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"My Mother's Letters": Simulation by Computer

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# My Mother's Letters: Simulation by Computer

### Vera Molnar



Mother had a wonderful handwriting—somewhat Gothic, somewhat hysterical. She began each line regularly and strictly with Gothic letters, which toward the end of the line became more and more restless, nervous, almost hysterical. As she aged, the letters became quite troubled, perturbed. Slowly the Gothic disappeared, leaving only the hysterical. Each week I received a letter, which meant a real experience for my visual world. The letters were more and more difficult to decipher but they looked very pleasant.

After her death there were no more letters . . .

I started "simulating" on computer her gothical-hysterical missives to myself (see Color Plate B No. 1).

#### **POST-SCRIPTUM**

Among the many unknown factors, the one that causes art to be art is composition: the force holding the work together. Perhaps the force and the quality of the composition

differentiate a chef d'oeuvre from

a plane surface covered with all sorts of colors and forms. "A composition is such a pictorial performance whereby the different parts of a painting are united, linked together" wrote Leon-Battista Alberti [1]. Composition that creates and ensures unity is likely to be a physiological or biological necessity. We know little about this, although for some decades now more and more interesting experiments

are being attempted in scientific-aesthetic laboratories (to register, for example, someone's eye movements while viewing a painting) to try to reach some understanding of this unknown phenomenon that would be very important to the visual arts. From ancient times to our present days, philosophers, aestheticians and a long line of artists have tried to understand and to describe composition. The visual artist who is interested today in the problem of composition naturally, almost instinctively, returns to the principles handed down from the history of art, which constitute the foundations of the artist's learning. But are these classical laws of classical composition still usable and valid today? The first reassuring answer would be that these principles, like art itself, are universal and permanent, constituting the solid basis of every artistic endeavor.

While creating and reflecting, a visual artist might ponder whether these traditions and "recipes" are still valid for today's visual world. And what if they have become obsolete? Are they still satisfactory from today's psychological and physiological points of view? Actually it seems that they are really out of date. First of all, they are obsolete because the principles and proportions were arrived at by artists and thinkers through the observation of nature's forms and proportions and from the study of the human body. According to Paul Valéry [2] the antique architect Eupalino's temple perpetuates the bodily proportions of his love—that of a Greek virgin. Secondly, and perhaps more importantly, these principles of composition that were not immediately

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Although it was not possible for Vera Molnar to attend the Creativity and Cognition symposium (13-15 April 1993, Loughborough University, Leicestershire, England), she has been invited to be a guest contributor to this section due to her work in the spirit of the symposium.

the artist's mother. This work presents two different approaches: (1) to get as near as possible to the formal aspects of the handwriting and (2) to reconcile the illbalanced aspect of the letters (almost regular on the left-hand side, close to chaotic on the righthand side) and a classical method of picture composition, working with principles such as symmetry, rebalanced asymmetry or countercomposition. The drawings were done with the help of a computer and a plotter, except for one series, where the artist used a printer instead of a plotter. The last pieces show the overlapping of plotter-tracing and actual handwriting: a kind of dialogue between human and machine.

My Mother's Letters is an attempt at simulation, an artificial re-creation of the handwriting of

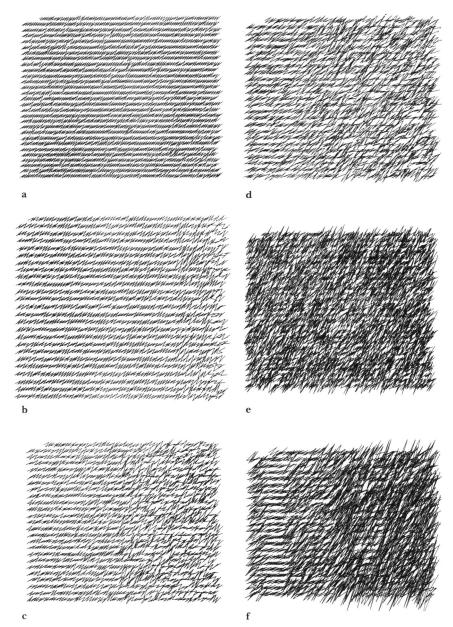


Fig. 1 (a-f). My Mother's Letters, computer and plotter, ink on size A3 paper,  $29.7 \times 42$  cm, 1988. Simulations of my mother's handwriting, with increasing disorder.

derived from the observation of human forms or natural proportions very often were based on mystical speculations or even on superstitions.

One of the old traditions of the visual arts requires that human and animal heads should be depicted on more or less the same level. The rule of isocephaly originates perhaps from the fact that human heads are more or less at the same height. On the friezes of many Greek temples the heads of horses, riders, groups of young dancing girls or members of a procession celebrating Bacchus follow this same rule.

An even more widely accepted principle of composition is symmetry. Jesus

appears in the middle of a picture between six apostles left and right of him. Or elsewhere, heavenly love appears on the left, earthly love on the right; the object of the little putto in the middle in the composition is to join the two forms that otherwise would not belong together. Many interesting eyemovement registrations were recorded concerning this Titian picture in the aesthetic laboratory of the Paris I University. In spite of the rigidity of the law of symmetry, it has manifested itself in more and more variety in richer and more unimpeded forms as time goes on. Perugino and his disciple Raphael illustrated this development in their respective pictures dealing with the same subject: "Mary's engagement."

Another well-used "recipe" is composing within a triangle. From the Renaissance masters to Kandinsky, many people utilized this form of composition with great success. The baroque painters especially favored diagonals, which they often used as an axis for symmetry.

In representative arts these principles were developed and perfected by the artists themselves. Today, when most artists do not represent—or at least do not represent nature with servile fidelity—one can ask whether these laws and customs of composition have not lost their right to exist.

The so-called abstract arts right from the beginning considered composition as their central problem. How could two circles and several rectangles create unity when they do not show two young women sitting in a pool? The early abstract artists—the constructivists, members of De Stijl, some Bauhaus artists—tried to preserve the principles of classical composition but in a more contemporary or more general form.

This new definition might be described as follows: a well-composed picture is the one in which the imbalance creates balance by itself. For instance, if in the left corner of a picture there is a large form, then, to reestablish an equilibrium, higher on the right corner proportionately to the distance either a smaller or an even bigger form necessarily has to appear. This procedure proved to be acceptable for a time. Artist-theoretician Van Doesburg even gave this a name; he called this "contracomposition" [3]. However, this rule of the game, like so many similar ones, caused narrow and restrictive burdens. Apart from this, another problem menaced. This mode of composition in visual art somehow brought in again the sujet: an almost literary chain of events. The painter who turned away, many times quite radically, from representing nature faithfully in favor of being able to place forms and colors freely next to each other without any reference or hindrance could not accept for long this method of construction alien to the logic of painting. Something new, quite new, was desired—something that nobody had ever seen anywhere, either in nature or in the museums. Something so fundamentally new cannot be led by old rules. It is impossible to force an adult's foot into a child's shoe.

A few painters decided—sculptors also, though that is a different problem-to shake off the classical heritage and look for something entirely different. A succession of interesting experiments took place, branching out into different, sometimes totally opposite directions. The most radical war was declared against classical art and at the same time against all kinds of compositions, since the aim became to have no composition at all. According to this concept, the surface of a painting is to be filled all over. Neither color nor form is to have any privilege—as in dodecaphony, where no exception is taken to any sound. There is no privileged place in any picture; on top, below, to the left, to the right, in the middle-every place is of the same importance and has the same role. Many works of Tobey, Dorazio, Sol Lewitt, and Morellet belong to this rebellious process against traditional composition. I myself adopted this same method for a long period.

However, there is another way as well. Some other people thought that for instance one could also compose "badly"—that is, in a way quite opposite what they had done according to the teachings of a school. For instance one could purposely not rectify an imbalance—a tempting thought but extremely difficult to achieve. The principle of "good" composition became second nature to artists during their classical studies at the Academy or during their visits to museums and exhibitions. Thus, whether they wanted to or not, at every point where they had to make an instinctively visual decision, they would refer to the old, ingrained recipes. This is an example a strong cultural "ready made." To dissociate themselves from it was almost completely impossible. Nevertheless, it was worth a trial.

My Mother's Letters constitutes a good example of composing badly. The visual aspect in these pieces, executed with computer and plotter, changes evenly at every line, proceeding from left to right. Using an increasingly random process, the lines—built up with regular sequences going up and down with a tilt of 110–120 degrees—become more and more chaotic as they advance to the right (Fig. 1a–f). This phenomenon occurs within each line, within each letter. The letters become more and more disturbed. The relative order seen in the first letters, on the left side, disappears

progressively. This is a hair-raising solution for a painter like myself with a classical education. There is no symmetry, no equilibrium, no transversal, no triangle. Would the whole thing be held together by the fact that it is the simulation of writing, that it is my mother's writing? But this is not one of the principles of the visual arts. This I immediately understood. I tried various ways to reconcile and bring together the two different and opposing areas: visual arts and my mother's dishevelled writing. Though the whole thing is against the rules, in practice I am pleased with the result!

My first endeavor toward introducing some unity involved building up the page not from separate lines but from one unique stroke. When the pen reached the right side of the plotter, the pen was not lifted but rather slid over to the beginning of the next line, like a baroque diagonal. I kept to this procedure at the end of each line (Fig. 2). Accordingly, a special kind of unity was born, since the page actually consisted of one single line. This unity was also due to the many diagonal lines, which gave a single perceptual

structure to the picture, thus repressing or significantly diminishing the characteristics of the writing.

My second attempt at creating a composition was to change the direction of the lower part of letters such as f, g, j, p, q and y, making them lean from left to right rather than from right to left (Fig. 3). The role of this counterpoint of 90 degrees would be to counterbalance the stubborn forward bendings.

In my next experiment I shifted the disordered line endings—so typical of my mother's handwriting—to the middle of the lines (Fig. 4). Each and every line became unruly towards the middle but regular again at the end. Thus I returned to classical symmetrical composition, but at the same time I departed from my mother's writing, losing on one hand what I had gained on the other.

In yet another experiment I tried to maintain the characteristic entanglement in my mother's writing that grew stronger toward the right by employing an even crescendo of movement across and down the whole page (Fig. 5). At the beginning of each new line, I contin-

Fig. 2. My Mother's Letters, computer and plotter, ink on size A3 paper, 29.7 × 42 cm, 1984. Drawing built up from one unique stroke.

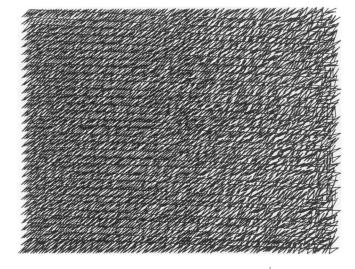
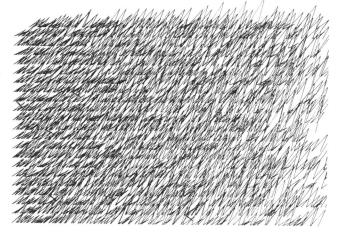


Fig. 3. My Mother's Letters, computer and plotter, ink on size A3 paper, 29.7 × 42 cm, 1984. Change in the direction of the lower parts of some letters: f, g, j, etc.



ued to increase the disorder produced at each end of the preceding one. Thus, the disorder increased not only left to right but from line to line. On top of that, I changed the technique as well: I did not use a plotter, whose movement is very similar to that of a human arm, but a printer. Rather than lines tilting towards the right, the forms consisted of small rectangles side by side with different proportions. These small rectangles gave a good construction to the whole. (This procedure using rectangles had already been used by the constructivists.)

Finally I tried to link together the two different concepts and techniques: using the plotter plus a computer to create the bottom half of the image and counterpoints drawn by hand for the top half (Fig. 6). The former used light blue, the second nearly black. Here I reached back to the old oil painting techniques using transparent paint in layers. I also used the counterpoint procedure in such a way that the plotter drawing, simulating letters, bent forward like my mother's writing, while in the handdrawn, top version, the letters bent backwards. With this I returned to classical composition, compensating for a created imbalance. The cultural "ready made" triumphed. I had to admit that the deeper I strayed into the realm of the composition of visual arts, a territory where in general I feel quite at home, the more I moved away from my mother's writing.

Actually I do not know quite what I wanted: to simulate my mother's writing or to use her handwriting as a pretext for working out new principles of composition and to remain, in spite of everything, in the specific and perhaps classical territory of the visual arts.

### **POST-SCRIPTUM II**

Mother, darling, forgive me. You certainly would have said since you opposed me always (or perhaps I countered you?) that you have an even, orderly, clear writing. I sincerely ask of you not to be angry; I shall never again contradict you. And should I ever again simulate anybody's handwriting, it will be my own.

#### References

- 1. L.B. Alberti, *On Painting and Sculpture*, text in Latin with English translation by C. Grayson, Vol. 2, Sect. 33 (Bath, 1972) p. 70.
- 2. P. Valéry, Eupalinos ou l'Architecte (Paris: Ed. NRF Gallimard, 1944).
- 3. S. Lemoine, Theo Van Doesburg (Paris: Ed. Ph. Sers, 1990).

Fig. 4. My Mother's Letters, computer and plotter, ink on size A3 paper, 29.7 × 42 cm, 1984. The disorder is shifted toward the middle of the lines.

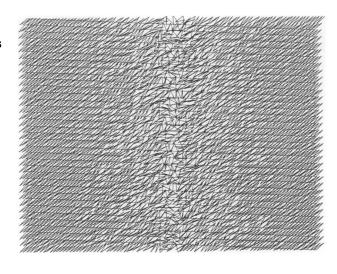


Fig. 5. My Mother's Letters, computer and plotter, ink on size A3 paper, 29.7 × 42 cm, 1988. The disorder increases from line to line.

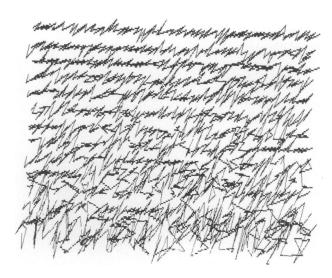


Fig. 6. My Mother's Letters, computer and plotter, ink on size A3 paper, 29.7 × 42 cm, 1988. Human + machine experiment.

