Claus Clüver

Claus Clüver is Professor Emeritus of Comparative Literature. Indiana University (USA).

SUMMARY

This essay is the first study to examine the relations, in creative practice, in theoretical orientation, and in collaboration and personal contacts, between Brazilian Concrete art and poetry, especially between the "Ruptura" group and the "Noigandres" poets of São Paulo, during the period of 1952-1962.

In 2006 we celebrated the fiftieth anniversary of two interconnected events. The first was the trans-Atlantic baptism of a new kind of poetry produced in Brazil by the "Noigandres" group of poets and in Europe, as the Brazilians had recently found out, by Eugen Gomringer and others, and which Gomringer in 1956 agreed to label "poesia concreta / konkrete poesie / concrete poetry", accepting a label that Augusto de Campos had first proposed for their own production a year before. The second event was the opening of the "I Exposição Nacional de Arte Concreta" in the Museu de Arte Moderna of São Paulo, where it was shown from 4 to 18 December 1956, without attracting unusual attention. When it was transferred to Rio de Janeiro in February 1957, it caused excitement and derision and unleashed a critical debate in the papers that was to last for months.

The first event established the international presence of the Brazilians in a movement that was found rather than founded as its participants gradually discovered each other, and that culminated (and ended) in the publication of several international anthologies in the late sixties and in a number of exhibitions, including a month-long "expose: concrete poetry" at Indiana University in 1970.¹ The second event had no international repercussions but turned out to be of considerable significance for the Brazilian cultural scene of the day. It established the label "Concrete Art", and with it "Concrete Poetry", in the public mind. It was apparently the first exhibition in Brazil where paintings, sculptures, and poster poems were exhibited side by side. It thus gave visitors an opportunity to explore the features that prompted visual artists as well as poets to use the same label for their work – a challenge that has gone largely unheeded, even though many of these works were reunited in memorial exhibitions in 1977,² in 1996,³ in 2002,4 and in 2006.5 It was the first – and for a number of years the only – time when artists belonging to two groups, one from São Paulo, the other from Rio, all of them engaged in developing a constructivist, abstractgeometric art which they now decided to call "Concrete" (as opposed to "Abstract" 6), exhibited their work together, ten artists from each camp. 7 The three Noigandres poets from São Paulo, Décio Pignatari and Haroldo and Augusto de Campos, were joined by three "Cariocas", Wlademir Dias Pino,

- ¹ The major anthologies are listed in the Bibliography of Clüver, "Concrete Poetry: Critical Perspectives." The month-long international exhibition at Indiana University in February 1970 was based on the collection of Mary Ellen Solt, with many contributions by others. Presentations were made by Vagn Steen, Emmett Williams, Iannis Xenakis, Claus Clüver, and davi det hompson.
- ² "Projeto Construtivo Brasileiro na Arte (1950–1962)", Rio de Janeiro: Museu de Arte Moderna; São Paulo: Pinacoteca do Estado, 1977.
- ³ In the "Casa das Rosas", Avenida Paulista, São Paulo.
- ⁴ Memorial exhibition "Arte Concreta Paulista" at Centro Universitário Maria Antônia da USP, one section of which was an attempt to reconstruct the "exposição do grupo ruptura no museu de arte moderna de são paulo 1952." Catalogues: Arte Concreta Paulista. 5 vols. São Paulo: Cosac & Naify. (1) Arte Concreta Paulista: Documentos, org. João Bandeira; (2) Grupo Ruptura: Revisitando a Exposição Inaugural, curator Rejane Cintrão, texts Rejane Cintrão and Ana Paula Nascimento; (3) Grupo Noigandres, curators Lenora de Barros and João Bandeira; (4) Waldemar Cordeiro: A Ruptura como Metáfora, ed. Helouise Costa, texts: Helouise Costa and Vivian Boehringer; (5) Antonio Maluf, ed. Regina Teixeira de Barros, texts: Regina Teixeira de Barros and Taisa Helena P. Linhares.
- ⁵ The exhibition "concreta '56: a raiz da forma" was held in the Museu de Arte Moderna of São Paulo from September 26 till December 10, 2006. The impressive catalogue had 311 pages.
- ⁶ See Augusto de Campos, Interview, 2006.
- ⁷ See the "Appendix" for a list of participants.

ós: Belo Horizonte, v. 1, n. 1, p. 114 - 135, maio, 2008.

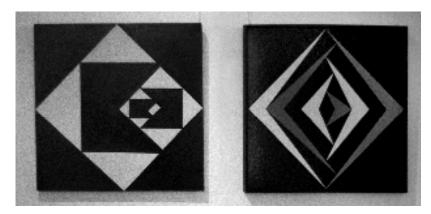
⁸ Unless otherwise noted, all translations are my own. The announcement of the exhibition has been reproduced repeatedly, most recently in Pérez-Barreiro, ed., The Geometry of Hope, p. 45. The reception of the program is documented in Bandeira, org., Arte Concreta Paulista, p. 46–51.

⁹ The images reproduced here are based on slides I took from the originals, the majority at the 1977 exhibition "Projeto Construtivo Brasileiro na Arte (1950-1962)" in Rio de Janeiro, others in the homes of the Noigandres poets, or from documents in my collection.

¹⁰ Perceptively analyzed by Gabriel Pérez-Barreira in The Geometry of Hope, p. 128-130 (fig. 16); the design has been reproduced on the front of the catalogue's hard-cover edition as a shape embossed on the uniformly blue cover (replacing the black-white contrast of the original with a figure-ground relationship). Ferreira Gullar, and Ronaldo Azeredo. Not long after, the artists and poets from Rio decided to break with the Paulistas for ideological reasons and declared themselves to be "Neoconcretos", except for Ronaldo Azeredo who had already joined the Noigandres group (and was followed a little later by another Carioca, José Lino Grünewald). The exhibition was, finally, also the place to reaffirm the claims by all involved to represent the avant-garde in poetry and the visual arts, a claim already announced by the titles which the groups of artists had chosen for themselves at their foundation in 1952: "Ruptura" and "Frente".

While the Frente artists from Rio were not given to producing manifestos, the Ruptura group distributed at its inaugural exhibition in 1952 a text that appears to have received as much attention as the works exhibited. Evidently formulated by Waldemar Cordeiro, the group's polemical theorist, it proclaimed "there is no more continuity!" and rejected not only figurative art but also "the hedonistic non-figurative art spawned by gratuitous taste" in favor of "all the experiments directed at the renovation of the essential values of visual art (space-time, movement, material)". ⁸ The exhibition was not documented; a reconstruction was attempted in 2002

Fig. 1: Geraldo de Barros (1923–1998)
Left: Desenvolvimento de um quadrado [Função diagonal] (Development of a Square [Diagonal Function]), 1952. Industrial lacquer on cardboard, 60 x 60 x 0.3 cm. Coll. Patricia Phelps de Cisneros. Right: Movimento contra movimento (Movement against Movement), 1952. Enamel on kelmite, 60 x 60 cm. Switzerland: Coll. Fabiana de Barros.



(cf. note 4). Examples of early works by Ruptura members who also participated in the 1956 exhibit are Waldemar Cordeiro's Movimento (1951; Plate 6, p. 138), Luiz Sacilotto's Concreção (1952; Plate 7), and Desenvolvimento de um quadrado and Movimento contra movimento by Geraldo de Barros (both of 1952; fig. 1). The reference to time or movement in the titles that is characteristic of Ruptura work, as well as the use of industrial media such as enamel or lacquer and of industrial board (kelmite or eucatex) for the support, are also found in Objeto rítmico No. 2 (1953; Plate 8) by Mauricio Noqueira Lima, who joined Ruptura in 1953.

The apparent movement evoked by the design is particularly intriguing in Círculos concêntricos e alternados [11]¹¹ (1956; Plate 9) by Hermelindo Fiaminghi, who joined in 1955. The design consists of an off-white vertical field traversed by coupled horizontal bands in red and grey arranged in an alternating sequence which reverses over the horizontal axis; its most effective feature is the suggestion of a series of half-circles whose placement prevents the upper halves from meeting the lower halves in a circle – which induces the viewer to mentally moving them constantly closer or pushing them apart in order to achieve the perfect circular form. The temporal dimension is clearly perceived as a mental function induced by the spatial design.¹²

For the National Exhibition of 1956/57, an issue of the magazine ad: arquitetura e decoração (No. 20, Dec. 1956) served as the catalogue and carried programmatic statements as well as reproductions of artwork and poems. The cover (Plate 10) was based on a painting by Fiaminghi that in 1977 was owned by the poet Ronaldo Azeredo (Plate 11). ¹³

Cordeiro opened his statement in the catalogue by asserting: "Sensibility and the object encounter, at the hands of the avant-garde, a new correlation." He continued:

Art represents the qualitative moments of sensibility raised to thought, a "thought in images". [...] The universality of art is the universality of the object. [...] Art is different from pure thought because it is material, and from ordinary things because it is thought. [...] Art is not expression but product. [...] Spatial two-dimensional painting reached its peak with Malevich and Mondrian. Now there appears a new dimension: time. Time as movement. Representation transcends the plane, but it is not perspective, it is movement. (Cordeiro, 1956)

Besides later work by the Ruptura artists already sampled, now less tentative and more sophisticated, the "National Exhibition" included work by a founding member, Lothar Charoux (Plate 12), by Judith Lauand, who had joined the group later (Plate 13), and by Alexandre Wollner, a close associate

¹¹ This is how the title is listed in Concreta '56: a raiz da forma, p. 67. In the exhibition catalogue projeto construtivo brasileiro na arte (1950–1962), p. 14, it is listed as Círculos com movimento alternado (Circles with Alternating Movement), 1953. There may have been several versions of the design. The painting was included in the 1956/57 exhibit; a black and grey version of the design was featured in ad, the exhibition catalogue, entitled "movimento alternado" (n.p.).

¹² I have analyzed this painting more fully in Clüver, "Brazilian Concrete", p. 208–09.

¹³ In Concreta '56: a raiz da forma, p. 64, it is listed as still in the poet's collection.

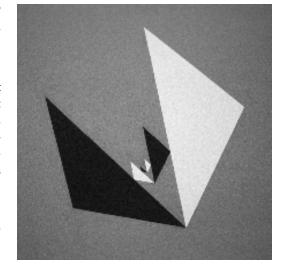
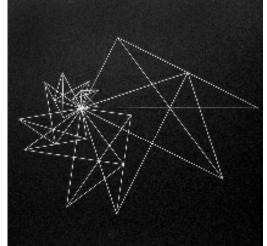




Fig. 3: Mauricio Nogueira Lima, Triângulo espiral (Spiral Triangle), 1956. Paint on eucatex, 60 x 60 cm.



s: Belo Horizonte, v. 1, n. 1, p. 114 - 135, maio, 2008.

¹⁴ Sacilotto called all of his works at that time "Concretions", which he dated by year and numbered. – The exhibit also included plastic constructions by Kazmer Fejer, another founding member, such as the Escultura em crystal (Crystal Sculpture) of 1956, owned by H. Fiaminghi, shown in Amaral, org., Projeto Construtivo, p. 205.

¹⁵ The slogan on the back of the invitation to the 1952 exhibit of Grupo Ruptura (reproduced in Amaral, org., Arte Construtiva no Brasil, p. 287).

¹⁶ Another version from 1956, smaller and using different materials (acrylic on masonite), is reproduced in Pérez-Barreira, ed., The Geometry of Hope, fig. 24, accompanied by an extended analysis by Erin Aldana, p. 148, 150.

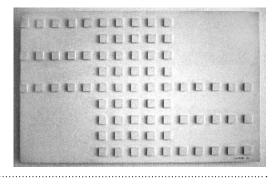


Fig. 4: Luiz Sacilotto, Concreção 5624, 1956. Oil on aluminum, 36.5 x 60 x 0.4 cm. Coll. Renata Feffer.

but never a Ruptura member (fig. 2). All three are based on the square, the preferred shape for much of the work by the Ruptura artists at the time (cf. Plates 8, 9, 12, 17, 19, 27); all three confirm the tendency of these Concrete artists' designs to use "variation" and "development" of lines and shapes by systematically altering their size and thus achieve implications of a temporal dimension and the illusion of moving into the depth of the field.

Alfredo Volpi, thirty years older than most of the others and now counted among the very great in Brazilian art, was for a number of years drawn onto the Concrete path. In his Xadres branco e vermelho (Plate 14) he introduced into a static, flat, decorative red-and white checkerboard pattern a dynamic ambiguity by splitting diagonally descending squares diagonally into halves of opposing colors, which inverts the pattern below the diagonal and altogether confuses one's optical orientation – which is only one of the consequences of this simple intervention, more difficult to verbalize than to grasp visually.

A black-and white design of Volpi's painting was reproduced in the ad catalogue, and so was Mauricio Nogueira Lima's Triângulo espiral (fig. 3), a black square in which a set of interlocking triangles follows a systematic pattern of development that imposes a rotation either inward to the left, with regular diminutions, or outward to the right, with the triangles increasing, so that the spiral movement may suggest either an implosion or an explosion. A striking example of the use of industrial material with a suggestion of manufacturing processes was Sacilotto's Concreção 5624 (fig. 4);¹⁴ its uneven surface, resulting from pasting on identical small aluminum squares in a rigorous pattern, introduced into the monochrome work a play of light and shadows that changed with the position of the observer.

In keeping with the slogan "the work of art does not contain an idea, it is itself an idea", "Cordeiro entitled many of his paintings of that time "Visible Idea"; Plate 15 shows one version of a series developing this particular idea, or theme. 16

The impersonality of their work of the 1950s made it at times difficult to recognize authorship, but – as these examples will have demonstrated – differences existed and would eventually become more pronounced; however, for a number of years the members of the Ruptura group adhered quite faithfully to their program. The materials of their paintings (straight or curved lines, geometric shapes, a few carefully balanced colors used for structural effect) were reduced to a minimum; all signs of individual production,

The work of these artists, much of which was undertaken as a kind of "pesquisa" (research), an exploration of the possibilities of the medium, created indeed a sense of movement, differently induced in each case and mentally executed by the viewer. "The painters, designers and sculptors from São Paulo not only believe in their theories but also follow them, at their own risk", wrote the influential critic Mário Pedrosa in response to the exhibition

```
u m
     movi
     mento
  compondo
 a I e m
           d a
nuvem
    u m
  campo
       d e
  combate
     mira
  g e m
       ira
           d e
    υm
       horizonte
puro
  num
     m o
     mento
 vivo
```

Fig. 5: Décio Pignatari (b. 1927), "um movimento", from Noigandres 3, 1956. English version: Claus Clüver.

Fig. 6: Augusto de Campos, "terremoto" (1956), version published in Solt, org., Concrete Poetry, np.

Pós: Belo Horizonte, v. 1, n. 1, p. 114 - 135, maio, 2008.

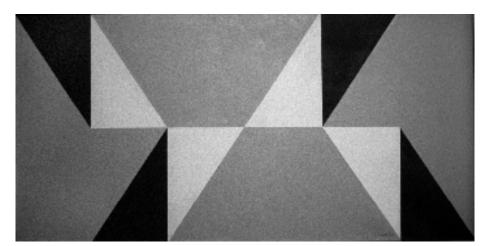
Fig. 7: Haroldo de Campos (1929–2003), "nascemorre", Noigandres 4, 1958. se
nasce
morre nasce
morre nasce morre
renasce remorre renasce
remorre renasce
remorre
desnasce
desmorre desnasce desmorre
nascemorrenasce
morrenasce
se

of 1956/57, contrasting them with the artists from Rio, whom he considered "almost romantics" by comparison (Pedrosa, 1957). Indeed, the poet and critic Ferreira Gullar, who was to become their major spokesman, confirmed:

The Grupo Frente did not have at least two of the characteristics that are common to avant-garde movements: the defense of a single stylistic orientation and a theoretical underpinning. [...] Nevertheless, it played a role in the renovation of Brazilian art [...]. (Gullar, "O Grupo Frente", p. 143)

¹⁷ Most recently reprinted in Gullar, Experiência neoconcreta, p. 76-79. A number of the artists from Rio who participated in the 1956 exhibition, including a very young Hélio Oiticica, were indeed to assume prominent positions in the artistic avant-garde, mostly in their "Neoconcrete" phase. But the break that led to Neoconcretism was caused by disagreements with the theoretical attitudes of both the visual artists of São Paulo and the Noigandres poets. In fact, it was Haroldo's 1957 essay "Da fenomenologia da composição à matemática da composição" (From the Phenomenology of Composition to the Mathematics of Composition) that led to a counterstatement by the Cariocas Bastos de Oliveira, Ferreira Gullar and Reynaldo Jardim, "Poesia concreta: experiência intuitiva" (Concrete Poetry: an Intuitive Experiment/Experience). ¹⁷ In March, 1959, Gullar completed the break by composing a lengthy manifesto in which he (with his fellow signatories) rejected the primacy of theory and the "mechanistic" and "rationalistic" turn allegedly taken by the Concrete artists and poets of the rival city (see Note 30).

No matter what the merits of this criticism, both their work and their theoretical statements confirm the affinities between the Noigandres poets and the Ruptura artists. Cordeiro met Décio, Haroldo and Augusto in November,



ruaruaruaso l ruaruaso l rua ruaso l ruarua so l ruaruarua ruaruaruas



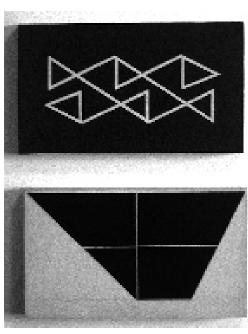


Fig. 8: Luiz Sacilotto, Concreção 6048, 1960. Oil on canvas, 60 x 120 cm. São Paulo: Pinacoteca do Estado.

Fig. 9: Ronaldo Azeredo (1937–2006), "ruasol", Noigandres 4, 1958.

Fig. 10: José Lino Grünewald (1931–2000), "vai e vem" (1959), Anthologia Noigandres 5, p. 181.

Fig. 11: Alfredo Volpi, two paintings. Coll. Ronaldo Azeredo.



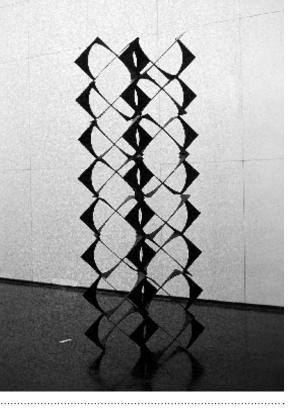


Fig. 12: Franz Weissmann (1911–2005), Coluna (Column), 1958. Painted iron, 280 x 110 x 75 cm. São Paulo: Museu de Arte Contemporânea, USP. Photo: Claus Clüver, 1977.

¹⁸ Schoenberg's idea that by changing instrumental or tone color one could produce an effect analogous to the melody achieved by changing pitches was developed more rigorously by Webern in his minimalist compositions.

¹⁹ Augusto had circulated them among friends as typewritten copies produced by using colored carbon paper, at the suggestion of Geraldo de Barros (Augusto de Campos, Interview). 1952, when they had just published the first issue of Noigandres with their recent poems and the Ruptura artists were about to open their exhibition. I do not know much about the intensity of the contacts in the years before the National Exhibition, but some of the Ruptura members have been called "interlocutores constantes" with the poets. In 1953 Décio and Cordeiro traveled together to Chile to participate in the Continental Culture Congress, a trip financed by the Brazilian Communist Party. But then Décio left to spend two years in Europe. In his absence, Haroldo and Augusto published Noigandres 2 (1955), all of one-hundred copies, made expensive because of Augusto's six multi-colored Poetamenos poems which he had composed as early as 1952/53 and which are rightly considered the first Brazilian Concrete poems.

All of these poems are inscribed in invisible squares. All contain at least two colors, with the sixth, "dias dias dias", displaying all of the primary and secondary colors as well as lower-case and capital letters. Inspired by the composer Anton von Webern's theory and practice of Klangfarbenmelodie, ¹⁸ these texts are meant to be sounded by as many voices as there are colors, and they were in fact publicly performed before they were published. ¹⁹ The most frequently discussed poem is "lygia"; I have shown elsewhere, following Augusto's own lead, that the poem is in fact (among other things) a transposition of the opening measures of Webern's Quartet for Violin, Clarinet, Tenor saxophone and Piano, op. 22 (Clüver, "Klangfarbenmelodie").

In the newspaper articles Augusto and Haroldo began to publish in 1955 there was apparently no reference to Brazilian Concrete art. When the "planopiloto para poesia concreta" (Pilot Plan for Concrete Poetry), the condensed summary of the theoretical statements composed by the two and Décio over the past four years and published in 1958 in Noigandres 4, defines Concrete poetry as "tension of word-things in space-time" and lists parallels in music and the visual arts, it refers to "mondrian and the boogie-woogie series; max bill; albers and the ambivalence of perception; concrete art in general." It is difficult and also rather pointless to speculate on the effect the personal contacts may have had on the thoughts and the work of poets or painters during the years leading up to the National Exhibition.

But the affinities are obvious. In hindsight, considering them from the "orthodox" (or "heroic") phase that their work had reached with the poems published in Noigandres 4, Augusto's Poetamenos poems still show a number of characteristics that were later eliminated (which, for some readers, may make them more interesting and appealing). There is still a lyrical "I" pres-

ent – in fact, in terms of referential content they are a kind of Erlebnislyrik. The fifth poem, "eis os amantes", using a more reduced verbal material and approaching the isomorphism so strongly emphasized in the "Pilot Plan", indicates most clearly the path that future developments will follow. Originally published in the complementary colors blue and orange, or it was placed in white and orange within a blue square for its publication in Mary Ellen Solt's Concrete poetry anthology (Plate 16a), with the English translation appearing in blue and white in an orange square (Plate 16b). The semantic representation of the sexual union of two lovers, culminating in the long portmanteau word in the center and the final verbal fusion of one in the other continuing the "infant" motif, is visually shown by the placement, approximation, intertwining and crossing of the two colors.

Noigandres 3 was published on the occasion of the 1956 exhibit, with poems by Décio Pignatari, Haroldo and Augusto de Campos, and Ronaldo Azeredo. Pignatari's "um movimento" (fig. 5) was also included in the ad catalogue as a typewritten text (which assigns to each letter an equal space). I reproduce it below with an attempt at a translation that makes compromises in order to somehow preserve its most salient features. The poem is (still) a syntactically coherent statement complete with a verb (a participle, "compondo") and separated by an empty line into two stanzas. But the most striking feature is the column of m's in the center (making it into a kind of Mittelachsengedicht), which emphasizes its spatial properties and invites the exploration of other vertical relations and internal visual structures. The entire shape suggests an iconic relation to its semantic content, a (metaphoric?) landscape or cloudscape, which moves from "a movement" to "a moment", with "horizonte" representing the most prominent horizontal feature. There is still an implied observer and therefore the expressed presence of a consciousness.

- ²⁰ The original can be accessed at Augusto de Campos's website.
- ²¹ First published in 1968 as a topical double issue of Artes Hispanicas / Hispanic Arts (1.3-4).

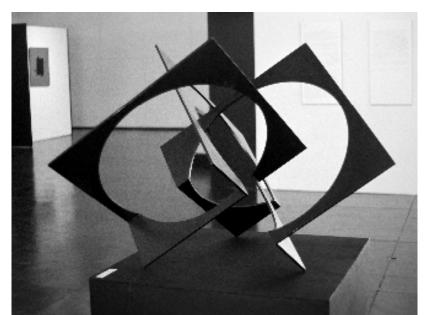


Fig. 13: Franz Weissmann, Três pontas (Three Points), 1958. Painted iron, 120 x 160 x 160 cm. Photo: Claus Clüver, 1977.





Fig. 14: Installation shot, "Projeto Construtivo Brasileiro na Arte (1950–1962)", Rio de Janeiro, Museu de Arte Moderna, 1977, with Franz Weissmann, Círculo inscrito num quadrado (Circle Inscribed in a Square), 1958. Painted iron, 100 x 100 x 100 cm. Photo: Claus Clüver.

²² "terremoto" appeared in Antologia Noigandres 5 as an unpublished poem. For a very detailed analysis of this poem see Clüver, "Augusto de Campos' 'terremoto'". Composed in the same year but not included in Noigandres 3, Augusto's "terremoto" (earthquake; fig. 6)²² has a purely spatial syntax, although conceptually, in its lexical references, it develops a temporal theme of cosmic proportions. Its "stanzas" descend diagonally from top to bottom, although each of these interlocking open squares is internally developed both horizontally and vertically (Augusto has referred to it as a Concrete crossword-puzzle). There is a sense of expan-

sion and contraction; the last stanza is a dense ball dominated by o's and t's (which in the Futura typeface look like crosses). This ball refers us both visually and conceptually back to the o's of the egg ("ovo") and the ball of yarn ("novelo") of the opening and thus suggests a circularity that is found in a number of poems of the later phase, formally expressing the space-time dimension emphasized in the "Pilot Plan", which is there likened to the same phenomenon represented "in concrete art in general". The poem was originally published in black on a white page; the version published in the Solt anthology, which shows the letters in white inscribed in a dark blue square, visually evokes a stellar constellation, in keeping with part of the dominant imagery. This iconic emphasis may subdue other implications and associations evoked by the text; but Augusto has agreed that a white-on-black reproduction may be appropriate (just as two of Haroldo's contributions to Noigandres 3 offered a white text against a black ground).

In "arte concreta: objeto e objetivo", the programmatic opening statement of the catalogue, Décio Pignatari emphasized that:

Verse having been abolished, Concrete poetry confronts many problems of space and time (movement) that both the visual arts and architecture have in common, not to speak of the most advanced (electronic) music. Moreover, the ideogram, for example, can perfectly well function on a wall, internal or external. (ad, no. 20, np.)

Obviously, the experience of showing their work side by side with paintings and sculptures determined the poets' decision to publish Noigandres 4 (1958) as a portfolio edition with twelve poster poems, ready to be displayed. It had a cover by Fiaminghi (Plate 17). With these poems, the production of the four had reached the most characteristic form of the Concrete "ideogram", as they called their texts as disciples of Ezra Pound. To a considerable

It is obvious that certain characteristics of the new poetry were carried by us to the limit, in the case of terms and themes such as that of the "mathematics of composition" and of "poem: useful object". But I think that this radical attitude was necessary in view of the self-complacency and sentimentalism dominant in our midst. I saw in the "sensible rationalism" on which we insisted the fundamental objective of poetry itself: to achieve a production where not a word, not a letter could be changed, where no part of the text could be moved without having the poem collapse – which is, after all, the goal of every poet. ²⁴

I have used Haroldo de Campos's poem "nascemorre" (fig. 7) on an earlier occasion²⁵ to show how a change of the minutest detail can destroy a major structural effect: the first triangle formed by a regular (if you like: mathematical) development of the minimal verbal material ("se nasce

²³ H. de Campos had introduced the concept of the "open work of art" with regard to structure and use of materials and the activity of the reader in 1955 ("A obra de arte aberta"), long before Umberto Eco.

²⁴ "É claro que certas características da nova poesia foram levadas por nós até o limite, caso de lemas e temas polémicos como o da matemática da composição' e do 'poema, objeto útil'. Acho, porém, que essa radicalidade foi necessária diante da autocomplacência e do sentimentalismo dominantes em nosso meio. Eu via no 'racionalismo sensível' que sustentávamos o ideário da poesia mesma: chegar a produções às quais não se pudesse substituir uma palavra, uma letra, deslocar uma parcela do texto sem que o poema desmoronasse – algo que é afinal a meta de todos os poetas."
Augusto de Campos, Interview, 16 Sept. 2006

²⁵ See Clüver, "Concrete Poetry: Critical Perspectives", p. 271-72. – Like so many of these ideograms, "nascemorre" is built entirely on a linguistic peculiarity (in Portuguese, "nascer" and "morrer" are active verbs, and personal pronouns are not needed) and on a spelling accident: the two verb forms have the same number of letters. Moreover, the final sound of "nasce" happens to equal "se", and the "re" at the end of "morre" takes on a function of its own.

²⁶ The poem is also entirely untranslatable, as is demonstrated by the French version, where the impossibility of re-creating the structural correspondences of the "re" and "se" elements renders the text meaningless (see H. de Campos, une anthologie, p. 47).

²⁷ For an examination of the way the Noigandres poets theorized different stages of isomorphism in their work see Clüver. "Iconicidade". morre", if he/she/it is born he/she/it dies) re-constructs itself by seemingly turning over an invisible horizontal and a structurally designated vertical axis formed by carefully aligned "re"s; a shift of the second triangle by one slot to the left (as it happened in the anthology organized by Mary Ellen Solt and in numerous reproductions elsewhere) not only removes that axis but violates the structural feature of vertically aligning all "e"s of the text except for those of the initial and final "se". ²⁶ Altogether the poem exhausts all the possibilities inherent in its semantic properties as well as of the visual arrangement of its triangles. The final syllable (an echo of "nasce") returns us to the beginning in an endless progression of dying and becoming.

In visual terms, the poem's structure is quite similar to Sacilotto's Concreção 6048 of 1960 (fig. 8), which also exhausts all the possibilities of combining the black and white triangles shown against the violet ground and of placing the pairs that are inherent in the design. Such similarities could be found in structural comparisons of several poems with works by Ruptura artists. But the triangles and the placement of the pairs in Sacilotto's painting obviously have a different motivation and function than those in Haroldo's poem, where each triangle manifestly performs the act of "becoming" signaled by the verbal semantics and where the "death" of the first triangle leads to its "rebirth" in the second and the inversion of the second also inverts the meaning of the verbs: "desnasce" equals "morre". On the other hand, as I hope to have shown, the similarities between the work of both groups in their orthodox Concrete phase reach significantly deeper.

The two latest members to join the Noigandres group tended to work with the least amount of verbal material. In "ruasol" (fig. 9) by Ronaldo Azeredo, the word "sol" (sun) seems to move through the visual field formed by repetitions of "rua" (street), only to return as a trace (an s) in the last line, where the s simultaneously turns "rua" into a plural – only "ruas" is left when "sol" is gone. But our reading of this text will not stop with recognizing its representational and iconic qualities; of greater interest is the mental exploration of the verbal material and its signifying properties on which the poem's isomorphism is based – and of the kind of isomorphism embodied in this text.²⁷ The most rewarding way to read the poems under consideration here is to approach them as metapoems – which in this case includes the observation that "ruasol" is intranslatable, because only Portuguese uses three letters to form each of the two nouns signifying "street" and "sun". An effort to understand how the text functions is very similar to the effort of understanding a Concrete painting or sculpture.

A poem that seems to "say" even less is José Lino Grünewald's "vai e vem" of 1959 (fig. 10). Here are some notes by the filmmaker Stefan Ferreira Clüver, who in 1980 based an 18-minute film on this poem:

Two simple, formal transformations of a commonplace generate some very complex possibilities for meaning making. First, by violating the syntactic closure of the phrase "vai e vem" with a repetition of the "e" at its end, a regular verbal pattern is created that can go on indefinitely: ABA becomes ABAB. Second, by giving this syntactic alteration a graphic statement that connects beginning and end, the way in which the now endlessly repeating phrase signifies is radically altered: it becomes an ideogram. This ideogram, however, is quite different from those in current writing systems that have become as conventional as letter-based ones. The poem generates its own rules for making meaning because, as an ideogram, it can only be understood as a graphic violation of the linear, cumulative signifying conventions of language. The poem's arrangement on the page creates a tension between a syntactic dynamism and graphic stasis. The verbs "vai" and "vem", normally words of action, become the visual resting points of the graphic, while the conjunction "e" is the visual motor. "Vai" and "vem" become thing words, "e" becomes the movement word. (STEFAN F. CLÜVER, 1998)

In 1962 the five "Noigandres" poets (now also including Grünewald) collected their published poems and quite a few unpublished ones in antologia noigandres 5: do verso à poesia concreta, with a cover (Plate 18) based on a painting by Volpi owned by Pignatari (Plate 19). The anthology concluded the "heroic" phase of orthodox Concrete poetry produced by the Noigandres poets, at about the same time that the Ruptura artists began to strike out in individually more distinct and separate ways, as did the poets.

The contacts among artists and poets continued. When I began my research in Brazil in 1974, one of the first things I was told by Augusto was to seek out the painters, and I consequently visited and interviewed Fiaminghi, Sacilotto, and Volpi and later Judith Lauand and Geraldo de Barros. But I also encountered the painters in the poets' living-rooms. Here is a sampling of slide pictures I took in the homes of Décio Pignatari and Ronaldo Azeredo, besides those already shown. Among other works, Décio owned Mauricio Nogueira Lima's Objeto rítmico no. 3 (Plate 20) and Fiaminghi's Triângulos entrosados com movimento circular (Plate 21; see also Plate 19). In Ronaldo Azeredo's home I found two small paintings by Volpi (fig. 11) and a larger one by Sacilotto (Plate 22) as well as a work by Noqueira Lima (Plate 23), besides the Fiaminghi painting shown in Plate 11. Augusto owned a painting by Sacilotto that I did not photograph; Haroldo's living-room wall was full of paintings, but there my son filmed while I was taping my interviews, and so I have no slides.

I have limited my remarks to the decade surrounding the National Exhibition and to the relations of the Noigandres poets to Concrete art produced



Fig. 15: Amilcar de Castro (1920–2002), steel sculpture displayed in front of the Palácio das Artes in Belo Horizonte, Minas Gerais, in 1976. Photo: Claus Clüver.

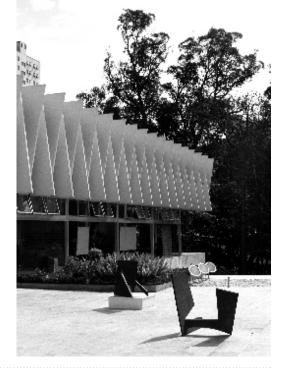


Fig. 16: Amilcar de Castro, steel sculptures displayed in the courtyard of the Palácio das Artes in Belo Horizonte, Minas Gerais, in 1976. Photo: Claus Clüver.

²⁸ A fac-simile edition of the catalogue of the "1a. exposição neoconcreta" in the Museu de Arte Moderna of Rio de Janeiro, March 1959, is included in Gullar, Experiênica neoconcreta. It contains the "Manifesto" over the names of the participating artists and poets: Amílcar de Castro, Ferreira Gullar, Franz Weissmann, Lygia Clark, Lygia Pape, Reynaldo Jardim and Théon Spanudis.

²⁹ These titles may be part of the polemical opposition of Neoconcretism to Concretism. In the catalogue of the 1977 "Projeto Brasileiro Constructivo" exhibit the work is listed as in the caption. However, Salzstein (p. 90-91) captions the work pictured as Coluna neoconcreta (196 x 76 x 52 cm), MAC, USP; Silva and Ribeiro oppose on pp. 28 and 29 a photo of Coluna Concretista (1952-53) with two photos of Coluna Neoconcretista (1958-78, 140 x 50 x 50 cm, no location). In the MAC's 1973 Catálogo Geral das Obras the sculpture shown on plate 147 is listed as Tôrre (Tower; 1957, 169 x 62.7 x 37.2 cm). Catalogues of 1988 (MAC, Perfil de um acervo) and 1990 (O Museu) list no holdings of a Weissmann work (but I saw the Coluna there in 1996).

in São Paulo. The Noigandres model induced the production of Concrete poetry in other parts of Brazil. As has already been suggested, the relations between the Noigandres poets and the two poets from Rio who were to be involved in "Neoconcretismo" became complicated in the late fifties, and so did the relations between the two groups of visual artists. In fact, the groups disbanded as such, with the most prominent Frente members exhibiting for a while under the banner of "Neoconcretismo". ²⁸ Indeed, Lygia Clark, Lygia Pape and Hélio Oiticica followed divergent paths that distinguished their later work significantly from that of the Paulistas.

On the other hand, the sculptors from Rio participating in the National Exhibition, Franz Weissmann, a Frente member, and Amilcar de Castro, long associated with the group, continued throughout their career to develop a line of work that retained close affinities to the Concrete aesthetic; some of their later work is found in public places also in São Paulo. This is not the place to investigate the claims that the ideas expounded by the theorists of Neoconcretism offered Weissmann an "alternative to the scientific orientation ['cientificismo'] that dominated the movement from São Paulo" (Salzstein, p. 91). Let us look at three sculptures dated 1958. To the "Coluna concretista" created earlier in the decade (and which won him the National Sculpture Prize at the São Paulo Biennial of 1957; Salzstein, p. 119) Weissmann opposed in 1958 a "Coluna neoconcreta" (fig. 12).²⁹ The work is systematically constructed out of flat metal squares framing circular cut-outs - not unlike the use of circle and square in the design of some of the paintings we have seen. Like the earlier column conceived around an empty space, but emphasizing the diagonal rather than the vertical and horizontal and thus resting on the points of its squares rather than on their sides, the new column was lighter and less austere. The basic idea on which the column is built is also found in another sculpture displayed in the 1977 exhibit, Três pontas (fig. 13). The artist told me in an interview in 1981 that he had hoped to see it placed, in a larger scale, in the Praça dos Três Poderes in Brasília, to symbolize the interplay and intricate balance among the three branches of government. The sculpture that stood at the entrance of the 1977 exhibit in Rio de Janeiro's Museum of Modern Art, Weissmann's Círculo inscrito num quadrado (fig. 14), shows one of the simplest forms of the idea of creating interlocking squares out of flat sheets of metal and "inscribing" in them circles by cutting them out; here, the squares rest on their sides.

Amilcar de Castro's work is characterized by an apparently intuitive approach and the great simplicity by which he creates spatial configurations by cut-

The work of both sculptors clearly shares the Concrete aesthetic exemplified by the paintings, sculptures, and poems shown in the National Exhibition of 1956/57. It was not even then a unified aesthetic, and the rupture between Cariocas and Paulistas that was to occur soon after and to turn into a split between Concrete and Neoconcrete art (and poetry) brought into greater relief what an attentive observer like Mário Pedrosa noted right away. But much of the public reaction involved an attempt to come to terms with the radical break with tradition perceived in all of the work, and most specifically in the poetry, because constructivist visual art produced in Brazil had already been in the limelight at least since the First São Paulo Biennial of 1951.

This essay has focused on the interrelations between the work of the Ruptura artists and of the Noigandres poets, and on the interactions among its members. As a consequence of the juxtaposition and of the exploration of analogies and similarities, access to these works may have become easier. But even nowadays, "reading" these texts – paintings, sculptures, and poems – is still a considerable challenge for many.

And the way we read them has changed in the course of fifty years. We are looking back at them with a knowledge of what has been produced since – both by the artists and poets themselves and by the culture that shaped them and that they have shaped in turn. The critical discourse

has changed: not only have post-modern notions about the nature and function of art affected the way we approach these visual and verbal texts, but we have witnessed a lively debate about the construction of avant-gardes and neo-avant-gardes based on a well-mapped landscape of the earlier part of the century that may be at odds with the information that was available to the young Brazilians at mid-century.

What is also beginning to change, to some extent under the impact of the new media and of the intermedial genres of textmaking that they are generating, is the habit of looking at such events as the National Exhibition of 1956/57 through the limiting lenses of the traditional disciplines. The developing field of Studies of Intermediality will provide a more appropriate perspective and better tools to approach such an intermedial phenomenon as Concrete poetry. Even now, the semicentennial celebrations have looked at it largely as a literary event. The insistence of the Noigandres poets on listing in the "Pilot Plan" not only Mallarmé, Pound, Joyce, Cummings, and Apollinaire as well as the Brazilian poets Oswald de Andrade and João Cabral de Melo Neto as "precursors", but pointing to aspects of the work of Eisenstein and Webern as well as of Mondrian, Max Bill, Josef Albers and "Concrete art in general" as providing signposts for the new poetry (and art) to be "invented" has had little impact on the critical discussion. Nor have the references to the other arts in the poems themselves received much attention.30 For the poets, their participation in the exhibition was a defining moment. They saw their work as constituting part of the new avant-garde that was to shape their country's cultural production - and possibly turn it from the post-colonial "anthropophagic" consumer of foreign models into a supplier itself of "models for export". 31

30 For instance. Haroldo's poem "mais e menos" was a response to Mondrian's Plus and Minus; his poem "branco", which I discussed long ago as an intersemiotic transposition of a Mondrian painting such as Composition in Black, White and Red (1936; see Clüver, "On Intersemiotic Transposition"), turns out to have been conceived as an homage to Malevich.

³¹ Cf. Clüver, "The 'Ruptura' Proclaimed by Brazil's Self-Styled 'Vanguardas' of the Fifties."

CLÜVER, Claus. The Noigandres poets and Concrete

³² One of the most important is the expansive catalogue Poésure et Peintrie: «d'un art, l'autre», org. by Bernard Blistène and Véronique Legrand, accompanying the exhibit of intermedial poetry held in 1993 in Marseille.

³³ This is not an entirely unusual situation. Thus, in Germany "Konkrete Poesie" is largely considered a German phenomenon. The widespread ignorance about the international character of Concrete poetry may be reduced by a critical collection in the making, Concrete Poetry: A comparative perspective on an international movement, organized by Anna Katharina Schaffner and Marina Corrêa and expected to be published in 2009.

³⁴ The situation may be changing somewhat: see the inclusion of works by Ruptura artists in such large exhibitions in the US as "Inverted Utopias: Avant-Garde Art in Latin America" (The Museum of Fine Arts, Houston, 2004; cf. the catalogue by Mari Carmen Ramírez and Héctor Olea) and "The Geometry of Hope: Latin American Abstract Art from the Patricia Phelps de Cisneros Collection" (Blanton Museum of Art, U Texas at Austin, 2007; cf. the catalogue by Gabriel Pérez-Barreiro).

³⁵ See esp. Amaral, Arte Construtiva no Brasil (1998), with an extensive bibliography.

³⁶ See Ana Maria Belluzo, Waldemar Cordeiro: Uma aventura da razão (1986); Isabella Cabral and M. A. Amaral Rezende, Hermelindo Fiaminghi (1998); Ronaldo Brito, Amilcar de Castro (2001); Enock Sacramento, Sacilotto (2001); Sônia Salzstein, Franz Weissmann (2001); Helouise Costa, curator. Waldemar Cordeiro: A Ruptura como Metáfora (2002); Fernando Pedro da Silva and Marília Andrés Ribeiro, Franz Weissmann: Depoimento (2002); André Stolarski, Alexandre Wollner e a formação do design moderno no Brasil (2005). I have listed only monographs about Ruptura artists, besides those about the two sculptors discussed.

³⁷ See Amaral, org., Projeto Construtivo Brasileiro na Arte (1977); also, one of the 5 volumes of Arte Concreta Paulista (2002) is dedicated to Grupo Noigandres, curated by Lenora de Barros and João Bandeira. To some degree, the poets have succeeded. They occupy an often privileged position in relevant international anthologies and exhibition catalogues, ³² although many of their manifestos and theoretical statements collected in their Teoria have for the most part remained untranslated. Strangely enough, the fact that the Noigandres poets formed part of an international movement with participants from most European countries, North America, Mexico, and even Japan is practically unknown in Brazil,³³ which makes it difficult in this country's critical discourse to assess the particular characteristics of these poets' Concrete phase and to fully gauge its achievements.

The Ruptura artists have remained almost entirely unknown abroad, for reasons that have little to do with their work and everything with the international art scene.³⁴ But their impact within the country, along with that of the Neoconcretos, can be assessed by the number of memorial exhibitions I listed earlier, besides a growing number of studies devoted to Brazil's "Constructivist Project" in general³⁵ or monographs on individual artists.³⁶ The publications accompanying and documenting the exhibitions³⁷ included material about Concrete (and Neoconcrete) poetry; in the monographs the connection between Concrete art and poetry is not a topic. Art critics and historians have disregarded the intermedial and intersemiotic dimensions of the Brazilian avant-garde of the fifties just as much as their literary counterparts. This essay provides no more than a possible starting point for a re-orientation of the critical discourse.

REFERENCES

AD: Arquitetura e Decoração (São Paulo), No. 20 (December 1956).

Aldana, Erin. "Waldemar Cordeiro, Idéia visível [Visible Idea], 1956." In Pérez-Barreiro, ed. The Geometry of Hope, p. 148–50.

Amaral, Aracy, org. Projeto Construtivo Brasileiro na Arte (1950–1962). Exhibition catalogue. Rio de Janeiro: Museu de Arte Moderna; São Paulo: Pinacoteca do Estado, 1977.

Amaral, Aracy, org. Arte Construtiva no Brasil: Coleção Adolfo Leirner. Portuguese and English. São Paulo: DBA Artes Gráficas, 1998.

Arte Concreta Paulista. 5 vols. São Paulo: Cosac & Naify, 2002. See: (1) João Bandeira; (2) Rejane Cintrão; (3) Lenora de Barros and João Bandeira; (4) Helouise Costa; (5) Regina Teixeira de Barros.

João Bandeira, org. Arte Concreta Paulista: Documentos. Exhibition catalogue, Centro Universitário Maria Antônia da Universidade de São Paulo. São Paulo: Cosac & Naify; Centro Universitário Maria Antônia da USP, 2002.

Barros, Lenora de, and João Bandeira, curators. Grupo Noigandres. Exhibition catalogue, Centro Universitário Maria Antônia da Universidade de São Paulo. São Paulo: Cosac & Naify; Centro Universitário Maria Antônia da USP, 2002.

Barros, Regina Teixeira de, ed. Antonio Maluf. Texts: Regina Teixeira de Barros and Taisa Helena P. Linhares. Exhibition catalogue, Centro Universitário Maria Antônia da Universidade de São Paulo. São Paulo: Cosac & Naify; Centro Universitário Maria Antônia da USP, 2002.

Belluzo, Ana Maria. Waldemar Cordeiro: Uma aventura da razão. São Paulo: Museu de Arte Contemporâneo de São Paulo, 1986.

Blistène, Bernard, and Véronique Legrand, orgs. Poésure et Peintrie: «d'un art, l'autre». Exhibition catalogue, Centre de la Vieille Charité, Marseille, 12 February – 23 May 1993. Marseille: Réunion des Musées Nationaux, Musées de Marseille, 1993 [1998?].

Brito, Ronaldo. Amilcar de Castro. Fotos Rômulo Fialdini et al. São Paulo: Takano Editora, 2001.

Cabral, Isabella, and M. A. Amaral Rezende. Hermelindo Fiaminghi. Artistas Brasileiros, 11. São Paulo: EdUSP, 1998.

Campos, Augusto de. "50 anos depois." Interview with Marcus Augusto Gonçalves. Folha Ilustrada [da Folha de São Paulo], 16 Sept. 2006: E8–9.

Campos, Augusto de. http://www2.uol.com.br/augustodecampos/poemas.htm

Campos, Augusto de, Décio Pignatari and Haroldo de Campos, "planopiloto para poesia concreta." Noigandres 4 (1958). Rpt. in Campos, Pignatari and Campos, eds., Teoria da Poesia Concreta, 42006, p. 215-218. English: "plano-piloto para poesia concreta / pilot plan for concrete poetry." Portuguese and English, tr. by the authors. In Solt, ed. Concrete Poetry: A World View. p. 72.

"pilot plan for concrete poetry." Tr. Jon M. Tolman. In Richard Kostelanetz, ed. The Avant-Garde Tradition in Literature. Buffalo, NY: Prometheus Books, 1982. p. 257–58.

Pós: Belo Horizonte, w 1, n. 1, p. 114 - 135, maio, 2008.

Campos, Augusto de, Décio Pignatari and Haroldo de Campos. Teoria da Poesia Concreta: Textos críticos e manifestos 1950-1960. 1st ed. 1965. 4th ed. Cotia, SP: Ateliê Editorial, 2006.

Campos, Haroldo de. Une anthologie. Org. and trans. Inês Oseki-Dépré. Paris: Éditions Al Dante, 2005.

Campos, Haroldo de. "A Obra de Arte Aberta" (orig. 1955). Rpt. in Campos, Pignatari, and Campos, Teoria da Poesia Concreta, 42006, p. 49-53.

Cintrão, Rejane, curator. Grupo Ruptura: Revisitando a Exposição Inaugural. Texts by Rejane Cintrão and Ana Paula Nascimento. Exhibition catalogue, Centro Universitário Maria Antônia da Universidade de São Paulo. São Paulo: Cosac & Naify; Centro Universitário Maria Antônia da USP, 2002.

Clüver, Claus. "Augusto de Campos's 'terremoto': Cosmogony as Ideogram". Contemporary Poetry 3.1 (1978): 38-55.

Clüver, Claus. "Brazilian Concrete: Painting, Poetry, Time, and Space". In Proceedings of the IXth Congress of the Internation¬al Comparative Literature Association. Vol. 3: Literature and the Other Arts. Ed. Zoran Konstantinović, Ulrich Weisstein, and Steven Paul Scher. Innsbruck: Innsbrucker Gesellschaft zur Pflege der Geisteswissen¬schaften, 1981. p. 207-13, ill. 44-49.

Clüver, Claus. "Concrete Poetry: Critical Perspectives from the 90s". In K. David Jackson, Eric Vos, and Johanna Drucker, eds. Experimental – Visual – Concrete: Avant-Garde Poetry Since the 1960s. AvantGarde Critical Studies, 10. Amsterdam and Atlanta, GA: Rodopi, 1996. p. 265-85.

Clüver, Claus. "Iconicidade e isomorfismo em poemas concretos brasileiros". Trans. André Melo Mendes. Dossiê: 50 anos da poesia concreta. Ed. Myriam Corrêa de Araújo Ávila et al. O eixo e a roda (Belo Horizonte, FALE, Universidade Federal de Minas Gerais), no. 13 (July-Dec. 2006): 19-38.

Clüver, Claus. "Klangfarbenmelodie in Polychromatic Poems: A. von Webern and A. de Campos". Comparative Literature Studies 18 (1981): 386-98.

Clüver, Claus. "On Intersemiotic Transposition." In Art and Literature I, ed. Wendy Steiner. Topical issue. Poetics Today 10.1 (1989): 55–90.

Clüver, Claus." The 'Ruptura' Proclaimed by Brazil's Self-Styled 'Vanguardas' of the Fifties". In Neo-Avant-Garde. Ed. David Hopkins. Amsterdam and New York: Rodopi, 2006. p. 161-96.

Clüver, Stefan Ferreira. "Viewing Notes by the Filmmaker" on vai e vem, a film from the poem of José Lino Grünewald, 1980/1998. 1998, unpublished.

concreta '56: a raiz da forma. Exhibition catalogue, Museu de Arte Moderna, 26 September – 10 December, 2006. São Paulo: Museu de Arte Moderna, 2006.

Cordeiro, Waldemar. "O objeto." AD: Arquitetura e Decoração (São Paulo), No. 20 (December 1956): np.

Costa, Helouise, curator. Waldemar Cordeiro: A Ruptura como Metáfora. Texts: Helouise Costa and Vivian Boehringer. Exhibition catalogue, Centro Universitário Maria Antônia da Universidade de São Paulo. São Paulo: Cosac & Naify; Centro Universitário Maria Antônia da USP, 2002.

Gullar, Ferreira. Experiência neoconcreta: momento-limite da arte. São Paulo: Cosac Naify, 2007.

Gullar, Ferreira. "O Grupo Frente e a Reação Neoconcreta / Frente Group and the Neo-Concrete Reaction". In Amaral, org., Arte Construtiva no Brasil, p. 143-81.

Gullar, Ferreira. "Manifesto Neoconcreto," Jornal do Brasil (Rio de Janeiro), 22 March 1959. Rpt. (with English translation) in Amaral, org., Arte Construtiva no Brasil, 270–75.

Museu de Arte Contemporânea da Universidade de São Paulo. Catálogo Geral das Obras. Orientação: Walter Zanini. São Paulo: MAC/USP, 1973.

Museu de Arte Contemporânea da Universidade de São Paulo. Perfil de um Acervo. Org., editorial e ensaio de Aracy Amaral. São Paulo: Techint Engenharia, 1988.

O Museu de Arte Contemporânea da Universidade de São Paulo. São Paulo: Banco Safra, 1990.

Noigandres (São Paulo, authors' publication):

No. 1, 1952; No. 2, 1955; No. 3, 1956; No. 4, 1958 (folder with poster poems). Antologia Noigandres 5: do verso à poesia concreta. São Paulo: Massao Ohno, 1962.

Pós: Belo Horizonte, v. 1, n. 1, p. 114 - 135, maio, 2008.

Pape, Lygia, curator. Projeto Construtivo Brasileiro na Arte (1950–1962). Exhibition catalogue. Museu de Arte Moderna do Rio de Janeiro / Pinacoteca do Estado de São Paulo, 1977. 20 pp.

Pedrosa, Mário. "Paulistas e Cariocas" (Feb.1957). Rpt. in Amaral, org. Projeto Construtivo Brasileiro na Arte, p. 136-38.

Pérez-Barreiro, Gabriel. "Geraldo de Barros, Função diagonal [Diagonal Function], 1952". In Pérez-Barreiro, ed. The Geometry of Hope, p. 128-30.

Pérez-Barreiro, Gabriel, ed. The Geometry of Hope: Latin American Abstract Art from the Patricia Phelps de Cisneros Collection. Exhibition catalogue, Blanton Museum of Art, U Texas, Austin, 20 Feb. – 22 April 2007, and Grey Art Gallery, NYU, 12 Sept. – 8 Dec. 2007. Austin, TX: Blanton Museum of Art and Fundación Cisneros, 2007.

Pignatari, Décio. "Arte concreta: objeto e objetivo." AD: Arquitetura e Decoração (São Paulo), No. 20 (December 1956): np.

Ramírez, Mari Carmen, and Héctor Olea, curators. Inverted Utopias: Avant-Garde Art in Latin America. Exhibition catalogue, The Museum of Fine Arts, Houston, June 20 – Sept. 12, 2004, ed. Héctor Olea. New Haven and London: Yale University Press, in association with The Museum of Fine Arts, Houston.

Sacramento, Enock. Sacilotto. Photos: Sergio Guerini et al. São Paulo: E. Sacramento, 2001.

Solt, Mary Ellen, org. A World Look at Concrete Poetry. Topical double issue. Artes Hispanicas / Hispanic Arts 1.3-4 (1968). Rpt. as M. E. Solt, ed. Concrete Poetry: A World View. Bloomington: Indiana University Press, 1970.

Salzstein, Sônia. Franz Weissmann. Espaços da arte brasileira. São Paulo: Cosac & Naify, 2001.

Silva, Fernando Pedro da, and Marília Andrés Ribeiro, coord. Franz Weissmann: Depoimento. Organização e entrevista do livro: Marília Andrés Ribeiro. Belo Horizonte: C/ arte, 2002.

Stolarski, André. Alexandre Wollner e a formação do design moderno no Brasil . São Paulo: Cosac & Naify, 2005.

APPENDIX

Visual Artists

Grupo "Ruptura", São Paulo (since 1952):

- * Geraldo de Barros (1923-1998)
- * Lothar Charoux (1912-1987)
- * Waldemar Cordeiro (1925-1973)
- * Kazmer (Casimiro) Féjer (b.1922)
- * Hermelindo Fiaminghi (1920-2004, joined in 1955)

Leopoldo Haar (1910-1954)

- * Judith Lauand (b.1922, joined later)
- * Maurício Nogueira Lima (1930-1999; joined in 1953)
- * Luís Sacilotto (1924-2003)

Anatol Wladyslaw (1913–2004) (gave up Concrete art in 1955)

Associated with the group:

Antonio Maluf (b. 1926)

- * Alfredo Volpi (1896-1988)
- * Alexandre Wollner (b. 1928)

Grupo "Frente", Rio de Janeiro (since 1952):

Eric Baruch (joined in 1955)

- * Aluísio Carvão
- * Lygia Clark (1920-1988)
- * João José da Silva Costa

Vincent Ibberson

- * Rubem Mauro Ludolf
- * César Oiticica (b. 1939)
- * Hélio Oiticica (1937-1980)

Abraham Palatnik (joined in 1955)

Lygia Pape (1929-2004)

Ivan Serpa

Elisa Martins da Silveira (joined in 1955)

Carlos do Val

- * Décio Vieira
- * Franz Weissmann (1911-2005)

Associated with the group:

Amilcar de Castro (1920-2002) Willys de Castro (1926-1988)

Poets

Grupo "Noigandres", São Paulo (since 1952)

- ** Augusto de Campos (b. 1931)
- ** Haroldo de Campos (1929-2003)
- **Décio Pignatari (b. 1927)

Associated with the "Noigandres" group:

Edgard Braga (1897-1985) José Paulo Paes (1926-1998) Pedro Xisto (1901-1987)

From Rio de Janeiro

- ** Ronaldo Azeredo (1937-2006) (joined "Noigandres" in 1956)
- ** Ferreira Gullar (b. 1930)
- ** Wlademir Dias Pino (b. 1927)

Not exhibiting:

José Lino Grünewald (1931-2000) (joined "Noigandres" in 1958)

- * Participated in the "National Exhibition of Concrete Art," 1956/57 (according to the list in ad, No. 20, December 1956)
- ** Participated in the "National Exhibition of Concrete Art," 1956/57