplicity, the connection of any subject of experience to any other subject, a plural and all-engaging expressive form. In this sense consistency should be viewed as part of a logical universe of meaning, as cohesion between the parts that form a harmonious and precisely coherent wholeness. On the other side, the digital world emphasizes singularity and difference, specificity and arbitrariness, as strategies of affirmation of the individual realm. This is the real protagonist of a scene where every subject of experience, through the digital world's endless communication forms, gets first-hand access to a multitude of notions, relations, connections and exchanges unheard-of until recently. In this sense consistency should be viewed as constancy, density, compactness, singularity. In other words, the subjects who live in the digital world have their identity realm –and its consistency – constantly engaged and stimulated by the increasingly widespread and pervasive social practices in the web.

Therefore, Calvino's interest in singularity and multiplicity across all of his *Memos* implies a connection between the future notion of consistency and the new media's communication universe. In fact, these are issues that emerge between the lines of the supposedly rejected memo, *Beginning and ending*, the result of an extended preparation work that led Calvino to the first five lectures' final draft.

In the digital world's endless relational and connection possibilities we are constantly required to make choices: from the general to the particular, from belonging to the wholeness to choosing a part of it, from a cognitive plurality to a subjective specificity. The

perceptive experience of the digital world seems to operate as a continuous series of choices, options, narrative paths or explorations. For Calvino it is a matter of relations between worlds, and more in particular of multiplicity/singularity as the relation between the experienced and the verbal world, or the need to constantly choose to take part of the former into the latter. On second thoughts, the digital world is indeed a verbal world, one that has certainly led to the supremacy of the visual dimension but only after achieving a full triumph of the textual dimension, of writing, and the verbal dimension as the ultimate linguistic form of expression. The emergence of the so-called virtual communities and now of the social networks, and more in general the system of the most recent mobile devices, from the smartphone to the tablet, has provided the ideal ground for the flourishing of entire social colonies based on language, text and writing. The huge proliferation of Twitter, or the success of message-writing exemplified by the email, as well as the instant messaging platforms are clear examples of this. It is nearly impossible to make precise estimates but it seems that the number of messages written since the Seventies, or since the invention of the e-mail, in particular over the last decade, equals the entirety of messages written over the entire history of humankind. And if one thinks about the endless production of web pages currently on the Internet, a similar equation may perhaps be made even in terms of the entire literary and non-fiction production, at least since Gutenberg. Therefore, the digital world is first and foremost a verbal world, and as such, following Calvino's insights, a world built on constant textual acts, choices of linguistic nature or, as suggested by Maurizio Ferraris, a world of «idiomatic inscriptions», a system of social objects built by the most diverse forms of recording, amazing tools for the construction of the social reality (Ferraris 2005: 15).

A further aspect of the consistency, or coherence, of the digital world, based on the singularity/multiplicity connection often illustrated by Calvino in his *Memos*, can be glimpsed in the process of identity reconfiguration implied in the emergence of the most recent forms of online communication. Indeed, the issue of the self's uniqueness or multiplicity is an issue that occupies most meditations and analyses focused on observing and interpreting the new social practices occurring in that most original contemporary agora that is the

web. The emergence of the first virtual communities and their most recent form, the social networks, has led many observers to redefine the coordinates of values and perceptive parameters that can be used to interpret, and update, the very notion of experience in the light of the new contemporary media scene. This becomes a cognitive process that seems to blur the boundaries between singularity and multiplicity. And therefore, if, as explained by Nathalie Roelens (1989), the issue of superseding singularity in favor of a virtualization of experience was already addressed by Calvino in *Palomar*, his perhaps bold selection of a key value like consistency as the core of the sixth lecture shows once more Calvino's ability in recognizing the most relevant issues and problems of the digital world that would soon emerge in all of its expressive forms. Subjectivity, experience and plurality thus form a trinity of values that may be ascribed to the large and in many ways mysterious sphere of meaning of consistency as much as to contemporary sensibility, to the system of social, relational and communication practices that all in all reveal the density, compactness, coherence, constancy as well as the openness of the peculiar relation between man and his digital world.

Works cited

- Appadurai, Arjun, *Modernity at large: Cultural Dimensions of Globalization*, Minneapolis, Minnesota University Press 1997; trad. it. *Modernità in polvere*, Roma, Meltemi, 2001.
- Barengi, Mario, *Italo Calvino, le linee e i margini*, Bologna, il Mulino, 2007.
- Belpoliti, Marco, *L'occhio di Calvino*, Torino, Einaudi, 2006.
- Calvino, Italo, *Six Memos for the Next Millennium*, Harvard University Press, Cambridge MA, 1988.
- Ceserani, Remo, *Raccontare il postmoderno*, Torino, Bollati Boringhieri, 1997.
- Ferraris, Maurizio, *Dove sei? Ontologia del telefonino*, Milano, Bompiani, 2005.
- Grundtvig Birgitte – McLaughlin Martin – Petersen Lene Waage (eds.), *Image, Eye and Art in Calvino: Writing Visibility*, Legenda, London, 2007.
- Lucchini, Alessandro (ed.), *Content management. Progettare, produrre e gestire i contenuti per il Web*, Milano, Apogeo, 2002.
- Lughi, Giulio, *La cultura dei nuovi media. Teorie, strumenti, immaginario*, Milano, Guerini e Associati, 2006.
- Markey, Constance, *Italo Calvino: A Journey Toward Postmodernism*, University Press of Florida, Gainesville, 1999.
- Modena, Letizia, *Italo Calvino's Architecture of Lightness: The Utopian Imagination in An Age*, New York, Routledge, 2011.
- Musarra-Schröder, Ulla, *Il labirinto e la rete. Percorsi moderni e postmoderni nell'opera di Italo Calvino*, Roma, Bulzoni, 1996.
- Nelson, Ted H., *Literary machines: the report on, and of, Project Xanadu*, Swarthmore, 1981.
- Perniola, Mario, *Contro la comunicazione*, Torino, Einaudi, 2004.
- Piacentini, Adriano, *Tra il cristallo e la fiamma. Le Lezioni americane di Italo Calvino*, Firenze, Atheneum, 2002.

Pilz, Kerstin, *Mapping Complexity: Literature and Science in the Works of Italo Calvino*, Leicester, Troubador, 2005.

Roelens, Nathalie, *L'Odissea di uno scrittore virtuale: strategie narrative in «Palomar» di Italo Calvino*, Firenze, Franco Casati Editore, 1989.

Scarpa, Domenico, *Italo Calvino*, Milano, Mondadori, 1999.

Scrivano, Fabrizio, *Calvino e i corpi. Il peso dell'immateriale*, Perugia, Morlacchi Editore, 2008.

The author

Paolo Granata

Paolo Granata teaches Cultural Heritage Management, and Media, Culture and Public Memory at the University of Bologna. His areas of research include: Aesthetics, Media Theory, Museum Communication, and Contemporary Arts. His main books are: *Arte in Rete* (2001), *Arte, estetica e nuovi media* (2009), *Mediabilia* (2012), *Ecologia dei media* (2015). In 2011 he was the recipient of the McLuhan Centenary Award from the McLuhan Program for Culture and Technology, iSchool, University of Toronto.

Email: paolo.granata@unibo.it

The paper

Date sent: 30/08/2014

Date accepted: 30/10/2014

Date published: 30/11/2014

How to quote this paper

Paolo Granata, "Ecologies of the Imagination: Italo Calvino's six 'memes' for the Digital World", *Tecnologia, immaginazione e forme del narrare*, Ed. L. Esposito, E. Piga, A. Ruggiero, *Between*, IV. 8 (2014), www.betweenjournal.it