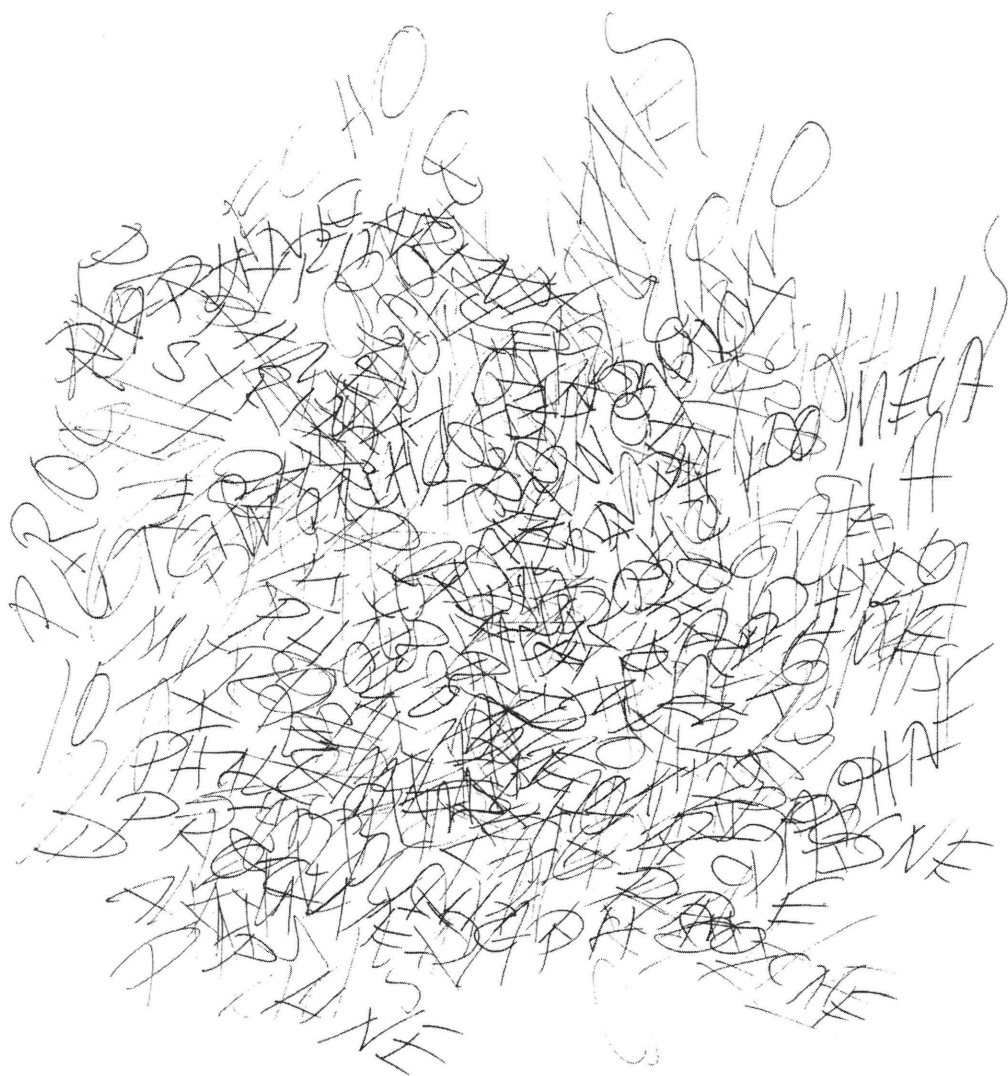


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Toward Disambiguating the Term "Roman"

Earl M. Herrick

The term "roman," when it is used for describing characters of written languages, can be confusing because it is overloaded with four different meanings. This paper distinguishes among these four meanings and suggests alternative terms for each of them. For a character derived from the alphabet originally used for the Latin language, it suggests the term "Roman/Latin." For a character that is not sloped, it suggests the term "upright." For a character having one of a certain group of basic shapes, it suggests the term "Roman-shaped." For a character having details of shape that are based on certain Roman monumental inscriptions, it suggests the term "trajanized." These alternative terms are offered in the hope that they can be used, when necessary, to help us avoid confusion when we are discussing the characters of written languages.

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The problem

When the word “roman” is used for describing characters of written languages, it can traditionally have any of four meanings:

- 1) It can mean that a character belongs to the set of characters which was originally developed for writing the Latin language.
- 2) It can mean that a character has a vertical orientation, i.e. that its non-horizontal main axis is vertical.
- 3) It can mean that a character has a certain kind of basic shape.
- 4) It can mean that certain details of a character’s shape are modeled on the characters of certain Roman monumental inscriptions.

These four meanings are illustrated in *figure 1*. In the first row, a roman character contrasts with Cyrillic and Devanagari characters. In the second row, a roman character contrasts with a character that has a non-horizontal main axis which is not vertical. In the third row, a roman character contrasts with a character that represents the same letter but has a non-roman basic shape. In the fourth row, a roman character contrasts with characters that lack some of its details of shape. (The meaning of “roman” illustrated in the third row applies only to single characters; its other three meanings ordinarily apply to entire texts or entire words or entire typefaces.)

These four meanings of the word “roman” do not always define the same set of characters: a character that is “roman” according one of them is not necessarily “roman” according to another of them. This ambiguity of the term “roman” occasionally results in statements that are incongruous, as when the characters shown in *figure 2* are said to be “sloped, roman, and cyrillic.”

When we need to use the word “roman” in such a confusing context, or when we need to use it without a context that can show which meaning

	"roman"	"non-roman"
1)	R	Ш 𑂔
2)	h	h
3)	a	a
4)	P	𑂔 P P

Figure 1. Characters illustrating four meanings of "roman" and "non-roman."

А В В Г Д Е Ж З
И К Л М Н О П Р
С Т У Ф Х Ц Ч Я

Figure 2. Examples of "sloped, roman, cyrillic" characters.

it has, it will be very helpful if we have available a list of synonymous, alternative terms for all of these meanings of "roman." The existence of these alternative terms will not, of course, prevent us from using the word "roman" whenever its meaning is obvious; they will simply be available for our use, as replacements or as supplements, whenever we need them in order to make our meaning clear.¹

I would hope that many of us who work with the characters of written language will also feel that such a list of distinctive, alternative terms would be a good thing to have, but I am not so hopeful that we will readily agree on what those alternative terms should be. Such a list and its acceptance will take time to evolve. But as we come to realize how many difficulties are caused by the different meanings of the word "roman," and as we become aware of how useful it will be to have alternative terms such as these available, a list of such terms may gradually become an accepted addition to our professional vocabulary. I would therefore like to suggest a list of such alternative terms in the hope that a discussion of them may lead toward a consensus.

The "Roman/Latin script"

The characters exemplified by the "roman" character in the first row of *figure 1* are sometimes called "latin" characters. The terms "roman" and "latin," when used for describing written languages, both have several meanings. "Roman" has the meanings illustrated above. "Latin," in addition to meaning the "roman" characters exemplified in the first row of *figure 1*, can mean the set of 21 characters (or 23, after Y and Z were added) that were once used for writing the Latin language, and it can mean sets consisting of some or all of

these characters along with others that have been used for writing other languages. (The word "latin" also occurs in the names of some typefaces which try to imitate stylistic features of certain inscriptions in the Latin language.)

It seems, however, that the characters exemplified in the first row of *figure 1* are the only things which are called by both the names "roman" and "latin." The terms "Roman/Latin script" or "Latin/Roman script," possibly written with "=" or "-or-" or "i.e." as the divider instead of the virgule, are possible terms for designating these characters.² These terms are rather long, but they should be unambiguous, and perhaps no simpler terms could be understood as readily. The several meanings of both "roman" and "latin" are well known, and a compound term which includes both of them should clearly indicate that it has the one meaning which they share.

When referring to the Roman/Latin script, we will sometimes have to distinguish between two historical stages of its development. As it was originally used for writing the Latin language, the Roman/Latin script was written in many styles, but each style had only one kind of character for each letter. Then, as this script developed over the centuries and as it was finally embodied in printer's type, it came to have several sets of characters, with each set having one kind of character for each letter, and with the characters of each set sharing certain features of shape. The Roman/Latin script came to have at least four such sets of characters: upper-case upright, lower-case upright, upper-case sloped and lower-case sloped. For some typefaces, it also has a fifth set of shorter upright characters of upper-case shape, and since the advent of computerized typography it may have a sixth set of shorter sloped characters of upper-case shape. If necessary, we can refer to the earlier form of this script with only one kind of character per

letter as the “original Roman/Latin script” and to its later form with four or more kinds of character per letter as the “present-day Roman/Latin script.” These terms are long, but they should be unambiguous and their meanings should be readily evident.

One usage which I hope we can avoid, because it is especially likely to lead to confusion, is to refer to the characters of the Roman/Latin script as the “Latin alphabet.” Although the word “alphabet” can mean merely a collection of characters, it has the strong implication that it means the characters of a particular language, arranged in their conventional order; coupled with the word “Latin,” it presumably means the ordered inventory of 21 or 23 letters used for writing the classical Latin language. In order to avoid this possibility of confusion, I have referred to these Roman/Latin characters as a “script” rather than an “alphabet.”

“Italic” characters

The term “italic,” when it is used for describing written characters, can be confusing because the non-roman characters shown in both the second and the third rows of *figure 1* can be called “italic.” This confusion arises because the term “italic” is used in two different ways by those who deal with letters as parts of written texts and by those who describe letter shapes.³ To editors and other people who work with written texts, the term “italic” ordinarily means characters of a kind used for showing that certain words in a text are to be emphasized, or are foreign words, or are titles of literary works, or are to be distinguished in some other special way; “italic” characters are what these people expect to have printed when they underline words in a manuscript. However, to students of letter shapes, the term “italic” ordinarily refers

aefg

a) Gill's list of "essentially italic" basic shapes.

bgiklvwy

b) Some other basic shapes often thought of as "italic."

Figure 3. Gill's "italic" basic shapes and some others that are usually called "italic."

Alabama

Alabama

khanjar

khanjar

le lac
supérieur

*le lac
supérieur*

a) Characters that have "italic" basic shapes but are not sloped.

b) Characters that are sloped but do not have "italic" basic shapes.

Figure 4. Characters that are italic in one way and non-italic in another.

to certain basic shapes of letters. This is the meaning that Gill (1936: 59) gives it when he says that printing in the English language uses three alphabets: a "roman alphabet of capital letters," a "roman lower-case alphabet," and an "alphabet called italic." Gill's illustration of his "essentially italic" letters is reproduced in *figure 3*, along with some other letter shapes that are usually thought of as typically "italic."

These two meanings of the term "italic" often coincide, but they sometimes do not, and therein lies the ambiguity of this term. *Figure 4* shows some characters which have italic basic shapes but are not sloped and some which are sloped but do not have italic basic shapes.

In order to make unambiguous statements about characters such as these, we need to have separate pairs of terms for these two ways of making the distinction between "roman" and "italic." For the meanings of "roman" and "non-roman" exemplified in the second row of *figure 2*, we can simply use the terms "upright" and "sloped." But for the meanings of "roman" and "non-roman" exemplified in the third row of *figure 2*, it may be most convenient if we devise new, and therefore unambiguous, terms for the basic shapes of such characters. To make our new terms look familiar, we could call them "Roman-shaped" and "Italic-shaped," capitalizing the terms in order to indicate that they are technical terms with agreed-upon meanings and are not simply descriptive phrases. *Figure 5*, which consists of the word "Futura" printed in a non-sloped version of the Futura typeface, shows how these terms can clarify a typographic description that otherwise could be confusing. We will not have to say that the last character in that word is both "italic" and "non-italic"; we can say that it is "upright" and that it is also "Italic-shaped."

Futura

Figure 5. Example of Futura typeface, illustrating an ambiguity of the term "italic."

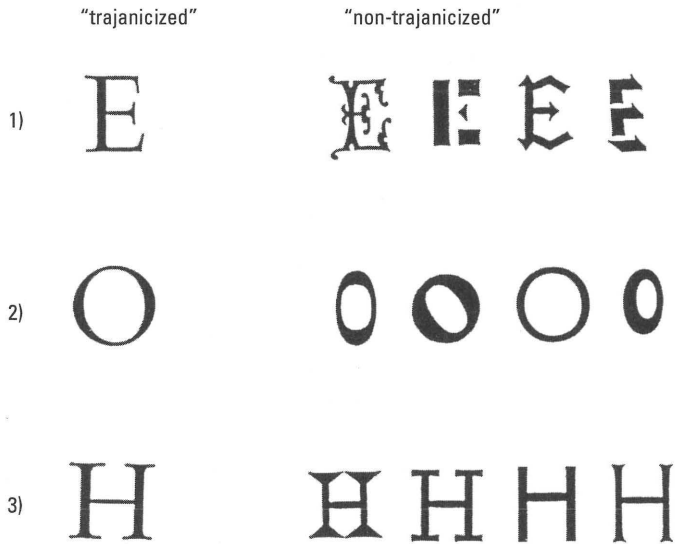


Figure 6. Roman/Latin characters that are not trajanized.

"Trajanicized" characters

In order to define the meaning of "roman" exemplified by the roman character in the fourth row of *figure 2*, we must identify the detailed features of shape which distinguish characters like it. These characters have three such features:

- 1) They are composed of straight lines and smooth curves⁴ that enclose each character's background as economically as possible.
- 2) They have some lines which are thicker than others, and the closer a line's direction is to an axis which lies somewhere between the upper-left-to-lower-right diagonal and the vertical, the thicker the line is (subject to some conditions that apply when a line which is neither vertical nor horizontal meets another line).⁵
- 3) They have serifs at the ends of their lines and, with some exceptions, at the corners where two of their lines meet.⁶

Examples of characters which are Roman/Latin but which lack one or another of these features of shape are shown in *figure 6*.

I would suggest that characters which have these three features of shape can be called "trajanicized" characters. The intended meaning of this term should be evident, because people who work with written language are generally familiar with the inscription on Trajan's column in Rome, shown in *figure 7*. It happens, however, that not all the characters of the present-day Roman/Latin script are modeled completely on the characters in this inscription; this script is actually a combination of two sets of characters which have different, although related, origins. One of these sets is the "capitals," which was widely used for important public inscriptions throughout the Roman Empire during second century A.D.; it is these capitals that appear in the Trajan inscription.⁷ The other set of characters reached its final development during the eighth century A.D. at the court of Charlemagne under the direction of Alcuin of York; it is therefore called the "Carolingian minuscule." Because so many of the styles of writing used in his time for Latin

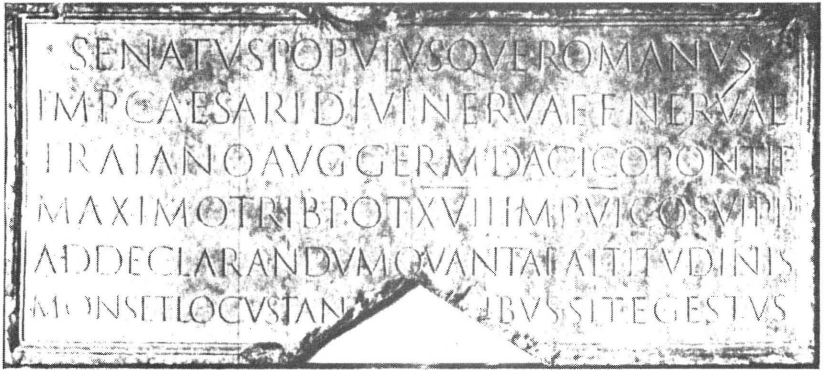


Figure 7. The inscription on Trajan's column.

were nearly illegible, Charlemagne encouraged the recopying, in the clear Carolingian minuscule, of the surviving works of classical literature (Nesbitt, 1957: 65).

Moreover, there was a medieval custom, derived from a similar Roman practice, that in formal writing the initial lines of texts and the initial characters of words should be written in a larger and grander style than the following parts of the texts or words. When the early Italian humanists in the 14th century A.D. looked back toward antiquity to find out how Latin had been (and so, they thought, how it should be) written, they also unconsciously looked for two styles of characters, one larger and one smaller, which would fit their idea of how formal writing should be done. What they found were the second-century Roman capitals, still visible on many inscribed monuments and in the initial lines of some manuscripts, and the eighth-century Carolingian minuscules, still visible in many

surviving manuscripts, including those of classical literature which had been recopied in it. They took these to be the two styles they were looking for, and they combined them to create their own humanistic writing. It is this combination of Roman capitals and Carolingian minuscules which has become our present-day Roman/Latin script.

“The classic capitals were combined with [the Carolingian minuscule] to form a dual alphabet.... The scribes noticed that the capitals and small letters did not fit together very well; so they performed a styling job of adding serifs and finishing strokes to the latter, in order to suit them to the capitals. By the time the craft of printing was introduced into Italy, the Humanistic writing afforded a fully developed basis for the type style we call roman.... When ... the [minuscule] letters were worked over by the type designers much more styling was done to suit them to the capitals.” (Nesbitt, 1957: 66)

“The marriage of inscriptional capitals and pen-made small letters... is not a perfectly happy one.... At first there was doubt as to which should be the dominant partner and impose its idiom on the other. However, Jenson to a large extent and Aldus completely laid down a pattern of consortium preserving the purity of the antique capitals and making the lower-case conform with them as best it could.” (Carter, 1969:46-47)

The upper-case capitals of the Roman/Latin script are presumably the only parts of that script which can accurately be called “trajanic”; but because they are characterized by their features of shape, and because the Roman/Latin lower-case characters have been adapted so that they will also show the same features of shape, it seems appropriate to describe all the characters of the Roman/Latin script as “trajanicized.” There are other scripts which have had their characters adapted to the style used in the Trajan inscriptions, and they can also be called “trajanicized.”

The Roman inscriptional characters such as those on Trajan's column owe some of the details of their features of shape to the tools with which they were produced: they were first drawn onto the stone with a wide, flat brush (Catich, 1968), and they were then carved into the stone with a chisel. The brush with which they were drawn was typically held with its edge slightly turned in a counterclockwise direction from the horizontal and the marks which it drew were therefore typically widest when the brush was drawn in a diagonal direction from upper left toward lower right. Catich (1968) has also shown how the use of this wide, flat brush resulted in the characters having serifs. Then, after the characters were drawn, they were carved with a chisel and the act of cutting them into the stone with that tool had its own effect on the shapes that resulted.

Among the world's writing systems, there are other examples of characters' shapes which have been defined by the tools used for producing them, but we have no general term for describing a group of written characters that have had their shapes affected in such a way, and I would suggest that we can use for this purpose the Greek word for a tool, which is "ergaleion." The trajanicized style of characters can therefore be called an ergaleion.⁸

Trajanicized characters institutionalized in other writing systems

Although trajanicized characters were first devised for writing the Latin language and have evolved largely within the Roman/Latin script, they have been systematically incorporated into the Cyrillic, Hellenic, Armenian and Sequoyah scripts, though sometimes with different functions.

АБВГДЕЖ
 ЗИКЛМНО
 ПРСТУФХ
 ЦЧШЩЪЬ
 ЫЭЮЯ

*АБВГДЕЖ
 ЗИКЛМНО
 ПРСТУФХ
 ЦЧШЩЪЬ
 ЫЭЮЯ*

абвгдежзик
 лмнопрстуф
 хцчщъьэюя

*абвгдежзик
 лмнопрстуф
 хцчщъьэюя*

Figure 8. A modern-day Cyrillic typeface with its four kinds of characters.

When Tsar Peter the Great was trying to westernize Russia and its culture, he saw that trajanized type was used by printers for most western European languages, and he ordered that the printed Russian language should be given the same kind of appearance (see Kaldor 1969-70). During the following centuries the shapes of Cyrillic letters were therefore trajanized, and Russian printers developed the present-day Cyrillic script which imitates the present-day Roman/Latin script in having upper-case upright, lower-case upright, upper-case sloped and lower-case sloped characters for all of its letters. *Figure 8* shows examples of these four kinds of characters from a typical present-day Cyrillic typeface.⁹

The present-day Hellenic script ¹⁰ has both upper-case and lower-case characters. Almost all of its typefaces which are not sans serif combine a trajanized upper-case with a non-trajanized lower-case. *Figure 9* shows the characters of one such typeface commonly used in English-speaking countries for printing scholarly books, and it also shows some lines from a book that was printed in Greece about

forty years ago using another such typeface. There are a few Hellenic typefaces which have both upper-case and lower-case trajanized characters; *figure 9* also shows the characters of such a typeface designed by Eric Gill (1936: 39).

The Hellenic, Cyrillic and Roman/Latin scripts are, of course, historically related. The Cyrillic script was based on ninth-century versions of the Hellenic script, and the Hellenic and Roman/Latin scripts were derived, respectively, from eastern and western versions of the writing system which the Greeks borrowed from the Phoenicians. These three scripts therefore share the shapes of many of their characters, and when their upper-case characters are trajanized, they often become indistinguishable from one another. Several titling fonts of upper-case Hellenic type have been created from titling fonts of upper-case Roman/Latin type by cutting only the Hellenic characters which do not have identical counterparts in the Roman/Latin type; *figure 9* shows two such titling fonts by Hermann Zapf.¹¹

The Armenian script, like the Roman/Latin script, has one set of characters that are used for the ordinary parts of texts and another that are used for the parts of texts which are emphasized or are otherwise specially marked. The characters of one of these sets are trajanized; but for the Armenian script, unlike the Roman/Latin script, the trajanized characters are used for the specially marked words in a text. The characters used for the ordinary words in an Armenian text are not trajanized: they are typically sloped, with thick and thin strokes and without serifs. *Figure 10* shows two extracts from a book printed in the Armenian script; the specially marked words are those in trajanized characters in the first line of the first extract and in the first, fourth and last lines of the second extract. (In the first

ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ
 αβγδεζηθικλμνξοπρστυφχψω

a) Example of a typical face with
 trajanized upper case and non-
 trajanized lower case.

γάλο πληθος. Πελάτης δέν μπαίνει στο μαγαζί. Ἡ μαρίδα—
 τὰ παιδάκια—ξετρελαίνονται γιά τὸ γαϊδουράκι ! Οἱ γυναῖκες
 πετοῦν λουλούδια, καὶ κάποιες καὶ λεφτά, στοὺς ἀπεργοὺς ποὺ
 πήγαιναν πίσω ἀπ' τὸ πουλάρι μὲ νταμπέλες στοὺς στῆθος, ΘΕ-
 ΛΟΥΜΕ ΟΧΤΑΩΡΟ, καὶ τοὺς χειροκροτᾷ τὸ πληθος καὶ
 βλέπει ἀγριεμένο πρὸς τὸ μαγαζί. Κι ἕνας ἀπὸ κάποιο δόγμα,

b) Typical example of printing done in
 Greece.

ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ
 αβγδεζηθικλμνξοπρστυφχψω

c) Gill's typeface with upper case and lower
 case both trajanized.

A B C D E F G H I
 J K L M N O P Q R
 S T U V W X Y Z

Α Β Γ Δ Ε Ζ Η Θ Ι
 Κ Λ Μ Ν Ξ Ο Π Ρ
 Σ Τ Υ Φ Χ Ψ Ω

d) Zapf's Roman/Latin "Michelangelo" and
 Hellenic "Phidias" titling fonts.

Figure 9. Examples of type for
 printing the Hellenic script.

րեւմուտք տարածուեցաւ, շեշտուեցաւ Միհրի պաշտամունքը, իբրեւ լոյսի, ճշմարտութեան, եւ արեւի աստուածութիւնը: Հռովմէական բանականերու մէջ եւ այլուր Միհրի պաշտամունքը իր խենեշ եւ յաճախ խորհրդաւոր

Այլ խօսքով պատմական դէպքի մը իմաստը դտած կ'ըլլանք եթէ կարենանք ցոյց տալ թէ ի՞նչպէս այդ մասնաւոր դէպքին հետեւը պահուած հոգեկան զսպանակները զսպանակներն են տրուած համայնքին ամբողջ պատմութեան: Քանզի այն մղիչ ուժերը, որոնք կերտած են մեր անցեալը, սահմանուած են կերտելու նաեւ մեր ապագան: Այսպէսով անոնք կ'ըլլան ժամանակի թելին վրայ իրարմէ հետու տեղաւորուած դէպքերու «կեդրոնը»: Անոնց միութեան մէջ մեր պատմութիւնը կը վերածուի իրարմէ բըղխող երեւոյթներու կաղմակերպեալ յաջորդականութեան մը եւ կ'ըլլայ հասկնալի:

Figure 10. Examples of type for printing the Armenian script.

extract, the trajanized word in the first line and the non-trajanized first word in the last line are the same word.)

The Sequoyah script, which is used for writing the Cherokee language, was devised in North America during the fourth decade of the nineteenth century. Its development is an example of stimulus diffusion – the spread from one culture to another of the idea that a certain thing can be done, followed by the devising within the second culture of a way of doing that thing, without borrowing the first culture's way of doing it. Sequoyah, a native speaker of the Cherokee language, devised a system of characters for writing his own language¹² after observing that

5 ปี แห่งความภาคภูมิใจ
รอยัลปรินเซส กรุงเทพฯ

Trajanicized characters in the banner at the top of an advertisement for a new, expensive hotel in Bangkok; the first line means '5 years of pride'; in the second line, the first word is the name of the hotel and the second word is the name of the city.

รอยัลปรินเซส

The name of the hotel printed in usual, non-trajanicized Thai characters, taken from the same advertisement.

ทรายี่ห้อ เดียวเท่านั้น
ที่มีสมองทล หรือ CPU หลายตัวใน 2 ตู้

Trajanicized characters in the banner at the top of an advertisement for a computer-ized private switchboard for telephones.

ที่มีสมองทล หรือ CPU หลายตัวใน 1 ตู้

A line from the same advertisement, containing four of the same Thai words printed in usual, non-trajanicized Thai characters.

Figure 12. Examples of type for printing the Thai script.

One comes from an 1828 issue of the *Cherokee Phoenix*, the official newspaper of the Cherokee Nation, and shows the newspaper's name in both Cherokee and English; the other comes from a broadside prepared by missionaries to show the script.

Trajanicized characters used for their cultural implications

Just as Tsar Peter the Great trajanicized Russian printing as a part of his effort to give all of Russia a western appearance, a number of other languages have developed trajanicized versions of their own writing systems which can suggest that they, or the things associated with them, are westernized and are therefore modernized. The Thai and Hebrew languages provide two very different examples of how this can be done.

The Thai language, as it is printed in advertisements in Thailand, often contains characters that are trajanicized, apparently to show that the things being advertised are modern and technologically advanced. *Figure 12* shows several examples of such printing, with comments on the words that are trajanicized and on the things that are advertised.

When the Hebrew language was revived as a language for everyday use at the end of the nineteenth century, the resulting Modern Hebrew language retained the grammar of Biblical Hebrew, but its vocabulary was expanded so that it could function as the language of a modern, technologically advanced nation. Modern Hebrew also retained the typographical conventions of Biblical Hebrew, except for the addition of some monoline typefaces; it has only one (or two) basic shapes for each letter,¹³ and for its typefaces which are not monoline, the axes of greatest width are horizontal.



Trajanicized book face:

a) upright upper case

b) upright lower case

c) sloped upper case

d) sloped lower case*

Trajanicized upright fat face:

e) upper case

f) lower case

Upright monoline face:

g) upper case

h) lower case

*as is the case for many Roman/Latin typefaces, the sloped lower-case characters are less trajanized than the others.

Figure 13. Six letters in their upper and lower-case versions from four of Schonfield's Hebrew typefaces.

However, there was once a proposal (Schonfield 1932) that the Modern Hebrew language should be provided with a typography which would be trajanicized and which would have upper-case and lower-case letters, both upright and sloped, so that it would look and could function like the typographies used for Western European languages. The author of this proposal stated his belief that, without such a change, the Hebrew writing system would serve as a brake on the development of the Modern Hebrew language and the literature and society which used it.¹⁴ (His purpose in trying to give printed Hebrew a westernized appearance was therefore the same as Peter the Great's purpose in revising the typography of Russian.) Schonfield designed upper-case and lower-case basic shapes for each Hebrew letter, he chose several body and display typefaces of the Roman/Latin script as his models, and for each of those typefaces he designed characters having his basic shapes. All of the typefaces which he designed (except for those that were monoline) were trajanicized. The first six letters for four of his typefaces are shown in *figure 13* in both their upper-case and lower-case versions. Although Schonfield's proposal failed to be popularly accepted, it provides an example of how the entire writing system of a language can be systematically trajanicized.

Summary

The term "roman," when it is used for describing characters of written languages, is confusing because it is overloaded with four different meanings. In order to discuss the characters of written languages unambiguously, it will be helpful for us to have synonyms for each of these meanings which we can use when we need to make our meaning clear.

When referring to the set of characters to which it belongs (viz. the alphabet that was originally used for the Latin language and has now evolved into an enlarged system that is also used for writing other languages), a "roman" character can be called "Roman/Latin."

When referring to the angle at which it is written, a "roman" character can be called "upright."

When referring to its basic shape, a "roman" character can be called "Roman-shaped."

When referring to the detailed features of its shape which show that it is modeled after the characters in certain Roman monumental inscriptions, a "roman" character can be called "trajanized."

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Endnotes

- ¹ There are some phrases, such as the commonly used one "sloped roman," which include contrastive contexts which make clear the intended meaning of "roman."
- ² In order to save confusion in this paper, I have always referred to these characters as the "Roman/Latin" script, without using any of the possible alternative terms such as "Latin/Roman," "Roman=Latin," "Latin-or-Roman" or "Roman i.e., Latin."
- ³ There is a curious paper by Stanley Morison (1926) titled "Towards an ideal italic" in which he moves from one meaning of this word to the other. He begins by saying that "the quality of slope is no true test of an 'italic'" (95) and ends by saying that "the perfect italic is...a slanted roman" (121).
- ⁴ These characters are drawn so that they appear to be composed of straight lines and smooth curves, even though the lines of which they consist are sometimes not quite straight and the curves are sometimes not quite smooth.
- ⁵ The first printer's type for such characters was made with its widest strokes parallel to an axis rotated counterclockwise from the vertical. This axis of greatest width was subsequently rotated clockwise until it reached the vertical. Because this change of axis occurred gradually, and because typefaces with the original axis of greatest width, the vertical one, and many intermediate ones are now in regular use, characters with all such axes of greatest width can be regarded as characters of this kind.
- ⁶ The first printer's type for such characters was made with tapered, filleted serifs, but in later years, serifs were changed in shape and became narrow, straight lines. Because this change occurred gradually, and because typefaces with tapered, filleted serifs, with narrow, straight serifs and with serifs of many intermediate shapes are now in regular use, characters with all such kinds of serifs can be regarded as characters of this kind.
- ⁷ It should be noted, however, that the capitals were only one of several more-or-less-formal, more-or-less-similar, chisel-carved, pen-written and stylus-scratched styles of writing that were used by the Romans for writing the Latin language (Gray, 1960, 15).

⁸ For the sake of our discussions of printed characters, it may be convenient to define several other ergaleions. Characters of any script written with lines of essentially uniform width would be examples of the “monoline” ergaleion. Characters written as though they were produced with a Chinese writing brush would be examples of the “maobi” ergaleion, from *maobi*, the Chinese name for that brush. Cuneiform characters would belong to another ergaleion. The term “ergaleion” does not have the same meaning as the term “ductus” which has also been used for describing written characters. The characteristic features of a ductus result from how a tool is used, and the same tool may produce more than one ductus; the features of an ergaleion result from the choice of tool itself.

⁹ The present-day Cyrillic script imitates the present-day Roman/Latin script in that its lowercase sloped characters are less trajanized than its others and its uppercase sloped characters are sloped versions of its uppercase upright characters.

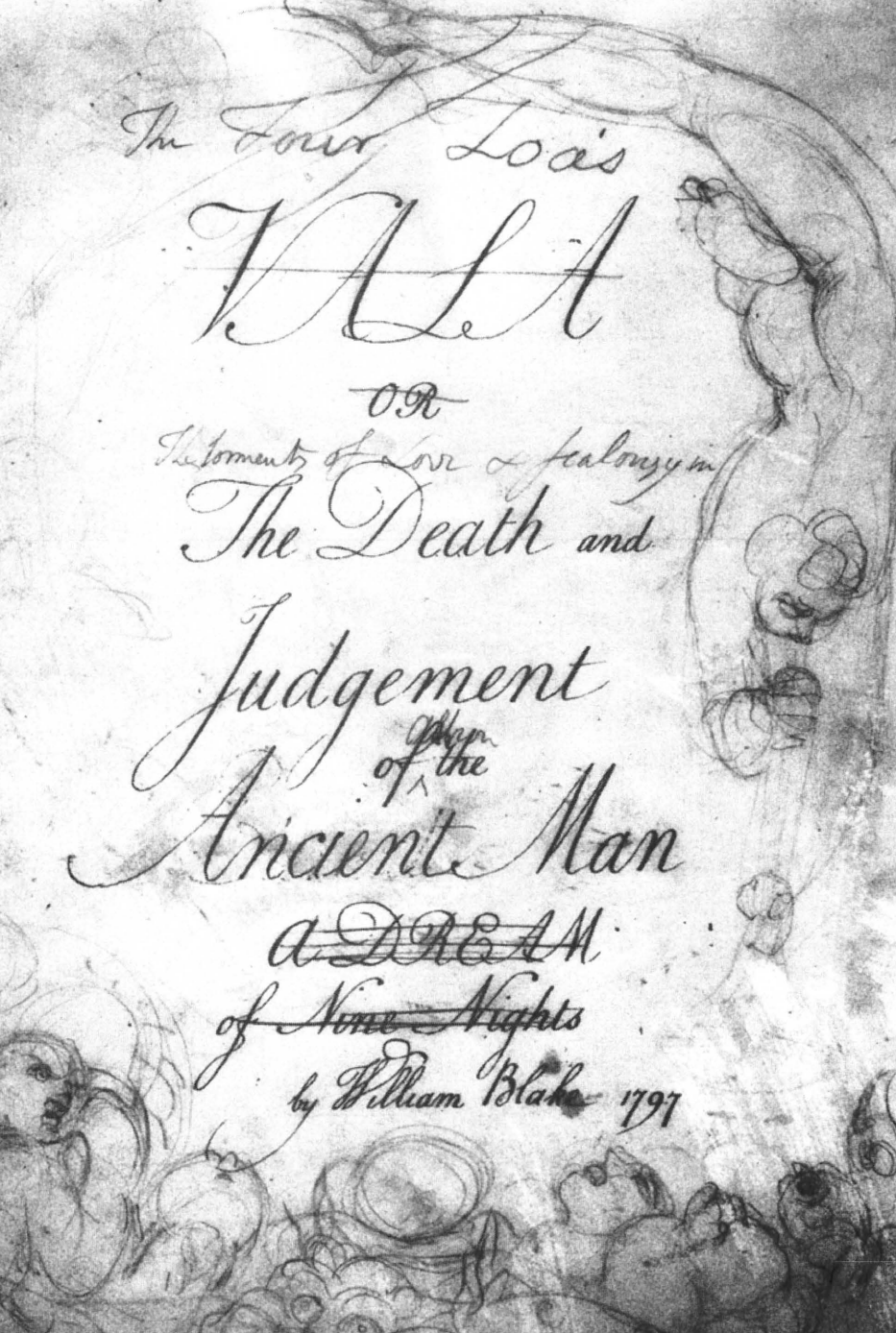
¹⁰ The term “Hellenic script,” like the term “Greek language,” refers to several different entities that have existed during different eras. Further study is needed in order to decide which of its stages should be described as different scripts.

¹¹ “As I had already in 1952 designed the supplementary Greek characters to my [Roman/Latin] Michelangelo type, they appeared in 1953 as Phidias.” (Zapf, 1970,48)

¹² Although some Roman/Latin characters may seem to occur in the Sequoyah script, their correspondences to the sounds of Cherokee are completely unlike the correspondences of these characters to the sounds of any European language. Sequoyah apparently used them simply as available shapes.

¹³ In Modern Hebrew, as in Biblical Hebrew, there are five letters, each of which has two basic shapes, one being used at the ends of words and the other being used elsewhere. The orthography proposed in Schonfield 1932 did not have separate basic shapes for use at the end of words.

¹⁴ Schonfield’s book includes a highly approving introduction by Stanley Morison.



The Four Zoas
VALA
OR
The torments of Love & Jealousy in
The Death and
Judgement
of the
Ancient Man
~~A DREAM~~
of Nine Nights
by William Blake 1797

Figure 1. Page 1, *The Four Zoas. Night I*. Pencil Drawing.

Becoming-zoa

Ron Broglio

The political, economic and print machinery of the 1790s brings Blake to a moment of crisis and visionary insight made evident in *The Four Zoas*. This essay questions the notion that *The Four Zoas* is simply a manuscript. A look at the complex politics of printing in the 1790s suggest that the *Zoas* is part of Blake's working through the problems of publication during the reign of a conservative, nationalistic government at war with France. To begin with, *The Four Zoas* is written on proof sheets of Blake's illustrations to Young's *Night Thoughts*. This detail leads to an examination of two types of literature in the mid-1790s, state approved literature and state censored literature. Blake's work is at a crossroads between the two since he wants to produce a lavish illuminated folio like the Blake-Edwards edition of *Night Thoughts*, but also include radical material that would be censored. Standing between printable national literature and banned anti-government works, Blake's *Zoas* is a highly unstable text which because of its instability defies and critiques the political, economic and industrial machinery of publication during the turn of the century.

Blake's construction of the *Zoas* makes the act of reading both traitorous and insightful. Editorial marks, multiple ways of arranging pages, and lined and etched drawings become part of the system of signification for the verbal text. Words, phrases and images in the *Zoas* are so deeply overdetermined that the reader struggles to produce meaning via ordered patterns of relations without shutting down or shutting out the surplus of possible readings. In order to keep a maximum of possibilities open, I devise a method of reading involving "vector" relationships. I use pages 99 and 100 of *The Four Zoas* as an example of the complex nexus of lines, marks, drawings, words and spacings made visible by a vector reading. Ultimately, Blake envisions that the dizzying experience of reading will open the readers' "doors of perception," challenging the way readers think about texts and the interface between text and world.

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By the mid 1790s William Blake has left traditional printing methods behind. He has also forgone much work in commercial designs and instead has taken up writing a series of small illuminated prophecies. But forced to make a living and finding no audience for his own illuminated poems, in 1795 Blake takes on a commission to illustrate a new edition of *Night Thoughts* by the mid-eighteenth century graveyard poet Edward Young. Yet, even as he is working on this commission, Blake begins writing his own epic prophecy on the discarded proof sheets for his engraved designs of *Night Thoughts*. While his commission ends in 1797, Blake continues his own epic poem, *The Four Zoas*, for another ten years. Most scholars consider the poem an unfinished manuscript abandoned after the poem was completed but before Blake could incorporate late additions and editorial rearranging of the text into a fair copy for print (see figure 1). Consequently, *The Four Zoas* is not often read as a work that stands on its own; rather, it is considered the rough manuscript used to work out ideas for Blake's later epic poems *Milton* and *Jerusalem*.

Due to the sheer unwieldiness of *The Four Zoas*, this text becomes classified as an abandoned manuscript and a workshop of ideas for his later poetry. While readers of Blake are accustomed to the weaving of multiple levels of material into a disjunctive narrative, *The Four Zoas* is simply too demanding and too Blakean even for readers of Blake. Texts of Blake are often made more accessible by reading through the lens of archetypal criticism that makes analogies between the strands of meaning that weave through his poems. In an archetypal reading each of Blake's main male characters has an Eternal Name (Luvah, Urizen, Tharmas, and Urthona) as well as a Time Name (Orc, Satan, Covering Cherub, and Los) and has a particular female counterpart or "emanation."

The male characters accompanied by

their emanations are related to the senses (Nose, Eye, Tongue, Ear), and parts of the body (Loins, Head, Heart, and Legs) as well as elements in nature, cardinal points and regions of Blake's universe.¹ My own reading of Blake privileges the minute particulars of Blake's texts over the abstract generalizations of archetypal criticism to help make sense of why Blake would leave *The Four Zoas* in the contorted state critics have called a "manuscript." By connecting the detailed points of the text through what I call a vector reading, I arrive at an understanding of *The Four Zoas* not as a manuscript but rather as an impossible text, a text that defies normalization of any print apparatus and evades British regulations of the 1790s that would censor Blake's revolutionary text.

As a means of proceeding, I have randomly chosen a particular leaf of *The Four Zoas* as a nodal point from which I intend to follow a series of vector relations. Vectors are the traveling of a minute particular in a text and its contextual meaning across the field of the text from the standpoint of another minute particular through which it travels and which provides the vector's directedness. The notion of vectors takes seriously the idea that "the words [and other textual details] of the plates have their own plots."² Not all the passages that would be considered "important" by an abstract scheme of archetypal criticism have relevance to the convergence of vectors, and some of the "less important" passages take on new found value. The "noise" of the text — its inconsistencies, materials of production, history of production, stray marks, editorial instructions, etc. — becomes increasingly relevant for the production of meaning.³ Investigation into this particular leaf has uncovered a quality of relation between Blake's figures I call transformation or becoming. Such a quality is antithetical to archetypal criticism's dependence on similarity as a method of scanning a text. Rather than looking for moments of similarity and conformity in a character's action, my attention to minute particulars assumes a stance of textual difference between any sections of the text. Radical difference without a grounding in similarity allows for the possibility of transformations, changes which un hinge the "character" from his/her locus of identity.

I have chosen the opening of the chapter called "Night Eight," pages 99 and 100, as the starting point for reading *The Four Zoas*. Having taken Night Eight as a starting point, a new series of questions arise in the inquiry of minute particulars. For example, what are the possibilities for the production of Blake's Night Eight of *The Four Zoas*? How is Night Eight possible? The words of the text are written on a proof sheet for Blake's illustration of Young's *Night Thoughts*. Richard Edward's edition of *Night Thoughts* which Blake illustrated is possible materially because of Whatman's new mills for the production of high quality folio paper in England and because of the rising demand for engravers at the end of the eighteenth century. *Night Thoughts* is made possible economically by the rise in popularity of the graveyard poets and folio editions of literary works. The rise of a national literature, which after 1793 feeds a national pride as Britain goes to war with France, creates a demand for sumptuous

editions of poets such as Shakespeare, Milton and even Young. And so in reading Night Eight of *The Four Zoas*, it is useful to inquire into its history of production. Such a history entails both how Blake is commenting on Young's text and its historical context as well as how Blake becomes proficient in using illuminated manuscript to verbally and visually depict the transformation of characters and objects.

There are two types of change at work: 1) Blake's reappropriation of the proof sheets of *Night Thoughts* in order to work against nationalism and 2) the metamorphosis of characters and objects in illuminated texts to confound identity based on similarity and repetition. As we shall see, transformation of objects and characters becomes a means of thinking revolutionary and political change.

1793

1793 presents Blake's work with the question of what is national literature, and as we shall see later, the political transformation of literature in 1793 opens the more abstract question of how to transform the writing surface. The war with France begun in 1793 provides conservatives in the English parliament with an excuse for tightening control at home and extending the grip of the State into the lives of its citizens. (Blake personally feels the overly zealous grip of the Law when in 1803 at Felpham he is arrested and charged with sedition.) To produce literature at the time of war is either to become a part of the State machine via national literature or to defy the State and to risk arrest via subversive literature; the options are appropriation or condemnation under the Law of the State.

In May of 1792, partly in anticipation of Part Two of Paine's *Rights of Man*, a royal proclamation against "wicked and seditious writings" tightens government control over authors, printers and distributors. Prime Minister Pitt explains to Parliament that "principles had been laid down by Mr. Paine which struck at hereditary nobility, and which went to the destruction of monarchy and religion, and the total subversion of the established form of government."⁴ In November, Lord Grenville and Henry Dundas, Home Secretary, vigorously urge enforcement of the May proclamation. Within a week another royal proclamation against seditious materials is issued. During the year 1793 more prosecutions for sedition occurred than any other year in the tempestuous decade of the 1790s. Nonetheless, persecution and threats by the government continue till the end of the century with suspension of habeas corpus (1794), the Two Acts (1795), Suppression of Seditious and Treasonable Societies (1799) and the Combination Acts (1799 and 1800).

With the pursuit and prosecution of Paine and Paineites, the government places limits on the debate about constitutional reform. Paine claims that Britain as yet did not have a constitution. He proposes to herald the Age of Reason in Britain with a constitution similar to that of the French Republic. Pitt is correct in seeing that such a claim would lead to "the total subversion of the established form of government." Later reformers tried for sedition such as John Baxter and Henry Yorke are forced to appeal to "the existence of our constitution" and couch their subversive politics in nationalist terms by an appeal to "our ancestors."⁵ In seeking to enter the conversation of political reform, all participants are forced to recognize their subjugation under the present form of government. Either reformers such as Paine and Priestly overstep the limits of the debate and are subjects of prosecution and public scorn or the terms of the debate prevent politicians such as Baxter and Yorke from challenging fundamental tenants of the government: monarchy, heredity, property and the Church.

So, the question becomes how to write without falling under the either/or demarcation of nationalist or traitor. How can Blake escape subjugation under the State apparatus and State ideology? A simple answer might be to write but not to publish. But the decision not to publish would be a decision not to publish *now* because of social circumstances. This would still make Blake subject to State apparatus since he would be responding to the ideological and legal force of the Pitt government. Thus, social confines affect not only published texts but also those texts that in other circumstances would be published but for political reasons cannot be published at the

present. Withholding publication is still under the tyranny of the State, under the threat of the Law, "To defend the Bible in this year 1798 would cost a man his life. . . I have been commanded from Hell not to print this as it is what our enemies wish" ("Annotations to an Apology for the Bible" 611).⁶ To write and not fall under the tyranny of the State is impossible.

As will be shown, *The Four Zoas* is an impossible text. Its complex amassing of minute particulars which are unreproducible in print technology defies the desire to print the text and yet is not a refusal to print. Its narrative disjunctions, eruptions of novelty and vector connections confound a State apparatus which makes all citizens subjects — both subjects of State law and a discourse which serves the law through its ideology.

1797

Consider that the first leaf of Night Eight of *The Four Zoas* is written on a proof sheet of Blake's illustration for the Edwards edition of Young's *Night Thoughts* (see figure 2). *Night Thoughts* is under the scrutiny of the State; it is part of a national literature, the rise in popularity of the graveyard school of poets. While Blake's illustrations drawn from 1795-97 are used for this national literature, Blake reappropriates sheets of *Night Thoughts* for the *Zoas*. Illustrating *Night Thoughts* entails mis-illustrating. The "bad" copies are used by Blake for his own work. This in itself upsets the value system that selects the printer's copy as valuable and considers rejected copies as valueless. As we shall see, the bad copy returns to haunt the good copy, to transfigure the figure from the good copy of *Night Thoughts* into something unexpected. Consequently, *The Four Zoas* undoes this privileging of the printed copy as the good copy or "correctly" drawn copy. Consider the *Night Thought* illustration to be but one moment in a series of sketches and reworkings of an image. There is no point of arrival, no goal, to provide stability to the image; it is always becoming something else.

A flawed proof sheet for page 24 of *Night Thoughts* is used by Blake for page 99 of his own work, *The Four Zoas*. The flaw serves as a starting point for reading *The Zoas*. A foot is redrawn on page 99. It is not the long toed, awkward left foot which is redone, but the firm-footed, stable right foot. Harold Bloom reads the left foot as symbolically impermanent, incomplete, (Erdman 915) and thus the right foot would be the sure foot, permanent and essential. On page 99 it is the essential foot, the right foot, that is changing. Along with this change comes the destabilization of identity.⁷ The territory of the

body begins to deterritorialize. The foot is no small matter in the *Zoas*. In Night One the Spectre issues from the feet of Tharmas, thus dividing him. In Night Two, Vala does not recognize her beloved Luvah except for his feet; the foot marks his identity. The foot is power: Orc's feet nailed to a rock or Los's unleashed in stamping the nether abyss, the power of stars around the feet of Urizen or Ahania submissiveness at Urizen's feet. On page 99 the big toe is redrawn, once next to the foot and again at a half-inch distance from the foot where a big toe appears on the banks of water or clouds. Power and identity, found in the "rightness" of the foot, are redrawn and, in being redrawn, their lines begin to unravel and transform. What will become of this figure?

From out the Womb of Thomas receiving them
 Into his hands. Then Methusalem creeps down in a baby's posture
 And calls the beams Collection in their forms he won the Specter
 Books of Negation saying falling sideways to throw away
 Dispar from the poor wandering Specter and his loved them
 With a parental love for the form hand composition here
 Has upon the hammer & the form construction here
 In Epiphany looking down the daughter of Babelah and
 With joy the bright night & in of a human form
 And knew he was the answer even joy & they worshipped

Jan. 1800 c.

2

~~And Methusalem~~ Methusalem the daughter of Babelah
 And Methusalem delighted in notes of Babylonian
 And Babelah stood astonished looking down to the ground
 They saw the answer beyond the pit of death & destruction
 For neither they could understand they saw the form
 Or whether they could understand till they saw the form
 Surrounding them in all their joy in a death & hell

Methusalem was in love saying long of lamentation
 And judging comfort as the night with on the word the Specter
 Also the Specter being which Methusalem was
 Open within their hearts & in their bones & in their brain
 To Babelah & the dead in the descent from the River
 Of Wagon & Thomas & from the Madrigal families
 And some were more ^{troubled} & some joyful & some three fold
 In head or heart or brain according to the father's order
 Of most merciful joy & compassion to the Specter's dead

But Wagon his mighty rage let loose in the mid sleep
 Speaks of Don affliction and from round his frozen limbs
 Mouthed forth a note he found saying the words of iron
 The drops & million millets cast in yellow glory & word
 Tapes on perhaps steel & round unbroken shells & wheels
 And chains & pulleys fabricated all round the towers of joy
 Commencing with the trumpet of joy in dark determination
 And with the organ of Satan in each thunder
 To determine the death of her & her bright Methusalem

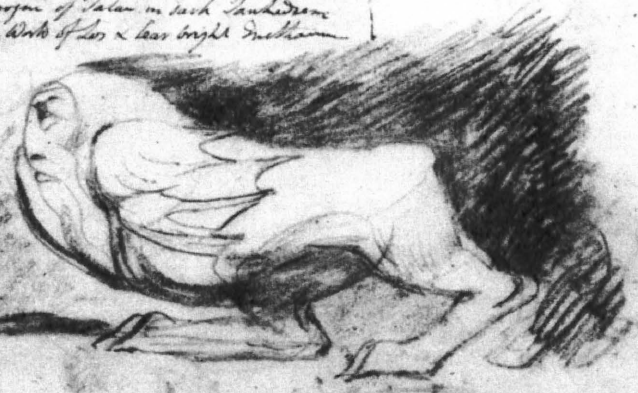


Figure 3. Page 100, *The Four Zoas*. Night VIII. Pencil and chalk drawing with chalk shading.

Before we look at what the figure is changing into, let us inquire into what it is changing from. What is this character with scythe and wings? In brief, the figure is an analogy. Dress up a man, put wings on his back and a scythe in his hand and now he is Father Time. According to the *Night Thoughts* text the line being illustrated is "Time, in advance, behind him hides his wings." Analogy is not transformation. Analogy is based on similarity while transformation is based on difference. Analogy uses an idea of difference based on mediation of difference by a higher concept. Analogical thought respects the governing or mediating concept which subsumes difference. Such thought is based on imitation. For Blake, the Daughters of Memory who work from Imitation are lesser than the Daughters of Inspiration who awaken the Imagination to creation over allegorical representation. The concern in page 99 is not for identity based on similitude but for Vision by transformation. Archetypal criticism that works by analogy fails. Blake's transformational becoming-other is not a reproduction of the same.

Sameness and imitation serve as traps for the engraver of the late 18th century. It is the artist working with oils who creates, while the engraver is hired to reproduce the works of the oil painter. The divide is between artists and craftsmen. Furthermore, print makers show concern that each print of an illustration come out as similar as possible to the one before it in order to standardize a product for the commercial market. Blake's methods of intaglio printing maintains an element of randomness and uniqueness to each print. Blake is capable of making commercial prints when necessary, but of interest here is his move toward blurring the line

between artist and craftsman and his move away from standardization as a means of commercial mass production. By using proof sheets from *Night Thoughts*, Blake deterritorializes the commercial venture. He unravels the territory, power and meaning of commercial printing. He interrupts the flow from engraving to print to bound book by taking misdrawn engravings as the starting point for an-other unbound text. One means by which Blake escapes the constraints of nationalized literature and the constraints of commercial production is by transforming the nationalized work for profit, the folio edition of *Night Thoughts*. While Edwards wants to market to the public correct and standardized engravings, Blake uses the "flawed" engravings as unique moments for his Vision.

1800

The right foot is redrawn — twice (see figure 4). Something is about to change. Look at the illustration on page 100. Again there is the face and beard of an old man as on page 99. Again there are wings. Again there is a stable right foot and a left foot in motion. But this is not a man, nor is it an animal, despite the lion- or tyger-like body, despite the horse- or deer-like legs. Not man nor animal, this is becoming-animal of a man.⁸ In the body organized by organs, in the organism, each body part takes on a habitual way of functioning. Habit is standardization and mechanization, performing the same action again and again over time. Thus organs take on different functions and each function distinguishes itself. Consider Los who in *The [First] Book of Urizen* and *The Four Zoas* continually swings a hammer in forging body parts. His mechanized motion turns his actions into habits till “he became what he beheld.” Los gains limbs by reducing his motions to redundancy and thus limiting the freedom and possibilities of these limbs. Becoming as a transformation of the organs is bodily thought as opposed to rational schematization.⁹ Becoming opens the organs to new dimensions, opens “the doors of perception” as Blake claims in *The Marriage of Heaven and Hell*. Instead of the same forces acting on a body for the same functions, new forces are applied so that the body functions differently and so that no organ remains caught within the redundancy of identity. Becoming follows a line of flight, a toe that refuses to stay in its place, for example. By redrawing the foot and then again redrawing the toe, mimesis is called into question. No longer does the drawing of a foot represent a foot. Instead, it is an abstract series of lines. Page 100 is filled with random lines not representing any object. Some of these lines reconfigure into an object at the bottom of the page.

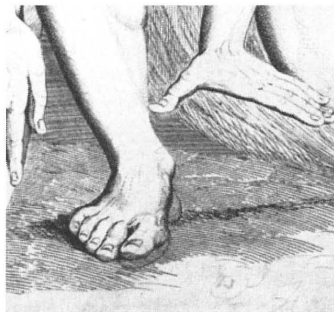


Figure 4. Detail of page 99, *The Four Zoas*.

In physically turning page 99 to read the verso side, page 100, the reader participates in the process of bodily thought that breaks redundancy of identity. By a flip of the wrist and a turn of the page, the reader becomes the agent of change. Moving from page 99 to page 100 the figure shifts between FatherTime and a half man, half animal form. Notice that it is not only the eye that reads but also the hand and the wrist. Blake makes us aware of reading as a bodily process in which readers give over their whole bodies to the process of reading. There is no

longer a safe distance between the eye of the reader and the material (of the) text. As the eye shuttles between Father Time and the man-becoming-animal, and as the hand flips between two temporal and spatial moments of reading, the reader is drawn into the text and made aware of his/her participation in the act of reading. In this way Blake breaks the redundancy of identity common for the complacent reader who keeps a safe space between him/herself and the text. Blake hopes to have the reader call into question his/her role and thus "open the doors of perception."

While the figure of page 99 looks to his left toward the text, the figure on page 100 emerges from the darkness of a future description and looks toward the past page, 99. The two figures face each other, one of the

past (99) and one of the future (100-02). The futurity which Urizen has dreaded since Night Two is now facing the past. The text itself describes two creatures hovering over the Fallen Man, "Two winged immortal shapes one standing at his feet/Toward the East one standing at his head toward the west." It is worth noting that because many of the lines regarding wings are crossed out in the *Zoas* "manuscript," the *Zoas* in the Erdman *Complete Poetry and Prose* edition gives little attention to wings on pages 99 and 100. In contrast, the "manuscript" shows a much larger concern for wings. Not only are the figures on these pages winged, but also five deleted lines in the right margin or wings of the manuscript are marked through. These lines describe "other wings" in addition to the ones in the body of the text. Are we to disregard the crossed out margins in the wings of the text or are we to read the crossing out and recognize this moment in the text as a struggle between winged creatures — Father Time and the man-becoming-animal? Here we see Blake playing against print technologies and editorial conventions. These wings as "other," in the margins and crossed out, makes them virtual or suspended. It is *possible* that the body of the text can stand alone without a winged margin; however, it is *also* possible that since a winged margin does exist — highlighted by the lines which mark its deletion — the transformation from feathered wings to bat wings is intensified.

With the problem of wings in the margins we see how the visual placement of text and verbal words of the text play off one another and amplify resonance. The visual transformation of pages 99 and 100 illustrates the "War of Urizen and Tharmas" (page 99) in which the corpses of the dead reanimate into a new protean mass for further battles:

*They humanize in the fierce battle where in direful pain
Troop by troop the bestial droves rend one another sounding loud
The dire confusion till the battle faints those that remain
Return in pangs & horrible convulsions to their bestial state
For the monsters of the Elements Lions or Tygers or Wolves
Sound loud the howling music Inspird by Los & Enitharmon Sounding
loud terrific men
They seem to one another laughing terrible among the banners
And when the revolution of their day of battles over
Relapsing in dire torment they return to forms of woe
To moping visages returning inanimate tho furious
No more erect tho strong drawn out in length they ravin
Flatten above & beneath & stretch out into bestial length
Weakend they stretch beyond their power in dire droves till war begins
Or Secret religion in their temples before secret shrines*
(Erdman 374; 101:45-102:13)

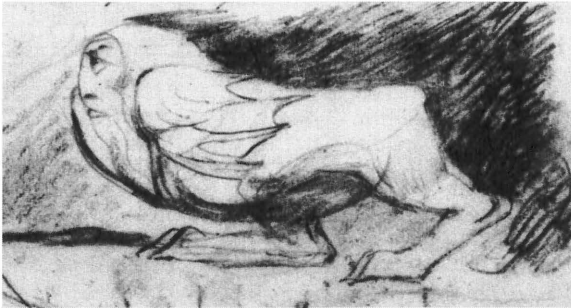


Figure 5. Detail of page 100, *The Four Zoas*.

The "They" functions as an amorphous mass which takes on various forms depending on the forces at work upon it. Unformed matter is forced to humanize by the resounding noise of "instruments of sound" and takes on the attributes of a pack of animals rending one another to pieces. Eventually the humanized troops force the battle to humanize, "the battle faints," and the animal attribute becomes attached to sound, "Sound loud the howling music."

The troops themselves become a phallus (see figure 5), erect in war and then limp

*Relapsing in dire torment they return to forms of woe
To moping visages returning inanimate tho furious
No more erect tho strong drawn out in length they ravin*
(Erdman 374; 102:8-11)

The drawing on page 100 has bat wings. Since more than analogy is at work, wings of Time from page 99 do not simply translate into bat wings. The bat wings replace arms and feathered wings. What guides transformation in becoming is not similarity but rather a constellation of vector forces applied to an object. The war forces have been evident since Night One. Likewise, weighing animal against man begins in Night One. In dire misery, Enion laments that "The Horse is of more value than the Man. The Tyger fierce/ Laughs at the Human form. The Lion mocks & thirsts for blood" (15:1-2). And also, sexual division has played its role in the narrative of the "torments of love and jealousy," as the poem is subtitled. The phallus combines with the troops of war and the animals to express at various levels the conflicts of the narrative.



Figure 6. Detail from page 42. Night III. Pencil and chalk drawing.

Granted the figure on page 100 does not look overtly phallic but the protruding head does look like a penis. What makes the phallic attribute evident is actually the bat wings. Page 42 (*see figure 6*), shows clearly a bat winged phallus, another flying bat winged phallus appears on page 134.¹⁰ Thus, the constellations of war, sexual division, and the animal attributes of both move the line of the deterritorialized right foot into a human becoming lion-tyger-wolf-bat winged-phallus. As readers, we

are affected by the vector relatedness of textual elements. We have to re-member the various dismembered fragments of text. We are given the most difficult task of assembling the forces of war, animality and sexuality which surface at various moments in the text. There is no grand scheme to Blake's text outside the reader's assembly of fragments and forces. Objects throughout the text apply a force and move with a trajectory toward the point in the text under scrutiny; here pages 99 and 100. As trajectories of contending objects pile one on the other and as distances between converging objects increases, readers strain their faculties of memory to recalling past occurrences of words and strain their faculties of imagination to combining these occurrences. In this sense the readers experience dilemmas similar to those of Blake's characters who forget lost or fictionalized origins, who struggle to combine objects and who forge new configurations.

The figure on page 100 is effected by such a constellation of vector forces that it takes on multiple forms, none of them fixed or certain. Just as the bat-winged phallus pulls together various narrative tensions, so too the words on pages 99 and 100 attempt to pull together these same narrative forces. In both versions of the text's Night Seven, the instigation of action for the Night is Urizen's attempt to win victory over Los. Night Seven (a) works with the sexual division plot. Urizen plots to destroy Los by luring the shadow of Enitharmon down the tree of Mystery. Heeding the cries of Orc, the Shadow of Enitharmon descends the tree of Mystery where, by dialogue and sexual union with the Spectre of Urthona, she becomes pregnant and gives birth to dead males without female counterparts who burst from their tombs. After dialogue with the Spectre, Los and Enitharmon build and weave forms for the dead. Seven (b) develops the war plot. Urizen assembles his troops for victory in battle against Los. Orc, jealous that Vala is the harlot of Urizen and Los, takes on a serpent form and enters the war. Luvah is nailed to the tree. Orc rends the Shadowy female and/or Vala who meets Tharmas. And as in Seven (a), so too in Seven (b) dead burst from their tombs. The war plot and the sexual division plot come together in pages 99 and 100.

This coming together becomes evident in the last lines of page 99 and the first lines of page 100:

[page 99]

*She sighs them [the dead] forth upon the wind
Of Golgonooza Los stood receiving them
For Los could enter into Enitharmons Bosom & explore
Its intricate Labyrinths now the Obdurate heart was broken*
[page 100]

*From out the War of Urizen & Tharmas receiving them "Los stood &c"
Into his hands. Then Enitharmon erected Looms in Lubans Gate
And called the Looms Cathedral in these Looms She wove the Spectres
Bodies of Vegetation*

(Erdman 372; 99:24-100:4)

Moving from 99:25 to 100:2, the passage could just as easily have read "Of Golgonooza Los stood receiving them/ Into his hands." The last two lines of page 99 seem to be a late addition. They have a unique position in relation to the rest of the body of the text on this page since these two lines are written over the illustration of Father Time. These lines look back toward page 90, the end of Night 7 (a) and the sexual division plot. The first line of page 100 recalls the end of Seven (a), the dead as "victims of the battle," and the war of Seven (b) as well as looking toward the war on pages 101-02.

Between 100:1 and 100:2 is a note to insert "Los stood &c" Erdman speculates that Blake considered bringing in the end of Night Seven (a) 90:2-64 at this point. This idea was abandoned since page 90 could tighten the ending of Seven (a). Left as is, "the thematic material of 90, amplified with marginal additions, seems all an amplification backward from the 'Looms in Lubans Gate' in 100:2" (Erdman 840). Thus the marginal note "Los stood &c" distorts the narrative sequence. Page 90 mingles briefly with page 100 in superimposition, or page 100 is amplified by resonating with page 90. *The Four Zoas* often repeats a brief sequence of words in order to signal a shift in the narrative.¹¹ In this case, the narrative on page 100 repeats the weaving which has already begun on page 90. Drawing a vector line of force from page 90 through 99 to 100, the repetition of "Los stood" picks up new images of divinity from page 99 thus adding to page 100 the "Divine hand" and "the Savior Even Jesus." Additionally, page 100 moves back into the war cycle which remains unresolved at the end of Night Seven (a & b).

The move back into the war cycle is marked in the manuscript by a circled passage. At the editorial level the circle marks a transfer of the last nine lines of page 100 into the middle of page 101. Graphically, the circle brackets off the violent war passage from the hopeful restoration passage of weaving. The war scene is an-other territory, one marked with a circle to be moved or de- and re-territorialized. The war theme which is circled is then illustrated by the human becoming lion-tyger-wolf-bat winged-phallus at the bottom of the page. (Circling this passage recalls the Blake-Edwards edition of *Night Thoughts* where an asterisk marks the passage illustrated.) The circle around the passage corresponds to a circle around the groin of the human

becoming lion-tyger-wolf-bat winged-phallus. There is a playfulness here. Is the anatomical part being illustrated circled; and thus, circling the area of the penis means the illustration is a giant penis? The figure is twice marked, once by circling the verbal text and once by circling the groin of the figure. Consequently, the figure is intensified by this double circling. (It is also possible that the circling of the figure is a sort of question: can an illustration of a phallus have a penis? *A mise en abyme*.) The circle of the text and the circle of the figure resonate till the circles become possible points of intensification, in much the same manner as the resonance and amplifications of "Los stood &c" explained above.

It is not a matter of moving or not moving marked passages; "Los stood &c" and the last nine lines of page 100 with its war scene, "But Urizen his mighty rage . . ." Rather than relate passages serially — page 90, 100, 101 or move them into a new serial order as Erdman has done 90, 100 i, 101 i, 100 ii, 101 ii; of interest is how these passages defy a serial order. Present computer technology uses hypertext for non-serial relation. However, in *hypertext* one text is always visible above the other which remains covered or the two texts may remain beside each other but at a reduced rather than an amplified size. The marks of resonance in the Blake text call for a correlation between these passages without a causal relation between them. The passages inter-relate without either necessarily preceding the other (as in a narrative ordering and origin) or one on top of the other (hierarchies established in hypertext screens or bound books with sequential pages one before and/or on top of the other). *The Four Zoas* "in itself" as a non-published text, conveniently called a "manuscript," achieves resonance between passages without a hierarchy of causality or primacy by marking passages to be moved or inserted but at the same time not actually moving the passage, only marking them to be moved. Who will do the moving? Erdman as an editor, for example, must make decisions regarding *serial relation* of passages where the text establishes *resonances* between passages.

Plateaus of Becoming

The Four Zoas is more than a manuscript for an unpublished folio. Deterritorialized lines are part of the text. A published version of *The Four Zoas*, if such a thing were possible, would clean up stray marks and by doing so reterritorialize and make solid the flux and destabilization of the "manuscript." The foot would not be redrawn twice. The random vertical lines of page 100 would be re-inscribed within a pattern or design. Publication would mean erasing flying phalluses due to their distastefulness to the public. After all, following the advice of friends, Richard Payne Knight recalled his first edition of his study on Priapic worship because of bat-winged phallus illustrations (Paley 45). Blake is looking to circumvent the censoring of "little glancing wings" which "sing your infant joy" (Erdman, *Daughters of Albion* 51). Looking at the way the words, marks and figures of the *Zoas* interrelate, we begin to understand how *The Four Zoas* is an impossible text. Within the confines of State censoring of literature during the war with France thus making all literature National Literature or conspiratorial, within the confines of a traditional print market which seeks standardization and normalization of a text, within a market of copyright such that to re-use illustrations of the Blake-Edwards *Night Thoughts* (even if they are the bad copies) would be

illegal within a whole state and capitalistic apparatus, *The Four Zoas* is an impossible text. Of course, modern facsimile editions of *The Four Zoas* come the closest to reproducing the problems of the text "in itself." Yet, as I will argue later in this essay, the very materials used to produce a page in the 1790s and the method of production effect the text in a way different from a facsimile edition.

What Blake has achieved is a becoming-zoa, no particular animal, several animals at once, a bat, a snake-Orc-phallus, a feather-winged bird... The becoming, the transformation, does not stop.¹² There is no final goal, no teleological end to the assembly of vector forces. Rather there is a rhythm of territorialization, deterritorialization, transformation, reterritorialization and back again to deterritorialization. The term "manuscript" is used to denote a text which is in route toward publication — even if it never makes this destination. But *The Four Zoas* as manuscript has no such destination. The imperfections, editorial markings, line revisions, etc. of the text are so much a part of the text that it defies the State and commerce established dichotomy of publishable and unpublishable.

Thus far this essay has explained the domain of reading Blake's text by reading not just the verbal text but the verbal in conjunction and disjunction with the illustrations; yet, there are still other thresholds to explore. Not only the words and images but also the very material apparatus of the paper and ink deserve notice. These other levels of the text often remain overlooked by readers of *The Complete Poetry & Prose of William Blake*. And *The Four Zoas* facsimile edited by Magno and Erdman makes no mention of the Whatman paper nor the

printing ink. Nevertheless, the complex relations of the *Zoas* to State and commercial interests occur again at the micro-level of paper on which the text is printed, drawn and written.¹³

Whatman's paper which is used in the *Zoas* is tied to nationalism. At a time when most paper in England was imported from France due to poor quality paper at home, Whatman was selected as the English paper maker for the illustrations of the *Sepulchral Monuments* of Great Britain and the Society of Antiquaries' *Vetusta Monumenta*, both of which Blake drew illustrations for in the 1770s. Whatman issued a new extra large and notably durable paper made especially for these antiquarian drawings. Using Whatman paper linked antiquarianism to national pride even at the level of notably British paper. Such a nationalistic link increased during the war years. Once the nation was at war with France, the British paper industry became increasingly responsible for producing paper for books.

The woven 1794 J WHATMAN paper used for the *Zoas* is itself heterogeneous. The paper is a conglomerate of English rags amassed from sails, ropes (pounded with hammers), and clothing of rich and poor all held by a

glue made with 7-10 percent animal leather, usually of cattle but also of rabbits, calves and oxen — another level of becoming-animal. Additionally, paper has various colors. There is whitening by bleach (lucrative methods were patented in 1790s) and blueing by “blues” and smalt (grounds of glass which have been oxidized with cobalt). All this coloring is to prevent the yellowing of paper. The very paper as content or base of the *Zoas* at one level is at another level an expression and holding together of forces applied to the contents — blues, smalt, glues, rags, etc. The vector relations of variable forces in the text of the *Zoas* is doubled at the level of the production of the text’s paper.

Additionally, just as written texts increasingly fall under State law during the 1790s, so too paper becomes appropriated by the State by means of Excise taxes which come into effect in the early 1700s but are heavily revised between 1792-1794 and are raised due to the war. By the mid-1790s paper must be named, marked and dated. (Dating of paper is a court matter, as when Whatman testifies to the date of his paper in a 1770 trial of a counterfeiter.) Here the question of State appropriation of the writing surface re-appears. And the elements used to transform raw materials into paper re-appears in the verbal text of the *Zoas*. Paper is woven, and the character Enitharmon weaves. Ropes and rags are beaten with a hammer, and the character Los uses a hammer in his forging. The wooden frame used to lower a mold for paper into a vat is called “bellows,” much like the iron work bellows of Los. And the words “Bulls of Luvah” are written on paper made of an oxen glue.

It is not just the text and the paper of the *Zoas* which is heterogeneous but also the ink for writing and the acid used for biting the copper plates of the rejected *Night Thoughts* leaf.¹⁴ Thus, not only at the level of the text, but also at the micro-level of the making of the text there is a series of mixtures and of forces combining and becoming something new.

In 1793 Britain goes to war with France. In 1797 the Blake-Edwards edition of Young’s *Night Thoughts* (Nights 1-4) is printed, and Blake begins work on *The Four Zoas*. By 1800 the narrative of the *Zoas* is well under way, and Blake moves to the coastal village of Felpham. There he will become obscure, as will the *Zoas*. John Johnson asks Hayley “is our dear Blake dead.” He is not dead, or rather as Blake himself proclaims on several occasions, he has died several (as many as twenty) times (Erdman 316, 756). Blake is deterritorializing, unraveling his identity outside of recognizable boundaries, becoming-zoa. The text of *The Four Zoas* undergoes revisions beyond any hope of publication. Blake claims to have died. He is outside the State and commercial apparatus. Yet, Blake lives on, differently. The *Zoas* as impossible text is worked and reworked until in exhaustion it is put down around 1810.

1793 marks for Blake a transformation of what is possible and impossible in print. '93 opens a new space, a space for becoming-zoa. This space acts like a level and consistent plane, field or plateau which holds together heterogeneous forces. Converging verbal, graphic, material, political, commercial and personal vectors are held together in an intensive state. 1793, 1798 and 1800 are plateaus in which Blake creates from incongruous forces and unstable combinations. Plateaus find their expression in the pages of Blake's texts. Each page acts as a flat surface holding together converging vectors of disparate material. The act of holding together of divergent material intensifies the state of the surface. In 1793 Blake finishes *The Marriage of Heaven and Hell*, produces *Visions of the Daughters of Albion*, *America*, and *For Children: The Gates of Paradise*, and beginnings *Songs of Experience and Europe*. The flurry of activity and diversity of subject matter addressed in these texts suggests that something has taken hold of Blake in this year. Blake's work in the 1790s reveals increasingly complex combinations of forces which contribute to an effect that I've called transformation — the recognition of a ground not of similarity but of difference which propels an object into an overturning of its identity and a becoming-other. Transformation of an object, its becoming-other, forces the reader into the awkward position of continually questioning the identity and stability of any object or any event in *The Four Zoas*. Such an unsettling feeling keeps the reader alert and aware of the reading process and his/her role in the creation of the text's meaning.

The becoming or transformational quality of Blake's text, and even of Blake himself, had begun long before the *Zoas*. Its trace can be found in *Songs of Innocence and Experience* and in *America*. But '93, '97 and 1800 mark thresholds which, as Blake crosses over them, cause his texts to become increasingly intense. *The Four Zoas* resonates with an increasing instability and probability of collapse as Blake continues to add, combine and re-combine segments of the text. He garnishes an image here, a sketch there; moves a block of text, adds text from his *Milton* manuscript, and signals with editorial marks the moving of another block. Each year forms a plateau of creative intensity, and each page expressing that intensity leaves an afterimage, an effect that reveals the way Blake relates image to text and even his idea of a text itself.

In April of 1785 Blake produces his last Stothard engraving. While he will continue to do commercial engravings to earn a living, such work is a mere camouflage, a disguise of fitting into the social-commercial apparatus while working against it.¹⁵ In 1788 Blake produces his original stereotype printing, which becomes a means of expression counter to the sentiments of the age:

Blake used relief etching exclusively for original composition and never attempted to disguise it as another medium. Variations in inking and subsequent coloring — the products of both chance and intention — distinguish each impression from all others. In their means of production and basic characteristics, original relief etching and reproductive intaglio engraving are the “contrary states” of Blake’s graphic art. (Essick 120)

Blake’s poetry, illustrations, illuminations and even his process of producing them work by way of surface detail rather than abstraction — by immanence on a surface rather than by transcendence and removal at a distance, by Vision rather than Allegory. This means taking seriously Blake’s comment on his art in his “Vision of the Last Judgment,”

“not a line is drawn without intention & that most discriminate & particular <as Poetry admits not a Letter that is Insignificant so Painting admits not a Grain of Sand or a Blade of Grass <Insignificant> much less an Insignificant Blur or Mark>” (560).

This essay tries to attend to the details of the “Letter” and the “Blur or Mark.” By treating *The Four Zoas* as a manuscript of a work meant for publication, the modern machines of commerce have been able to capture the zoas, stabilize the text and move from manuscript to printed text. This is not to belittle the feat of such editors as Erdman. Capturing and territorializing the highly unstable *Zoas* is obviously a difficult task.

The task is difficult because becoming-zoa is meant to defy capture. A typeset and edited Blake undermines the Blakean project (Essick 120).

Edited and published editions of *The Four Zoas* often censor the sensual enjoyment of reading caused by a shuttling back and forth between images and words, and the enjoyment found in creating resonances and amplifications which result from engaged reading. The anomalies presented in the text often force editors into difficult positions. For example Erdman adds the “Globe of Blood” section to page 55 ii following a line in *The Four Zoas* reading “Bring in here the Globe of Blood as in the B of Urizen.” Erdman explains “Editors have shirked their duty heretofore, but Blake plainly wanted the *Urizen* lines inserted here” (832).

The question here is not whether editors shirked their duty or whether Erdman has over-extended his. Rather, ask why Erdman takes these lines of the text as a command to himself, Erdman as editor, but does

not find other lines such as “Los stood &c” as compelling to follow. Erdman’s addition to the *Zoas* can make the reader of the standardized and normalized *The Complete Poetry & Prose of William Blake* aware of the *Zoas* as a text which in the eighteenth century and even today defies conventional printing methods. To enter Blake’s text is to take up the challenge of becoming-zoa, of passing thresholds of the senses and crossing over to the plateau marked by *The Four Zoas*.

- ¹ Northrop Frye. 1947. *Fearful Symmetry: A Study of William Blake*. Princeton, New Jersey: Princeton University Press, 277-78.
- ² Nelson Hilton. 1983. *Literal imagination : Blake's Vision of Words*. Berkeley: University of California Press, 4.
- ³ Donald Ault. 1987. *Narrative Unbound: Re-Visioning William Blake's The Four Zoas*. Barrytown, New York: Station Hill Press, xi.
- ⁴ John Keane. 1995. *Tom Paine: A Political Life*. New York: Little, Brown and Company, 335.
- ⁵ E. P. Thompson. 1963. *The Making of the English Working Class*. New York: Vintage Books, 87-88.
- ⁶ All quotations of Blake's work are taken from *The Complete Poetry and Prose of William Blake*, David V. Erdman, editor. New York: Anchor. Henceforth referred to by the editor, Erdman. Page numbers for quotations from *The Four Zoas* include the page in the Erdman edition followed by the page number of the "manuscript."
- ⁷ George Bataille's "The Big Toe," 1985. *Visions of Excess: Selected Writings 1927-39*. Minneapolis: University of Minnesota Press, 20-23.
- ⁸ Deleuze and Guittari. 1987. *A Thousand Plateaus*. Chapter 10, "1730: Becoming-Intense, Becoming-Animal, Becoming-Imperceptible . . ." Minneapolis: University of Minnesota Press.
- ⁹ Brian Massumi. 1993. *A User's Guide to Capitalism and Schizophrenia: Deviations from Deleuze and Guittari*. Cambridge, Massachusetts: MIT Press, 99.
- ¹⁰ Morton D. Paley. 1978. *William Blake*. New York: Greenwich House, 45.
- ¹¹ Ault, *Narrative Unbound*. 32-40.
- ¹² Blake professes a state of unfettered change in his letter to Hayley of Oct. 23, 1804.
- ¹³ Thomas Balston. 1957. *James Whatman Father and Son*. London: Methuen, chapter 10.
- ¹⁴ Joseph Viscomi. 1993. *Blake and the Idea of the Book*. Princeton, New Jersey: Princeton University Press, chapters 9 and 10.
- ¹⁵ Iain McCalman. 1993. *Radical Underworld: Prophets, Revolutionaries and Pornographers in London, 1795-1840*. New York: Oxford University Press.

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Markus Hallensleben

The Work of Art in the Age of Digital Reproduction

On the relationships between early twentieth century avant-garde movements and new media



In this article, which was presented as a paper at the Colloquium *Literature and Media* at Nagoya City University on June 16, 1998, I focused on the relationships between the early 20th century avant-garde movements and the new media. I provide some ideas on the influence of avant-garde aesthetics on today's media environment. The article stresses the new media's use of traditional avant-garde techniques such as collage on an internalized and functional basis. The computer is seen as a surrealist network. Art is performed as a bourgeois event. The Internet, which is often considered to be a world wide museum or library, builds a bourgeois institution, which controls the production as well as the reception of art.

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Allow me to begin with an example from my own experiences within our computerized new media world. Shortly after I started working with the computer I had a dream. One morning I woke up in a foreign, unfamiliar room. Lying on my back, I stared through a window in the ceiling. The clouds moved by, the sun moved by and suddenly I realized that I was moving my hand, and in the way my hand moved, the world outside the window changed. It was a disturbing image. Then I discovered that I was also able to replace the window by moving a finger (it was a subconscious movement).

The ceiling easily turned into a wall, and I was lying on my side, looking through the window, watching the changeable world outside. Then I got up and concurrently lost my balance. The window and the room started moving with me. There was no orientation; there were no fixed points. When I looked for the door, it turned out to be only a picture. I finally woke up and found myself in my own bed at home. I felt as if I had been a part of one of Magritte's or Max Ernst's surreal paintings (see figure 1).

Our reality has changed, but has our language changed with it? The ambiguity of reality can be seen best in the language, or where language becomes metaphorical. There is a phrase I noted for the first time since working with the computer: some people say they have to work on the computer, they no longer say what they are working on; they simply refer to the machine they are using. Or they say,



Figure 1. Max Ernst. *La Femme Chancelante*. 1923. Düsseldorf: Kunstsammlung Nordrhein-Westfalen, Germany.

that they have to go back to their computers instead of going back to work (but one may also say, that the workers in the age of the industrial revolution had to go back to their machines as well...), thereby the computer has become a symbol for work. Whereas no one would call a plantation worker of the nineteenth century an independent person, everyone believes that computers give us more independence. The better paid "work" is now computer-related work: programming, desktop publishing and managing the use of computers. At the same time, no one can give guarantees for a definition of certain work in our age of digital reproduction. A printer, for example, in today's language means mainly a computer controlled machine that prints files. Furthermore, we speak about a "printer" when we mean the symbol for printer software on a computer screen. Those icons, as well as pictures made of computer language, are broadcast codes; they are

shared by a mass audience and learned through experience.

Such overlapping of aesthetic frames can already be found in the early twentieth century avant-garde movements. Using letters or words only as icons, as the dadaists or cubists did, changed the medial character of language. Language from that point on was part of a communication process without necessarily transmitting any meaning. This may be best shown in Raoul Hausmann's advertisements of 1918, which consist only of meaningless letters (*see figure 2*).



Figure 2. Raoul Hausmann.
Advertisement printings. 1918.

The meaning of a word was no longer necessary for understanding. Instead words became symbols for something else. For the cubists, the newspaper shreds they used, stood only for the world of cafés or the reality represented in the picture itself.

The symbolic language within commercials is another indicator for such a gap of reference. Language more and more has become an icon. We can see this phenomenon in the use of English words within Japanese advertisements. They are symbols for another culture. However, these Roman letters as symbols do not represent the American culture as it is, but the world of commerce. That switch I would call a gap of reference (see figure 3).

When these techniques, originally used by the avant-garde, are now used in advertisements, how can we still define

works of avant-garde art? We are tempted to say, a commercial is only pseudo art. One problem of this definition is that pop artists, such as Andy Warhol, followed the same structure of advertisement. Thus, advertisements can be taken for art. Everything can be taken for art.

It is, of course, our misunderstanding of the old avant-garde. Their idea of presenting art as life, of overcoming the borders of reality and art work, has turned into an understanding of life as art based on a synonymy of style and fashion. Avant-gardist art is now so popular that art is

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本日、全国テレビ朝日系「トゥナイト2」内にて出演予定。

Figure 3. The Yomiuri Shimibun. 5/26/99, 31.

not targeted to a limited audience any more. To use the terms of media theory: art was supposed to be a narrowcast code. To read a book once involved more deliberate learning. Now one can access literature over computer data bases. We can search for certain phrases, and we may pick up some scholarly background information, as well as read images. The linear system of writing and print has switched to a multi-dimensional system of language. On the World Wide Web, readers and writers can hardly be distinguished. Mike Sandbothe has, among others, analyzed the impact of the new media:

In hypertextual conditions writing and reading become pictorial operations. The writer develops a netlike framework, a rhizomatic image of her thoughts. This image is multiform and complex. It consists in a plurality of varying paths and references which the reader forms into new thought images resulting from the interplay between the text's open structure and the reader's interests and perspectives.

Equally, in the hypertext medium the writer is no longer in a position of omniscience.

Whereas the traditional author is responsible alone for sketching out the closed system of the book or essay he writes, hypertextual writing and thinking can take place in immediate interaction with other people's writing and thinking.¹

Thus, the Internet is often described as a worldwide museum or library, easily accessible for everyone. It is so easy that we sometimes forget that we depend on search engines. Often when looking for a book on a real bookshelf, the book next to it turns out to be the better one. What I discovered serendipitously, is nothing less than an accident. Everyone knows that a library is only as good as the librarian. A good librarian can not be replaced by a search engine on the computer, which is more of a gatekeeper than a librarian. It hides information by leading one to too many different and unordered sources. It is, as interactive as it looks, not an intelligent system at all; it is more comparable to a nonsense play or an event of art.² It reminds me of the sur-realist word games, reflected best in the surrealist papillon: "Surrealism that is the negation of literature."³ On the other hand, a search engine is more creative than a librarian. In an odd way it is creative since it demonstrates the process of searching instead of fulfilling its meaning. It is searching as a movement, and it makes one believe

that the loss of a librarian makes a better library. It is mathematics without a final sense and surrealist art without an artist (see figure 4).

The Internet is the first museum or library that is not one. It makes one believe that the loss of a library or a museum can still be taken for a library or a museum.⁴ Hans Magnus Enzensberger once pointed out that the German newspaper *Bild*⁵ was the first newspaper which sold the loss of news as news (see figure 5).

It was also the first newspaper that presented a media switch in German Newspaper printing history: from word to picture. One can take those switches for better or for worse. The fact is that on the Internet a newspaper is not a newspaper, and a broadcast is not a broadcast. The same applies to the arts, including literature.

Lets look back again to the cubist aesthetics. The newspaper within a collage was not a newspaper any more. A cubist portrait was not a portrait at all. For the Russian Futurists, especially Vladimir Chlebnikow, the words were not words within a system of grammar. They worked with language more as material. In 1913 they claimed that grammar did not count, that letters were only traffic signs for the words.⁶ The network of meaning was deconstructed. The flow of information was purposely interrupted to shock the audience. However, today's flow of information is an ongoing interruption. Walter Benjamin's definition that shocks can be cushioned by a heightened presence of mind seems to be ridiculous, when we look at the shock waves of our new media age. Whereas in Benjamin's time the shock could be seen as a single interruption, it is now a flow of interruptions. The shock has become part of our media culture. We even talk about a cultural



Figure 4. From *La Révolution Surréaliste*. 1926.

shock when we define the process of assimilating to a new culture. The paradox, that we do not mean what we say, continues in our everyday life.

Let me explain this paradox with an excursus to the history of avant-garde.

Since I focus on the relationship between literature and media, it seems that my argumentation has become a dialectical approach between two opponents: the old narrow and the new broad code of signs; the art of avant-garde and its overcoming in the mass media. The differences, nevertheless, are evident. After the turn of the century, when many European artistic and linguistic circles rediscovered the materialistic and medial side of language, the metaphor network became useful to analyze the structure of language itself.⁷ The bourgeois idea of being rational — in the sense of linear thinking — was totally rejected. It was a protest against a cultural tradition that had used the body

as a medium for the mind. In opposition to this, the mind should have been used as a medium of the body. Parallel to it, glorification of the soul was frowned on by the avant-garde. A new body cult, including the new dance movement, led to the idea of a more sensual life style. But such an understanding simply turned the old ideas upside down. Here we can find one reason for the paradox of the avant-garde as a sub-bourgeois movement. The idealist notion of being a forerunner is the reverse side of a bourgeois society that believes in a development of its culture. Therefore the avant-garde has always been a part of bourgeois life style. In its rejection of tradition, it followed tradition.⁸ In other words: a bourgeois society needs a certain number of outsiders to define and constantly redefine itself. The perfect bourgeois society would perhaps be built by a mass of outsiders who are all using the same medium.

The Internet, with its myth of a virtual community,⁹ is a bourgeois institution



Figure 5. *Bild*. Online Title. August 1998.

that includes anti-bourgeois ideals as well. Avant-garde freedom and bourgeois ubiquity are only provided within the framework of a wired society.¹⁰ The Internet, exactly defined by its metaphors, is a more powerful medium than Benjamin could have imagined. That power has often been described by the term multi-media. It includes not only one medium, but a combination of all media as well as the possibility to switch between them. In consequence the single media can not be distinguished any more. In the beginning, the Internet had been seen as a new medium for an anti-bourgeois sub-culture, as the old avant-garde had been presented itself. But the myth of new media is nothing less than the old myth of the avant-garde as an anti-bourgeois movement. The future of multi-media, which is represented by a single, all purpose medium unfortunately provides not more freedom, but less.¹¹ The individuum does not get more powerful, but less.

In *The Japan Times* of June 24, 1998, an article by Bill Gates appeared, in which he discusses the future of the Internet. He begins with the question "Content or discontent?" then compares the development of the Internet with the television revolution, and ends with the statement:

"The Web content business will really get exciting when you're able to carry an inexpensive electronic tablet with you that connects wirelessly to the Internet. You'll be able to look up everything."¹² The myth, Bill Gates uses, is obviously a bourgeois one. The old ideal of enlightenment continues in the idea of a medium that can provide every content we may ever need. Furthermore, Bill Gates is not the only one, who believes that the organization of content in the form of digital reproduction is the best possible way for everyone to easily access information. When both of the large computer companies Macintosh and Microsoft started their 1997 promotion campaigns, they showed us pictures from the world of education. They wanted us to believe that we or our children are able to easily gain knowledge only with a computer. I do not know whether this is the truth about today's education or not, but the campaigns reminded me of someone who

tries to teach language with only a picture book. The Microsoft campaign presented a lot of pictures, pictures of course, one might also have found in a dictionary, and I asked myself: why would it be easier to access those pictures over the computer instead of opening a book?

It is an old myth that a new medium helps us educate people better. Walter Benjamin believed in this myth as well. When radio as well as film took the first steps as mass media, Benjamin wrote his well-known essay *The Work of Art in the Age of Mechanical Reproduction*.¹³ He believed that the new mass media would help raise the audience to a more active and more political level. Literally, he wrote that the distinction between author and public was about to lose its basic character. He wanted the readers to become authors. He did not know about the Internet, of course, but I am certain, that in this sense he would have welcomed this kind of

mass communication as a perfectly practical solution for his theory. On the Internet, a mass audience itself creates an art medium. It seems that Benjamin's *interactive* understanding of the arts has made his theory fruitful for today's media analysts. However, the question remains, who is the director of this reality play and who is the consumer?

The key to answering this question is the perception of reality. Natan Altman, a Russian futurist painter, already claimed in 1918, that a futurist painting exists as a collective life.¹⁴ Some media analysts argue that there is a similarity between watching television and perceiving everyday reality, since reality is in itself a complex system of signs interpreted by members of a culture in exactly the same way. I would like to add that the distinction between author and reader, that Benjamin was referring to when he was describing the audience's reaction to new media, has meanwhile changed to a relationship between those who *provide* a new medium and those who *use* it. We have learned that the author is no longer only a person who writes a web page or creates a movie or a radio play. There is a new reader behind this old-fashioned type of author. This new reader is even more

powerful, since he is setting the frames for the medium; he is the one who uses the programs that others have written. The new authors and readers of the new media age are consumers or pseudo authors (to follow Adorno's definition of a pseudo artist).¹⁵

Let us look at this issue from another point of view: The artists, from Horaz to Mozart to Zappa always had to go where the money was. This is not a secret at all. Where is the money today? As a matter of fact, the computer industry seems to take control of the arts, the educational system and the sciences. It is going to change the status of independent authors and readers into the status of a mass of dependent consumers. When sources become transformed, it might be important to ask who is doing it and why. We can neither "think different," as the Apple slogan suggests, nor think faster than Bill Gates (as I recently read in an Internet article). We also will not "inform ourselves to death" (Neil Postman's prediction),¹⁶ but we can try to be as smart as they are. In 1914 the American Futurist Mina Loy wrote an aphorism, which illustrates the need to deconstruct the old myth of the new media: "IN pressing the material to derive its essence, matter becomes de-

formed."¹⁷ We are now at the beginning point of moving outside this electronic black box, called the computer, to deconstruct its aesthetics and to write a media theory that analyzes programming language as well as its products.¹⁸

When we talk against the market strategies of the media world, are we, at the same time, talking against avant-garde aesthetics? Or when we are glorifying the new media world, are we — at the same time — repeating old Futurist arguments? What if our position is the same, and could be explained by the same determination of a bourgeois code? One can say that the dadaists, for example, preserved the old idea of an idealistic art instead of creating anything new. To educate people by throwing meaningless phrases at them must have reminded the audience more of what had not been presented, than what was presented during a dadaist performance. In the end, dada had become

bourgeois, a problematic development, which was discussed by the avant-gardists at the end of their international movement.¹⁹ In 1920, it was not the nonsense art of the Berlin dadaist exhibition, which was accused by the German justice, but the brutal and realistic drawings of the military by George Grosz (see figure 6).²⁰

One other argument, which young people often have against the criticism of their pop culture today, is an old dadaist one: to make one's own experience!²¹ The early avant-garde, as we know, has also been described as a mode, a trend, a life style.²² The Internet, with its dadaistic web pages and its surrealist search engines, with its cubist network and its futurist technique is — like the avant-garde was — only the reverse side of our bourgeois society. A computer is not a new medium, and a hypertext is not a new language. The new media work with the same structure of metaphors and

myths. We still read the words and look at the pictures, singularly and consecutively. The aesthetics of the multi-media culture were first presented in the art of the early twentieth century avant-garde movements. The computer is neither a higher nor a more communicative medium in media history. In HTML programming, there is no difference between the old footnote and the hyperlink. There is also a coincidence between the surrealists' reality of a dream and what Walter Benjamin called the second reality ("*doppelte Realität*"). The idea of a virtual reality was described best by the Italian Futurist avant-garde movement.²³ In their *Technical Manifesto* of 1910 the futurist painters pronounced: "We shall henceforward put the spectator in the center of the picture."²⁴ Reality and virtuality were combined in a holistic manner. The difference between the old avant-gardists and the new media seems to be marginal. There is only a difference in how to create a surreal reality. The painter and author Max Ernst used to cover his head with a



Figure 6. First International DADA-Fair: Berlin 1920.

blanket for several hours, not sleeping but daydreaming, before he started working on his art. Magritte's paintings often show overlapping windows and canvas. Today, when we use a computer, a mouse, a screen and an operating system called Windows, we are constantly working with this surreal aesthetic (see figure 7).

The avant-garde utopia of a "machine man" is now reality. "The arts are like any sciences, a discipline of mathematics," wrote the Russian futurist Rodtschenko in 1921.²⁵ The Italian futurists also used the phrase an "electric heart." A cardiologist would agree with this terminology,

but not from an aesthetic point of view. What the futurists and dadaists understood as an aesthetic concept of life, has become real in a completely different way (see figure 8).

The Italian futurists would have loved today's computerized world, but they would have had problems to define themselves as artists, too. Magritte or Max Ernst would have taken advantage of the new media and created many surrealist pictures, but they would have had problems in obtaining the same attention as they received in their life-time.²⁶ What I want to point out is that we are using the avant-gardist's aesthetics on an internalized basis. We are consumers and so are the artists of the new media age. There is no difference any more. Who is still able to distinguish between an artist and a pseudo artist? We are not necessarily aware of the techniques that we are using every day, techniques that have been developed by avant-garde artists: collage, the art of

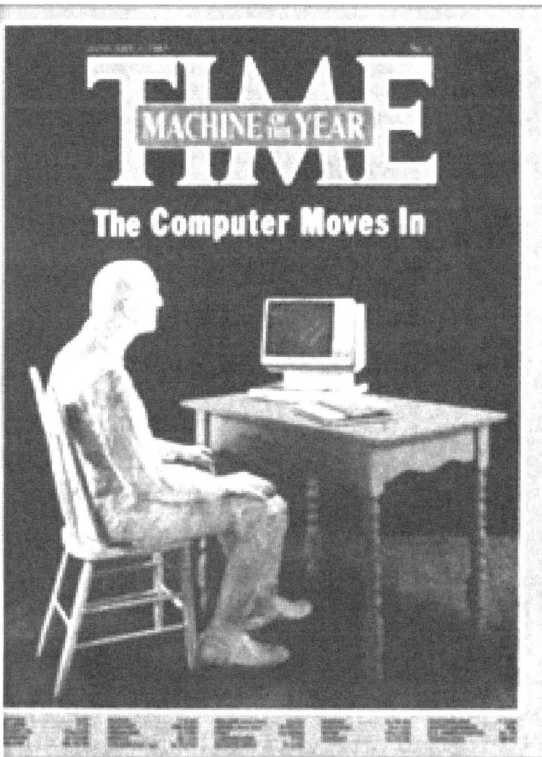


Figure 7. *Time Magazine*. Title with sculpture by Segal. January 1983. The "Man of the Year" is the Computer.

noise, word art, the exquisite cadaver, automatic writing, etc.²⁷ We live within a surrealist picture. When we work with a modern text program on the computer, our text is a collage and so is the draft. And almost every advertisement shows us the perfect use of original avant-garde techniques. When the cubists used parts of a newspaper as material for their collages, they wanted us to become

defamiliarized with our bourgeois concept of art and life. Today, within the world of advertisement, as well as on the Internet, we have become familiar with those techniques of defamiliarization (see figure 9).²⁸

If we want to search for a definition of artwork in the age of digital reproduction, we need to ask if those techniques of defamiliarization still work. The surrealists already depended on an art market which had mixed up innovation and event. For Lyotard, the less meaning found in a work of art, the more it is considered to be avant-garde. Art as event can be seen as the negation of content.²⁹ Stephen Foster defines events of art in a more sociological way:

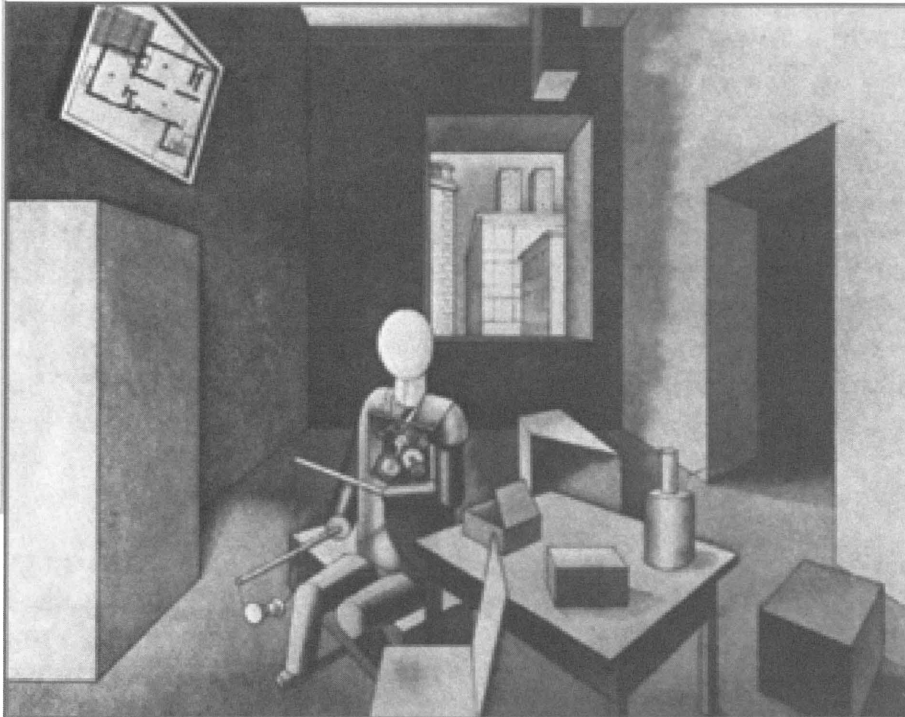


Figure 8. George Grosz. *Diabolo player*. Aquarell 1920. Privately owned.

That the historical concept of the event coincides with the intentions of the avant-garde is no accident. This concept of the event [...] is fundamental to the avant-garde's concept of itself and to its concept of the facilitation of change. Here, events are postulates or propositions about relationships between the past, present and future. Yet, notwithstanding what they are about, they are conceptually never more nor less than acts in the present. [...] Cultural patterns and processes are nothing if they are not perceived as such. The event, as part of the chain of events, is recognized as a pattern and employed as a process. This is the case whether perceived internally (by the 'agent') or externally (by the observer) or in hindsight (by the historian).³⁰

The process of digital reproduction does not necessarily change the avant-gardist definition of artwork, but it changes the reception of art. On the Internet, the chain of events continues. Today we have in a very traditional way what the avant-garde movements once proclaimed as a new art. Our way of perceiving reality changed in the first half of the twentieth century: digitalization is only a result of

that change. The Internet or network as metaphor is the transformation of the old avant-garde idea of secessionism. It is the idea of building a net between different arts and artists. Since they already understood art as multimedia art, do we live in a world of art yet? Has our media age fulfilled the imagined world of the constructivist and futurist avant-gardists of the twenties? Or is the futurist aesthetic close to today's reality? The Italian futurists were mainly influenced by the technical inventions of the late nineteenth and early twentieth century. One

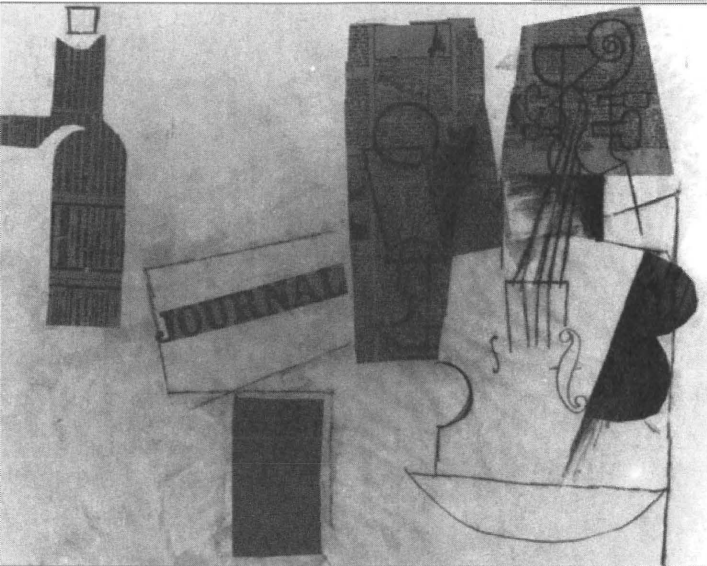


Figure 9. Picasso. *Bottle, Glas and Violine*. Collage 1912/13. Stockholm: Nationalmuseum.

of their goals was to renew human sensibility. Marinetti thought the human psyche was influenced by the telegraph, the telephone, the gramophone, the train, the bike, the car and other ways of communication, transportation and information — he was, interestingly enough, literally talking about communication in that way!³¹ When we compare those statements with some common models of communication theory, we find a similarity in the use of technical metaphors (see figure 10).

Based on avant-garde aesthetics, we can understand signs more abstractly, and we do this on a highly advanced level. Although Mondrian's pictures perfectly presented this abstract aesthetic, in 1965 a hundred people at Bell Labs compared a computer generated composition to one of Mondrian's compositions ("Composition in lines"). They had to decide which was the original.³² Fifty-nine percent made the wrong decision. The randomness of the

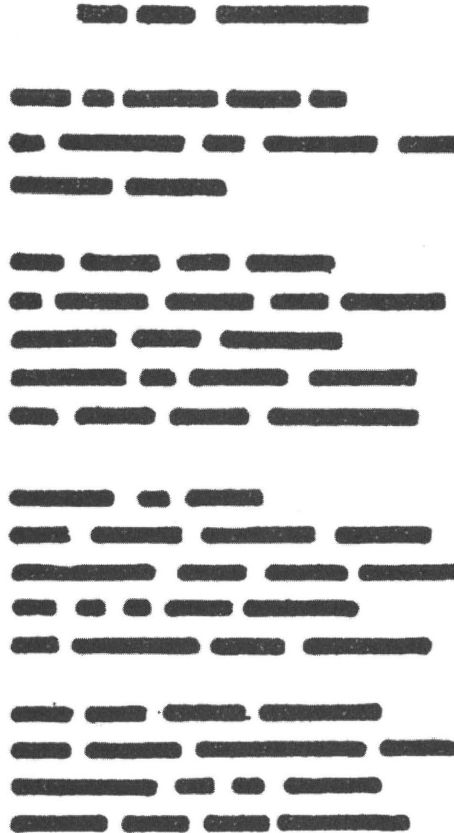


Figure 10. Man Ray. *Poem of Sounds*. 1924.

computer composition seemed to be more creative than the orderly structure of Mondrian's lines. I surmise that an audience of 1917, when the original was created, would have made the opposite decision, not because they would have known Mondrian's art better, but they had a different understanding of art. One goal of modern aesthetics was randomness. We are now so familiar with the avant-gardist's old techniques of defamiliarization, that we can take a computer's work for art. Our understanding of creativity can be fulfilled by a computer program as well as by man. We are satisfied with a computer program, which has built in enough randomness so that we consider it to be creative. How a work of art is made has become more important than its content. We do not need an author or an artist, but we do need programmers and consumers.

However, when the computer is a surrealist art network itself and the Internet is the institutionalization of avant-garde events, art or literature on the computer cannot be art or literature in the traditional definition. Art within the new media is a paradox: it is a mass product, a product of the mass and for the mass. It is art

without a real audience and without an author in the original meaning of the word. It is neither folk art nor high art. It is exactly what Walter Benjamin called tendency art, though he understood this term politically. In the age of digital reproduction, the audience as a critical factor does not matter. Art on the computer is art within its own medium. Benjamin did not know that there would be a medium that could be neither controlled by a single author nor by an omnipotent collective. The traditional avant-gardist movements had a critical understanding within their aesthetics of fragmentation. They were mostly anti-movements against the old bourgeois art and their institutions. And they often claimed a political intent. They wanted to change the aesthetics of mimesis to an energetic concept of art, which forces the observer or the audience to change their point of view.

Today's mass culture uses avant-garde aesthetics rather affirmatively. The news on television is a collage; the cutting is often dictated by the number of shocks that can be provided (not to mention the Hollywood film industry). The quality of shock has switched back to a quantity of shocks. Benjamin was right when he wrote that the film, as a new media of entertainment, was a chance to change the passive role of the audience to an active one. His idea of a "mobilization of the masses" was the desire for a more political and critical thinking audience. Art can be seen as a political forerunner: today the media play this part by using the aesthetics of avant-garde. So what could possibly be the politics of an Internet society? Though there are now first attempts at defining the prospective politics of an Internet society in synergy with the developments of bourgeois society, the hope

that political-economical power and public interests do not merge is, nevertheless, small.³³

Niklas Luhman, defining power as a medium of communication, said that the concentration of different media into one changes the different and symbolic character of each single media.³⁴ Equivalent to this, the individual is losing its power. If we need criteria for a definition of mass or multimedia culture, we can find it in the aesthetics of dada. The Berlin "dada manifest" of 1918 stated:

The word Dada symbolizes the most primitive relation to the real environment, with Dadaism a new reality takes place. Life appears as a simultaneous mixture of noises, colors and spiritual rhythms; it is transformed in Dadaist art with all sensational proclaiming and longing of the risky psyche of every day life, and with all its brutal reality.³⁵

If we take this as an early definition of multimedia culture (MTV, Reality TV, etc.), we will obviously discover that the medium became more important than the message. The dada movement was probably the first avant-garde group which had a mass audience. It was art only to be understood through experience and without any educational preparation. The

different narrowcast codes of the old media (music, language, painting, etc.) were forged together into a single broadcast code. However, dada had no choice in becoming just another movement in literary history. Later film or radio easily and in a more productive way integrated noises or words as acoustic material. The experimental character of dada's avant-garde aesthetic soon became another common realistic element.

If we want to know about the future of artwork in the age of digital reproduction, we may have to consider that our perception of reality is influenced by the historic avant-garde and their dependence on a bourgeois society. Digitalization, understood as a result of fragmentation and defamiliarization, is perhaps the only way to perform avant-gardist artwork as a bourgeois event — it might turn out to be the perfect way to institutionalize subcultures within a so-called global society.

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¹ "Interactivity - Hypertextuality - Transversality: A media-philosophical analysis of the Internet." 1996-1998. Internet resource: www.uni-jena.de/ms/tele/e_top.html

² The media scientist Hartmut Winkler compares it with the structure of language itself: "Suchmaschinen: Metamedien im Internet?" In Becker, Barbara and Michael Paetau, editors. 1997. *Virtualisierung des Sozialen*. Frankfurt: Campus, 185-202. Internet source: www.rz.uni-frankfurt.de/~winkler/suchmasc.html

³ "Surrealistische Papillons." In Barck, Karlheinz, editor. 1990. *Surrealismus in Paris, 1919-1939*. Leipzig: Reclam, 212.

⁴ The project of an imaginary library, maintained by the University of Hildesheim, Germany, reflects this dialectic: "Die imaginäre Bibliothek." Internet resource: www.uni-hildesheim.de/ami/pool/

⁵ "Bild" means picture and describes the content of this newspaper which is also available online at www.bild.de/

⁶ "Richterteich." In Asholt, Wolfgang and Walter Fähnders, editors. 1995. *Manifeste und Proklamationen der europäischen Avantgarde (1909-1938)*. Stuttgart, Weimar: Metzler, 71.

⁷ Winkler, Hartmut. 1997. *Docuverse - Zur Medientheorie der Computer*. Munich: Boer, chapter 1. Internet resource: www.rz.uni-frankfurt.de/~winkler/h-1kap.html

⁸ Jürgen Habermas' thoughts on the philosophical discourse of the modern age reflect this as "aporias of a theory of power": "Jede Gegenmacht bewegt sich schon im Horizont der Macht, die sie bekämpft, und verwandelt sich, sobald sie siegreich ist, in einen Machtkomplex, der eine andere Gegenmacht provoziert. [...] Wer die theoretische Avantgarde von heute besiegt und die bestehende Hierarchisierung des Wissens überwindet, stellt selbst die theoretische Avantgarde von morgen, errichtet selbst eine neue Hierarchie des Wissens." *Zwölf Vorlesungen*. 1985. *Der philosophische Diskurs der Moderne*. Frankfurt a.M.: Suhrkamp, 300.

⁹ "Virtual communities are social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace." This definition is taken from an online introduction by Howard Rheingold to his 1993 book *The Virtual Community*. Cambridge, Massachusetts: Touchstone Books. Internet source: www.rheingold.com/vc/bookintro.html

¹⁰ See Bernhard Debatin's discussion of "Allwissenheit und Grenzenlosigkeit: Mythen um Computernetze," paper presented at Jahrestagung der DGPK at Mainz, 1998. Internet source: www.uni-leipzig.de/~debatin/German/CompMyth.htm#5

¹¹ Bernhard Debatin, in "Metaphern und Mythen des Internet: Demokratie, Öffentlichkeit und Identität im Sog der vernetzten Datenkommunikation," 1997, talks about a new imperialistic, marketing based "Frontism," which undergoes the idea of freedom. Internet source: www.uni-leipzig.de/~debatin/German/NetMet.htm#III

¹² Gates, Bill. 1998. "The Internet, circa 1998: Content or discontent?" *The Japan Times*, July 24, 14.

¹³ Benjamin, Walter. 1935. "The Work of Art in the Age of Mechanical Reproduction." Frankfurt a.M.: Suhrkamp, 1974. Internet source: www.aber.ac.uk/~ednwww/Undgrad/ED10510/benjamin.html

¹⁴ Altman, Natan. 1918. "Futurismus und proletarische Kunst: Programmatischer Artikel." *Manifeste und Proklamationen*, 160-162.

¹⁵ For an analysis of Adorno's position see Kausch, Michael. 1988. *Kulturindustrie und Populärkultur. Kritische Theorie der Massenmedien*. Frankfurt a.M.: Fischer.

¹⁶ Postman, Neil. 1990. "Informing Ourselves to Death." Speech at German Informatics Society, October 11, 1990. Stuttgart, Germany. Internet source: www.interact.uoregon.edu/MediaLit/FA/MLArticleFolder/informpost.html

¹⁷ Loy, Mina 1914. "Aphorisms on Futurism." *Camera Work*, 45: 13-15. See also, Conover, Roger L., editor. 1996. *Last Lunar Baedeker*. New York: Farrar, Straus and Giroux, 272-275. Susan E. Dunn maintains an excellent webpage on Mina Loy: www.shc.stanford.edu/sed/Mina.Loy.html

¹⁸ Hartmut Winkler expressed this opinion in an interview with Geert Lovink. "The Computer: Medium or Calculating Machine?" *Convergence* 3:2. Internet source: www.rz.uni-frankfurt.de/~winkler/lovink16.html

¹⁹ "Everything in our age is dada, except the dadaists. [...] Art is dada. Politics: dada. Philosophy: dada. Revolution: dada. War: dada. Peace: dada. Dada is our age! Poincaré: dada. The German emperor: dada! Dada can not be defined. But everyone knows what dada is, since he lives in Dada." [Author translation] Doesburg, von Theo. "Charakteristik des Dadaismus." *Manifeste und Proklamationen*, 295.

²⁰ Tucholsky, Kurt. 1920. "Dada-Prozeß." In Riha, Karl, editor. 1977. *Dada Berlin: Texte, Manifeste, Aktionen*. Stuttgart: Reclam, 127-129.

²¹ "Dada ist der Schrei der Jugend." Aleksiz, Daragan. 1921. "Dadaismus." *Manifeste und Proklamationen*, 246.

²² Böhlinger, Hannes. 1978. "Avantgarde - Geschichte einer Metapher." *Archiv für Begriffsgeschichte* 22, 90-114.

²³ When "virtual reality" was introduced, "[w]ith just a few words they have invoked the traditions of art and representation, psychology and metaphysics, ontological philosophy, discovery, colonization and the frontier." For a further discussion see Chesher, Chris. 1994. "Colonizing Virtual Reality: Construction of the Discourse of Virtual Reality, 1984-1992." *Cultronic* 1:1. Internet source: www.eserver.org/cultronic.chesher

²⁴ Boccioni, Umberto, Carlo Carrà, Luigi Russolo, Giacomo Balla and Gino Severini. 1910. "Technical Manifesto of Futurist Painting," *Poesia*, April 11. Internet resource: www.shoga.wwa.com/~sluggo/futurism/painters.html

²⁵ Rodtschenko, Alexander. 1921. "Losungen." *Manifeste und Proklamationen*, 229. For information on Rodtschenko see Susan M. Hansen's webpage. www.artcon.rutgers.edu/projects/typography/hansen/default.html

²⁶ The most used picture on webmasters' homepages is probably Magritte's pipe, "The Betrayal of Images" (1929), which "is neither a singular nor a definitive work." As Jeffrey T. Schapp points out, it has become the most popular "modernist signature object" and therefore "a distinctive object of and instrument for modern desires." "Art/Lit Combines; or, When a Pipe Is Only a Pipe." *Profession, MLA*, 37-50.

²⁷ The exquisite cadaver has become an excellent example for art on the computer. Internet source: www.pharmdec.wustl.edu/juju/surr/games/ExCad.html

²⁸ Bernhard Debatin points out that the understanding of author, text and authenticity has become similar to the structure of "dadaist text collages": "Die in Newsgroups und Mailing-Lists übliche Form der Kombination von Texten verschiedener Autoren, bei der die zitierten Bezugstexte in meist zerstückelter und dekontextualisierter Form in die jeweilige Antwort eingefügt werden, erzeugt einen neuartigen Typus von Text, bei dem mitunter dadaistisch anmutende Textcollagen entstehen. Eine solche elektronische Textcollage hat keinen klar bestimmbar Autor, sondern eher eine Vielzahl von Editoren, die immer neue und andere Versionen eines sich gleichsam automatisch fortschreibenden Textes kopieren und transformieren. Damit wird die Wahrheitsfrage hier höchst prekär, zumindest solange man die Wahrheit von Aussagen mit auf Subjekte zurechenbaren Geltungsansprüchen verbindet. In "Ethik und Internet: Überlegungen zur normativen Problematik von hochvernetzter Computerkommunikation." Internet source: www.uni-leipzig.de/~debatin/German/Netzethik.htm

²⁹ Lyotard, Jean-François. 1983. "The Sublime and the Avant-Garde." In Benjamin, Andrew, editor. 1989. *The Lyotard Reader*. Oxford: Blackwell, 196-211.

³⁰ Foster, Stephen C. 1988. *Event Structures and Art Situations. Event Arts and Art Events*. Ann Arbor, Michigan: UMI Research Press, 7.

³¹ Marinetti. "Destruction of Syntax." Internet source: www.shoga.wva.com/~sluggo/futurism/destruction.html

³² This example was taken from Susanne Acker's online teaching materials, which includes the pictures of Mondrian and Noll. Internet resource: www.ikm.his.se/ikm/~susanne/TwentiethCentury/TwentiethCentury3.html

³³ See, with reference to Habermas' *Discourse of Modernity*. Debatin, Bernhard. 1996. "Elektronische Öffentlichkeiten: Über Informationsselektion und Identität in virtuellen Gemeinschaften." FIFF. Kommunikation, Computer und Demokratie 4, 23-26. Internet resource: www.uni-leipzig.de/~debatin.english/Articles/FIFF.htm#Absch2

³⁴ Luhmann, Niklas. 1988. *Macht*. Stuttgart: Enke, 102. His definition of media is broader than mine as used here.

³⁵ Hülsenbeck, Richard et al. 1918. "dadaistisches manifest." *Dada Berlin*, 23. [Author translation] Internet source: www.peak.org/~dadaist/English/Nav/dadamanifest.html

*Letter lapidary holds tight
semi-precious, keyed-up
-m-a-r-k-s-
stripe-ing blank
followed by cut and polished sense.*

*Worded-wealth affords scarce
time, people, things, yet drips into
the gaps and gilded margins.*

*And in the engravers game
tracks slip toward global screens
staining and echoing through,
to intermezzo.*

What's *What's*
Been *Been*
Cooking *Cooking*
in the *in the*
Type *Type*
Kitchen? *Kitchen?*

Colin Banks

A report on the ATypI conference MultiType98

With a long interest in typography,
the author critically reports on the
events of the AtypI conference
MultiType 98 in Lyons, France.

Lyons has a claim to be the world's number one kitchen for gastronomes: it also has much to offer the type taster. It has a significant history in printing and dredged up from out of the confluence of its rivers recently was some type that might as well have been distributed there by an idle apprentice in the late fifteenth century. It also has a claim to be a cradle of type design plagiarization.¹

In 1998, over five hundred years later, the *Association Typographique Internationale* set out its stall for its annual conference in architect Renzo Piano's austere but beautiful Palais des Congrès in Lyons for three days in October. It attracted members and non-members, trade and pure typo aficionados from twenty-two countries; rather less than some other recent conferences and maybe this was because it only ran a three-ring circus, unlike "Type 90" in Oxford which was a five-ring plus multi-windowed monster. Three concurrent program choices were to this conferee still a problem, usually I wanted to be in two of the places at once although a decision could be made on the language on offer.

This year for the most part we were spared the carpet bombing of traumatized letter forms masquerading as post-modernism; we were shown lessons in how lettering could inform messages, not imploded and hollow typographical trivia. This was refreshing and important for my feeling is that the tide is going out leaving multi-layers of pixilated flotsam rotting on the rocks.

We had talks from *Eric Kindel* who is trying to find better indicators in typomorphology: Not a lot of help to those in the trade but useful perhaps when guiding typographic desktop users to the best font for the job.

We had a rare opportunity to hear *Christian Paput* speak as the punchcutter from the Imprimerie Nationale where he shares responsibility for the maintenance and recreation of half a million steel punches from a historical, but living, archive that dates from the times of François I (1494-1547). *Alan Marshall*, a Scotsman at Lyons, researching at the Musée de l'Imprimerie set us thinking on how the end of each century sets up a revolutionary ripple in print and the "structural factors underlying the latest wave of typographical iconoclasm."

Pierre Bernard, who seems to have left the radical exploration of his Grapus Group behind him, has now forged an alphabet out of the pressed metal license plates of French motor cars for new signing at the Centre Pompidou. Quirky, charming and recognizably French, they do not make up into good balanced words but they do say "here were are in Paris."

Alan Kitching showed how an artist's imagination can use letterpress poster wood letters in a bold way to reanimate the printed sheet. We were also witness to an intriguing, but ultimately frustrating, interview with *Adrian Frutiger* on the occasion of his seventieth birthday in which a synthesis was sought, but not found, between his letterforms and his preoccupation with other graphic and sculptural abstract shapes. An interview can be narrowly defined as "a question that demands an answer," so Frutiger said he "prefers round things because his head is round!"

"Poetry and Typography" shone a light on Mallarmé's use of lettering and its disposition on a page to create a "new written language." Whereas the Microsoft "Sulfaen" OpenType font, as explained by Canadian *John Hudson* is there for us to use. We are told to build "multiscript" lettering.

It was left to that doyen of French typography, *René Ponot* to bring us back to Lyons. He advanced the evidence and theory that the nationally honored local printer *Louis Perrin*, designed all his mid-nineteenth century "Augustal" typefaces in one hit; not as typefaces were generally planned until today, in an evolutionary succession. The circumstantial evidence was in Lyons for all of us to admire in one of the finest collections of Roman inscriptions under one museum roof in the world. There *Marius Audin* did his research into Roman inscriptional letters and Perrin cut the type for Audin's "Antiquities of Lyon" before 1840. *Ladislav Mandel* has recently digitized these letterforms.

We had talks on generating a mature and independent French graphic design style; and were shown moves towards that direction both from French television, and authors who write, illustrate and design their own books. Maturity was not on the menu in a tale told by a lady designer of multiple orgasms on a Chinese restaurant lavatory floor and a brain hemorrhage. This she visually balanced with a resuscitated 1960's image originally by Robert Brownjohn of the word OBSESSION strung between two nipples. From then on it was further downhill, letters collapsed in a heap of pixels ("material and de material") while we were beaten on the ear drums by surprisingly clichéd noises. We had pictures from birth and the mortuary: "my real life was messy" she said. Spare a prayer for the next generation! It is one thing to reflect in art the dysfunctions of our time, but please to give social design the dignity it deserves; we should put our personal disfigurements behind us.

Gerard Unger turned in a closely researched but very humorous exposition of the hundred year retreat from the letterforms of the Didots;

these developments left the American Type Foundry justly holding the stage with “Caledonia,” “Century” and “Excelsior.”

Garth Walker from South Africa projected his rich colorful slides of stall and shop fascia lettering in Johannesburg, and the townships and the “shacklands.” He took us closest to the reality of our business “if you don’t communicate, you don’t have customers, if you don’t have customers, you don’t eat.” He reminded us that “blacks were only allowed to live in the South African cities from 1990, they set up home on the street.” All the lettering on the street therefore was very new and he felt had sprung up from nowhere. Well I suspect that the one million ethnic Indians who live in South Africa may have an explanation. They are traditionally traders from Gujarat and the Punjab and in India one can see all these iridescent letterforms and more.

We listened dutifully to another “lifelong stranger to humility” and a legend in his own mind: *Massin* who complained at being rejected for entry in a “Who’s Who?” in France. This is sad for our small world of typography, for his book *Letter and Image*, which he first published in 1970 opened up our subject to a great feast of unusual letterforms, but then how much immortality does anyone need. His mother should be secure in French history though during the liberation, the Mayor dictated what he had heard on his radio to Madame Massin, who then typed it out and distributed it around their village.

The type designs and much improved make up of the newspaper *Le Monde* then had a showing from *Jean François Porchez* who won the ATypI 1998 Charles Peignot Award for “designers under 35.”

James Mosely explained Simon Pierre Fournier’s quarrel with l’Academie Française; the setting up of his own foundry; his new types to grace “the art that preserves all arts;” a sloped roman which Mosely thinks was commissioned by Benjamin Franklin. However the Académicien *Louis Luce* cried “foul” and claimed both the italic and the ornaments were copied from him, *plus ça change...*

Matthew Carter gave us a crisp rundown on his early interests in type letterforms leading to his and *Mike Parker’s* research in the Plantin Moretus Museum, Antwerp. Plantin’s account books are there and these two scholars were able to attribute punches in this uniquely historical collection to the punch cutters named in the accounts.

Robert Grandjean (who at one time lived in Lyons and married there; died 1590) was the first to christen his typefaces: Galliard is a jog; hence “Galliard” Carter’s design (Linotype 1978). Grandjean’s ornaments, his arabesques, may have been based on Lyonesse patterns for the silk

industry. That brings us to another of Lyons great preserves: its Museum of Textiles. Carter described today's great problem in type designing as "drawing a bold letter without it looking as though it had to be dipped in chocolate."

There was much more like this and perhaps more to slant a report in another way, but this correspondent could not be in three places at once. However, I do feel a simpler, elegant and humanistic style of typography is on the horizon, leaving time and sand to cover the deconstructed computer-generated ruins of the braindead. Our craft will follow the greater utilitarian arts which confirm that "modernism" is the unfinished business of this century. Others will lead, and type designers will remember we make "bricks" not "buildings."

We had a talk about customized lettering as part of a visual identity kit. This raised a lot of monsters out of the graveyard — Frankenstein, Wolfman, rats and hardcore inspired horrors. The long shadow cast by ITC "Souvenir" ("revived" as they say in the 70's) can still chill the blood; why buy bad letter shapes when any graphic designer can achieve their own genuine badly drawn headlines.

A presentation by *Phillipe Millot*, a young French winner of the Societ of Typographical Designers premier award, showed us covers for the journal *La Semaine*, publicity for the French Radio music season, the *Association pour la promotion de la pensée Française* and cultural events initiated by the Mayor of Paris. This reminded me of how the progressive arts go hand-in-hand with left-wing politics in France: Lyons has its influential Mayor and its magnificently restyled Opera House: there is nothing provincial in provincial centers in France.

One of the most interesting themes, taken up by the *Dutchmen Erik van Blokland, Max Bruinsma and Gerard Unger* was Words on the Screen. It was variously commented that "screens are for watching not for reading...works on the screen metamorphose into images; the screen is not a preview"; "after three years of screen information, German students return to books"; "type on the screen becomes decorative images, a degraded historical artifact"; "Communication should be entertaining but not necessarily hilarious." What we read on screen is where the serious type designers are applying serious skills these days.

So considered as a forum for ideas the conference has something to offer, but the price at 700 US dollars plus fare, hotel, main meals and excursions, is a lot to pay for three days. The real reward comes socially, we meet new people, catch up on the doings of old friends and feel at ease in our own company. As one money racked student told me

at the 1997 Reading, United Kingdom conference "where else could I go up and chat with Adrian Frutiger, Jost Hochuli, Matthew Carter and Gerard Unger?" It is most disappointing that delegates are not given a list of attendees and their addresses (their "coordinates" as I overheard): failing that clearer, bigger names on badges would be a useful nod in the direction of the laser printer.

Typography in France seems to be eternally racked by schism. But Lyons as I have said, is about food. And at the invitation of local and seemingly renegade typographers (they did not go to the conference) I joined them at two of the best restaurants there. My share of the bills work out at a lot less than \$50. This is something ATypl does not seem able to match these days, at last year's conference at Reading in Britain, the food had for me the ghastly aftertaste of a bleak wartime childhood, in Lyons, the *Grande Gala* dinner again could not rise above paper tablecloths and napkins. It promised "*La Table de Rabelais*"; Rabelais must have had a terrible time of it, the canar roti (sic. as spelled in the menu, not canard roti, was it a joke?) this canard must have given its last quack some long time before and so it went on; even the drink was disagreeable. All this in an abandoned factory with serving wenches, sackbuts, bagpipes, a hurdy gurdy and long explanations from a chap in a dressing gown, woolly socks, buckled shoes, with a tea cozy on his head. This extra set us back three times as much as the best Lyons had to offer.

But we have to set against this the generosity of the corporations that subsidize the events; individuals too, *Eric Alb*, a Swiss publisher and the printing museum put together a massive and luxurious buffet lunch in honor of *Adrian Frutiger's* 70th birthday. By dint of employing a large professional staff, this was by far the smoothest ATypl conference I have been to, but that comes at a price.

What of the *Association Typographique Internationale* itself? Inaugurated in Paris in 1957 it now claims a membership of 500 from thirty-two countries, but reliable figures have been hard to come by in the past. Typography now has a high public profile and the Association is open to all interested in type. ATypl claims in its program to be "the only worldwide organization dedicated to typefaces and typography"; but this is also the business of the *International Society of Typographic Designers*, started in 1925. STD has a bigger membership and MSTD is a professional qualification worldwide.

ATypl has a publication program in place: a journal *Type* edited by *Sumner Stone* and a news sheet; in 1998 members were given two booklets. This is not to overlook the work for the Association in the past

by *Fernand Baudin*, *John Dreyfus* and *Nicolette Gray* and others who variously produced "Typographic Opportunities in the Computer Age" Prague 1970; "Dossier A-Z" Copenhagen 1973; "A Chronology 1957-1977" Frankfurt; and a substantial historical exhibition of calligraphy on tour from 1981. The Munich typophile *E. Schumaker-Gebler* worked with *Banks&Miles* in London to produce the now much sought after commentaries on type "26 Letters" in two volumes 1989 and 1992. We shall see what the future can deliver. The Charles Peignot award was recently bestowed on *Robert Slimbach* in 1994 and *Carol Twombly* in 1990.

ATypI was set up to face down the pirates who could copy with impunity and ease the fonts of established manufacturers. This copying still happens and is likely to continue into the future. This initial motivation required the big foundaries to bring designers on board where they were tolerated but ultimately frustrated (the word was that all the real decisions in ATypI were made by a cabal of industrialists). It also helped with organizations such as *UNESCO* and the *1973 Vienna Congress on Industrial Property* to have a cadet wing of graphic educationalists.

An agreement was reached to protect the copyright interests in typefaces, but sadly the ultimate and necessary ratification by the ten national signatories seems further away than ever. "Univers" will continue to be sold as "Universal" and "Optima" as "Optimum" without benefit to *Adrian Frutiger* or *Hermann Zapf* respectively. ATypI's failure on this front should be balanced against a measure of membership satisfaction with the visible core activity: the annual conferences and congress. These have been held in some fine venues: Basle, Beaune, Barcelona, Budapest and so on through the alphabet to Vienna. In 1999 we meet in the United States, in Boston; in 2000, Leipzig; 2001 Lucerne; 2002 Glasgow.²

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¹ Aldus was the first to try and protect his type designs, but there were times when no censure attended copying. I am indebted to Fernand Baudin and H.D.L. Vervliet who directed me to Lyons early succession type plagiarism. See H. Baudrier *Bibliographie Lyonnaise*, volume 12, Lyons 1896-1921, entry on Klein; and in the summary to A.F. Johnston *Type Designs* and much happy devising is to be had in Johnson's *Selected Essays*, New York, 1970/71.

² If this has whetted your appetite, membership details can be had from the ATypI secretariate: Sharon Irving, 10 Ridgeway Road, Redhill, Surrey RH1 6PH, United Kingdom. Telephone +44 1737 780150, Fax +44 1737 780160, email atypi@sharonirving.co.uk, <http://www.atypi.org>

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compensating for the loss of 'color,' shade and implied form contributed by more expensive printing techniques like copper engraving. Then the author gives us a brief description of copper engraving, etching, aquatint and mezzotint printing and relates their distinct qualities to their employment, e.g., and predictably¹ copper engraving and lithography for music printing.

Unlike many introductions to printing which are 'typocentric,' Twyman's account shifts to a more even balance between the demands of words to the possibilities of pictures on the page. After 300 years of mainly letterpress printing, the commercial exploitation of new mass literacy and the growth of advertisements, packaging, journals, posters, etc. had to be satisfied, first by wood engraving (as against woodcuts), and then lithography which dominates printing as we know it today. Another pressure for change came through-out "the search for verisimilitude"—more detail and refinement in the reproduction of banknotes was possible through steel engraving than before. Many more needs were of course satisfied when photography and especially the photographic half-tone screen was harnessed to wood engraving, relief copper plates and then offset lithography.

Twyman posits that a general move into color printing was initially driven by the exacting needs of the natural historian, the archaeologist and the anatomist. The evidence is there to see in the libraries of our great nineteenth century scientific institutions, these high expectations crossed over to popular posters, theater bills, etc., but could still be satisfactorily met in the nineteenth century by the intervening improvements in mass letterpress printing.

The author leads us then down the quest to produce all the hues in nature's pallet using only four printing inks, this to satisfy the demand cheaply for only what had previously been achieved by

great expense. This 'photomechanical' process concludes the nineteenth century. Social change again drove mechanical improvements in the rapid development of printing machinery throughout the nineteenth century: newspapers demanded speed, hence the development of the rotary process and curved printing cylinders; the national postage rates generated great quantities of mail with stamps and intaglio printing meeting the need. The rapid composing and casting of type became perfected in the Talbert Lanston Monotypes (1894) and the Mergenthaler Linotype (1886). Innovation had crossed the Atlantic by the end of the nineteenth century.

By the 1960's we saw letterpress printing fall before the speed and flexibility of offset lithography and the increasing bringing together in a seamless process the origination of text and picture. Both were initially photographically based, but by the 1980s the digital processes we now use were putting photographic film behind us.

Twyman makes all these points clear and has produced an excellent brief account of how printing has shaped our lives and how our lives have shaped printing techniques. There are over sixty illustrations to enjoy and this book is another marker in the excellent and inexpensive British Library's Guide book series. Other books in the series include: *Writing and Scripts*, *Bookbinding and Manuscript Illumination*.

¹ Michael Twyman has taught at the University of Reading since 1959 and is author of numerous books and articles on printing; including *Early Lithographed Music* (London: Farrand Press, 1996).

Reviewed by Colin Banks, a long time typophile and bibliophile. He is a member of journal's advisory board and the European book review editor for the journal.

discrete sections in the paper are a result of their competition's organization and the need to differentiate the new paper. Description of the paper's visual assembly process is interesting. The paper was short-lived from 1994 through 1998. It would be interesting to know the reason(s) behind its demise — whether political, financial or something else.

Built on a concept of multiculturalism, The Public Theater's success moved it into more gentrified and homogeneous territory than its origins anticipated. The Public Theater is similar to a holding company for often famous 'brands' like the venerable New York Shakespeare Festival. The problem was that the producer, George C. Wolfe, needed to clarify corporate and brand activities. "His directive was this: create an image of the future in the context of present needs; shape that image to be streetwise and inclusive; and give it an enduring, unifying language . . . style with grit and a voice with an edge."

The design and communication focus developed in response to this mandate was on typography with bold 'shouting type' and abbreviated messages — in the street at a pedestrian level on both stable and moving surfaces. New York City is a pedestrian town despite its size and complexity. Posters went everywhere creating a European feel and context. The bold statements celebrate both The Public Theater and more generally the nature of language itself — and visible language in particular.

In yet another case study for which the reader/viewer desires more information, the redesign of the Hammond World Atlases are examined. Map-making has been an arduous and important craft evaluated by the accuracy of its data presentation. In the late 1980's, the availability of satellite imagery and computer-aided design both increased precision and made more economical the process of regular updating of atlases due to geological event or political change in territory. The Hammond corporation seized this opportunity to build a computer-based mapping system. Pentagram's role in this project was three-fold: create

an identifiable brand image for Hammond's products, clarify navigation within the atlas and unify visual representation throughout the atlas.

The visual presentation and brief descriptions of projects are like eating excellent appetizers — one's appetite is whet for more. But here one wants more substance (interpreted here as more process). This is available only for industrial design. Communication design, even that based on careful analysis of a problem, suddenly appears fully formed from the designer's genius. One example that explores user dimensions of product development is the work Pentagram did for a British oil company. The user problem is that twenty-five percent of all British cars on the road are running with the wrong motor oil. The corporate problem was to increase marketshare (and profitability in general) at the premium end of product sales. Sketches for wildly different bottle concepts are presented along with a chart listing functional requirements and communication needs. The chart provided the opportunity for evaluation of conceptual sketches based on a point-scoring system. Foam models were constructed, user trials were evaluated, a successful product package/communication was launched.

The problem with these 'case studies' is that the design process is usually ignored. The reader jumps from the problem to a conceptual solution, but even more often to the realized solution without any investigation of the divergence that design usually goes through prior to convergence on a solution. The book is beautifully produced and clearly shows the diversity of work Pentagram does. But these are not 'case studies' as design needs them.

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