Although "... the legend that Bruno was prosecuted as a philosophical thinker, was burned for his daring views on innumerable worlds or on the movement of the earth can no longer stand" (cf. Frances A. Yates, 1964, p. 355), the attraction to this very unusual man of the Renaissance remains relatively unabated. Few read Bruno's writings in Italian, even fewer his works in Latin, but not because they once appeared on the Index of Prohibited Books or because the author's life ended in flames at the stake. The attraction, then, is not to the work, just as it is probably not to a heroic figure—which he was not—or to a martyr. One wonders: Do we celebrate in Bruno the never subsiding attraction humans have to the realm of magic? Or the *sui generis* instinct of non-conformity? Or the scope of work whose reputation well exceeds its real impact on the minds and souls of its readers? Probably all these and more are at work.

I know that I came to Bruno with skepticism. Marxist indoctrination required a dose of the "heroic Bruno," the materialist opposing Inquisition and religious dogma, with the suggestion of breakthrough contributions to mathematics and astronomy comparable to those of Galileo. Well, if there are any, I never came across these contributions. But due to the extraordinary writings of Frances A. Yates on memory, Giordano Bruno attracted me as a primary source—original books, not mere references passed from one writer to another until post-modern fiction entirely erases the original thought. Surprise! Bruno's writings revealed elements of semiotics, logic, cognitive science, some ideas whose time has passed, and some whose times are just coming. I found out how much he impressed Leibniz and how many of his thoughts were furthered in Leibniz's revolutionary system. And I became aware—not sufficiently though—about his influence on other scholars of his lifetime and of times beyond his life. Then, in the spring of 1981, at the Brown University Library, I discovered

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DE IMAGINVM, SIGNORVM
ET IDEARVM COMPOSITIONE
AD OMNIA
INVENTIONVM, DISPOSITIONVM ET MEMORIAE GENERA
LIBRI TRES
AD ILLVSTREM ET GENEROSIS
IOAN HAINRICVM HAINCELLIVM
ELCOVIAE DOMINVM
CREDITE ET INTELLIGENSIS.
FRANCOFVRTI
APVD IOAN WECHELVM ET PETRVM FISCHERVM
CONSORTES
1591
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*Arguments (from a rejected grant proposal) in favor of a translation*

In 1982 I wrote a grant proposal for an English translation of this book. Allow me to quote from the proposal since, sooner or later, in reviewing the book I will have to explain why it is significant to semioticians (but not only).

"Dedicated to Johannes Henricius Haincelius (Hainzell), this is the last published book by Giordano Bruno (original edition: Weichel and Fischer, Frankfurt, 1591; republished in 1890 by Tocca, Vitelli, Imbriani). Not the easiest person, not the most acceptable character, this illustrious Dominican defined his book as 'one child from among the principal children of my genius.' Not all its commentators agreed as to its scope and relevance. Considered as a text for a magic memory
system, it is in fact one of the first known treatises on signs and on the semiotic nature of memory. Dealing with the composition of images, signs, and ideas, Bruno defined twelve central principles or, as we would call them today, types of sign operations (semioses). Besides describing the sign as such, he distinguished between idea, vestige, shadow/shade, quality, character, seal, index, figure, similitude, proportion, and image. It is a very refined model in which the relation between language and image is studied at length. For instance, in approaching the complementary nature of the sign (an entity simultaneously sensible and intelligible), Bruno ascertained that in the constitution of the visual sign, light plays a fundamental role. He also noticed that the mechanisms of memorizing images are quite different from those of memorizing language. Bruno researched the role played by archaic images and mystical representations. In the archeology of semiotics—this is a source of invaluable information. Bruno examined in detail the role played by the magical, in connection to which his theory of imagination is articulated.

Due to the very complex perspective from which the goal of the book was pursued, it can be considered a contribution to semiotic theory, congenially interdisciplinary, even if it is not explicit in all its predicaments. Citing Aristotle’s statement “To think is to speculate with images (cf. De anima, 1935), Bruno developed his ideas about the role of the imagination in expressing truth. The same is achieved in relation to memory mechanisms. He set forth powerful mnemonic devices, sometimes in detail, but Bruno’s genuine interest lay in the sign processes taking place in cognitive processes involving memory or to be used to improve mnemonics. Nevertheless, the original contribution is in the awareness of the role played by signs, not in the mnemonics (quite well aligned with theories in place at the end of the XVI century).

Of course, the book should be understood in the context of Bruno’s entire work, in which code, encoding, decoding, the foundation of logic, the principles of memory, the relation between truth and magical components, among other themes, are of special interest in our day. The reader will also recognize how some fundamental ideas in Leibniz’s attempt towards a universal symbolism stem from Bruno’s work. (It is well known in the history of philosophy that Leibniz’s model of the monad derives from Bruno.) This is an additional argument for the translation, publication of a parallel Latin-English text, and critical analysis of the semiotic significance of the work in question. As far as I know, the text has never been translated nor considered from a semiotic perspective, still another reason for having it included in a ‘Foundation of Semiotics’ program.

This is the background. Although this proposal attracted the collaboration of the erudite Dr. Ralph Powell (who worked with John Deely on Tractatus de Signis, The Semiotic of John Poinsot, 1985; a splendid bilingual edition), it fell through the irregular nets of the usual grant agencies. (No hard feelings; I was naive enough not to know the grant game that starts with how you present your goal, not what you intend to accomplish.) The only thing that has changed since the proposal and my early attempt to translate Bruno is the publication of the book that occasions this review.

Sign processes

The book translated by Charles Doria and edited by Dick Higgins is a very precious addition to the library of semiotics. Both translator and editor deserve credit for an effort that by and large does justice to Bruno’s thoughts and to their own work. Charles Doria is a poet, the author of several books and anthologies, evidently a person of broad interests and impressive culture. Dick Higgins—with whom, back in my early years in the USA, at the Rhode Island School of Design, I discussed Giordano Bruno, not knowing that one day he will edit and annotate a book I would have loved to make happen—co-founded Happening and Fluxus, major artistic innovations of aesthetic and social significance. He is a visual artist and a writer. Together, they realized the many dimensions of the book, not least part of its relevance to semiotics. The few shortcomings or alternatives, which I shall soon point out, are in no way meant to diminish the merits of their effort, or the results of their endeavor.

But before going into details, it is quite appropriate to warn that Bruno’s semiotic considerations are part of his broader philosophic views, very deeply rooted, as Yates
demonstrated, in Hermeticism. The fusion of neo-Platonic and neo-Pythagorean, Zoroastrian (coming from the source texts of Avestas), Gnostic Christian, Chaldean, and Egyptian elements in his writing makes him sometimes sound like a pre-postmodern. Within the obsession with magic, a so-called doctrine of signatures maintained that signs were means of interaction among various things. This is why Bruno so generously exemplifies influences among various entities. If the names he focused on, and finally formalized in strings of letters, were to be read as DNA sequences, one would not be at all surprised by how a “letter” (read gene) change results in major changes of the entire “thing.” As opposed to others who conceived magical “chariots” or “instruments of flying” (Roger Bacon), Bruno conceived “mental machines,” semiotic engines for driving analogies further and eventually leading to inventions. But their magic program is quite similar. Bruno’s signs are quite syncretic. As a result, he wrote about the syncretic nature of art and philosophy: “True philosophy is music, poetry, or painting; true painting is poetry, music, and philosophy; true poetry or music is divine wisdom and painting,” (p. 129). This condition of the sign is reflected in the actual syncretism of the text. Sign processes are processes that expand from one domain of human concern to another.

In Bruno’s own voice

The three books making up De Imaginum . . . (as I shall henceforth refer to the book) are dedicated, in order, to 1) various forms of signifying (what he called “diversa significandi generas”) and sign operations leading from elementary to composite signs (or to use Max Benses’s concept, supersigns); 2) the use of signs, in particular of images (memory is the dominant theme); 3) signs in context. This reading of Bruno’s book would not necessarily be accepted by Yates, or by the exegetes of other themes present in the text. I take it upon myself to prove that the semiotics in this book is the underlying foundation, not the goal, and that the various categories of practitioners Bruno himself described—grammarians (for whom he shows only disdain), poets, orators, natural scientists, astrologers, students of mechanics—could indeed use it for domain specific applications. Obviously, in order to understand how the “semiotic machine” that Bruno devised works, one has to be familiar with his vocabulary.

All there is in his conception—and this is the dominant conception of the time—can be perceived from a metaphysical, physical, and logical perspective. These viewpoints correspond to the divine, natural, and artificial worlds, behind which stand God, nature, and art. What would eventually become the Kantian apriorism was expressed by Bruno as “in the world of post-natural things, it is called reason or intention.” Plato dominates the scene; ideas are the cause of things before the things (“Ideae sunt causa rerum ante res”). Abruptly, a new distinction of beings falls into place here: things and those which are their own signs or indications (“quae sunt seu signa vel indicationes”). Bruno was so intent upon finding a method—remember, around that time the word method was popularized by Ramus (Pierre de la Ramée) the dialectician—for dealing with significance that he soon defined a concept of specificity, i.e., dogness, apeness, humanness, etc. Indeed, his signs are meant to reveal the specificity of things, that which qualifies them under the labels that we are familiar with, as “signatures.” As signs, marks, indications, things have their rationality. Significations are testimony to this rationality. Among the signs, the visible seems to Bruno the most important (“liveliest and effective”). Lower in the hierarchy come signs associated with touch (reminiscent of things that linger), smell, hearing. He distinguished between knowledge gained in sensorial experience and knowledge generated in semiotic experiences. Signs are, nevertheless, vehicles used from the magical exercise to religious symbolism, grammar, science, poetry.

The philosopher Bruno is hard at work at reconciling conceptions of the world predating religion with those originating from a religious foundation. The abstract system, “First, since there is one, there are two, three, four; second, because one is not two, two is not three, three is not four; third, because one and two are three, because one and three are four,” sounds almost like Peirce in four dimensions (cf. Firstness, Secondness, Thirdness and their relation within Peirce’s synechism). Indeed, from the four elements of earth, air, fire, and water to the triad of the divine, natural, and artificial and back to the abstract sequence (probably closed in the ever prevalent mystical five, quintessence of the four), Bruno passed through many phases. As the book under review is his last, prior to its author’s being attracted back to Italy and submitted to a protracted incarceration, it
is only fair to assume that the abstraction of sign brought with it also the abstraction of the process involved in how the one and the two can eventually generate three, and then four: “From possibility’s abyss to the summit of act” (cf. p. 4), which I would translate as “from the depth of potentiality to the heights of act” (cf. “de profundo potentiae at actus promoveat sublimitatem”). This attraction to how signs change, and how our ability to express ideas appears as an ability to process signs, is of extreme significance.

A semiotic space

What is fascinating in this semiotics in *status nascendi* is the obsession with a semiotic topological space. This space is comprised of atria, chambers, fields, courts. Sure, the architectural model is not new, but the ability to use it not as mere “notation,” or “illustration,” but rather as the virtual space for sign processes is new. Many diagrams, some probably left uncorrected by the author, illustrate a semiotic progression from the abstraction of space (e.g., atrium: “a quadrangular shape, whose center is the earth and the eye”) to that of particular embodiments, symbolized through their names: altar, basilica, prison, etc. The atrium form, related to the uncovered courtyards in the architecture of the Italian villa, carries with it the expectation of the actual “living spaces,” the cubilia (rooms surrounding it), or chambers, as the translation identifies them.

Modifiers applied to signs in the center of an atrium generate professions (The Bacchant, The Guard, Stonecutter, etc.), again semiotically identified in the chambers of this topology. Further, modifiers generate fields (campus) populated with new signs, as adjectives were applied to the contents of chambers. The procedure is generative. Every new step can be logically pursued. In many cases, variation results from anagrams, since the elements in Bruno’s semiotic world are the letters of the alphabet. Of distinct importance to the success of his whole enterprise is the implication of images in the sign processes pursued chapter after chapter. The distinctions agent, instrument, operation, initially exemplified in sequences like

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>A baptizer</td>
<td>with a ewer of holy water baptizes</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>a soldier</td>
<td>with a banner</td>
<td>leaps</td>
</tr>
<tr>
<td>G</td>
<td>H</td>
<td>I</td>
</tr>
<tr>
<td>a workman</td>
<td>with an axe</td>
<td>levels a tree</td>
</tr>
<tr>
<td>K</td>
<td>L</td>
<td>M</td>
</tr>
<tr>
<td>a tailor</td>
<td>with a pair of scissors</td>
<td>cuts cloth</td>
</tr>
</tbody>
</table>

Here ABC yields Ba ba ba
DEF yields Mi mi mi
GHI yields Fa fa fa
AHM yields Ba fa su

leads to a diagram of all productions (cf. p. 126), correctly defined as archetypes. It is by no accident that this diagram is reprinted in the final part of the original book (cf. p. 232), under the explicit title “Archetypes,” since the semiosis of generating infinite variety from a limited number of signs is the actual purpose of his long journey: “So that all the species of things may be signed.” As already pointed out, a “genetics” of sign based operations can be identified in the sequences quoted above that Bruno used.

But more than the diagrams, the images of the gods (Jupiter, Saturn, Mars, etc.) contain an incredible wealth of details, all involved in the semiosis that Bruno describes. One can expect that research in the area of visual semiotics and in the word-image field will be stimulated by the publication of this book in English. The same can be expected regarding new applications to artificial memory, cognitive science, and even design. The semiotic machine Bruno designed implies sharing his set of conventions. For all practical purposes, this is an implicit definition of a code. Within the entire book, awareness of shared conventions, or, moreover, of cultural backgrounds (as references; Bruno knew many texts by heart) is very evident. Proteus in the House of Mnemosyne (which is the fifth chapter of the Third Book) relies entirely on familiarity with Vergil’s *Aeneid* (even when the text shifts from verse to prose). The statement, “Proteus is,
absolutely, that one and the same subject matter which is transformable into all images and resemblances, by means of which we can immediately and continually constitute order, resume and explain everything,” reads less clear that the immediate analogy, “Just as from one and the same wax we awaken all shapes and images of sensate things, which become thereafter the signs of all things that are intelligible.” (He exemplifies the thought by the assertion of “Proteus and parts of a very famous and widely published poem, or rather simple words from it” and “the immortality of the world.” The reader will enjoy the text more than a reviewer’s succinct presentation.) That Bruno’s attempts to devise and use codes rest in the hermetic tradition only confirms the perspective I already suggested in defining the context of semiotic considerations.

The underlying semiotics is well ahead of the areas exemplified in the text. Naive notions, many times revised since, lead the author in all directions. The book has no focus, and were it not for Bruno’s attempt to give a foundation of a coherent sign process method, I wonder if we could do more than to enjoy some poematic fragments (which for the most part Doria translates with real sensitivity to the original poetry), or recognize semiotic themes of interest to us 400 years after the book was first published.

A beginning or an end in itself

In their introduction (p. xxxvi), Dick Higgins and Charles Doria cite Bruno:

... images do not receive their names from the explanations of the things they signify, but rather from the condition of those things that do the signifying. For in a text we are not able to explicate passages and words adequately by signs like those we trace out on paper, unless we think of the forms of sensible things, since they are images of things which exist either in nature or by art and present themselves to the eyes. Therefore images are named not for those things they signify in intention, but for those things from which they have been gathered. (See also p. 31.)

When in 1981 I first read this text in CAPVT X, “De imaginibus verborum seu vocum et dictionum” (On the images of words or of utterances and expressions, cf. pp. 31-33 of translation), I wondered, as do Higgins and Doria ten years later, whether Ferdinand de Saussure, with whom the distinction signifier and signified is first documented in semiology (1916), did not by some fortune come upon Bruno’s elaborations. The similarity of thought is quite evident. But many more semiological and semiotic concepts recall Bruno. His concern for sign processes most certainly define another of semiotics’ beginnings. Just as an illustration to the thesis that his concerns are a beginning later followed by others, I would like to mention that Bruno’s influence on Leibniz, from within his Hermetic philosophy, is probably another subject of semiotic interest that could have been pursued. Leibniz assesses the relevance of memory (meant to store the argument and provide the substance of an argument), of method (used to shape the argument), and of logic (which applies the substance to the shape). Bruno is present, even in terminology, as Leibniz defines Mnemonica: reunion of the image of the being to the thing to be remembered. Nota is the name of the image. (At one time, the translator actually uses the term in this sense; cf. Book One, Part One, Chapter Four.) Although this lead was not pursued, I would like to again praise this edition for the intention of highlighting such beginnings.

But with this praise I am somehow forced to land in the area of questionable (and sometimes more than questionable) decisions or interpretations, not to mention errors. The first of my questions is why this translation was not published in a bilingual edition? Sure, the question “Where is the publisher who would undertake such a task?” is not easy to answer; as it is certainly not easy to find the historic information that puts Bruno’s work in the appropriate semiotic and semiological perspective.

Then, why so many errors (especially in the introductory part of the book? Due to their number, it is not a matter to be minimalized. No doubt, the spelling Fernand for Ferdinand de Saussure is a typographical error. But it is one too many, especially when, on page xxxvi, his work is suggestively and correctly called upon (without reference, though). Whole chunks of text (as on
pages xix and xx) are repeated; other times left out. Desktop publishing, regardless in which variation, is tricky. Cut and paste in digital format can result in unpleasant surprises. They hurt, especially when the authors are so conscious of good book design— alas, spacing is literally painful!— and accuracy. Higgins and Doria are able to point to examples of changes from the original edition to that of F. Tocca, H. Vitelli, and V. Imbriani (Opera Latine Conscripta, 1890), but miss trivial printing errors. Moreover, sometimes they made decisions that require more than the assumed acceptance from the reader.

Two examples: In the Dedicatory Epistle—and I do not know why the authors took it upon themselves to come up with a title where the original had none—Bruno quotes Aristotle: “non intelligimus, nisi phantasmata speculemur.” This quote is translated as “We do not understand except by observing phantasies,” (cf. p. 5). Yates opted for, “To think is to speculate with images (quoting Aristotle, *De anima*, 431a, 17). Other authors (cf. Dorothea Waley Singer, 1950, p. 152) prefer, “We understand naught unless we observe the images.” My own attempt of 1981 read, “We understand nothing unless we think in images.” I refuse to be partial to any of these but believe that the translator could have at least pointed to the established translation, even though he chose a different wording. The distinction phantasy-fantasy suggested in the footnotes (cf. p. 280) is simply unacceptable. When we are told that “Bruno has in mind” in using what was translated as phantasy, i.e., “the image making active imagination,” we can wonder why the translation does not reflect this.

Then there is the omission of text, such as the explanatory parenthesis before the quotes from Aristotle: “Our intelligence [i.e., the operation of our intelligence] is . . .” (omitted without any explanation, cf. p. 5.) In other cases, it is difficult to establish what was omitted intentionally or accidentally. Some criticism, I am afraid, should go to the publisher. In cases of such special books, probably limited to one small, hardcover edition, extra editorial effort should go into making them as definitive as they can be.

But my major observation regards exactly the well intended focus on semiology and semiotics: good intentions with a disappointing final result. The disaster starts right at the Foreword, in which the enthusiastic Manfredo Piccolomini of the City University of New York, describing De imaginum as “a fascinating and engrossing multi- and intermedia work” (whatever this means), ascertains that its symbolism “is not to be read with the eyes of the body [sic] but with the eyes of the mind.” So, abusing the power of free association, he declares that Bruno wrote his book near Zurich and that Zurich is the city of Carl Gustav Jung, “one of the leading enemies of modern rationalism, who believed that meaning often rested in the psyche and its free association” (pp. xix-xx). He goes on to ask rhetorically: “Would it be too much for me to say that Jung’s interest in free association came about from his conversing with the dead spirit of Bruno which, in turn, put him in touch with the ancient Hermetic mysteries?” (cf. p. xx). It is too much indeed, as is the attempt to make of Bruno a champion of irrationality or a spiritual relative of Caravaggio, of Saint Teresa and some others whose names pop up arbitrarily (from Julian the Apostate to Alberto Savinio, Giorgio de Chirico’s brother and dubious author, Schliemann, and others). To make things as relative as Piccolomini assumes he is entitled to do is not exactly what one expects from a work in intellectual archaeology. Bruno worked in a different spirit. It is highly disputable that he expected his writing to “have as many meanings as it will have readers” (p. xxii). Ergo: the reader, expert or not, deserves a better guide, or at least one faithful to the text translated, and not to the fortuitous inclinations and interests of the author of the Foreword.

Dick Higgins did his best in his annotations, although it is not clear whether he worked alone or Doria’s contributions are integrated in his own notes. His discovery of Albumasar’s work is a good key to some of the images. But *Poeticon Astronomicum* (Venice, 1485) preceded Flores Albumasaris (1487). Juan E. Cirlot went even so far as to reproduce Saturn in his popular *Dictionary of Symbols* (1962). The further reference to Bede’s *Mundi Sphaera* are right on target, but not so some semiological and semiotic considerations (e.g., the meaning of *signaculum*, the diminutive of *sign*, cf. Book One, Part One, Chapter Five; the dichotomy signifier-signified, Chapter Ten; the reference to morphemes, cf. p. 287). Generally, it would have helped to create a context for interpretation. And this is where I want to end. A book, complement to this edition, rigorously defining the context, deciphering what is still left unexplained and ambiguous, relating Bruno’s ideas to those of followers, critics, and mainly to ideas of current interest could be a valuable addition to the library of semiotics. To my surprise, in carrying out research for this review, I found that not one
References