The text as product and process. History, genesis, experiments

Domenico Fiormonte (Università Roma Tre, Dipartimento di Italianistica, Italy)
Cinzia Pusceddu (University of Edinburgh, Division of European Languages and Cultures, UK)

1. A new paradigm of the text

1.1 Crisis and renewal of textual criticism in Italy

The early 1900s were years of crisis for positivist philology, the science of restitution of the lost original. In France, Bédier launched the first attack on Lachmann’s method, followed by Quentin shortly afterwards. Bédier’s criticism of the subjectivity inherent in Lachmannian procedure, undermined once and for all the primacy of the German school, not only as regards restitution of the text, but also, and most importantly, on a hermeneutic level. The choice to publish the bon manuscrit implied a reduction in the critical control exercised by the editor, shifting the focus onto the author and onto the manuscript as a historical document.

The crisis of confidence in Lachmann’s method had its repercussions in Italy too. The so-called historical school, headed by Rajna, which had seen the strict application of this method and had produced a large number of critical editions, began to decline. The beginnings of a renewal can be seen in the 1930s, and this renewal continued to develop through the Second World War. Antonelli describes the philology of these years as ‘material’, thus indicating a new interest in the manuscript as an ‘established’ artefact, in both its historical and physical aspects. The seeds of this new direction were planted by Pasquali and Barbi. Although they both reconfirmed the value of Lachmann’s method, they also sensed its limits. Barbi recognised the need to consider documents in their historical uniqueness. Pasquali, a classical philologist, was more critical, however, and suggested the study of links between codices, without isolating them from the historical-cultural context.

In this climate of material interest in the manuscript we should not be surprised at the renewed interest also in authors’ drafts, writing sketches and variant texts. In fact Pasquali dedicated an

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1 Although the paper is the result of a collaborative research work, as regards material composition paragraph 1 was written by Cinzia Pusceddu, and paragraphs 2-3 by Domenico Fiormonte. We would like to thank Colin Swift, Desmond Schmidt, Jonathan Usher, and Peter Shillingsburg for their substantial help in improving both the style and the content of this paper. The Flash programming of the Magrelli Genetic Machine was realized by Monaldo Grandoni.


5 R. Antonelli, idem, p. 207.


entire chapter to this phenomenon in 1934, in the same book in which he suggested a ‘global’ approach to codices. In it, the philologist documented a significant number of cases of authorial variation in classical texts, and produced an analysis of the same phenomenon in Italian medieval literature, namely in Petrarch and Boccaccio’s autographs.

While Pasquali was one of the first critics to stress the problem of variants, Santorre Debenedetti was the first to incorporate them in an actual critical edition. His Orlando Furioso Frammenti of 1937 shows in its critical apparatus the additions made by Ariosto in the last version of the poem, as recorded in two manuscripts. But it was in the same year that a brilliant twenty-five year old student of Debenedetti brought about a radical reassessment of authorial variation, and introduced a new line of research and methodology in Italian textual criticism.

Obviously we are referring to Gianfranco Contini. It was he who took the decisive step. Instead of considering corrections as empirical data, he was the first to ask himself what meaning manuscripts corrected by an author might have for the critic, and thus how do we interpret them, and attribute to them a fundamental function in the process of textual analysis. He was the originator of variantistica, ‘the criticism of variants’, which Benedetto Croce, the most influential literary theorist of that time, once disdainfully defined critica degli scartafacci (‘scribble criticism’).

His commentary on Debenedetti’s Frammenti in 1937 contained the kernel of his ideas. Contini pointed out that this edition constitutes ‘clearly and immediately, in its exact chronology, all the elaborative and corrective work of Ariosto’. Thus, he singles out a temporal sequence in the creative act, measured by the succession of changes made to the text. A little later, in a famous and much-quoted passage, he brings his intuition to fulfilment, maintaining that the literary work is to be considered dynamic, an ‘endless approximation to a [fixed] value’. If the work enters the flow of time – a diachronic dimension – the task of the critic must be that of restoring the temporal dimension embraced by the text. This is Contini’s methodological, but also theoretical revolution. The text as an object of critical analysis ceases to be static, to be a datum, ‘like an object or a result’, and takes on attributes of mobility and fluidity.

The second pillar of the criticism of variants rests on the concept of the text-system, which was defined some years later, in 1941. Contini maintains that no variant can be considered singly, separate from the others and isolated during analysis. All the variations and revisions, taken together, constitute the text, which therefore comes to emerge as a system of elements interacting with each other. Each variant is therefore a shifting of form and sense which reverberates through all the text, a partial and dynamic representation of its making over time. This implies that each revision and authorial modification changes aspect and meaning of the text overall and not just locally. In doing so, Contini incorporates, and at the same time goes beyond Bédier and Pasquali’s contributions. Each single authorial draft is the text, an historically established and original document, not a reject or a second-rate version, compared to the ‘perfection’ of the last version produced or desired by the author. Thus the final result of critical analysis of the variants texts, the critical edition, becomes an object in time and its apparatus a diachronic record of the entire evolution of the text.

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10 G. Contini, idem, p. 232.
Contini’s elaboration on the new ontological status of the text was influenced by the cultural movements and ferment of his times. The text as a dynamic and fluid entity, and the creative act itself as a process, formed the manifesto of a new generation of modern poets like Mallarmé and Valéry, who were active in those years, while the concept of system lies at the core of the philosophical reflection of the school of Tartu. In the former case we can legitimately speak of influence over Contini’s ideas, since Contini himself recognises it explicitly. In the latter it seems to us more appropriate to speak of suggestions and echoes.

The variantistica school of criticism was to have for a long time a productive and fundamental influence on the Italian – and not only the Italian – literary scene. The new generation of structuralist critics of the 1970s discovered in this methodological framework a fertile ground on which to base their linguistic and structuralist theories. As stated by Contini himself, the theoretical field they shared was the concept of text-system. The links between variant criticism and structuralism were identified by Benvenuto Terracini and D’Arco Silvio Avalle in the 1970s, and have been recently commented on by Antonelli and Caprettini. But it was the personal contributions of those involved in the journal Strumenti Critici, which began in the 1970s, in particular Cesare Segre and Avalle, along with Maria Corti, who developed and enriched Contini’s revolutionary ideas. While Contini’s merit lies in his focus on the Author-Text segment of the hermeneutic circle, Segre with his conception of diasystem identified textual movement on the opposite side to that of Contini, i.e. in the Text-Reader/Critic segment. Whereas variantistica identifies dynamism in the writing process, Segre’s theory of the diasystem focuses on the act of reading/criticism and on the text’s reception.

1.2 The writing process: the critique génétique in France

Three decades after Contini’s criticism, there developed in the France of the 1970s a new literary methodology aimed at the study of the process of writing: namely critique génétique. There seem to have been two crucial events which allow us to fix a date:

1. the creation inside the CNRS in 1969, of a French-German research group for an edition of Heine’s manuscripts, obtained by the Bibliothèque Nationale. This group was to constitute the initial core of today’s ITEM, Institut des Textes et Manuscrits Modernes, which became the official body and nucleus of French genetic criticism.

2. the publication of Bellemin-Noël’s volume Le texte et l’avant-texte (Paris: Larousse, 1971), which introduced the term and concept of avant-texte, the set of all original textual material which precedes the final version.

11 ‘The poetic school deriving from Mallarmé, which found its theoretician in Valéry, considered poetry in the making, and interpreted it as a continuously changing, unfinishable work, of which the historical poem represents one possible version, selected at random, and not necessarily the last. It represents the viewpoint of the producer, not the user. Except that, if the critic sees the work of art as an “object”, this constitutes only the objectivity of its working, the “datum” is the hypothesis of the moral work of its abnegation. And a consideration of the poetic act will lead her or him to shift dynamically its formulae, to find directions rather than fixed contours, of poetic energy. The corrections of the authors describe a directive, not a boundary.’ (G. Contini, o.c., p. 5; our translation).


According to a large body of literature\(^{14}\) the objective of genetic criticism is to reconstruct the genesis of a literary work. The origin of the creative act begins with formless drafts, writing sketches, marginalia, reading notes, outlines, proofs, work projects, etc. and can be traced in the erasures, rewritings and additions present in the graphic space of the different documents, until the last (published) version is achieved by the author. Thus, the *avant-texte* or genetic dossier constitutes the material aspect of the author’s work as a process, and of its ‘becoming over time. Textual genesis has mostly focussed on contemporary authors, since it is usually only they who have left behind sufficient documentary evidence; indeed this limitation to such a narrow temporal band has given rise to many stimulating questions.

The cornerstones of genetic methodology – the conception of the literary work as evolving over time, the objective of reconstructing the writing process, the return to the history of the manuscript – are clearly the same as those of variant criticism, as is now recognised by genetic critics. Falconer describes a single, uninterrupted genetic movement that unfolds between the 1920s and 1970s,\(^{15}\) and the 1995 issue of the *Romanic Review*, dedicated to textual genesis, refers to Contini as the forerunner of genetic philology. Of course there are differences. For example, the different connections which *variantistica* and genetic criticism have with structuralism and traditional philology, continuity in the former case and rupture in the latter.\(^{16}\) However, these critical instruments, although they both identified the third dimension of the text, and so got nearer to the author by studying the writing process, also resemble each other in their limitations: both still represent the movement of the text in a bi-dimensional medium, i.e. the paper edition.\(^{17}\)

2. Philology or post-philology?

2.1 Challenges and limits of document digitalisation

As we have seen, one of the elements that French genetic criticism and Italian *variantistica* have in common is the recognition of the multidimensionality of the written document, or its contextual (psychological, social, etc.) and physical aspects: handwriting, *outils*, paper type and texture, deletions, images and drawings. This multidimensionality is also recognised by the Anglo-American school of textual bibliography which is today oriented towards the concept of mobile text.\(^{18}\)

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17 As Hans Gabler notes referring to the realm of manuscripts representations ‘[…] it may be said that its auxiliary representations of manuscripts which the généticiens do produce, tend towards text-edition-type manuscripts editions’ (H. W. Gabler, ‘Editing on the Border Lines of Manuscript and Text.’ Paper given at the Thirteenth Biennial International Interdisciplinary Conference of the Society for Textual Scholarship, March 16-19 2003, New York City, New York University [unpublished]).

We might say that all these theoretical positions make up a new ‘post-textual sensitivity’. Three consequences can be identified: the challenging of the author, the challenging of the stable text (and the editorial practices deriving from this), and the shifting of the focus from the product to the process of writing. It would be a mistake to underestimate this shift, for which there are many causes, but what is certain is that the computer has accelerated its development. The influence of computing on the text is both practical and theoretical, and appears as a two-sided, contradictory phenomenon. Perhaps it would be more correct to speak of two specular ‘textual views’ originated by, and incorporated in, computer science. On the one hand, the computer has provided the conception of the text as informative structure with powerful tools, such as the search engine and the database. On the other hand, although it seemed to provide the most solid alliance to the textual world, the computer revealed (for example with the problem of digital encoding) the conditioning and the fragile historicity of its theoretical model and practical implementations. This crisis is the consequence of the dialogic and processual dimensions and products inherent in online communication, which offer no support to textual stability and its relative forms of structured data. Rather, at this level, digital environments favour the birth of hybrid expressive forms, such as Chat, MUD, SMS, and other electronic script acts. Thus the crisis of philology and textual criticism as instruments of the reconstruction of the ‘truth’ of the text (a crisis traceable from Joseph Bédier up to Jerome McGann), intersects the current scenario of the new forms of digital communication. In this new context it is difficult – and perhaps useless – to trace the existence or predominance of a definite and individual authorial will.

At this moment the interpretative model of the textual world proposed by the advocates of markup languages based on SGML/XML architecture and the connected paradigm of textual retrieval (text=information) seems to be the most successful. Because of the way in which computer science has developed in the last forty years, the tools and technical solutions it has provided to humanists up to now have been modelled on (and sometimes flawed by) a pre-digital conception of the text. This has been considered as a particular kind of ‘data’ (and today, with a slight improvement, a ‘network of data’), whilst we know that text is also a particular kind of ‘data’ (and today, with a slight improvement, a ‘network of data’), which offer no support to textual stability and its relative forms of structured data.

24 The tendency to disregard the various ‘forms’ that a written document may take in different moments of its historical life, and how these forms can socially and cognitively affect our perception of the text (‘forms affect meaning’, cf. D. F. McKenzie, Bibliography and the sociology of texts. London: British Library, 1986), is reflected in the emphasis which markup languages place on text transmission/preservation, rather than on its use and reception. Nonetheless, within the Humanities Computing community it is becoming clear that ‘computationally speaking, the divide between image and text remains all but irreconcilable. […] This computational divide in turn reflects and recapitulates certain elemental differences in the epistemology of images and texts.’ M. G. Kirschenbaum, ‘Editor’s Introduction: Image-Based
relationship between time and text (i.e. how to represent the non-sequential movements of the text through time), and the dialogical-contextual elements. According to Burnard the scope of markup is that of representing three basic classes of features: 1) compositional features, i.e. linked to the external aspect of the text; 2) contextual features; 3) interpretative features. However, he states that a unified approach does not exist, for there exist as many encodings as there are texts, corresponding to the many questions we intend to ask of them. Thus, not only is it impossible (or ‘too complicated’) to ask different questions at the same ‘time’, but the analogical tool (the eye or the photograph) is still indispensable for reading certain multidimensional aspects of reality.

These aspects become more important in modern and contemporary textual criticism, where the attention shifts from the product to the process. It is probably for this reason that the French genetic school has been exploring more in recent years the possibility of visualisation rather than retrieval of the text. And this explains why the ‘antirealist’ arguments, i.e. those which take to the extreme the encoding/interpretation paradigm, are supported by those who study contemporary authors. As a result, a tool which tends to reconstruct and map hierarchical relations is less appropriate for the scope of a genetic edition, or to express ourselves in the terms of writing science, that is to say of a representation of a compositional process. If we analyse the work as process and not as text and, above all, if we frame it in a context of interaction with the user/consumer (as it is with certain types of online writing), we can say about writing that which is said about other media: ‘that which happens in practice cannot be deduced simply from that which happens in texts and in structures’.

Writing is not simply transcription of the spoken word, it also offers us a conceptual model of the verbal dimension: ‘writing is in principle metalinguistics’. Thus, similarly to writing, digital encoding provides us with a ‘conceptual’ model of the original text obtained by means of ‘metalanguages’ – the markup languages. Olson, however, writes that ‘knowledge of those aspects of linguistic structure for which our script provides a model, and about which it permits us to think, has imparted an important bias to our thought and to the development of our document culture’. It seems to us that neither deconstructionists nor anti-deconstructionists (and neo-structuralists) have interpreted the sense of this bias correctly by elaborating, as would be necessary, an adequate theoretical frame for the new relationship, which, in the digital dimension, is established between processes and products. Where writing merges with other forms of communication, adopting ‘mixed operative criteria’ (such as the mixture of semasiographic and alphabetic as shown for example in Valeri), or texts conceived and consulted as databases, what should be encoded in the...
future? Which passage of support could guarantee the fidelity and stability of the source, and how? But even if we limit ourselves to the present, there are many methodological consequences that this reconfiguration brings with it, above all affecting the ideas of conservation and reconstruction (restitutio) of the text.

In 1985 MacGann denounced the fact that orientations in textual criticism at the time (amongst which was ‘the ideology of final intentions’) were an obstacle to the birth of a different way of transmitting, and thus, reading, texts. Tanselle criticised such positions and although he admitted that every method was legitimate in science, he (re)indicated a single direction, that of the rationale: ‘McGann believes that “to see the ‘author’s intention’ as the basis for a ‘rationale of copy-text’ is to confuse the issues involved; […]”; one should rather say that confusion is promoted by maintaining that an undefined mixture of two distinct approaches constitutes a useful rationale. It is surprising that the core of Tanselle’s criticism returned after some years in an article on the links between textual criticism and critique génétique, despite getting closer to the concerns elsewhere dismissed as ‘sociological’. Perhaps at this point we should speak not so much of criticism, but rather of fear of dangerous deconstructionist germs, which are perhaps incubating—who knows—in genèse also.

Tanselle’s view not only reflects his own idea of textual criticism, but also constitutes a vision of literature: an idea of works of art as a succession of states and quantities which are separable and interpretable, which place enormous trust in the author and in the interpreting community. This is the reason for his caution concerning the hypertexual edition (where the methodological change is ‘of degree, not of kind’). This caution derives from a suspicion towards a hermeneutics contaminated by the new digital environments, which challenges the irreversibility and fixity of the text. But the new conception of the work spread by art, aesthetics and philosophy of the early 1900s has forced us to abandon the idea that literature and its reconstruction (philology/textual criticism) can be considered as theoretically separable entities. Edition and production are not always two divisible moments of the history of the text—i.e. of a phenomenon which is made over time and of which, if it is legitimate to cut out the synchronic segment of the critical edition, it is equally legitimate to refuse it the demanding historical intangibility.

2.2 Towards a dynamic textual criticism

More than ten years ago a number of philologists and textual critics began to express dissatisfaction with traditional tools and methodologies. Such perplexities pushed those editors who had to deal with social and material aspects of the literary artefact towards the ‘forced’ rediscovery of the textual process: ‘I hope I have made my point that the Quarto and Folio Lear s are artificial, if not arbitrary, abstractions from the debris of evidence left by the history of the unstable text’. Dissatisfied with the typographic solutions adopted for the variant edition of Lear, Brockbank suggested exploiting the recently-born CD-ROM technology for a Variorum edition of Shakespeare.

Computer-assisted philology from the 1980s onwards had begun to provide the first answers. Raul Mordenti was using the same expression as Brockbank (‘mobile text’) while commenting on his

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36 Idem, p. 102.
The idea of an electronic edition was then fashionable, and the French and Italian paths crossed. Jean-Louis Lebrave, from the *genèse* school, planned an experimental model of a hypertextual edition to make the heterogeneous manuscript bulk of Flaubert’s *Héroïdes* navigable. The American school of material and sociological textual criticism, where judgement on the rigidity of print was even more incisive, forged ahead, well beyond the affirmation of the potentiality of the new tools.

Nowadays, the encounter between computers and textual criticism, by means of its applications and the continuous theoretical verifications, forces us to add to the five ‘orientations’ or editors’ interests identified by Peter Shillingsburg, a sixth – the need for representing the textual genesis and the writing process.

3. **Psychology of composition and variants**

The Digital Variants project is indebted to two Italian scholars, Giorgio Raimondo Cardona and Gianfranco Contini. European textual criticism in the Twentieth Century could be defined as the history of the dialectic tension between Text, Author and Reader, between real and historical entity and an abstract object. All critical schools converged at the turning point which came with modern authors. These were authors like Flaubert, Proust, Montale, Dickinson or Joyce who guided theoretical reflection towards a new ground, that of the dynamic conception of the text. But the shift described by Contini is also accompanied by the intuition of the ‘epistemic’ and pedagogical contribution of the variant.

Although from a distant disciplinary area, Cardona, one of the founders of the anthropology of writing, wrote in 1988: ‘Literary activity offers us the opportunity to see thought during its functioning […]. Even the so-called error – ultimately a divergence between the circuit of thought and the writing process. 42

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and that of language – interests us.\footnote{G. R. Cardona, \textit{I linguaggi del sapere}. Roma-Bari: Laterza, 1990, p. 356-357.} He was convinced, from his knowledge of Italian and French variant studies, that in certain materials like manuscripts, autographs, notebooks etc., it was possible to follow the traces and clues left during the movement of thought. Thus he conceived writing as an activity, a dynamic object and not simply a ‘transcription’ of the spoken.\footnote{Cf. R. Duranti, \textit{Linguistic Anthropology}. Cambridge: Cambridge University Press, 1997, p. 118.} That is to say, he believed that writing could supply ‘new concepts and categories’ with which to reason about language.\footnote{D. R. Olson, o. c., p. 5.} But whereas, on this last front, research was already being produced,\footnote{Cf. J. Miller, Miller, ‘Spoken and Written Language: Language Acquisition and Literacy.’ in: R. J. Scholes (ed.), \textit{Literacy and Language Analysis}. Hillsdale (NJ): Lawrence Erlbaum, 1993, p. 99-139.} Cardona was one of the first to pose the problem of the ‘variant’ with respect to the writing process, and of this with respect to language. As we have seen, the epistemological importance of the reconstructive process was known, but the other path, the compositional, remained largely unexplored.

In spite of repeated references to the compositional process, in the research of language historians, philologists and textual critics, what stands out is the absence of references to the psychology of composition and to the first important research results of cognitive psychology.\footnote{Cf. L. W. Gregg & E. R. Steinberg (eds.), \textit{Cognitive Processes in Writing}. Hillsdale (NJ): Lawrence Erlbaum, 1980.} The \textit{genèse} project seemed timid and at the same time suspicious of a general science of written production (Grésillon speaks of ‘zones d’interférence’, but dedicates only a few lines to the work of cognitive scientists).\footnote{A. Grésillon, o. c., 1994, p. 220. And yet, the contacts are singular – for example in the description of writing types.} Compared to textual studies, the psychology of composition goes the other way, i.e. it studies writing from the point of view of those who write, while philology and textual criticism, for centuries had studied writing from the perspective of those who read – the editor and his or her critical edition. But what had happened to the struggle of the writer? \textit{Genèse} and \textit{variantistica} took more of a step in the direction of the author, but they did not make the decisive leap. The reader is left at the most with the sensation of being a ‘peeping Tom’ of the text. The next shift – and the change of perspective – takes place in psychology and in cognitive science, this new science of sciences which came to fill and reinforce the space for reflection common to editorial and authorial sciences (because naturally textual scholars and psychologists ignore each other on the common ground of the writing process).

The idea of writing as an activity of ‘knowledge transforming’, and the conception of the text as a ‘step’ in a process, lead us to the reflections of modern philologists. Modern textual criticism, apart from exhibiting a certain resistance to the recognition of Information and Communication Technologies (ICTs) as the privileged ground for the expression, modelling and study of signs, should be a ‘cognitive science’ par excellence and the psychology of composition should constitute its natural achievement (and complement). We might almost say that the latter achieves the prophecy contained in the former: they both assume a diachronic viewpoint – psychology as experimental science, textual criticism as historical science – proceeding in opposite directions along the same path.

The Digital Variants project arose from the encounter between these two cognitive sciences, with the objective of recovering (and exploiting) the lost dynamism of writing. Reflecting on the limits and strengths of the variantistica-genèse du texte approach and on that of the psychology of composition, we tried to fuse the two.52

4 An experimental setting: The Magrelli Genetic Machine

On the Digital Variants site a number of variant texts, autographs and drafts of Italian and Spanish authors are available and may be consulted with the help of different visualisation tools. The main objective of the site is not preservation, but the provision of a user-friendly access to these original materials for both teaching and research purposes. It is our impression that, in spite of the significant opportunities for research and analysis provided by many digital libraries, little attention has yet been paid to the problem of how to make the text readable on a computer screen. In fact, user interface study and design have received little attention in comparison to the technological efforts expended on information retrieval.

The decision to adopt current encoding standards only in a few cases (i.e. Magrelli and Cerami) has been dictated by the significant heterogeneity of the documents, which each author has provided to the archive. Among the more important texts in the archive, and available on the Digital Variants website, are a short story by Francesca Sanvitale in eight writing stages, and a collection of stories, La gente (Turin, Einaudi, 1993) by Vincenzo Cerami, of which we possess all the intermediate drafts as well as those that have been published in different periods and contexts.

The Magrelli Genetic Machine, the most recent tool, originated from the need to explore new solutions for the visualisation of the writing process.53 With this objective in mind we began working with Flash, a software normally used in commercial sites for animation effects. A word or two on this ‘technical’ choice – technical does not mean ‘neutral’, because any choice of tools implies and presupposes a theoretical stance. The adoption of Flash might be arguable from a scientific (and ethical) point of view because it is not based on open source software. However, now we have started to encode some of the Magrelli poems in accordance to XML-TEI guidelines, our main objective was to build a usable interface that could be easily accessed online. The style sheets (XSL and XSLT), which allow us to transform texts encoded in XML into HTML, require a separate programme which does not guarantee the display of all graphic and textual features. Another problem intrinsic to XML is the difficulty of representing overlapping textual phenomena (typically variants of complex temporal structure,54 which is the case with Magrelli’s texts). In spite


53 In addition to this tool, we are currently exploring the possibility of using the variant editor realized in JAVA by Desmond Schmidt who is collaborating with the DV project.
of its shortcomings, *Flash* allows a significant saving in time and cost, and seems to lend itself well to the display and the visualisation of textual *mouvance*.

The materials used in the *Genetic Machine* project are the *brouillons d’écriture*, the notes and different drafts from the collection of poems *Ora Serrata Retinae* (Milan, Feltrinelli, 1980) made available by the author. The complete dossier consists of a notebook containing the original draft, various versions, printed or typed by the author, before he arrived at his definitive version. Each poem thus has a different genetic history. Every poem in Magrelli’s collection will have a *Genetic Machine*, i.e. a set of tools, created expressly in accordance with its editorial history, which would allow us to illustrate and explore its dynamics.

So far, three *avant-textes* of *Ora Serrata Retinae* (*Il corpo è chiuso, Essere Matita and Molto sottrae*) have been published online with this system. In the left hand window (Fig. 1) is the image of an original, manuscript or paper. The original chosen can be read in comparison with the diplomatic transcription of the manuscript in the window at the bottom, or with the transcription of the various printed versions (up to the final) in the right-hand window. A window at the bottom right hand corner details the diacritic signs that have been used in the diplomatic transcription. Other effects are available. ‘Floating variants’ show each of the two printed versions in sliding panels that can be moved around the screen. ‘Fade transcription’, with a simple slide of the mouse, allows us to read in the manuscript erasures carried out by the author. ‘Zoom effect’ allows us to shift with a magnifying lens on to the first autograph. What is more, we are adding a facility for the user/researcher to insert comments using an online form.

Fig 1. Exploration with Flash of the writing process of *Il corpo è chiuso* by Valerio Magrelli. Siding the mouse on to the erasure of the autograph we see displayed, with a fading effect, the transcription of the text below (see fourth line ‘gettato in sé’)

There is not enough space here for an accurate analysis of *Il corpo è chiuso*. However, we might note how this type of representation of textual movement can in itself open up the path to interpretations independent from one given (i.e. final) text. In other words, an interactive – or ‘unstable’ – representation of the text can influence and change its reception. Observe the autograph in comparison with later versions. Beyond the expected differences in structure (e.g. the composition of the poem) and wording (lexical changes, shifts, deletions, substitutions, etc.), this representation offers a number of visual and textual accessories at the bottom of the page, which help to contextualize and illuminate the meanings of the text. These images and notes allow us read and interpret the composition by following, in contrast or affinity, the parallel discourse between graphic and linguistic means (‘occhio-ginocchio’, ‘ciglio-portale’, etc.). In the final version from 1980 the first two lines are suppressed (‘Splendido l’occhio/Questo è il suo segreto’), lines which had been preserved until the journal edition of 1979. And yet, after an examination of the manuscript, it would seem that it is precisely these two lines which release the phonic (‘occhio’), the iconic (the ‘ginocchio-occhio’ drawing at the top) and the thematic (‘il suo segreto’) traces of the poem. Therefore, it is only by means of a comparison of the different versions that we become...
aware of how the author is proceeding, via later ‘skimmings’, along a path from the explicit to the implicit. From this perspective the autograph presents itself as a cognitive map, into which all the motifs and themes which have been developed – or put aside – are woven and deposited, in the form of knots and flows of thought, in later drafts.

We think that the main character of this display instrument is not only to show the genesis of the poem. It is the whole focus of the text which shifts, creating a new equilibrium in which all the elements – all the parts – are equally important. The intra-textuality revealed and exhibited by the Genetic Machine becomes an independent object, since the set of links between texts and avant-textes thus assembled, builds and shapes a new experience. Perceiving and using the definitive text without seeing or reading the sister galaxies which surround it becomes a forced operation, and perhaps useless.

Stretching an analogy with the physical sciences one might say that up to now we have analysed the literary text according to the laws of the pre-Heisenbergian universe, i.e. inside a stable system, in which the observer does not modify the object observed. All the factors at work – Author, Work, Reader, Medium – keep their independence and intangibility. The computer, with simple or complex tools (but all made possible by the malleability of binary code), allows the observer to abandon the myth of this neutrality and enter into the time of the text. What else is an edition on paper – diplomatic, critical, or genetic – if not an attempt to justify and immortalize specific and historically determined conception of the text? But when writing, by means of digitalisation, is returned to the status of a process (or to a simulation thereof), and thus re-enters the time flow, the only chance for the stability of the text remains chronology.