"... [it] is reducible to neither the One or the multiple. It is not the One that becomes Two or even directly three, four, five, etc. It is not a multiple derived from the One, or to which One is added (n+1). It is comprised not of units, but of dimensions, or rather directions in motion..."

Gilles Deleuze & Félix Guattari: *Rhizome (Introduction)*

**New Old Media**

Traditional mass media communication are undergoing a process of remodelling of their nature and aims. No-one can fail to see how the emergence of new information and communications technology has brought with it a radical change in their modern definition, leading to the appearance of new communicational dimensions. The final effects and consequences of the general process of updating and/or redefining that we are witness to are uncertain. The increasing digitisation of communications processes and products over the last decade implies important
changes not only in the communicative content, but also in the necessary associated tasks for their creation, production and diffusion.

The explicit confirmation of this process opens an interesting debate on the scope of the new reality of the so-called new media in terms of their non-digital predecessors. Real or illusory duplicity? Previously unitary channels are now doubling up. Journalism and Digital Journalism. Cinema and Software Cinema. Television and Interactive Television. Mail and email, etc. And it is the same for virtually all of the new old media. This simultaneous old and new reality raises certain questions. The recent process of adaptation by traditional mass media to the new digital habitat a) merely requires an evolutionary jump from the old species? Or on the contrary, b) are we witness to an (revolutionary) uprising of -if you will allow for the animal analogy- a new species? In other words, is the logic that dominates this digitisation process hiding a (completely) new reality or are we dealing with a (mere) evolution? The crux of the debate thus is hidden behind the conflicting positions and senses on the validity and meaning of the (new) term New Media.

The evolutionary responses to this debate blend and cautiously accept the supposed independence of new media compared to the old media, stressing the danger seen in converting the expression new media into a new symbol of transitory fashion which will soon be superseded, with critical analysis such as this, “the very term “new media” is ambiguous. Is video still a “new” medium? Are operating systems media? Is hypertext a different medium than the electronic book? In the end, the phrase “new media” turns out to be yet another placeholder, this time for whatever we eventually agree to name these cultural productions.” (Lunenfeld 1999). On the other hand, in the opposing avant-garde solutions, the same label, beyond its (possible) merely descriptive use, it possesses and exemplifies a really revolutionary situation: “in the 1990s the term “new media” was used as shorthand for new cultural forms which depend on digital computers for distribution: CD-ROMs and DVD-ROMs, Web sites, computer games, hypertext and hypermedia applications. But beyond its descriptive meaning, the term also carried with it some of the promise of radical cultural innovation” (Manovich 1999).
One of the areas that exemplifies where the debate is most up-to-date is in terms of the task of creating and producing interactive scripts, in which the writing of changing stages and routes leads to a considerable increase in their complexity with respect to the traditional creation of linear scripts. Compared to the closed, stable and, for the most part, limited nature of communicative content in traditional media, communication through the new digital communication media offers content which is typically flexible, unstable and even unlimited, leading thus to a change in the former common models and the need to study and search for new guidelines for the necessary pre-visualisation in the process prior to the scripting and the pre-design of form and content.

With the arrival and introduction of new media, whether in the descriptive (evolutionary) sense of the term or in the avant-garde (revolutionary) sense, the work of the scriptwriter on interactive multimedia productions moves away from the basis of setting limits, towards, at least, a new situation with blurring and reduction of these limits in the scripts. In this way, it is often a case of (paradoxically) unlearning lessons learnt for the scriptwriter, “because limiting options is what most linear writers have been trained to do. In a linear video, film or book, it is essential to find just the right shot, scene, or sentence to express your meaning.” (Garrand 2001). Unlike the screenwriter, the (new) interactive writer cannot establish a single direction, a single path for reading and/or reception, but must look to renew their training so as to be able to promote changing forms and figures.

**Figures of dispersion**

At the heart of Western aesthetic thought, the notion of form should be highlighted as one of the key historical concepts and/or categories. The traditional concept of works (of art) as *fine forms* has been one of the common areas for valuing them or not. This paradigm has dominated over the centuries and was based on the establishment of a close interrelation between the notions of work, form and limit. The task of producing pictorial or literary works has been seen thus for centuries as the dominance of a series of techniques destined essentially
to fix profiles, limits and borders, with the basic and central aim of offering as a final result well-defined, balanced and closed works.

One of the most common traditional senses of form, and which appeared at the heart of Platonic thought, is that which sees it tied to the notion of perimeter, the object's or element's limit. "Then this is enough to tell you what I mean by ‘shape’. For I say this of every shape: a shape is that which limits a solid; in a word, a shape is the limit of a solid" (Meno 76ab). According to this sense of form, it is a synonym of perimeter, figure or configuration, above all in the visual arts. To give form to a work consists of just this, to establish limits or perimeters. In short, to remove the possibility for multiplicity and dispersion, two characteristics that are considered not only (creatively) sterile, but even to be linked to ugliness and that which should be rejected.

In the aesthetic tradition, dispersion is often seen to be a property that blocks any possible unity, that blocks the possibility to obtain valid and worthy forms. The Platonic definition of the figure presented thus offers a model (paradigm) for measuring success in the task of producing, in its widest sense. Production essentially implies being able to include and trap. The notion of figure, work as limit, fixes its basic identity in terms of opposition with respect to the undefined. To imagine, create, produce a work consists of detaining and obviating dispersion. Dispersion is thus conceptualised as (bad) degradation compared to the (good) ordered, unitary and limited.

In terms of this historically dominant logic, we should also see it as "the limit contains that which it limits, in both senses: it includes and compresses" (Brague 1978). Limiting is not simply giving form, but rather a form will only be such if it presents well-defined limits. There is no place in the world of ideas for contradictions (sic) such as informal figures. The same classical definition that was made by Aristotle of tragedy, "Tragedy, then, is an imitation of an action that is serious, complete and of a certain magnitude; in language embellished with each kind of artistic ornament, the several kinds being found in separate parts of the play; in the form of action, not of narrative; through pity and fear effecting the proper purgation of these emotions" (Poetics 1449b-1450a), maintains and extends the formal logic of limits set out previously by Plato as the paradigm for
all aesthetic literary production. Shortly after, in the same treatise, Aristotle clarifies and states, "Tragedy is an imitation of an action that is complete, and whole, and of a certain magnitude; for there may be a whole that is wanting in magnitude. A whole is that which has a beginning, a middle and an end" (Poetics 1451a). The narrative task is thus defined as selection and presentation of whole and complete events, with a clear and well-defined beginning and end, leaving no room once again for dispersion and/or the undefined.

On the contrary, creation and production of interactive and/or multimedia scripts moves attention and the basic axis of action from the limited to the unlimited, from the defined to the undefined, it opens the way towards uncertain territory. "Narrative writing in interactive multimedia requires that the writer abandon the traditional Aristotelian premises on scripts and narratives. In their place, writers have to experiment with new forms and methods, which they are not familiar with, some of which are not only foreign, but seem strange, disconcerting or even threatening" (Orihuela 2000).

**Starring the text**

Faced with the principally unitary and linear structuring of the classical narrative text, interactive multimedia productions are essentially structured as complex electronic hypertexts, by this we mean in the now canonical sense as set by Theodor H. Nelson in Literary Machines: “By hypertext I mean non-sequential writing -text that branches and allows choices to the reader, best read at an interactive screen (...) As popularly conceived, this is a series of text chunks connected by links which offer the reader different pathways (...) Hypertext can include sequential text, and is thus the most general form of writing. Unrestricted by sequence, in hypertext, we may create new forms of writing” (Nelson 1980).

Previously, the visionary discourse by Vannevar Bush, presented in Atlantic Monthly, had already shown with great clarity the revolutionary movement that would come into play with the (then only imagined) interactive multimedia technology: "It affords an immediate step, however, to associative
indexing, the basic idea of which is a provision whereby any item may be caused at will to select immediately and automatically another. This is the essential feature (...) the process of tying two items together is the important thing” (Bush 1945). In an electronic hypertext, there is the inherent possibility of opening the text instead of closing it: “it avoids structuring the text excessively, avoids giving it that additional structure that comes from a dissertation and would close it: it stars the text rather than assembling it” (Barthes 1970).

Faced with the usual primacy of unity as the final aim resulting from analogue productions, the new digital productions reward autonomy and singularity in a unique way in the units that make them up, each of the parts and fragments that form the disparate puzzle that interactive multimedia productions represent. "Digital media break up the linear nature of narrative that belongs to analogue media, it confers the text with a polyhedral architecture, it opens it up and expands it, it breaks it up and makes it, thanks to networks, ubiquitous and participative" (Orihuela 2000).

This renewed importance of internal units, of the lexia, according to the expression coined by Roland Barthes and now common since its acceptance and institutionalisation by George P. Landow in the new hypertextual territory, expands the task of the interactive scriptwriter from unity to multiplicity, from the linear story to the plural discourse. “The lexia is only the wrapping of a semantic volume, the crest line of the plural text, arranged like a berm of possible (but controlled, attested to by a systematic reading) meanings under the flux of discourse: the lexia and its units will thereby form a type of polyhedron faceted by the word, the group of words, the sentence or the paragraph, ie, with the language which is its 'natural' excipient" (Barthes 1970).

Despite all this, and despite the textual dispersion foreseen in a hypothetical interactive script, the most arduous task for the writer may well be inherent in providing possible and coherent plot lines for this non-linear whole. "The experience of viewing a multimedia presentation is a linear event; however, the information contained in the presentation is not written or stored in a linear format. The main challenge in a multimedia production is how to write and develop the information in a non-linear way for linear viewing" (Redmond 1995).
A viewing and reading experience able to offer the user of the multimedia production a pathway and a sense. That which they have chosen in their free and associative surfing through the content and options has to have been foreseen by the scriptwriter beforehand. In interactive media, the writer must think of all the possibilities.

**Trail Blazers**

The new electronic textuality has moved the usual territories of the linear writer, those belonging to the typographical culture of print. "Electronic hypertext, the latest extension of writing, raises many questions and problems about culture, power and the individual, but it is no more (or less) natural than any other form of writing, which is the greatest as well as the most destructive of all technologies (…) We must abandon conceptual systems founded upon ideas of center, margin, hierarchy and linearity and replace them with ones of multilinearity, nodes, links, and networks" (Landow 1992).

At the heart of this process of change and replacement of ideas and key tools, the scripting of interactive multimedia application is currently undergoing a phase of investigation of its possibilities and scope. It is worth remembering that currently a (truly) non-linear narrative tradition does not exist. Despite the laudable achievements in the printed literary tradition, the recent decade of stabilisation in the creation and production of multimedia applications has not allowed for settling on absolute methodological bases or guidelines and/or common canonical criteria. Directions today change too often: in the market, in industry, in society. Producing a multimedia project requires working with a team of professionals who come from a range of backgrounds, without there currently being a stabilised or standardised mode or model for working. Presently, the work of a multimedia scriptwriter occupies an indefinite space shared more often than not with designers, programmers and project managers, which leads to a necessary and delicate balance between the creation of content, technological development and the management of resources.
The profile of the interactive scriptwriter thus resembles that of a tightrope walker, able to move bravely and with ease in an indefinite and unstable territory. The premonitions of Vannevar Bush, once again, show correctly one of their (current) peculiar functions: to mark paths, travel guides both for their work colleagues and for future users of their projected and completed works. “There is a new profession of trail blazers, those who find delight in the task of establishing useful trails through the enormous mass of the common record” (Bush 1945).

The interactive scriptwriter takes complete control of the hierarchy and ordering of access to the wide-ranging information on offer in a multimedia work. They are responsible for foreseeing and discriminating between the main paths and the side paths to be offered to the user. The author, in short, selects the important routes and rejects those that are not so desirable, limiting the dispersion inherent in non-linear productions, often hiding their omnipresent predetermination of the user's (apparently) free navigation in the informational and/or narrative flux on offer. Likewise, with the move from the passive spectator to the active user, from receiving to using, from a predetermined diegetic universe to an interactive diegetic universe "the figure of the hypertext author approaches, even if it does not entirely merge with, that of the reader; the functions of reader and writer become more deeply entwined with each other than ever before (…) Hypertext does away with certain aspects of the authoritativeness and autonomy of the text and, in doing so, it reconceives the figure and function of the author" (Landow 1992). With this, the figure of the interactive writer and/or scriptwriter inevitably loses a certain amount of authorship. Users now, through the continual decision-making of their navigation, and, less often, through their (possible) direct contribution to certain multimedia productions, assume a true, yet indefinite, level of co-authorship.

Cartographic writings

For the interactive writer, the screen no longer represents a closed space for showing data; the screen should be seen to be an open field for events, a
deterritorialised no-place able to convert the user into the authentic actor in the application. If an audiovisual script consists of the obtaining of a detailed plan of the scenes [units] that, in a predetermined way, form part of the discursive whole to be generated (audiovisually) a posteriori, an interactive script, likewise, consists of a detailed plan of scenes, but they are conceived not as static units, but as "what the user does, see and hears at a certain moment in time during the running of the application (...) groups of multimedia elements that are conjugated to form units" (Bou 1997).

Interactive writing consists, more so than any other form that has gone before, of the task of information visualization. Pre-visualising a project requires a complete scripting process, which focuses on the multimedia territory in the selection and structuring of specific significant units, but units that instead of remaining stable and defined, now form part of an unforeseeable kaleidoscope in which a certain graphical user interface is presented on each visit. "The computer presents us with the spatial mosaic of the newspaper page, the temporal mosaic of film, and the participatory mosaic of TV remote control (...) It offers us a multidimensional kaleidoscope with which to rearrange the fragments over and over again, and it allows us to shift back and forth between alternate patterns of mosaic organization" (Murray 1997).

The graphic and visual dimension is, thus, essential in interactive multimedia productions, even for the blocks of content that are strictly-speaking textual. "On a screen, I cannot see a text, but merely an image (...) Writing requires a distance that the internet annuls with its obsession for the simultaneous. Internet and computers allow for another language, another way of working, with their own rules. Computers make us think in another way" (Baudrillard 1997). The digital text becomes image, equal in each and every respect with any other element that is reduced to the common binary code of zeros and ones.

The development of graphic and visual elements in interactive script writing is no longer an accessory, but central. The boundaries between text and image, between visual and verbal languages, between writer and designer become blurred. "The interactive writer may create proposals, outlines, sitemaps, treatments, walkthroughs, design documents, scripts, and all other written material
that describes a multimedia or Web project. This can include developing the information architecture, on-screen text, overall story structure, dialogue, characters, narration, interface, and more” (Garrand 2001). For this reason, it is vital to complement the (most) common narrative and textual basis with the use of numerous tools and applications for the production and processing of graphics designed for this.

The interactive scriptwriter has to understand the resources of the visual language and conjugate them in terms of those of computing (human interaction with computers, information management, digital image processing, usability or accessibility) recognising that, unfortunately, "apart from some exceptions, the quality of a multimedia application will be judged more in terms of the user interface than the internal structure. In other words, it will be evaluated in terms of ergonomics, aesthetics or presentation, not algorithms" (Bou 1997) or narrativity. For this reason, carrying out tests with alpha versions and prototypes of the final multimedia application are vital for the success of the cartographic writing involved in interactive scripting.

**(scriptwriting) Realms that are yet to come**

Interactive writing opens a new discursive realm. A non-linear space, with multiplicity and dispersion, able to update the Deleuzian maxim, according to which "writing has nothing to do with signifying. It has to do with surveying, mapping, even realms that are yet to come" (Deleuze 1980).

Interactive writers: abortionists of the unit. "The interactive program scriptwriter's aim is not a unique and closed work, but rather an environment and a context" (Berenguer 1997). Faced with the creation of a specific centred, stable and unitary system, non-linear interactive writing designs rhizomatic structures: "To these centered systems [arborescent structures], the authors contrast a centered systems, finite networks of automata in which communication runs from any neighbor to another, the stems or channels do not preexist, and all individuals are interchangeable, defined only by their state at a given moment – such that the
local operations are coordinated and the final, global result synchronized without a central agency" (Deleuze 1980).

No places. Frameworks for possibilities. Music ... and dance as well. "In electronic narrative the procedural author is like a choreographer who supplies the rhythms, the context, and the set of steps that will be performed. The interactor, whether as navigator, protagonist, explorer, or builder, makes use of this repertoire of possible steps and rhythms to improvise a particular dance among the many, many possible dances the author has enabled" (Murray 1997). The author of a unique, disperse and undefined work, a diffuse trail-blazer, the cartographer of a unique map, produced and constructed, but which can be taken apart, connected, altered and modified, with multiple entrances, exits and ways of escape towards realms that are yet to come.

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