INTERMEDIA POETICS

From Visual Poetry to Procedural Architecture

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ABSTRACT

This book examines how the poetic happens in intermedial genres. It offers basic notions for approaching visual poetry as poetry and as intermedia. It extends observations from experimental poetics to initiatives for a constructivist and speculative aesthetics of communicative reception in multiple media.

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VISUAL POETRY

1. VISUAL POETRY: ARTISTS' WRITING IN A PARA-LITERARY AGE

Fig. 1: John Riddell from *Criss Cross*, 1977.

Poetry is Art

Nothing better illustrates the problem of literature's ambiguous aesthetic status than the term "artists' books"[1]. If literature were truly considered an art, this phrase would be redundant. Any cheap paperback edition of Shakespeare, or Baudelaire, or Saarikoski, would – quite obviously – count as an "artist's book". But it doesn't.

Why doesn't it? Why, to put it differently, don't students of literature have to take studio courses? Or, the other way around: Why isn't poetry taught in the art department, along with painting and sculpture, or even in the increasingly common "intermedia" or "interarts" programs?

To question the separations that exist between literature and art is to dig at some of the fundamental distinctions structuring western culture and contemporary consciousness: language vs. matter, word vs. thing, thought vs. perception, content vs. form, mind vs. body. However much they may have in common, poetry and painting, poetry and music, literature and art, are taught in different departments, and according to different pedagogies, because they are believed to deal with fundamentally different things, and to involve fundamentally different human faculties.
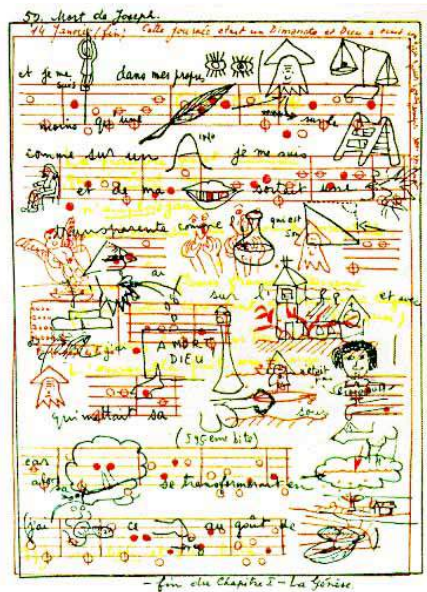
Fig.2: In the "hypergraphic" writing of Lettrist poet Isidore Isou, words, icons, musical notation and abstract symbols mix in a hybrid language. To be "read", the images have to be transposed into words, the words into music, and the music into visual patterning. From *Les Journaux des Dieux*, 1950.

Visual poetry, on the other hand, one of the many modern trends to begin mixing once-separate art forms, challenges these assumptions. To engage a visual "poem", to try to "understand" it in the multiple ways it requires, is to watch these distinctions lose their certainty. If the distinctions do not disappear altogether, they at least blur significantly. In visual poetry, words behave as things, or things as words, thought takes on perceptual qualities, and there is often no way of separating the content of a poem from its visible forms, what it means from how it looks.

As the distinctions blur, the modes of culture and consciousness built on them discover new freedoms, new possibilities, new ideas of art emerging out of new relationships between materials and our modes of perceiving or "reading" them. Where a pattern of colors and lines, or the expressive likeness of a natural object, are as important to the logical or lyrical argument of a text as any words that might be there, we are dealing with both art and literature simultaneously, inseparably, as one thing – call it *litarture* – not just two things set next to each other. We are not on one side of the cultural divide or the other, and we can no longer use only half our mind to process it.

The Verbal is Visual

Historically, visual poetries originate in an exploration of, or in an exultation in, the visual forms of language. Whether we consider the millennial arts of calligraphy (East Asian, Islamic or European), the ancient tradition of shaped-text or "pattern" poetry (Simias of Rhodes, ca. 300BC; George Herbert, 17th Century; Guillaume Apollinaire, 1910's, etc.) or the particularly modern practice of spatialized free verse that begins with Stéphane Mallarmé at the end of the 19th Century, visual poetry emerges where writing realizes the complementary potentials of its own visual forms.

In the case of Mallarmé, for example, whose *Un coup de dés jamais n'abolira le hasard* (*A Throw of the Dice Will Never Abolish Chance)* (1897) represents the true beginning of visual poetry as a sustained and self-aware practice, the visual component was a way for printed language to do more of what it was doing already. Mallarmé, the high poet of *Symbolisme*, was the most literary, the most dedicatedly verbal of poets, and was not interested in "mixing" the medium of his poetic expression by bringing in foreign visual elements. On the other hand his very dedication to language as an art, to poetry as an art of ideas that is reliant on an art of sound, led him to discover the role typography and spatial form could play in replacing the poet's voice on the printed page. For him the visual layout of a text, varying the typeface, size and positioning of words, was a way of presenting a poem as its own performance score, of delivering language with just the right emphasis or delay to maximize its poetic effect. Visual variations were to produce variations in how the text sounded in the inner ear of the reader, larger words appearing louder, smaller words softer and less intoned, while loose spacing would slow the reading, allowing each word more resonance and ambiguity.
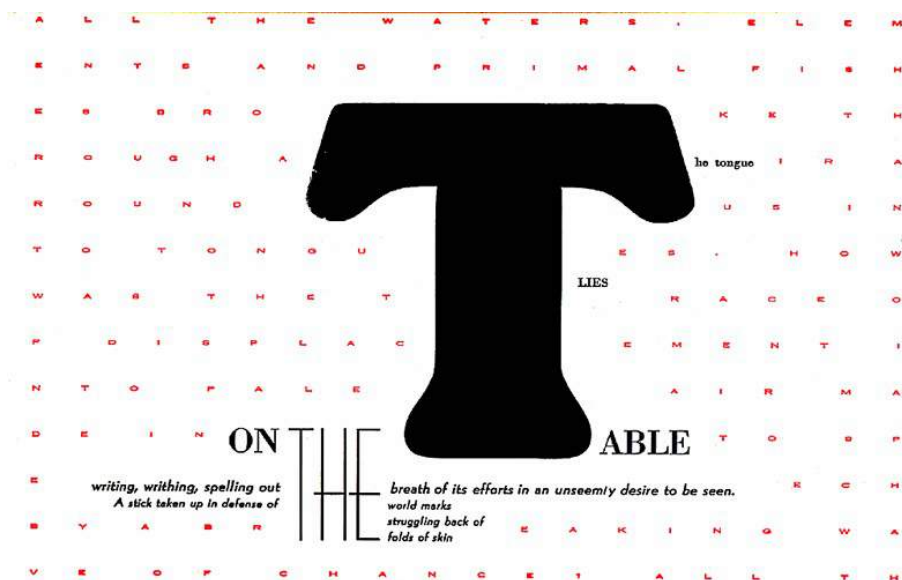

Fig. 3: Johanna Drucker, from *The Word Made Flesh*, 1996.

Printed language is always visual, and so if those cheap paperbacks of Shakespeare or Baudelaire are poetry, they should count as visual poetry, too. The difference is that in conventional printing, as in conventional writing, the visual aspects of the language are kept as standardized as possible, so as to be effectively invisible. *Seeing* the text, needing to notice specific articulations in its visible form, would distract from *reading* it, which in the traditional conception requires us to ignore the body of the text (typography, spacing, margins, ink quality, paper) in order to grasp the spirit. In visual poetry, body and spirit are reunited, and the visible is embraced as a rich possible source of meanings. Potentially, everything is used.

The Visual is Language

The emergence of visual poetry at the experimental margins of literature parallels the rise of print advertising and other forms of visual communication at the heart of modern consumer society. Mallarmé was in part attempting to turn the blatant attention-getting strategies of newspaper typography to higher literary purposes, and the Dadaist, Futurist and Surrealist poets all made active use of the product labels, slogans and commercial iconography that had come to characterize their increasingly visual culture, and to seriously challenge the hegemony of religious and "high art" symbols in the visual imaginary.

The fact that visual poetry today remains a marginal practice, rarely given much attention within the academy, is strange considering mainstream literature's own anxieties in the face of the advancing visualization, or de-literarification, of culture. Where conventional literature now appears marginal, even archaic, within a cultural formation which increasingly privileges modes of viewing and mediated interactivity over traditional reading, visual poetry deserves recognition for having long ago assumed a position much more central to the major media shifts at work within culture.

If visual poetry's founding intuition was that writing was already visual and the visual could be used, its full maturity came with the realization that visual images are already a language, or many languages, available for writing in. The advancing mastery of visual communication evidenced in advertising and the mass media, together with the semiotic analysis that allowed these media to be understood as linguistic or "language-like" systems, gave rise to the now-common notion of visual language. Obviously, it would seem in retrospect, if there was visual language there should be visual poetry. And particularly in the 1960's and 70's, when the semiotic analysis of visual media was applied to the wide-spread socio-political critique of media's manipulative powers, a growing number of "engaged" writers identified visual language as the key terrain on which to do the poetic work of challenging official systems of representation.
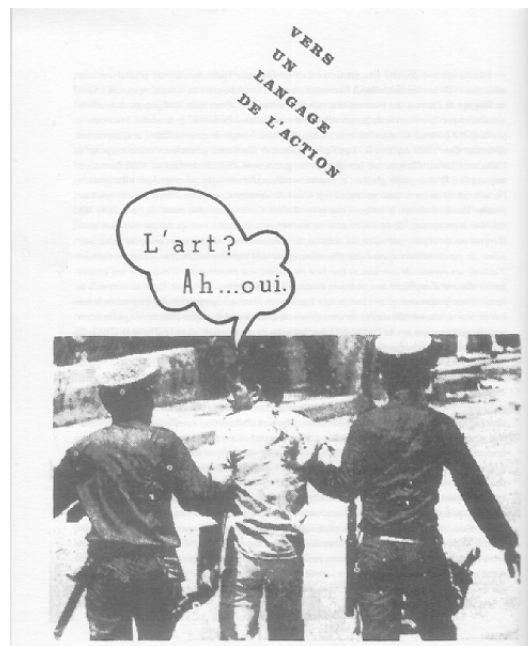
Fig. 4: Clemente Padin, "L'art ah oui", DOC(K)S no. 1 Folio 95. 1976

Concrete in the Visual Mix

This second realization, that poetry could move beyond the visual aspects of writing and employ any type of visuals as signs in a poetic construction, was delayed for many years by one of visual poetry's own greatest successes. Emerging in the 1950's (simultaneously in Switzerland and Brazil), the movement known as *concrete poetry* achieved the highest cultural profile and greatest literary influence visual poetry as such has yet enjoyed. Replacing linguistic syntax with the logics of spatial structure and material presence, concretism sought to evolve a new art of words in which seeing and reading were called upon to do equal work in the production of meaning. The "catchiness" and conceptual poignancy of many concrete poems and the seeming endlessness of the possibilities it offered brought the form a real popularity, and the clarity of its theoretical statements (in particular the writings of Eugen Gomringer and the Brazilian Noigandres poets, Haroldo de Campos, Augusto de Campos and Decio Pignatari), won a small place for it in many academic curricula and literary anthologies from the 60's onward.

Gomringer's stated enthusiasm for concretism as a literary form had a lot to do with his interest in the international signage systems being developed for airports and train stations during the mobility boom of the 1950's. He saw his literary activity as conspiring in the advancement of important worldwide, trans-national modes of communication.

Despite the obvious role imagery and icons would have to play in such languages, his own compositional theory and practice propagated an orthodoxy that effectively excluded the use of non-verbal elements. The (relative) worldwide success and academic influence of concretism thus limited the semiotic range of visual poetry at the moment of its broadest public recognition. It wasn't until that orthodoxy softened, with the "clean" concretism of

the 50's yielding to the "dirty" concretism[2], *poesia visiva*[3] and *poesie élémentaire*[4] or "*langue DOC(K)S*[5] of the following decades, that the dominant trends in visual poetry resumed the full range of visual language resources available to them. However, because no single movement or trend since concretism has attained the same visibility, the fame of that movement continues to interfere with the spreading of a fuller picture of what visual poetry is or might become. Indeed, for many, "concrete poetry" *is* "visual poetry", rather than just an historically and generically limited sub-species of it; though this prejudice is fading. Perhaps the single most fully realized vision of what a rigorous visual poetry might be beyond concretism, featuring intricately readable texts of both language and visuals, is to be found in the extensive and beautiful work of Klaus Peter Dencker.

Objects, Actions, Architecture

Visual poetry is often described as an "intermedia", a fusion of different media in an integrated practice. In the simplest version, and this is true for Dencker, the media fused are language and the graphic arts, or language and visual art more generally. Usually what we are dealing with are two-dimensional works on paper, perhaps created for display on a gallery wall but eventually transferable to the pages of a book, where it can be viewed/read in a format comfortably preserving at least some aspects of the conventional poetry experience. But boxes, clothing, short films, odd stage performances, holographic projections, bread, rooms, buildings, and information architectures are all on the long list of media that have been used in avowedly "poetic" productions; some of them without the intervention, written or spoken, of even a single word. Amid such a variety of forms, it would seem that the term "visual poetry" is either ill-defined, or too all-encompassing to have any useful meaning. And that may be true. As a literary genre, visual poetry sprawls beyond definable boundaries, but as a culture of experiment and exploration there are certain underlying coherences that unite much of what is otherwise a very disparate corpus.

One underlying logic accounting for many very different kinds of work goes as follows: if poetry is the art of language, any artwork made of words or letters is a poetic work. Language here is taken quite literally, or rather "concretely", pushing the logic of concretism to its material extremes. Thus, especially in the 70's and 80's, a huge range of works is generated by artists/poets exploring the endless ways in which language manifests among the objects and devices of our everyday material culture. Archaic letterpress type, LED screens, the brilliant but obsolete IBM Selectric typewriter ball, ABC refrigerator magnets, letter-shaped pasta, Kellog's-brand "Alphabits" cereal, or things, like bagels, that just *look* like letters – all these become material inspirations for a new type of poetic play. Sometimes this play consists in composing poetic texts whose meanings incorporate the generally anti-literary values of their material base. But often the play is as much sculpture, performance or conceptual art as it is writing, and the poetry of it has more to do with imagining poetic potentials into objects and devices that are outside of literature, but may ironically reflect new possibilities back onto it. Since these materials highlight how language is embodied as tool or toy in every aspect of life, a major sub-text of such explorations is

language's problematic role in *constituting* us as socialized, gendered and ideological beings.
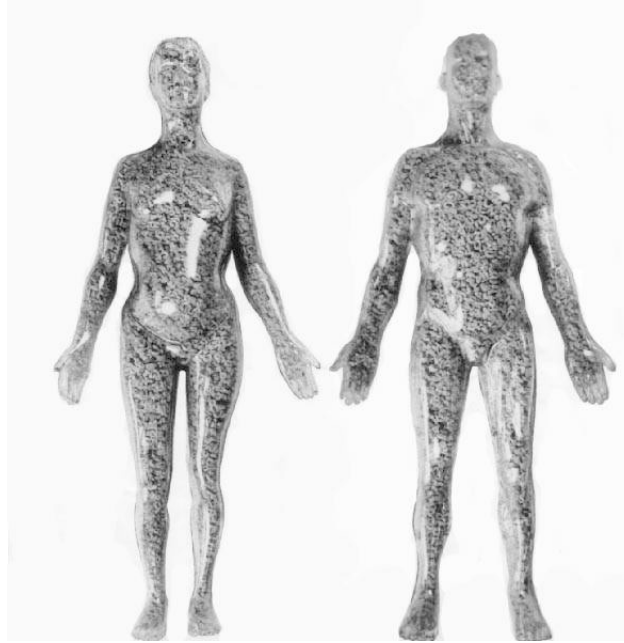

Fig. 5: Patty Arnold, "Visible Woman/Visible Man", Café Solo 2 3/4, 1979.

Another logic that can help us understand another wide range of works is the semiotic logic that sees potentially everything as a sign in a language-like system, and every sign as a possible resource for poetic composition. On the one hand this explains widespread experiments (e.g. Max Ernst's *Une semaine de bonté*, Giuseppe Steiner's *Drawn States of Mind*, or the collage works of John Heartfield or Gerhard Rühm) in using visual imagery to construct texts that in some way "read" like poems, often with little or no verbal language involved, or alternatively texts whose poetry arises precisely in the tensions and interplay between visual and verbal meanings (cf. Clemente Padin or Julien Blaine). On the other it explains the fascination with pre-existing visual codes – semaphore, traffic signals, assembly instructions, body language, sign language, the "language of flowers", fashion, dance-step notation, gang signals, weather maps, every manner of diagram and technical illustration – and their ambition to recruit the conventional or prosaic meanings of these systems into poetic service. Whether such codes are employed carefully to constitute legible "texts", or more abstractly or playfully, and whether the works employing them are presented on the page or on stage, in the gallery, on screen, or out in the urban environment, they reinforce the notion of poetry even as they abandon the medium it is traditionally done in. The notion that poetry is a liberatory extra, a potential trapped in every system, waiting for release, an imaginative surplus of meaning that breaks the conventions of language to free up new possibilities for expression and experience; this is the age-old mission of poetry served in a new way by these radically innovative forms.

Poetry – the remainder

Historically visual poetry is associated with the exhaustion of traditional literary forms, with the crisis of literature as such. And as a parallel or counter-literary activity, it can be seen as asking, and perhaps answering, two critical, related questions. First, what is left for poetry, when everything has been done, when culture itself, which once held poetry in the highest esteem, seems done with poetry? And secondly, what is left *of* poetry, when the traditional forms have been abandoned, and we want to keep using the word?

To address the first question first, visual poetry *per se* may not be the future of poetry, but it is certainly part of the bundle of experimental practices that have already identified and established a future for poetic activity in a post-literary age, where language and literacy themselves are being radically redefined by new modes of inscription and communication. The computer age has given rise already to several waves of poetic innovation, in many of which the efforts and experience of visual poets have played important roles. Appearing in the 1980's, hypertext poetry began exploring the poetic potentials of spatialized, interactive text navigation even before the internet emerged as a mass extension of those potentials into the basic functioning of our wired society. Then, since the 90's, the development of text and text-image animation tools (e.g. Java, Flash, Director) has supported the emergence of new kinetic poetries. These new forms, arising at the forefront of our evolving language- and media-scapes, are fulfilling important potentials intuited since the very beginnings of visual poetry. On the one hand, expanding on earlier experiments with cinema, they have added movement to the resources of textual presentation, literalizing an effect Mallarmé could only hint at through suggestive typography. On the other hand they have brought the poetic enterprise into an environment of near-total media integration – text, sound, image, animation and video blended in a single compositional platform, and viewable on a single screen, or navigable within a single immersive virtual environment.

Here we have in some sense the imaginable maximum of the poetic text, the complete realization of Apollinaire's famous futuristic vision from 1917:

> a new art (vaster than the simple art of words), where, conductors of an orchestra of unheard-of extent, …[poets] will have at their disposal: the whole world, its noise and its appearances, thought and human language, song, dance, all the arts and all the artifices, more mirages yet than Morgane could have lifted on Mont Gibel, to compose the book seen and read of the future. (Apollinaire, "L'Ésprit nouveau et les poètes")

But add to this still the possibilities of full interactivity, co-authoring, tele-presence, multiple-user interaction, computer text/sound/image generation, and the self-organization of media environments as virtual worlds, and we enter the 21st Century not merely at the conceivable limit of our conventional notion of a text, but in fact on the doorstep of a radically new and alien paradigm of textual authoring and participatory reception. Bill

Seaman, an MIT-trained artist, has theorized the poetics of this new paradigm, where the poetic enterprise adventures forward into still largely unknown territories of an emerging world, as a "recombinant poetics", organizing "an expanded computer-based environmental semiotics".

So plenty left for poetry: to explore the creative potentials of each new (visual) media regime as it emerges. But what is left *of* poetry, when those explorations lead it beyond the limit of poetry's traditional materials – voice, page, book – beyond even language as traditionally understood? Already the term, "visual poetry", should alert us to a strain this trend of experimentalism has placed (along with its sister forms, sound poetry, action poetry, and computer or "code" poetry) on our fundamental notion of what poetry is. The effect, after over a century of such questioning and experimentation, has been a progressive differentiation of poetry as principle from the conditions of its historical embodiment, a distillation of poetry as an essence out from the conventional poems of words in which that essential thing was first made known, named and propagated. If poetry in this sense is the principle of fundamental creativity and liberatory play within systems of meaning and representation, then moving beyond the traditional forms of literary language and publication can be seen as simple evolution in some cases, or in others as a survival strategy.

If poetry feels endangered today (as it perhaps has always felt endangered), it is not because the cultural institutions of high literary art have lost much of their prestige, nor simply because of any possible decline in literacy or the social importance of words and reading. A greater danger lies in the encroaching uniformity of cultural messaging and human experience, the progressive domination of public discourse and common thought by corporate media, and of corporate media by a narrow set of political allegiances. What is in jeopardy is not state funding for the humanities, but an ecology of human alternatives, as the world increasingly submits to a single political/economic model and to a single version of what to expect from life, entailing the defeatist consensus that no large-scale, substantial change is possible. When poetry, as poetry, is no longer able to exert any effective leverage against these diminishments, there is no point in preserving it in its usual forms. Already in the 1950's the Situationists, who saw poetry as "the revolutionary moment of language" and developed an important critical poetics of visual media, had applied this test to poetry and declared: "One thing we can be sure of is that fake, officially tolerated poetry is no longer the poetic adventure of its era" (Situationist International 115). Instead of continuing poetry within culture, they undertook the direct poetic adventure of transforming everyday life outside it.

More recently, Steve McCaffery, without abandoning poetry as a cultural activity, has argued "that contemporary poetics has reached an impasse in *exclusively* poetic territories", and argued that "an exclusive focus on the poem-as-such severely curtails the potential critical range of poetics," and that "for the latter to maintain a vital critical function then a radical readjustment of its trajectories seems required." McCaffery refers to this vocation of poetry outside of poetry as its "parapoetics". More than blending poetry

with other media, as in "intermedia", parapoetics implies the contamination of non-literary discourses and societal forms with poetry's essentially critical/creative spirit. Thus, in looking to the future of poetry beyond literature, we can expect certain forms of visual poetry to remain highly relevant for poetically engaging society and the largely visual media that suffuse it. On the other hand, as our society and its forms of communication go on evolving together, we should not be surprised to lose sight of poetry even in the new places where we have learned to look for it. The impulse that first led poets to embrace visual materials, at the onset of our modern media regime, is now urging them to go further, to seek more effective forms in new, unexpected places. To escape the neutralizing and banalizing influence of official culture today, poets may have to disappear off the literary radar screen entirely, jettisoning all but the most essential of their creative/critical tools, to reemerge elsewhere without papers, and begin the search for employment among the unsuspecting architects, legislators, news broadcasters, marketing executives, computer programmers and economists who seem to run our world.

2. RENEGADE: A RECENT ANTHOLOGY
Some Palette Analysis for the Renegade Anthology

The Crux: Language as Material/Material as Language.

Visual poetry emerges where verbal writing realizes the alter-linguistic potentials of its visual forms. Or where visual form discovers its possibilities for carrying utterance and expression in a language relying on alternate (visual, spatial) lexica and grammars.

Simias Rhodius 4thC BC George Herbert 1633   Stéphane Mallarmé 1897
Marinetti 1915   Apollinaire 1916

LanguageMaterial/MaterialLanguage. The phenomenon of visual poetry has everything to do with what art can be found/made at this threshold, this interface, transition, border, flap, overlap, shift, crux, flip between the linguistic and what is not language, between what is visible/touchable/pliable and what is also language. Here we can start. The fascination and importance of visual poetry, of work we can find fit to call this, like here in this new anthology[1], comes down to a large extent to the importance and interest of **this crux**, where we encounter the fundamental wedging between the being of world/stuff/object/surface and the being of anything in a system for meaning, and between our thoughts on the one hand and on the other anything that can be made to convey them – between being material and meaning something. Obsessing at this juncture, troubling the margins/thresholds of language as phenomenon and as force in the field of available materials is, perhaps most profoundly of all, what visual poets do, and what the artists collected in this anthology do in myriad ways. Material media embraced for the **more traction** they give in ongoing projects of constructing or construing a text as meaningful, and perhaps the meaning as poetic.

New Evidence: Visual Poetry Lives

Visual poetry has its literary history, its origin moments, champions, stars, groups, trends, styles, controversies, hits, classics, clichés, crap, all within a widely fluctuating

genre formulation with many variants extending over many generations, and in the long view already over many hundred/a couple thousand years. Though some of the work in question belongs already to other art-discourse framings and doesn't necessarily need or welcome inclusion here, much/most comes from dedicated traditions of self-aware visual poets since the beginning of the 20th Century, producing large bodies of high-quality work in loosely or tightly connected groupings often central to art scenes at the forefront of art experimentation and cultural transformation in many countries. Many of the classic introductions to visual poetry, earlier anthologies like Emmett William's *An Anthology of Concrete Poetry* (1967), Mary Ellen Sollt's *Concrete Poetry: A World View* (1970), and Richard Kostelanetz anthology of critical writing: *Visual Literature Criticism* (1979), were working against a background of general skepticism as to the existence or plausibility of their subject, and with a limited overview of what in fact was being done. Still today, when skepticism as to visual poetry's relevance or interest is more an issue than incredulence/cluelessness as to its existence, an anthology like this one, now in 2015, still appears necessarily as a reminder, re-membering for us this thriving (whatever you think of it) literary genre/artform, which everyone seemed to have forgotten (again). Since the 70s, great collections and serious critical work have been done, establishing to anyone who can find the material that visual poetry is a confluence of grand traditions in experimental art. See the great French collection, *Poesure et Peintrie* (1993), in German Klaus Peter Dencker's recent vast *Optische Poesie* (2012), and the massive *Visual Poetry: L'avanguardia delle neoavanguardie (ed. G. Allegrini,* 2014) from Italy, as well as the book you are holding in your hands, international but an American collection, for evidence. The last anthology to come out in the American field that I know of was Crag Hill and Niko Vassilakis's *Last Vispo Anthology 1998 - 2008*. It was obviously not the last; and good thing. Many figures recur but here a larger time-range is included, and medially the works represent an expanded palette, displaying artistry, doing poetry, with a broader range of visual/conceptual resources.

So visual poetry has its literary history, its proof in the cultural record, but it also has its idea, its promise as a cultural pursuit. To say it in slang: **The language-like use of visuals for poetic purposes**. There is also the **visual art-like use of letters and text**, and it is often hard to tell a difference between the two, but theoretically there is a difference. As an offer/invitation into literary history, **the idea of visual poetry** adds the whole universe of "visual" to our stock of expressive resources for doing "language", and by means of language, poetry. The world of possibilities this opens up is breathtaking. Its many horizons have been assiduously explored by artists in various trends and traditions, especially since the beginning of the 20th Century, and over time the terrain has been partially organized into semi-distinct fields. This book presents a very comprehensive sampling of the fate of this idea in practice, and its aliveness in practice today.

To help think about the work collected here, it might help to pick out a couple of the types or trends that show up, and look more closely at the different fields being worked. As the corpus of visual poetry consists of a wide range of styles and kind, resulting from artists' idiosyncratic use of available resources for expression, I try to represent the different types and trends appearing here not in strict category boundaries, but as a set of **palettes**, sample assembled material-sets for meaning making, ways of using materials/language for different modes of reading, yielding different meaning effects. As a short list of palettes we recognize in the work collected here would include: concrete poetry with its many descendents and deviances, calligraphy ancient and modern, the legacy of modernist typography and photomontage, visual poetry in the broad sense, sound poetry and performance scoring, and object art/book art/-and in a limited sense, installation art. To keep track of the broadness of the field we're wandering in reading/viewing this book, it is helpful to remember that many of the qualifying works are intermedial pieces originating in, or gravitating back to, other fields: the graphic arts, painting, music, sculpture, sound art, installation and conceptual/action/performance art. Each distinction marks a possible and actual visual poetry, bearing one or another visual style, claiming or excluding one or another set of possibilities in order better to explore those possibilities selected with the framing, within the resources assembled on the palette.

These few palettes, and a thought on how we read, should help you/us get in to the rich sampling of current creation Andrew Topel has gathered here. Each palette a spread of the possibilities along a certain axis, with certain distinctions and sorting made to help. The measure (the legibility text) is a way of finding the peotics in what shows up thus as evidence of visual poetry being vital and alive. Enjoy seeing for yourself.

Palette 1: Concretism and Calligraphy

Concrete poetry is still for many the best known type/trend within the field of possibles we could call visual poetry, but it is also the most narrowly defined, and should not be allowed to stand for visual poetry in general. It is, however, easy to talk about, and helps make the point (that language is material) clearly. In its programmatic formulation, e.g. Gomringer (19??)'s formulation of the "Konstellation", concrete practice explicitly excludes the use of material other than the alphabet and the page, the better to observe what happens at this edging between letters and their materiality in visible/printed space.

silencio silencio silencio
silencio silencio silencio
silencio   silencio
silencio silencio silencio
silencio silencio silencio

Eugen Gomringer 1950s

Classically based on an isomorphism between the alphabetic/verbal gestalt and the graphic/spatial gestalt, "getting" a concrete poem in the classic formulation comes down to tracking this virtual matching: verbal/conceptual sense : graphical/spatial sense. The minimalism of Eugen Gomringer's program for **concretism**, and the German-language concretism he famously anthologized, represents a purism in the art of bringing this to salience, this pairing, the tracking of a meaning in mirrored codes: lexical/grammatical : spatial/material. The simultaneous, related and independent movement of concrete poets in Brazil, and the many afterwaves in the US, Canada, France, Japan and elsewhere, proved the serious interest of concretism as a rigorous investigation based in any language or alphabet. At the same time experimentation beyond rigorous concretism's limits produced further proliferations in the corpus of plausible visual poetry, beyond concretism, through a messier palette of materials including non-alphabetic visuals and the materiality of print media and reproduction technologies, evolving a "dirty concretism" more relevant to the visual linguicity of the media age, and to the work in this anthology. While often still minimalist and purist in their practice, artists of this stamp are in contact with a fuller field of visual potentials for their poetic work. In this anthology this would include: Avelino de Araujo, Karl Kempton, Scott Helmes, Kelly Mark, Derek Beaulieu, Leon Schidlowsky, and Pete Spence.
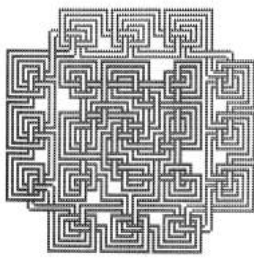
Karl Kempton (pXX)   Scott Helmes (pXX)   Derek   Beaulieu
(pXX)   Pete Spence (pXX)

Another important source are the various ancient arts of **calligraphy**, where a similarly strict practice of typography becomes a mode of meditating on the way in which

meanings take and arise from material form. In the great story of Arabic calligraphy coming out of Islamic traditions, the interdiction against the visual imaging of divinity places creative pressure on the now strictly verbal means for spiritual expression, and in this characterization inflates language with new potentials won in the expressive shaping of script. In a simple sense of calligraphy, the verbal material is styled simply for devotional/aesthetic effect, but in more serious craft, calligraphy too is working around an isomorphism, artfully managed, between verbal/conceptual and visual/material meanings; a craft/conceptual pairing whose incompatibilities, differences and distances account for much of the dynamic tension of a compelling creation.

Shinichi Maruyama (pXX)   Bin Qullander (pXX)   Abdallah   Akar   (pXX) John Moore Williams (pXX)

Once you have a piece of language (verbo-conceptual construct) in material form, everything you can do with the material becomes a possible articulation or inflection you can make in the linguistic expression. The materiality of ink on page is one whole world of potentials for poetic construction and inflection. The materiality of 3D objects and spaces is another. A whole sub-genre can be constructed of letterform art, placing language into repeatedly new shapes, and therewith the substance of language into new material contexts and framings, with each embodiment making a new statement about the nature of language, even before any content is sought in the semantic units. Then there is the extreme materialisation of book art, reproducing a literarity/poeticity in the sculptural object of the book that might or might once or never have been found in its pages.

Pablo Lehmann (pXX)   K.S. Ernst (pXX) Guy Laramee (p.XX) Jaume Plensa (pXX)

Palette 2: Visual Poetry in the Broad Sense

Behind concrete poetry emerging in the 1950s, contextualizing it in a broader cultural project, are modernist ambitions for a new art of visual communication, a synthesis of all available means in a graphic vernacular capable of bridging national-linguistic barriers and expanding potentials for thought, expression and exchange. With roots in the modernizing craft traditions of printing, bookmaking and display signage, and in the intermedial experimentalism of the avant-gardes of the 1910's and 20's, the Constructivist/Bauhaus traditions of **typography and photomontage** represent a great forge of visual language development, systematic study and codification of the expressive potentials of visible language and legible visuals. Integrated by now tracelessly in the everyday language of our mediated visual culture, the assembled use of these resources was the material of avant-garde speculative practice before it was consumer media and information design. A designer like Moholy-Nagy, aware both of visual media becoming grammaticalized, and of poets taking up visual means in an age of growing intermedia, comes to a visual poetry from the visual end, as a visual/spatial designer speculating a poetic graphic design art, proving the integrity of visual poetry as an intermedia, accessible from both ends. His theorization of typophoto in 1922 (**?**) approaches a total statement of the potentials present in visual language and language arts.

Moholy-Nagy 1924   Kawao Tomoko (p.XX)   Fernando Aguiar (pXX)
Andrew Topel (pXX)

Visual poets in the broad sense insist on including non-alphabetic elements, visual imagery and graphic media together with elements from verbal systems. The art developed here has to do with distinct modalities/styles in how materials are used to share the work of conveying poetic meanings. And the aesthetics of any visual poetry happening in these media lies in the particular blending and balance a particular writerly practice creates between its verbal/lingual and non-lingual/visual contents. This dualism or flicker between the verbal and the (non-legible) visual, between material and material you can read, handled in a composition applying principles of perceptual and

informational contrast and counterpoint, is a defining feature or texture in many works. A lot of the variety we see in these examples comes down to the different strategies and styling artists apply in coordinating codes within the construction of a "text" designed for the eyes.

Paralleling the trend towards purification of the technical means, the trend that brought futurist/constructivist experimentalism down to the rigors of Swiss design, concrete painting, minimalism and literary concretism, there was/is the vector towards a maximal resourcing for visual expression, for making use of everything and anything in an eventual total blending of visual means for meaning, constantly updated by evolutions within the medial field itself.

Clemente   Padin   (pXX)   Patty   Arnold   (p.XX)   David   Arnold   (pXX)
Andrew van der Merwe (pXX)

This trend, **visual poetry in the broad sense**, has had to re-distinguish itself from concretist practice, which came later and is smaller, and has put forth different terms and discourses for claiming its wider field. The terms *visual poetry, poesia visiva and poesie élementaire* stand in this sense as specifically distinct from concrete poetry which they contain. Dada and Surrealist collage, Constructivist geometries, in addition to Bauhaus typesetting (in e.g. Typephoto), all show up as impulses behind new visual language blends, intimating the increasingly pervasive visual-languagification of our modern, mediated consumer society. The proliferation of possible medial blends, intermedial meaning systems (language) and new kinds of poetry in or involving visual codes, lead to even higher levels of integration, bringing the idea of intermedia to an ultimate generalization or totalization, *Poesia Totale* in Adriano Spatola's phrase (+) , expanding with the subsumption of all possible visual poetries, along with all possible poetries of sound, architecture, concept, movement (etc.). The becoming-total of our image of these potentials, the coming of age of the idea of intermedia, corresponds historically with our entrance into a new phase of human embodiment, characterized by all-consuming mediation and a digital dimensionalization of reality that challenges us as all our capacities of information intake, processing and comprehension. The examples of visual poetry you will encounter here vary between expressing the pathologies of, and exemplifying new masteries for, this constantly emerging new visual media culture.

The Poetics: Visual Poetry in a Strict Sense

The plausibility of a poetry done in visuals hinges not on the simple linking of a verbal content with a visual form, but on the assembly of visual contents into a structure for utterance and articulation, a conceptual structure, a system to be read. With visual poetry in the broad sense we come to the question of how to ground a visual poetry in the rigorous sense, i.e. where the poetry can be found and agreed on in the reading of the visuals. The informational density (or yield) of a visual text is one of its key variable features. As in the value system of literary poetics, the length or duration of the reading experience is a key proof of concept for a "visual poetry". Concretism staked its claims on a koan-like minimum of poetic enunciation, a word or word-group to set in (poetic) relation to its spatial form. Julien Blaine, espousing a visual poetry in the broad sense, developed a visual-verbal sonnet form based on simple, regular phrase-image pairings, where principles classically explored under the rubric of *ekphrasis* secure the poetics of the composition. Can a visual poem hold readerly interest without verbal language, or bring its reader near to the same intensity/complexity/indeterminacy of interpretive experience we know from a good session reading traditional poetry? Or is this even what we're after in looking for what we're looking for here? Visual poetry.

Texts combining many parallel or intervergent codes, or texts carrying a narrower code-set out over a longer span of elaboration, affording a longer text experience, offer a stronger basis for really asking the question. Affordances for exploring the visible space as codage, and the codage as a disposition to be read poetically, determine whether I can get the poetic text I'm getting, get it as visual poetry, and hence get visual poetry, as a clear it of theory or practice. How to build an argument as to the visual-poetriness of a medial text object is a scholar's concern. [If that's interesting, the "attention analysis" mentioned below might be for you.] What seems more relevent for the challenge and pleasure of exploring this new anthology, is just attention to the experience of reading, and attention to what we learn about reading in the process. While trying, it is important to remember that many of the pieces here are excised from longer sequences, and so lack material one would need for a full reading. On the other hand, the process in every case is the same: see and make sense. Whether visual poetry exists or is alive and kicking is your decision, reader; a literature only if an audience. Can you read visual? Is it poetry?
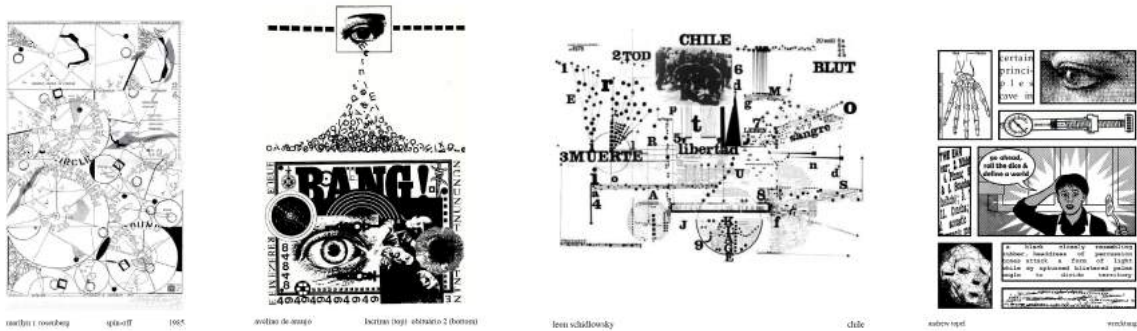
Marilyn Rosenberg (p.XX)   Avelino de Araujo (p.XX)   Leon Schidlowsky (pXX)
Andrew Topel (pXX)

Visual Reading: Awareness Science

What we notice attending to the reading of visual poetry, is that when the poetry happens, it happens not in what's seen on the page, but in concepts in the mind, and in an experience of how these line up and relate. Encountering a visual poem, or what invites to be read as one, there is a series of glances that lead to a series of thoughts (however determinately or indeterminately formed), and in that series of thoughts, an experience we might call poetic. Do we? How can we tell?
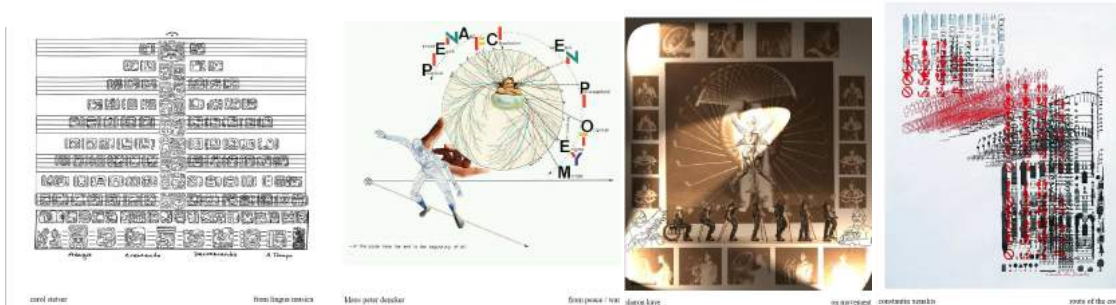
 Carol Stetser p.XX   Klaus Peter Dencker (p.XX)   Sharon Kaye
(pXX)   Constantin Xenakis (pXX)

Poetry is an effect in the mind as it builds concepts out of signs. To discuss a conceptual effect, we need a theory of experience. To see our seeing poetry in the visuals, we need a frame for watching our reading, and explaining the meaning we thereby experience. How? Before there is an analysis of the signs, the syntax or the story, there is an analysis of the (visual/perceptual) attention mobilized to take it all in, and of the (mental/conceptual) attention used to construe/construct from that a text, possibly poetic, and explore the results. The literary study of intermedial texts necessarily requires of us a particular phenomenological analytics, based in the study of attention and what its movements tell us about the way meaning is made from a field of visuals. If the study of how we read and put together meaning from words is at the basis of what we call intelligence in Western society - philosophy, logic, and rhetoric being

little else - the study of how we do so from visuals brings us to a broader idea of intelligence, of a reasoning with perception, in perception, rather that outside of it.

The study of visual poetry (re-)teaches us what it means that we think and need to think in a much wider ambit, in an idea-stream/-chain that cannot abstract itself from the images, materialities, sensations, emotions, bodily processes and movements of which they are made and in which it is embedded. The challenge to account for the meaning we build in reading a "text" increases with visual poetry and the experimental arts of visual language, to include projects of reading/construal/construction feeding off different channels of sense input and exploiting different cognitive modalities in the processing.
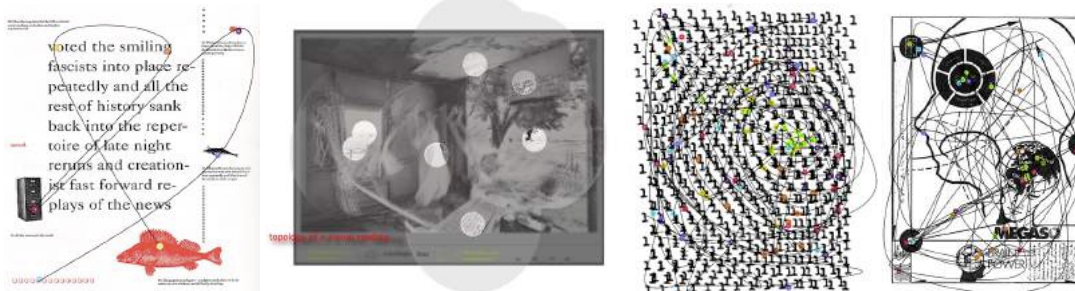
Attention Analysis - Samples from an Empirical Study for Visual Poetics - by the author - alanprohm.wordpress.com/attentiontracking

Visual poetry continues to be relevant and interesting today (as opposed to just beautiful which is easy) because of what it shows us of our capacities for multi-channel meaning making, for higher order integration and relational construal. The literacy in between media, in intermedia; I would call it an intralinguality. The media age presents us with a mental/informational/infrastructural landscape that is unprecedentedly layered and cross-accessible. The ability to make sense and promote life in/on this landscape requires an unprecedented coordination, agility and dexterity at the level of visual attention, mental attention and construal. The effort to understand this ability and the literary/artistic disciplines it finds expression in, brings us to an art science based on an integrative aesthetics, a theory of reading as a participatory bodywide/bodydeep reception involving all senses and cognitive faculties.

Even as the academic study of poetry continues to lose relevance, the study of meaning production and consumption in media-cultural objects and in society at large is as crucial as ever. Visual poetics in fact represents an important antidote for those who fear the death of literature departments in the media age, if it is mobilized to re-establish the knowledge-base of literary analysis as the knowledge-base of more relevant, more intermedial modes of textual production and cultural exchange. On the one hand this opens the way for an evolution in the nature of "language" and textuality, not simply to media technologically, but towards a media-materialism in thought involving a greater

integration of linear and non-linear, verbal and visual-spatial, conceptual and corporeal modes. And so it supports the urgent and ongoing cultural project of waking up to the embodied nature of mind, and of correcting the error that has allowed us to construct modern civilization on the basis of a rationality and intelligence trained to ignore huge swaths of what goes on in and among the senses as the experience of embodiment.

Figures:

Simias Rhodius, "The Axe" 4th Century BCE.
George Herbert, "Easter Wings" 1633.
Stéphane Mallarmé, from "Un coup de dés jamais n'abilira l'hazard" 1897.
F.T. Marinetti, "Après la Marne, Joffre visita le front en auto" 1915.
Guillaume Apollinaire, "La colombe poignardée et le jet d'eau" 1916.

Eugen Gomringer, "Silencio" 1950s.

Karl Kempton, "maze" p. XX
Scott Helmes, "untitled" p.XX
Derek Beaulieu, "for kristen" p. XX
Pete Spence, "from mezzo" p.XX

Shinichi Maruyama, "from kusho (writing in the sky)" p.XX
Bin Qullander, "magnify the eye" p.XX
Abdallah Akar, "journal.n.qabani (diary of a woman)" p.XX
John Moore Williams, "ohne 3" p.XX

Pablo Lehmann, "freud's book" p.XX
K.S. Ernst, "broken english" p.XX
Guy Laramee, "untitled" p.XX
Jaume Plensa, "twins i & ii" p.XX

Moholy-Nagy, "school-girls' dream" (1924)
Kawaor Tomoko, "untitled" p.XX
Fernando Aguiar, "poetry is dead. long live poetry" p.XX
Andrew Topel, "comix-harnessing the power of language" p.XX

Clemente Padin, "L'art? Ah…oui" (1973)
Patty Arnold, "expected harm – mean time" p.XX
David Arnold, "she dreams about guns knives and water" p.XX
Andrew van der Merwe, "untitled" p.XX

Marilyn R. Rosenberg, "spin-off" p.XX
Avelino de Araujo, "lacrima" (top) "obituário 2" (bottom) p.XX

3. CUT PAPER THINKER – A FEW THOUGHTS WITH KLAUS PETER DENCKER

First published in Klaus Peter Dencker *Visuelle Poesie II*, Bibliothek der Provinz, 2016.

(Photo: Christin Rodewald, 2005)

Figure 1: Klaus Peter Dencker "Die Poetische Theorie der Visuellen Poesie" (The Poetic Theory of Visual Poetry) 2012

1 - **What is this?** or **If this is poetry, what is he writing it in, and how do we read it?**

Media

To know what it might mean to call any work visual poetry we can start by examining what media are in use. In Klaus Peter Dencker's case, it's cut printed paper, some ink, and that's pretty much it. An analog practice, though with materials only a digital technology and society could produce. The materials belong to different classes, categories and canons, … . You can cut this up the way you like to make your theory of it, but with such an analysis of the medial basis we have a first approach to getting what this is.

Language

A next question is What orderliness underlies the way meanings occur in these media? What systems for decoding or encoding appear that allow us or require us to think of it,

or some aspect of it, as language. A language is proven in its usefulness for exchange. The semantics in play is cross-medial and the syntax highly mitigated by disjunctions that gap the space between discourse systems. Here classes, categories and canons are reduced to codes, and revalued for the grounding they give to inference. How do I know to read this as meaning that? Because there is system there for referring back and implying forward.

Poetry (Poetic)

The next step, in this way of getting into the topic, is to ask What of that which is happening in this language/these languages makes me want to or ought to call it poetry? If poetry is an effect experienced in the processing of language (broadly conceived), what more precisely is this effect in experience? Many traditions answer this question with something like: indeterminacy, polyvalence, figurativity, metaphor, layering, openness, suggestiveness. A good cognitive scientific formulation of a near standard idea of what poetry does comes from Adrian Pilkington:

> "extended search of weak implicature"[1]

Meaning that poetry composes material to signify strongly (enough to hold attention and desire in the reading) but not definitively, appealing to and rewarding attention in its search for meaning, but not allowing it to land once and for all on a particular meaning. "Weak" in the sense of not assuring the implicature it strongly suggests. This is almost exactly the formulation of "indeterminacy" that has come to define our discourse on modernism, the avant-garde, and experimentalism in the arts, including poetry.[2] It serves as a classic common reference for what makes a language work poetry or a language experience poetic. Extended search of weak (meaning strong, but not sticking, inconclusive, open-ended) implicature.

So, how do we read it?

So, how do we know how we read it, to know if how we read it is poetic? An argument for poetics in other medialities requires a phenomenology of reading across media. The question of reading order comes up immediately. Whatever we're reading (fixating ocularly for a mental construal), how do we string it together into something readable, hence a text?

In print tradition, the convention of where to look next is set, though it differs from culture to culture and from special case to special case. Confronted with a non-

Figure 2: Klaus Peter Dencker, from Denkköpfe, Section 6 Page 4

lineated visual field, there are also "orders" in how the field (text) will end up being read, but in general these are neither linear, nor set. Reading order is the outcome of graphic/optical forces, carrying semantic forces, encountered by an active attention out to find and grapple with these forces, landing on materials to construe from them a reading. This process and its outcome are unpredictable, but far from random, being some averaging between what is offered (affordances) and what is used and how, (performance). Because this takes place in the behavior of the eyes, and of a closely related mental attention, it can be studied, both introspectively and empirically on test readers. Our reading is something we can learn to read. Thus it becomes a basis for literary analysis of visual texts, establishing how they are read and what we can make of that.[3]

Test Case

In a study I conducted in 2000 for dissertation research into visual reading, I used an iconic page[4] from Klaus Peter Dencker's *Denkköpfe*, a classic of his long text style from 1989, engaging visual language materials cut from popular print media, setting up a strong a reference field for questions of science of the mind and new media[5]. The space of this page is asymmetrically filled, with a concentration of items in the lower, and particularly lower right portion. An approximate diagonal from lower left to upper right divides this denser region from the emptier upper portion, characterized by fewer and larger figures and more continuous lines. Figure 2, below, shows the viewing paths of the first seven subjects in a test of 21, which, typical of the results as a whole, highlight how this graphic difference corresponds to a difference in attentional behavior. Figure 1 shows one example from the set, corresponding to one person's reading as reported retrospectively for the first seven steps.[6]

1   2
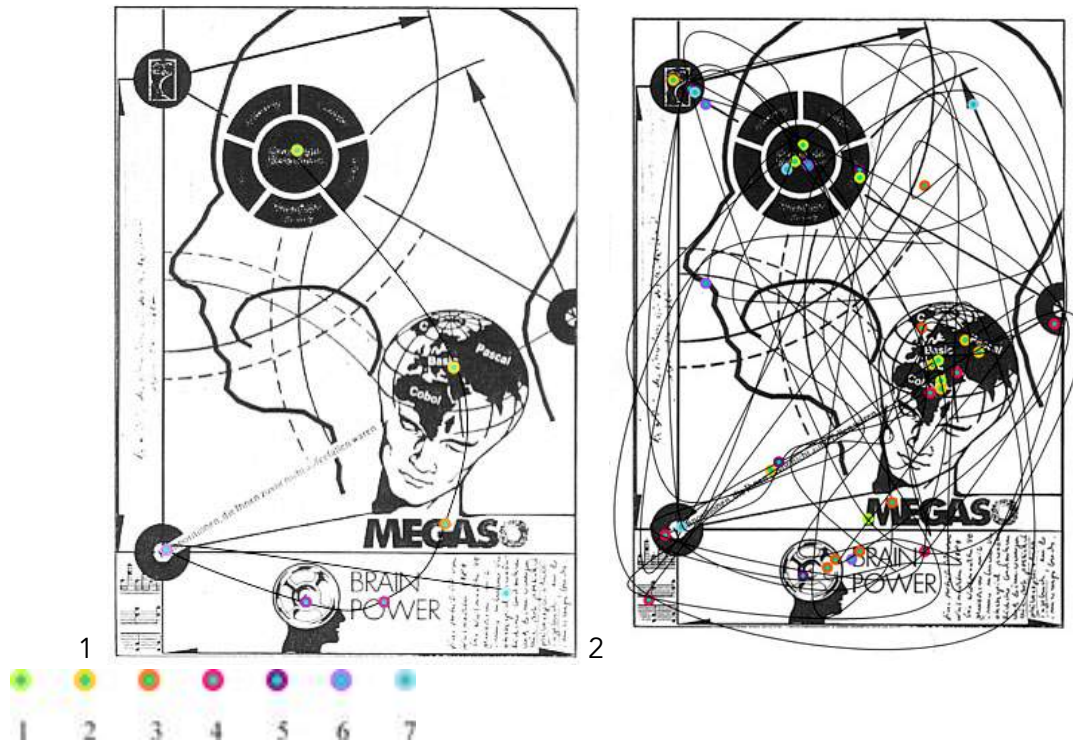
Reading Order

The results of this test showed a strong consistency in how the gaze of readers moved into and "through" the text. With rare exceptions, everyone viewing this piece recorded their first gaze at one of two locations, either the large segmented circle at upper left, or the globe-head figure lower to the right. Of those who looked at the circle first, most looked at the head next, but no one who looked at the head first looked next at the circle. In other words, no one went up/left from the elements they first landed on. Everyone continued down/right. The reader of Figure 1 above is typical in this respect, though readers differed in how they explored the lower right region once they got there. The effect could be ascribed to the lingering influence of engrained page-reading conventions, but there are sufficient visual cues in the work that contradict this directionality to counterbalance the influence if it existed. Invariably two or three further fixations went to items lower and to the right before attention again found its way up into the "quieter" region of the segmented circle. The result is an empirically discerned basic current in the text, a page-specific reading order drawing attention downward to the right and keeping it occupied in that region, from which it might continue only later to explore the less dense region in the upper half.

As we try to explain the phenomenon, we observe a basic partitioning in the work, a strong delineation of the page into two basic zones, inflecting attention's movement and the construction of meaning along this divide. A spatial level of meaning is at work

extablishing the current of viewing: in the one zone, the head turned up, open forms, loose lines, little text, uncrowded page, a wide thin arc line marking the division and angling everything at the margins away toward the center, reinforcing the framing on the large head and the segmented circle. The owl, perched on its strong perpendicular crossing lines, confirms this stability further, anchoring it in a pure vertical/horizontal orientation. A gaze to the circle is as a result a relatively leisurely gaze. Attention landing there finds less to draw it away. The lines and arrows offer traction more than they direct movement, and the distance between the circle and any next point of interest (other than the owl) holds potential competing attractors out of the frame.

Conversely, focusing on the head slightly further down, the gaze is held and deflected differently, into a tighter clustering of elements, and a tighter series of fixations, on the particular continents (labelled with names of computing languages) covering the scalp/globe, on the portions of text, or the other salient graphical elements. The head stands in more and "tighter" relationships than the circle, characterized by a greater number of near-neighboring attractors, and shorter distances of movement from one to the other, than is the case for the segmented circle. There is a different pressure, density and acceleration in this region, for the thinking eye looking for meaning. The initial biasing that probabilizes first acts of attention to the two spots sets up a temporal direction in the visual exploration, which contains this inflection.
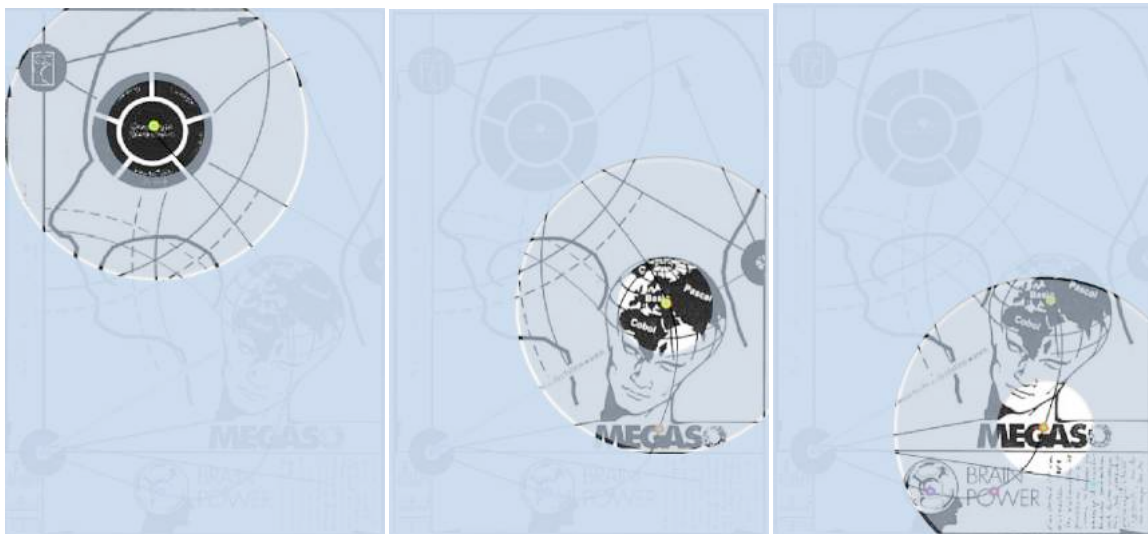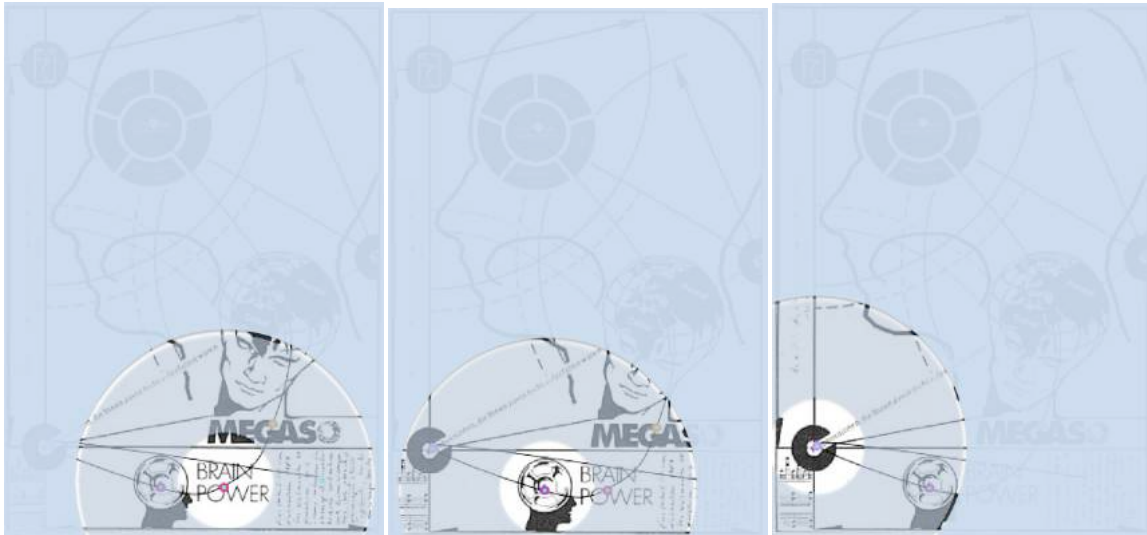
Topology

What we notice we are reading, then, rather than a line, is a topology, circuits, a spatialized set of items whose relations hold independently of the exact sequence they are taken up in. The order is present not as a single direction, linearly sustained, but as a reentered stream, continually repeated and run each time differently. Cycling through items activates them within the process of construal (reading, building sense), establishes, thickens, prunes, complicates, abandons or restores their relations. The order in which a topology is activated makes a difference, a difference that stays, mitigated, where the order is rewritten.

Meter

Topology takes the place of line in this poetics, but as we observe there is still meter. The effect of the difference between the up/left and down/right regions, on a gaze looping back and forth among items across the two regions, is a metrical alternation, a variation in perceivable measures, back and forth, on and off, stressed and unstressed between two intensities, the closeness/quickness of attending effort in the lower right region, and the more loosely rising and sustained gaze at or around the segmented circle. The pull downward and to the right, even beyond the initial viewing, remains felt as a tendential visual weighting however the gaze at a particular moment is moving, whether with it or against it. The total variation of perceptual values along the looping and reentered line of topological search adds metrical detail to the reading, with patterning in variations as fine as the visual system can handle or the visual surface

offers elaborating and complicating the base pattern I observe here as binary. However the visual field is arrayed, as eye and mind discern and associate various visual elements within it, a topology emerges bearing particular perceptual dynamics as if in code form, activated when sense-seeking, visual/mental attention arrives to read it. Scanning or jumping from spot to spot, attention is simultaneously laying a base beat for its ongoing reception of visual units in ocular-cognitive sequence, just as we do reading or hearing words in auditory-cognitive sequence.

Network

Observing attention's flights and landings[7] as movements in a process of construal, of inner building, rather than just of orientation and spatial/material discernment, brings us to the explicitly semantic layer of analysing visual textual reception. It is hard to believe in any firm distinction between things that appear and things that mean, but to use the distinction for what it's worth we can call everything so far discussed the proto-semantic[8], and note that with the theory of protosemantic visual cuing (a theory we have in highly evolved form especially in the legacy of Bauhaus design theory, Swiss design, Concrete Art aesthetics, and gestalt perceptual psychology) we have (at the very least) the equivalent of a theory of prosody in verbal/textual literature. The use of visual intake in a project of construal makes it semantic, where construal builds meaning from everything "handled" by the eye and mind in seeking to interpret, think or understand. The meaning a text of this nature delivers is hence not to be conceived in the image of a statement, as the meaning of a conventional poem is traditionally (questionably) imagined. The non-linearity of visual reading brings with it a non-finality. The utterance cannot be a statement in the same sense, as it cannot have a period. Rather than the linearly structured sentence-statement, we must think the meaning as network. Here the texture is decisive, the complication of lines of reading that cross and resequence themselves, the thicketing of relations and implications. It is in fact a structure for trellising that grows only slowly as element after element is sensed and sorted, associated, defined, guessed at, translated, re-ascribed, re-associated, re-sensed, re-sorted, re-networked, re-wired into the evolving "whole" that makes this scanning a reading, and into the inner lived event of this that makes that meaning.

Figure 3: from *Arakawa - Under Construction*, Page 2

The question of anything being visual poetry, or worth calling this, comes down to the experience a reader has in pursuing construal among the networks of given visual material. In this text, a page from the sequence dedicated to the artist Arakawa[9], we discern elements in some sequence, and sense some topology take focus as we explore it. Again a dual zoning is noticed, here more explicitly with the strong central full-length vertical, but also with the slightly off-center repetitions of this pivotal

structuring, first the boxed letter groups "SHU" and "KU", balanced left and right with bi-directional arrows between them, then, on a tilted axis, the pair of hands, one full-color with a ball raised for throwing, the other in wireframe rendering, backgrounded behind the image fields at the center of the work. Contributing perhaps most dynamically to the metrics of this page is the angled rod and curved line of the fisherman, just off-center to the left. The red ink seal at the end of his line answers the much bigger green globe ball about to be thrown by the facing hand, and the implied movement in the figure's bodily posture sets up a counterpointing diagonal with the hand. At several levels, along overlapping axes, the page sets up dual zonings, with the effect that back and forth scanning of the visual elements activates clear beats with metrical effect, laying a baseline for the ongoing process of semantic search and assembly.

If we start with SHU and KU, we can try to decipher them. If they are Japanese, as we assume from the context, maybe even a quick online search can help. Assuming the search engine is guessing correctly which Japanese characters I mean, I get for SHU, "Main", as in "principal", "chief", "important man". Here I can associate Arakawa. For KU I get "Ward", as in "district" and "section". Is the translation reliable, or relevant? Am I totally on the wrong track? I notice the background image behind the fisherman is a map. In the upper right corner is the word Arakawa. It is the name of a prefecture, a district, in Japan. But also the name of an important man. Important enough to have this text dedicated to him. Important enough to be known almost only by his last name. Did he fish? Not that I knew. A text under SHU asks if we have any further questions (noch Fragen?). We do. The KU morpheme appeared also on the previous page of the series, page one in fact. The SHU morpheme apears for the first time on this page, page 2, rhyming with KU, distinguished by its consonants. The place name and the name of a person. Are they the same? How closely do they relate? On the next page, the pair is complimented by a third morpheme, centered on a line below them: SA. What does it mean? My search gives me "Difference", and "variation", graphicalizing the semantic relation it draws between Shu and Ku. Shu-sa-ku. A clear meaning forms. The triad closes as a circuit. Shusaku. With a little research or familiarity, we know this is the artist's first name. Shusaku Arakawa. The ambiguity aroused in the steps it took to construe this, the openness in the syntactic bonding that makes of loose morphemes a word, remains in the ongoing reading to a greater or lesser degree, depending, kept active in the combinatorics of how these morphemes and others forming "Ara-ka-awa", continue appearing arranged on subsequent pages.

Indeterminacy in Intermedia

Finding Arakawa's name in this text is a guarantor that what we are doing here is reading, and that the reading builds and pays. It represents the beginning of the growth of a network or thicket of meanings and meaning material that will accrue as a reading if we continue. It will grow and transform as long as we engage with it, by

continuing to attend. Everything this text is about, or says, or presents, is yet to be discovered in this analysis. But already we are at the point where we can know what we are dealing with. The question of whether it is a text or visual art is answered in how sustainedly the reading can be carried forward, to what extent the construal advances in steps that build upon each other, yielding a sequencing of meanings that achieves salience, maintains some coherence, and has articulable import. The question of whether in this process poetry is happening is answered in the experience we have of that construal. What was our definition? "Extended search of weak implicature". Do we have that? Is that enough?

It at least appears intended. Highly articulated polyvalence is everywhere in the text, as it is in Klaus Peter Dencker's practice generally. The hands, one wireframe, one high-res flesh-tone, are a typical example. They reappear in the rest of the text, we recognize them, wirehand and flesh hand, yet each time triggered by a different material image. Regularly what appears as a clear object, theme or protagonist in Klaus Peter Dencker's texts exists as ambiguous territory in the zoning of an undecideable conceptual construction, a stochastic manifestation webbing its form in between events of appearance in differing materials, showing at various scales and to various modalities. The Arakawa sequence was first published in print in a collection called "Ambiguity & More" (2010) in the *C'est mon Dada* series with Redfox Press (Country Mayo, Ireland). The title is justified with this work in it, and labels something essential to the poetics at hand. Indeterminate language-like behavior in readable visual media. We have what we need to call this visual poetry. But what is significant about finding poetry being done in visuals? What difference does the difference in media make?

Let's look at the Arakawa series for some answer.

The sequence was inspired by the occasion of an international online conference on the work of Arakawa and his life-long partner Madeline Gins.[10] Klaus Peter Dencker's generous impulse to contribute, at my invitation, was based on an admiration for Arakawa and Gins' major mixed-media work, *The Mechanism of Meaning* (1979 in its first published version)[11], a work which certainly demands consideration in the history of mixed- and inter-medial writing, as well as for its philosophical significance. One section of that work addresses the topic of "Ambiguous Zones", and reveals an indeterminist ontology underlying the artists' poetics. The section includes a panel entitled "About the network of AMBIGUOUS ZONES OF A LEMON", showing this single object of mental focus "Lemon" as a dispersed weave of variants: "Lemon", "Model of a lemon", "Drawing of a Lemon", "Actual lemon", "Cut-out of a lemon", "Sliced lemon", "Memory of a lemon", "Area of a lemon", "This is a lemon", "After lemon", etc. Each time lemon
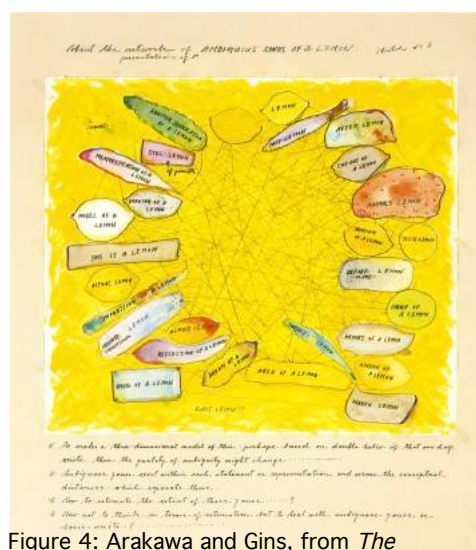

Figure 4: Arakawa and Gins, from *The Mechanism of Meaning*, Section 3. Ambiguous Zones, "About the network of Ambiguous Zones of a Lemon"

is revisited, entrained as a repeated node in a renewed circuit, lemon is different, raising the question, when is it ever the same? Below the diagram, a few short notes are appended, including this as a basic principle:

> *Ambiguous zones exist within each statement or representation and across the conceptual distance which separate (sic) these.*

The philosophical observation pursued in this panel speaks to a whole career (actually two) dedicated to articulating, concretising and realising indeterminacy as a mode of perception and social existence. "Blank" was the starting point in post-Dada, early conceptualist Arakawa's practice: "Part of doing is always blank."[12] And "tentativeness", also isomorphic with indeterminacy, was central to the efficacy the artist/poet-turned-architect pair sought from architecture, "procedural architecture", for realizing their Reversible Destiny project, dedicated to the question of how not to die: "Staying current with bioscleave, remaining alive as part of it, involves keeping pace with the tentativeness it brings to bear…".[13] Experimental poets, and experimental artists in various practices, have taken indeterminacy as the focus of their craft and target of their effort at innovation. Arakawa and Gins saw tentativeness as the key to an aesthetic strategizing aimed at overcoming "the code of automaticity" and learning how not to die. They learned this strategy as artist and poet, amplified it as philosophers, and in order to achieve it, together became architects. As I have narrated elsewhere[14] the story of Arakawa and Gins is the story of a visual/literary poetics that became an architectural practice, just to carry out its business. In migrating media with a somewhat consistent content, Arakawa and Gins were seeking certain (architectural) conditions for its reception. In their analysis, only something that communicates body-wide is capable of stirring up tentativeness in a modality capable of impacting the "organism that persons" and effecting change in life, e.g. by extending it: "Questions need to be asked in a 365° way."[15]

Figure 5: from *Arakawa - Under Construction*, Page 5

Although Klaus Peter Dencker was not lead in his practice to abandon graphics for construction – his great contribution is the clarity that comes of his consistency - his work is precisely distinguished by the inclusion of a certain maximum of mediality graphics can transmit. His poetics, too, must be considered in its nature as intermedia, conducting a discourse that overarches the various modalities brought together to do the communicating. His positioning in the history is based on the difference this inclusion makes, as contrasted with the extreme minimalist mediality of the concrete poetry tradition. Eugen Gomringer, Swiss father of literary concretism, emphasized Klaus Peter Dencker's role here[16]. Klaus Peter Dencker, clearly, took the path of opening the fuller field of mediality called "visual", while retaining and developing a

concretist/constructivist rigor in his new broader practice. Despite how this is sometimes framed,[17] this was more a recovery than an advance. Visual poetry existed before and was wider than concretism. Concretism, by virtue of its rigor, brought the idea of visual poetry to a sharpness it had not achieved previously, and became relatively well known. But the practice it presented, to many as the only visual poetry out there, was a highly restricted practice. Going beyond concretism meant continuing with the potentials visual literary practice had brought into play with Apollinaire, El Lissitzky, Moholy-Nagy, Max Ernst, John Heartfield. It meant advancing in an engagement with contemporary media materialities along with other serious experimenters doing the same. While Klaus Peter Dencker stands out in the German-language context as the clear next step beyond concrete poetry, it is important to understand the field he was working in in relation to the already more visual Brazilian concretism of the 1960s and 70s, the Wiener Gruppe and Gerhard Rühm, in France the "poesie elementaire" movement of Julien Blaine and the extensive networks collected in his prodigious journal *DOC(K)S*,[18] and in Italy with the *poesia visiva* movement[19], whose media-critical visual language practice was particularly advanced.

The "more" of visual poetry

Having now this second volume of collected works, we see a whole career in answer to the question of what "more" was available to visual poetics, beyond the just words of verbal poetry or concretism. The field Klaus Peter Dencker not only opened, but worked prodigiously, remains sharply delimitated in certain senses: he sticks (aside from his film work) to the page and to found print materials, and to a certain Swiss cleanliness and Constructivist flavoring in his page design. But decisive in his contribution is the range, or volume, he opens in the field he lays out on pages. More than a style or a palette, the materials choice Klaus Peter Dencker makes is about coordinating and charging a space, setting up ranges of similarity and difference at the perceptual level, to leverage constructions of relation and blank at the semantic level. In particular we can observe the span between flat geometrical elements and implied volumetric and in-motion, body-based elements, and again between these corporeal symbols and the more or less visually simple letterforms of words. These spans, between flat-line and full-bodied and between body and word, are always stretched in his texts, as dimensions of a basic range in which he finds the language-nature of his visuals. Between these sets of poles lies the whole of the medial space open to a visual poetics based on the page.

What is gained in this medial range, activating poetic processes of construal in a broader medial encounter, is on the one hand the embedding of these processes in readerly modalities closer or more adequate to the inner experience of poetic search and inference, and more relevant to how thoughts are encountered and trasmitted in everyday media culture. I said before that raising the question of poetics in other media requires a phenomenology of reading in other media. Establishing a major oeuvre in

another mediality, and developing a complexly inflected, poetic "language" system in that mediality, delivers that phenomenology as a reader experience. In every sense that made the linguistic experimentalism of the LANGUAGE poets a LANGUAGE poetry, the oeuvre Klaus Peter Dencker contributes witnesses to an intensive, sustained project of visual-linguistic investigation, making his just as clearly a VISUAL LANGUAGE poetry. We learn the syntax of visual attentional search as we make the effort of visual attentional search, and the semantics is what we encounter as meanings come to mind and interrelate on the basis of how we entrain things in our ongoing visual/mental uptake. The insight that language is transcendent to media, that mind is intermedial, that poetic is a phenomenon of experience transcendent to the language that triggers it, and the discovery of new worlds of literary effect in visual materials taken for the full richness of their syntactic impact and semantic import, all these are delivered in the reading experience of a visual poetry constructed to these dimensions.

Another thing gained, to bring this to an end where there is no period, is precisely the dimension most unavailable for articulation in printed verbal text. The body as a regular node in the cross-lingual circuits Klaus Peter Dencker composes for us to read, mixing with words, inflects the language-reception experience with a felt dimension absent in strictly verbal, or even most graphical, deliveries. Languages differ from one another in part according to how they wire their semantics. Words connect to their meanings via dictionaries, with a grammar to set the rules for encoding and decoding. Visuals pass through resemblance, imaging, to invoke meanings as recognitions, plus the inflection that comes of their integration in a complex field or series. This is the basic opposition. The body triggers viscerally.

Figure 6: "Schoolgirls' Dream"1924

language" 2015

Figure 7: El Lissitzky, "Tatlin at Work" 1921

Figure 8: Andrew Topel, "COMIX - harnessing the power of

The graphic force of body forms in Klaus Peter Dencker's works, which we can place in a strong tradition from the beginnings of photomontage to recent work using digital tools, presents a conundrum to a theorizing of the linguistic nature and function of visual materials. Their mode of signification, included in a textuality intermixed with words, other images and abstract geometric graphics, gaps a span conventional linguistics would view as ungappable. At one end they approximate the abstraction of linguistic signs, entering an expressive plane with them to take on language-like functions in a read text, and at the other they suggest the phenomenality of a real perceived presence standing outside the text, a full body, intimating a perception that would potentally include all dimensions. The "H" formation in Moholoy-Nagy's humorous and elegant "Schoolgirls' Dream" from 1924 is a great example. On the one hand it asserts a unitary lexical sign function based on conformity to a system of letter forms, on the other it projects a manifold human presence with very specific and charged bodily import.

The valence of angle or tilt, a dimension Klaus Peter Dencker exploits exhaustively as an articulatory device, helps us understand the weight and function of body signs in these texts. The tonality articulations of this sort deliver is received, we know from the science on mirror-neurons, via an empathy in the kinaesthetic imaging, an activation in one's own body of a matching sensation to complete the communicative circuit initiated in the sign. Its meaning at this level is a kinaesthetic activation in the reader, a recognition and re-firing of the tilt, posture or gesture as proprioceptive content projected into the object of perception. We saw this already in the attention study on the example from *Denkköpfe*, where an image-based recognition of head-posture established the proto-semantic spatial organization of the page. In his *LW Sequenz* (1996), the body plays a particularly muscular and vigorous role in the presentation of image and text materials. And in his elegiac series on the catastrophe of US Empire, *Dero ABECEDARIUS* (2001), body forms carry a tremendous pathos and tragedy, anticipating 9-11 in a dramaturgy of reaching, leaping, and falling from great height. Integrated into the resource base for articulation and inflection in a demonstrated visual poetry, this bodily dimension is a "more" that more than validates visual poetry as an expansive departure from conventional textual literature or concretism. This Klaus Peter Dencker has given us.

The beauty, thought and story that emerge in the actual reading is your own experience. Enjoy.

Conclusion – or, **So, do we have a visual poetry by now, or what?**

In the history of visual literacy and literarity, Klaus Peter Dencker plays a very special role. What he achieved, others had proposed. What others invented, he proved. He is part of a tradition which for most of its over 120 years of existence has been perceived as a short-lived phenomenon, whether because supposed to be brand new, or because believed eclipsed in a passed historical moment. Visual poetry has been invented so

many times since the 1890´s that it's hard to understand how it hasn't always existed. No one is better cut out to testify that it has than Klaus Peter Dencker. Well-precedented and far from alone in his field, Klaus Peter Dencker is nevertheless uniquely decisive in the history of visual poetry. Active with passionate *Konsequenz*, as German allows us to say, since the 1960's, he bridges everything you would need to bridge to establish once and for all visual poetry as a gapless, solid, constant multi-stream current and literary-historical development of obvious significance. His continuity/consistency has bequeathed us an oeuvre of indisputable girth, length and density. The question of a convincing corpus has been answered. Volume One of this two-volume collected works would have sufficed for this. Volume Two greatly expands the answer.

The consistency of practice this second volume adds further testifimony to, supplies the basis for a technical poetics as detailed and generative as any verbal poetics. The sustainedness of his chosen medium, the recognisability of his text-image practice as a linguistic activity, gives us as solid an object of study as we could want for examining the critical phenomenon behind this hypothesis, this wager, visual language, for visual poetry. In steady steps back through Wiener Gruppe, Concretism, Dada collage, Bauhaus, Constructivist photomontage, Klaus Peter Dencker connects us to the root of visual language as an aesthetic project and visual literature as a progressive (counter-)cultural ambition. Even just taken on his own, independently of the rich traditions and movements in which his work is embedded, Klaus Peter Dencker constitutes a full-bodied corpus and tradition for visual poetry. Re-embedded, or re-mixed on the worktable of visual poetry history – which no one has done more to document and demonstrate than he – he enriches the thicket of visual poetic practice with a tremendous growth and flourishing. With the publication of this second volume of Klaus Peter Dencker's collected works, visual poetry can at last rest, pretty assured of its existence.

Section 2

VISUAL POETICS

4. RESOURCES FOR A POETICS OF VISUAL POETRY[1]

In this chapter I want to approach the poetics of visual poetry as a theoretical challenge. The very notion of visual poetry is conceptually problematic, and thus deeply intriguing in its implications. Visual poetry, or what is claimed to be visual poetry, confronts us as a substantial and persistent cultural phenomenon before we are prepared to address it as a subject of theoretical study. When we do address it, the sheer dispersive variety of the forms it claims argues against there being any *it* there. At the core of the challenge is the suspicion that the notion itself is a contradiction in terms, embracing a visuality that lacks the precisions of language, on which, paradoxically, the vaguer, elusive effects of poetry traditionally depend. As with arts of all sorts, this challenge has no theoretical solutions, only practical ones. The ideas presented here aim to provide some resources for practical solutions.

Visual poetry

Many attempts to define visual poetry focus, for obvious reasons, on the mode of its reception, specifying that it must be seen, that it cannot be transmitted aurally without a critical loss of meaning.[2]   Other definitions strive to specify something of the unique "intermedial" quality arising from the hybridization of textual and visual information (Dencker, *Wortköpfe* 49–50). These definitions in general are geared toward identifying the visual as a material condition of visual poetry; they do not address the question of how the visual functions and is processed in texts that are received as "poetry", and how meaning is established in the multifarious forms in which textual and visual information interact, even in instances when the "poem" is seemingly wordless.   To develop a poetic theory of any use in making visual poetry, or in seriously engaging it as a reader, we have to address this question. The traditional preoccupations of poetic theory with definition and classification will not help us in this regard, though as a way of articulating the scope of what I mean by visual poetry, it is worth mentioning two taxonomic distinctions that seem to be useful.

One way to embrace the full range of work for which the status of visual poetry has been claimed, without either prematurely accepting those claims or prejudging our conception of the field in favor of only one portion, is to think in terms of a continuum from the "very verbal" to the "very visual". We can tentatively, and for heuristic purposes, locate any given instance of visual poetry according to the degree to which it approaches the condition of a conventional text or foregrounds linguistic elements for

verbal reading, versus the degree to which it approaches the condition of painting or another "purely visual" medium or foregrounds its visual aspect.[3]

Two "thresholds" help articulate such a scaling further. One separates work whose only visual resources are the materials of verbal language, from work that incorporates non-verbal materials. This distinction figures often in attempts to draw a line between strictly "Concrete" poetry and "visual" poetry, understood as drawing from a wider field of meaning materials (Dencker, CORE 47; Gomringer 153–4). The other threshold separates work that visibly blends verbal and non-verbal visual materials[4] from what might be called "purely visual poetry" which ostensibly does without words and verbal language altogether. Most academic treatment of visual poetry, institutionally biased toward the literary, stays focused on the verbal end of this spectrum (Concrete poetry, pattern poetry, typography).[5] Actual practice since the 1960s, bolstered by avant-garde precedents, has tended more to explore the middle region of mixed verbal and visual means, while "purely visual poetry", also with its roots in avant-garde experiments,[6] continues as a marginal, yet persistent utopian trend within visual poetry, posing the conceptual challenge of a visual poetry most acutely.
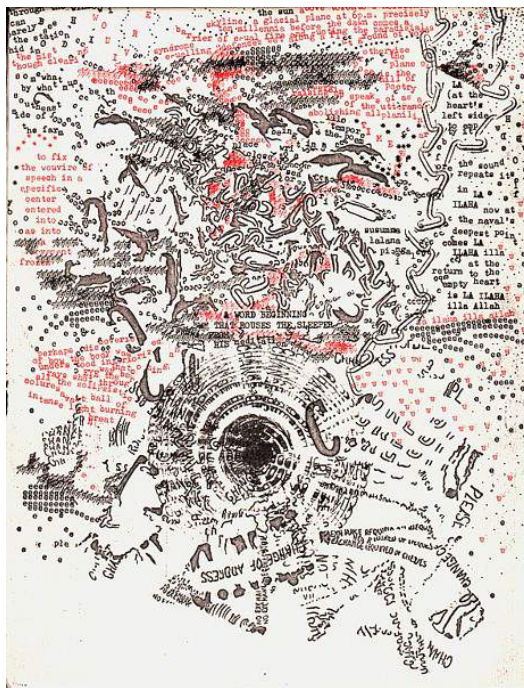

Fig. 9: Steve McCaffery, excerpt from *Carnival, Second Panel,* typewriter and rubber stamps (1970–75), p.7.   Using only words and letter forms, this work achieves a visual/spatial intensity beyond that of most work higher on the "verbal-visual" spectrum.

Another taxonomic tool involves categorizing works of visual poetry according to the materials and media they employ. In this case the range of labels would extend from pen-and-ink, typewriter, and letterpress, through the full variety of contemporary visual art media,[7] including sculpture, video, performance, interactive digital media, installation, and architecture. In some cases such categories provide the benefit of genre distinctions otherwise hard to isolate in visual poetry; "letterpress poetry", for example, designates both a material/technological and an art-historical coherence among its examples.[8] In another sense, to specify the materials a work is made with is to specify the expressive resources in which its poetic "language" must be sought.

Poetics

Efforts to classify visual poetry are useful in introducing the field to students or an unfamiliar audience, but the task of articulating a *poetics*, understood as a working technical theory of visual poetry, requires something else. Tzvetan Todorov describes poetics as an "abstract" theory of literature, one not concerned with particular works, but with the general "structure and functioning of literary discourse" (Todorov 19/7). In 1968, Todorov could still assume that "literariness" was inherent in a special class of texts, an essentialist position that was echoed in 1976 by Roman Jakobson's claim that the nature of poetry resided in what he called its "poeticity" (Jakobson, 164–75). The theories set forth in these influential treatises are still held to be useful in literary or poetic discourse where the texts under discussion are accepted as literary or poetic; but it is generally agreed that they do not help distinguish a poem from a text that is not a poem, because "literariness" or "poeticity" are qualities assigned to texts by interpretive communities. A poetics of visual poetry cannot, therefore, rely on an inherent quality that would constitute the text's "poeticity"; as with any and all poems, it is up to interpretive communities to decide whether, and by what criteria, such texts can and should be read as "poems". Since the 1950s, it has become possible and acceptable to receive as "poems" texts consisting of single words or word fragments or single letters, even though illegible or unintelligible. This reception was based on three conditions: the text had to have a recognizable connection to verbal language or its oral articulation or visual representation, it had to be understood as connecting with a literary/poetic tradition, and it therefore had to be acceptable within an "arts" discourse. These conditions have also marked the discourse on visual poetry, although in a number of instances the connection to verbal language has become tenuous, and the tradition has turned into that of the newly discovered long line of visual poetry through the ages.

No poetics of visual poetry can be constructed by simply expanding or modifying any poetics of literary texts—which in our age have been replaced by theories in which

"literary" usually appears in quotes. And although we are becoming increasingly familiar with the millennial history of what we now call visual poetry, the concept and that history are fairly recent constructs, and there is no history of theorizing about such texts. The search for a theoretical basis is *the* foundational crisis of a poetics of visual poetry.

All the experimental poetries that Dick Higgins named "Intermedia" (Higgins, 12–17) are based on the interaction of verbal texts or elements with other media or sign systems or meaning-producing activities that results in intermedia texts received as "art". A poetics of visual poetry, therefore, will have to articulate a notion of meaning-construction in visual media in interaction with elements or aspects of the verbal medium in works received as visual poems. This notion would constitute for the visual media an equivalent to verbal language whose mode of reception *and* mode of cognitive processing are visual.

Visual language

The identification of visual poetry as an interaction of one or more visual "languages" with elements of verbal language seems to make easy sense of the term and to open it up to a broad universe of possibilities. The influence of Ezra Pound's 1918 translation of Ernest Fenellosa's writing on Chinese ideograms, an important event for modern visual poetry, speaks to the power of visual language as an idea to inspire poetic innovation. So-called visual languages abound, not only in the arts and in commercial design, but as essential tools of science and education, and as truly vernacular phenomena within the mass media. And, without necessarily worrying the theoretical underpinnings, visual poets since the beginning of the twentieth century have exploited them as resources.

Fig. 10: Lars Arrhenius, excerpt from "The Man Without Qualities" (2001). <mark>p. ?</mark> The reading of this visual narrative is guided by its title and its ironic reference to Robert Musil's novel *Der Mann ohne Eigenschaften*.

And yet there might be false comfort in this definition. Visual language is a term with a broad range of applications, some loose, some rigorous, but none amounting to an underlying vocabulary or syntax of visual expression *in general*. To point to visual language is not to simplify the task of specifying a semiotic basis for visual poetry in its interaction of visual media, sign systems, and codes with elements and aspects of the verbal medium. Rather, it is to open our understanding of the process of meaning production to the full complexity of visual signification in all its forms.

Visual language is not a language, but rather a universe of resources for visual signification. Roughly, these resources can be divided into three semiotic levels or categories. Most "language-like" are systems of marks and symbols whose meanings, like those of words, are arbitrarily or conventionally assigned and formalized in a lexicon. Visual poets who use mathematical symbols or musical notation, for example, are working at this level. Other visual signs, while subject to the influence of culture and conventions of usage, are "representational" and have their meaning by virtue of a relative visual resemblance. This resemblance can be relatively "abstract", as in the case of pictograms, or relatively "realistic", as in highly rendered or photographic imagery.[9] A third level of visual signs includes shapes and color in a "raw" state, with meanings mediated neither by assigned definitions nor by physical resemblance, but only by relatively "immediate" processes of psycho-physiological response to the visual stimuli.[10] This is the realm of spatial meaning I will discuss more below.

Though there is no one "visual linguistics" to undergird visual language as such, a broad range of iconological, semiotic, hermeneutic, and cognitive psychological theories exist for exploring how visual meaning is made. Applying any of these theoretical approaches to the question of producing or receiving the visual information in visual poetry will open up valuable avenues for research. To bring the visual aspects of a poetics of visual poetry to their theoretical depth, however, I think it is particularly important to focus at the "ground" level of primary perceptual experience and look for the requisite articulatory capacities in the fundamentals of vision itself.

Spatial meaning

The processes that underlie visual meaning-construction are hierarchically ordered. Before an image can be recognized, raw light data must be organized in the eye and early visual regions of the brain, yielding shape and color that we can grasp and then decipher more thoroughly. One of the earliest stages of meaning-construction, then, occurs at the psycho-physiological level that so interested early abstractionists. The meaning made at this early stage is primarily spatial meaning, that is, the organization of random light information into a coherent visual field. And it is at this level that most

systematic theories of visual language begin. Gyorgy Kepes, a colleague of László Moholy-Nagy and an important link in the chain of visual language theory, sought to synthesize the insights of painterly abstraction and the pedagogical researches of Paul Klee and Wassily Kandinksy in the light of new Gestalt theories of perception, and for the sake of a widespread visual literacy. His book *Language of Vision* (1944), explains spatial meaning in these terms:

> Positions, directions and differences of size, shape, brightness, color and texture are measured and assimilated by the eye. The eye lends the character of its neuro-muscular experience to its source… Only incidentally does the spatial quality derive from the fact that optical signs resemble objects known empirically. One experiences space when looking at an articulated two-dimensional surface mainly because one unconsciously attempts to organize and perceive the different sensations induced by the optical qualities and measures as a whole, and in so doing is forced, by the various qualities in their relationships to each other and to the picture-surface, to impute spatial meaning to these relationships. (Kepes 20)

The strongest claims for an independent semiotic basis for visual poetry can be made at the level of spatial meaning. While space as a cognitive domain is about as different from language as possible,[11] it is similarly vast in its capacities as an articulatory and expressive resource. Mallarmé's *Un Coup de dés* can be said to have inaugurated modern visual poetry in that it introduced space as a dimension of expression and articulation amplifying the capacities of language. Much of the promise early observers saw in this move,[12] and much of the promise still to be realized by coming generations of visual poets, lies in the knowledge that thought itself, and experience, have fundamental spatial dimensions which words can hardly access (Saint-Martin xii). The differentials separating language and spatiality, if on the one hand seeming to confirm the sense of "visual poetry" as an oxymoron, on the other hand guarantee its ongoing relevance, marking out a territory of meaning which spatial articulation is uniquely fit to engage.

Spatial meaning can function at many levels of a visual poem simultaneously. One chief function is the ordering of verbal or pictorial signs in a spatial distribution that helps determine the order in which elements are "read", how they are grouped or associated, and how priority or relative importance is attributed to them. This is how space functions in *Un Coup de dés*, "scoring" the text for a visual reading where pacing, volume, and inflection have visible correlates in the placement, size, and typeface of words. In works where the verbal dimension exists apart from the physical text (i.e., in ostensibly "purely visual" poems), such scoring consists primarily in choreographing the movements of visual attention, determining the dynamics by which items are presented to consciousness. Since rhythm, meter, and other features of time-based articulation are

key to the classically poetic experience, it is significant to note the potential latent in spatial arrangement to reproduce these visually. And since visual language lacks a standard reading order to support precise syntactic linkages, the ability to influence the movements of visual attention should prove key to evolving further meaning resources for visual poetry.

Fig. 11: Klaus Peter Dencker, untitled [?!]. from *Wortköpfe* (1991), p. 69.

Aside from such "syntactic" functions, spatial meaning also has its own articulate expressiveness, based largely on the deeply ingrained logics of bodily movement and perception. While space has figured as a fundamental concept for the poetics of visual poetry since Mallarmé, this "full-bodied" spatiality has barely been explored. With the advent of computer-aided design technologies, material limitations discouraging such experimentation have been removed, and contemporary computer design is quickly making up for lost time.[13] Most interesting, in my view, are developments in the emerging field that has been labeled in some quarters as "architectural poetics",[14] in particular the work of Arakawa and Madeline Gins, which demonstrates the extreme potentials of spatial meaning to guide "poetic" experimentation. Whether or not anyone might read this work as visual or architectural poetry, it has interesting implications for any theory of visual/spatial meaning construction.

Fig.12: Arakawa and Madeline Gins, computer model for "Reversible Destiny House II", Gifu, Japan. From Arakawa and Gins, *Architecture* 94.

Arakawa's and Gins's "Reversible Destiny" architecture makes good on the Situationist notion of the "architectural complex" as the only truly efficacious means of transformative poetic intervention in experience (Situationist International 8–14). Mobilizing a "built discourse" (Gins and Arakawa 57) of disorienting and spatially ambiguated structures, the "architectural surrounds" they present engage the body/mind in an immersive process of reading and interpretation that strains a person's capacity to integrate conflicting or excessive spatial information, and so viscerally problematizes the cognitive processes of world-building and subject formation. The targeted result of such "architectural procedures" is to "reconfigure" the human person beyond the limits, including mortality, which it needlessly accepts as destiny. As a poetic intention this stands in a direct line with avant-garde and Romantic projects, whose use of language hoped similarly to heighten awareness to a transformative intensity, yet the means it adopts challenge poetics to understand space as a meaning resource more adequate to the efficacy it has traditionally desired.

Attentional analysis

Obviously, such brief commentary can only posit, and not prove, the efficacy or validity of spatial meaning devices as an underpinning for a poetics of visual poetry. What would help more in substantiating claims of this sort and in generalizing the resources they reveal as visual devices or strategies in visual poetry, is a critical framework for discussing the relevant details of experience. Lacking any simpler "linguistics" to support its claims, a poetics of visual poetry must seek grounding for its visual meaning

claims in a phenomenology of the visual/spatial meaning experiences it involves, looking to the intimate dynamics of perception and meaning-construction for an understanding of the way visual language functions in visual poetry.

This approach might be thought of as a "reception theory" for the visual dimensions of visual poetry. Rather than basing literary analysis on pre-formed literary concepts and categories, reception theory, especially in the psychological version espoused by Wolfgang Iser, has the virtue of grounding analysis in reading as a process of construal, or "consistency-building", as it takes place in the interaction between awareness and the textual materials (Iser 16–18). Iser's model of reading as the complex cognitive function that it is centers around the role of the "wandering viewpoint", or focus of attention, as it moves (left to right in Iser's cases) through the sequenced field of materials that mean things (Iser 108–18). If only on the strength of its root metaphor, this concept seems very promising as a resource for theorizing the reception of visual texts.

In an empirical study I conducted with Barbara Tversky at Stanford's Center for the Study of Language and Information (CSLI),[15] we explored the idea of the wandering viewpoint as the basis for an "attentional analysis" of meaning in visual language. Interested in isolating "objective" data on visual reading, we devised a method for observing the movement of attention[16] as it interacted with the visual/spatial constraints that guide interpretive viewing. On a computer monitor, we showed twenty subjects a series of twenty-one visual poems, covering the full taxonomic range I sketched out above, but emphasizing works with a high degree of spatial articulation. Subjects were asked to mark, using up to seven dots in a color-coded sequence, the spots where they thought their attention landed in the process of trying to make sense of each piece, and then to trace the path of their viewing through these spots, using a line tool.

The results yielded the attentional thread of each viewer's reading, revealing what stood out as elements, and the order in which those elements were taken up. For an individual, such an exercise serves to make the process of visual reading more conscious, identifying more clearly the semantic elements and syntactic steps underlying the perceived meaning. When viewed collectively, the results give the beginnings of an "objective", statistically focused reading of the work. Where invariances occur in how subjects viewed a piece, we see traces of a determinate semantic structure not discernible to the single, subjective viewing. And where features or elements show a strong constraining influence on attention, we see the potential for building rhetorical or poetic devices into the reading.
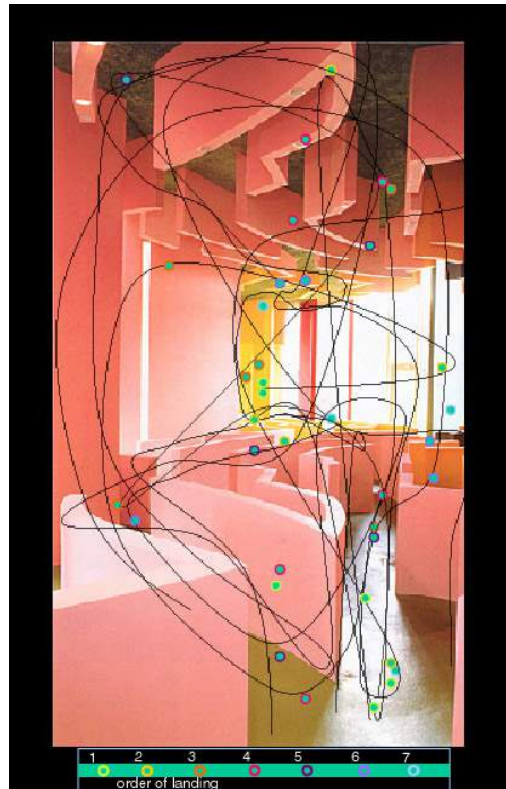
Fig. 13: Composite of 6 "attention paths" viewing an interior photo of Arakawa's and Gins's "Reversible Destiny Office" from the Reversible Destiny park in Yoro, Japan. From Arakawa and Gins, *Reversible* 205.

Focusing on the analysis of attention in visual reading leads us to an important understanding of the *unit* in visual poetry, a notion which should be basic to any theory of visual meaning-construction, but which would otherwise prove difficult to determine. Where in verbal language the meaningful units are specified in the alphabet and the principles of morphology, there is no way of specifying for visual language just what constitutes a meaningful object or a meaningful area of light and color, and what doesn't. Anything that falls beneath the gaze may figure in the process of visual sense-making, and so, as Saint-Martin argues, the unit of visual language can only be understood as the momentary correlate of ocular fixation (Saint-Martin 5–10). Discounting efforts to define the visual unit as "the image", or according to Kandinsky's "point, line, plane" morphology, she proposes the term "coloreme", generalizing the notion to indicate "a patch of light energy" and the visual variables into which it resolves under attention. This notion parallels Iser's literary notion of the "chunk", the variable amount of verbal information taken up in a single act of reading, and therefore serves well as the basis of an analogous visual reception theory.

Fig. 14: Simulation of the phenomenological "topology" of a visual reading of "it was green, it was black" from David Arnold's *Situations*. The topology reflects the structure of visual awareness, with each foveal region of high focus surrounded by an area of more diffuse macular vision.

An attentional analysis of this sort also suggests what might serve as an equivalent to the "line" or "sentence" as a scale of visual linguistic structure. No strict convention of linear concatenation or visual scanning governs the uptake of visual information. What we observe instead is the establishment of "topologies", or sets of spots which, regardless of the temporal order of their fixation, reveal the unit-groupings that play a role in building semantic consistency (Saint-Martin 68–74). Exploring the relations between visual variables at each spot in a topology leads to a sense of the syntactic forces linking the elements into larger wholes of meaning. Just as it is possible to attract attention to a specific spot or semantic element in a piece, it is possible to establish "circuits" of such spots, causing the viewer to "read" them for more complex, associational meanings. A topology in this sense corresponds to what Iser terms a "sentence correlate" (Iser 107–17), the mental grouping of meaning units that form a basis for context-framing, reference, and other fundamentals of consistency building. It represents another valuable resource for designing a theory of visual meaning-construction, and ~~thus~~ therefore also for a corresponding "poetics".

Conclusion

These terms, and the framework of a phenomenological reception theory that offers to contain them, show the beginnings of a systematic theory based in experiential attention to the act of making meaning with visual materials. It has the potential of becoming an integral part of a poetics of visual poetry. A phenomenological analysis anchored in the available cognitive science–and employing the wide range of semiotic and iconological distinctions already in use, promises to enable a far clearer and more comprehensive discussion of visual poetry, its forms and devices, its aims and effects, than has yet taken place.

5. ATTENTION TRACKING: SOME EMPIRICISM FOR A VISUAL POETICS[1]

ABSTRACT

In this chapter I describe a simple empirical methodology for applying attention tracking to the literary study of visual texts. In particular I apply it to making sense of the notion "visual poetry", as a tool to substantiate and explain "poetic" effects on the intmate cognitive grounds of readerly reception. The paper starts by identifying reading order and sequential processing as gateway questions for addressing visual language and visual poetry as concepts. It then takes up the more established methodology of eye tracking, reviewing the literature on reading and scene perception for insights relevant to an intermedial theory of visual reading. Describing also the limitations of eye tracking as a methodology, in particular the difficulty of concluding anything about mental attention and reading from the dry data on eye movements, I describe my attention tracking methodology as a radically simplified alternative, and argue for its superiority on this key point. I then report on an extended study I conducted at Stanford University, and demonstrate how the analysis of attention can be used to reveal textual structures, ground interpretations, and explain literary effects in a visual reading experience. The theory of reading that emerges from this analysis is one that can easily embrace word and image in a coherent account, laying the foundation for a mature reception poetics of visual poetry and intermedial textuality in general.

0. Introduction

Figure 1. Attention Tracking Interface with a slide showing a page by bpnichol.

Making sense of the notion "visual poetry" requires some effort. To common sense the term generally seems either contradictory, because poetry is verbal by nature and any visual dimension can be at most supplemental, or very unrigorous, where "poetry" is applied to a non-verbal work simply to mark some unspecifiable extra value, like the cliché "poetry in motion" for figure skating. The marginality of visual poetry as a field or as a practice, at least in the minds of critics, has a lot to do with the difficulty of

finding much to say about it. The articulations of conventional literary criticism, poetics and prosodics lack traction on visual texts precisely to the extent that their textuality is visual, and thus disappears from the optic of a linguistics-based analysis. Without wishing to dull the challenge that visual poetry poses to literary practice precisely along these lines, I would like to open a perspective onto visual literary production that can demonstrate at least some of the textual richness visuality of itself can generate.

The question comes down to how, and how satisfyingly, anything visual can be read as poetry. Conventional criteria for calling a text poetry – its lyrical or metrical character, the density, compactness or layerdness of its expression, its transgression of common usages, its use of metaphor and other figures – seem hard to apply in the absence of a linguistic base. This, in addition to the natural myopias of academic specialization, helps explain why literary discussion of visual poetry has so often misrepresented the field by choosing to focus on forms and instances at the verbal-most end of the intermedial spectrum, because that's where their analyses hold.[2] But to give up on visual poetry at the point where it exits the verbal is not only to miss much of the genre's challenge to poetry as a practice and as an experience; it is also to miss the challenge it poses to our understanding of language. For, before anything can be read as visual poetry in a rich sense, we have to acknowledge the richness of how the visual can be read. We have to acknowledge that the visual can be, and inevitably is, read, and consequently that, far from leaving language behind when it exits the verbal, visual poetry instead brings it with, into the visual.

A theory of visual poetry (and poetic visual effects) requires a theory of visual reading, because poetry is experienced not as recognition of an object, but in the experience of certain effects of reading. And a theory of visual reading in turn requires a theory of visual language, or an account of the visual meaning resources underwriting a text, one that will amount to a theory of language in a supra-ordinate sense, capable of substantiating the idea of reading intermedially. Key to the significance of visual poetic practices historically, and to the value of theorizing visual reading with their help, is that these call for visual language in practice, and as a consequence call it forth in the cultural blend of intermedial experimentalism. But how are we to engage this language and these languages critically, what analyses are we able to apply to the kinds of text they make? There is no end to the angles and lenses that can be applied to "reading" visual texts in art-critical, literary-theoretical or cultural-critical discussion, but the particular challenge of taking the "reading" of visual poetry literally, of thinking visual language minutely and observing it in behaviors, remains largely unmet. We have no comprehensive theory of semantics to underwrite our taking visual form as language, so we have to look to the phenomenological immediacy of interpretive response for clues as to how possibly-poetic meaning is made of visual texts. Visual language, like visual reading, is not the province of a delimited faculty performing according to more or less known rules, but is rather the correlate of an activity that calls into play the full range of visual perception and intelligent response, including everything from lexical processing of verbal signs and iconic recognition of objects to the awareness of space and situations.

What I am presenting here is a tool for building a theory of visual reading in this broad sense, by enabling the observation and investigation of visual readerly experience. Attention tracking is an extreme simple method for investigating and reporting on how we read visual texts. In this paper I present it with an eye to making visible some of the dynamics that reveal what it can mean to say we read those texts as poetry. In this form it is specifically an articulatory tool for literary analysis serving a phenomenological visual poetics. But the generality of the reading that can be observed and analysed makes attention tracking a tool for applying these optics and analyses more widely, and before applying it as poetics, I argue its scientific basis, explain the empirical procedure, and discuss questions of analysis. Attention tracking is an awareness tool, both empirical and introspective, for tracking the reading experience, and pinning it, through the behaviors of attention, to particulars. It supplies any reader the starting point for a phenomenological reception study of visual texts. And, however clinical it may sound, that is something very fundamental. Seeing as in a broad sense, for us, they say, 80% of the world comes in as visual, requiring reading.

The methodology does not in itself amount to a theory of visual reading, but rather serves to anchor any such to the phenomenological starting point, the moment of perceptual/cognitive encounter. From there I sketch only a few steps in the direction of a fuller theory of visual textual reception, but hopefully far enough to show how it can grow with the input of different discourses (poetics, psychology of perception/awareness, cognitive linguistics) into a highly articulated and rich way of describing the moment-by-moment construal of meaning from visual texts, also in terms that might convincingly account for the experience of poetic qualities in that construal. The methodology is empirically grounded, and so could potentially support a robust theory of visual literary experience, but it is also designed to strengthen first-person phenomenological observation, and so supports a visual literary and media education of the kind that could foster the development of an informed "readership", critical reception and awareness.

1. Reading Order

Classically, reading and the viewing of pictures have been distinguished on the premise that one occurs sequentially and the other "simultaneously". There are good reasons for arguing that more visual information is taken in at a single moment of viewing a picture or a scene than at a single moment of reading lines of text[3], but aside from this it is misleading, and for the most part meaningless, to describe picture viewing as simultaneous. Picture viewing is every bit as sequential (or temporal) as verbal reading, if not as geometrically linear, in the sense that even a small image can only be satisfactorily perceived by means of multiple fixations of the gaze, constituting a total image only through a series of discrete perceptual acts. What may be experienced as simultaneous is the outcome of this process, a stabilized representation of the viewed object or field, which is however a mental construct, an internalized correlate of the physical object, and not the actual live input of perception. This

internal representation, furthermore, is not necessarily more simultaneous or static than the equivalent representation constructed internally during verbal reading. A verbal text describing a static image, however sequentially delivered, will be constructed as a static, or simultaneous image in the mind, though even there, it would seem, a kind of internal scanning is required to perceive the various parts. On the other hand a painting, even while simultaneously present as a physical object to the view, will often be perceived as a pattern of movements, and so represented internally as such.

As Gyorgy Kepes explains it, the visual coherence of a picture is itself the product of sequential dynamics:

> The final task of plastic organization is, then, the creation of an optical structure of movement that will dictate the direction and progression of plastic relationships until the experience reaches full integration…The kinetic basis of plastic organization—the linear paths of the eye on the picture-plane—is the common measure that binds into a unity the changing plastic relationships (Kepes 59).

The possibility of theorizing visual reading depends on the possibility of reconciling the procedures of sequential visual attention with the internal dynamics of information processing and "construal". The interaction of these two processes defines reading, and because picture viewing is also sequential, the notion "visual reading" has none of the problematic quality present in the terms "visual language" or "visual poetry". Even Nelson Goodman, whose firm distinctions between pictures and paragraphs try to exclude this hybridizing, has no problem saying that pictures are to be read (Goodman ???). The challenge of a visual reading theory that would answer the questions of visual poetry, however, is to observe in the reading process itself the crucial continuity between the verbal experience called poetry, and the visual one for which claims to poetry are made.

Many of the literary readings of visual texts I offered in my dissertation, *Visual Poetics: Spatial Meaning from Mallarmé to Metalheart* (Stanford 2004) to substantiate the idea of visual poetry in non-verbal materials, whether of David Arnold's photo poems or of the 3D graphics texts of Metalheart artists Tim Jester and Per Gustafson, relied heavily on the role of visual features in determining a temporal order to at least portions of the viewing. In Jester's "Blood", I observed a counter-clockwise flow that helps channel the eyes' movements in a pattern sharpening the semantic focus of the piece. And in both Gustafson's "Tribute to Metalheart" and Arnold's "and all the whining sounds" I pointed to effects established by delaying presentation of certain details until certain others have been perceived first, and the construal process carried far enough to effect a surprise or reversal on that basis. The possibility of such effects is vital to a robust conception of visual poetry as I want to portray it here, even if such effects themselves are not necessarily characteristic of the genre as it exists. They are important because of their potential to fulfill the requirement of a sufficient "language-likeness" in visual texts, as one way of substantiating the notion that pictorial signs can

be organized to perform discursively, and within that discursivity do poetry.

Reading order is critical to the functioning of verbal syntax and to the directional build-up of meaning in verbal poems. So, one possibility for recognizing visual reading effects as poetry, is if visual texts can establish some analogous mode of ordering. Rosalind Krauss sees even a non-directed sequentiality as approaching Rauschenberg's "flat-bed" collages to the condition of language, generating "an undeniable experience of syntax" that shares "with language some of its character of discourse" (Krauss 40). Adding to this a more determinate temporal/spatial ordering should go even further, and may answer adequately to the intermedial artist Dick Higgins' condition that in a poetic work where the visual element predominates, "something of a verbal method of experiencing the work remains—the process of reading, of abstracting a sort of verbal pattern from the work …" (Higgins 47).

Willard Bohn, a prominent scholar on the topic, sees reading order as a crucial aspect of effective visual poetry, though the judgement is self-selecting in his case, since the corpus he constructs in his *Modern Visual Poetry* is made up almost entirely of verbal-intensive examples. He argues at considerable length that the individual calligrammes that compose Apollinaire's "Paysage" were designed to be read in a certain order, and that that order both facilitates fluid reading of the parts, and purposefully constrains how the piece gets interpreted. Elsewhere, he criticizes poets for falling short of this basic requirement of visual poetics by failing to establish a clear reading order in their poems. While I think it limits our reading of "Paysage" to insist that there is a single right order in which to sequence the pieces, in the case of a predominantly verbal form of visual poetry looking to reconstitute a strict linearity in the lines of text may indeed make sense. But for the majority of visual poems, and particularly for the "very visual" range that concerns me here, it would be wrong to either expect or require anything so determinate. In winning for poetry a measure of independence from verbal language, the rules of linear sequencing are among the first to go.

Poets often insist on the value of visual poetry as a "non-linear" mode, and a chief virtue of being non-linear is allowing for a variety of reading orders. Virginia La Charité, in her book *The Dynamics of Space,* makes this point about *Un coup de dés*, though the spatialized layout there only minimally impedes following the poem as an obvious sequence of lines. The forms of visual poetry that emerge after Mallarmé include many in which any possibility of deciding a sequence for reading is studiously eliminated. The enthusiasm surrounding early literary experiments with hypertext centered largely on the possibility of unlimited and unconstrained possibilities of sequencing. Much, even most, hypertext poetry, however, failed to yield interesting results precisely because the possibilities were left too wide open, making uninteresting compositions as or more likely than interesting ones. When Adrian Pilkington points out that successful poetic devices depend on establishing a "directed" search of weak implicatures, he is merely reformulating a basic lesson of 20th Century experiments with indeterminacy in art and poetry. The so-called LANGUAGE poets, for example, who sought to maximally challenge the ordering regimes of conventional language use and

thus continually advocated indeterminacy as a poetic strategy, show themselves to be equally preoccupied with closure as a crucial ingredient. Ron Silliman concludes his essay "Migratory Meaning" with the observation that the primary need in formulating a contemporary poetics focused on indeterminacy, is an understanding of the devices that motivate closure. And Lyn Hejinian's now classic essay "Rejection of Closure", similarly argues that the trick lies in walking a fine line between total absence of constraints, and fatal fixity of meaning. She writes:

> I want to say this at the outset and most emphatically, in order to prevent any misunderstanding. Indeed, the conjunction of *form* with radical *openness* may provide a version of the "paradise" for which the poem yearns—a flowering focus on a distinct infinity. (Hejinian 27)

2. Eyetracking

Speculating on the reading order of a visual poem, or on general principles of how visual texts are scanned and processed, is of little use without some means of verifying how viewers in fact view texts. Naive theories that assumed pictures are scanned left to right like text, or on a diagonal from upper left to lower right, or clockwise by right-handed and counter-clockwise by left handed viewers (Saint-Martin, 189), have not been borne out by empirical studies. Eye-tracking technologies that allow precise recording of the rapid-fire movements the eyes make when viewing anything reveal no "normal" pattern of viewing. Eye movement research is slightly older than the modern tradition in visual poetry, dating back to psychological studies of reading from the latter 19th and early 20th Centuries (cf. Rayner 372). Since the 1970's both the technology and methodologies for studying eye movements have developed dramatically, and extensive, sustained research has been conducted, yet still no simple or standard viewing procedure has been identified. Researchers today are still uncertain whether eye placement is decided more on the basis of semantic or perceptual properties of the candidate objects (Rayner 398-9).

Nevertheless, eyetracking would seem a promising means for confirming hypotheses as to how a visual text gets read. By recording the eye movements of a group of readers viewing Apollinaire's "Paysage", for example, we could statistically confirm, if not the order Apollinaire intended us to read its various short elements in, at least whether there happens to be clear consensus among viewers in following a particular order. Of course, for such a simple example we could presumably rely on the readers' own memory of how they read the poem, and save ourselves the effort and expense of using the complicated devices and procedures of eyetracking. For more complex works, or where the question is not In which sequence were these four calligrammes read?, but rather Where did the eyes go in reading this piece, more sophisticated methods are required. The speed and number of eye movements easily exceed our ability to keep track of them ourselves. To confirm the optical flow I

observed in Tim Jester's "Blood", for example, or to determine what visual elements were viewed and in what order, we would need precise data on where each subsequent fixation landed, and since eye movements as revealed by eyetracking technologies are notoriously jerky and stuttering, we would also need some means of statistically averaging the results to discount distracting data.

Though I am unaware of any previous study to apply the methodology of eyetracking to visual poetry, its possible relevance to graphic design has long been recognized. Despite Rudolf Arnheim's pessimism concerning the usefulness of such an approach to formalist study – "there are very few links between the order and the direction of the fixations and the compositional structure of a work" (Arnheim 364; qtd in Saint-Martin 189) – eye movement research has seemed promising for understanding the efficacy of information delivery in graphic design. In the 1980's the journal *Visible Language* devoted a two-volume issue to eye-tracking research[4], most of it clinical work that still required extrapolation to possible applications for design theory and practice. Since at least that time, eyetracking has been a tool in the high-stakes business of attention-getting and messaging, serving to confirm or correct the visual strategy of glossy magazine covers and advertisements. More recently, the new field of webdesign, whose interactive variables are beyond the scope of conventional industry wisdom, has sought to benefit from the scientific observations of eyetracking. The California firm, Eyetools, Inc., for example, offers eyetracking services to companies eager to maximize the impact and efficiency of their on-line presence. They use the techniques of eye movement research to "capture and depict customer viewing patterns and behavior", and answer the vital client questions "Is advertising being viewed? Where am I losing customers? Do viewers recognize branding elements?"[5]

The two main areas addressed in eye movement research are reading and scene perception, offering insights relevant to both aspects of the intermedial "language" of visual poetry, though until recently, relatively little research had been done directly considering mixed verbal and visual forms of reading, e.g. cartoons or mechanical diagrams (Rayner 392). Recently the interest in user interaction with websites has spurred a great deal of such research. The basic picture we get from this research, applicable to both reading and viewing, is of a gaze in constant, irregular movement. The viewing gaze is literally in constant movement, even during the relative stillness of a fixation, due to a phenomenon called *nystagmus* which involves a continual slight oscillation of the eye to keep renewing input on the retina (Rayner 373). The more significant eye movements, made in search of new information, are called *saccades* and occur on average 3 to 5 times per second (Henderson 260), interrupted by pauses for processing, called *fixations*, lasting an average of 200 to 300 microseconds each (Rayner 372). The field of vision, continually shifted and repositioned by eye movements, is divided into three concentric regions of variable acuity. The *focal* region, spanning about 2° at the center of vision (about the size of a thumbnail at arm's length), is the highest in acuity, surrounded by a *macular* or *parafoveal* region of significantly reduced acuity, extending approximately 5° beyond the focal core in all directions, in turn surrounded by the *peripheral* region of very limited acuity extending

to the edge of vision, some 120° in diameter (Rayner 374).

The behavior of the eyes in reading shows many irregularities. Studies show that 10 to 15% of fixations actually go backward along the string of text, 15% of words get fixated more than once (Rayner 387), and about 40% of words in a text never get fixated at all (Underwood 118). These irregularities are due in part to the fact that looking and seeing, fixating and reading are not the same thing, and the key challenge in using eye movement studies to build a theory of reading is to discern within the blur of physical evidence about looking, something of the invisible processes of seeing and making sense.

One crucial distinction that emerges from the research is between where we are looking and where we are directing our attention. William James, and no doubt others before him, had already noted that we can direct attention to objects in the periphery of our visual field without focusing the eyes there (cf. Henderson 260). This manifests, in empirical studies of reading, in a distinction between the size and shape of the ocular focus (based on acuity factors in the retina), and what is called the *perceptual span*, or the "region from which useful information is acquired during an eye fixation" (ibid), based on the freedom of movement of attention beyond the foveal region. Studies since the 70's have shown conclusively that the perceptual span is asymmetric, stretching in the direction of movement (e.g. to the right when reading English) and beyond the scope of ocular focus. When the eye lands on a particular point in a word or sentence, it can discern up to three or four characters to the left of the one fixated, but up to 15 characters to the right (Henderson 261; Rayner 380). The *word identification span*, i.e. the span within which words can not only be discerned but also read, is slightly narrower, extending perhaps 7 or 8 spaces to the right (Rayner 380). These facts help explain how we might skip 40% of the words in a text and still understand it. They also explain how we might know ahead of time what words we can afford to skip; according to one study, we skip only 18% of "content" words but fully 62% of "function" words (Underwood 118). At the same time, most studies conclude that no information is gathered from below the line being read, suggesting that the reading span is purposefully shaped to the task and material conventions of reading. In reading, the viewer makes efficient use of this shaping, restricting attentive activity to the narrow slot of "incoming" text, and keeping attention slightly ahead of the eyes to help strategize effective placement of the next fixation. And when the eyes land on a word, they do so in accordance with the asymmetry of the perceptual span, its momentum pushing on in the direction of reading: the *preferred viewing position*, or the position at which a word is most likely to be fixated, is about half-way between the beginning and middle of the word, only slightly off from what has been identified as the *optimal viewing position* given the forward-looking structure of attention (Rayner 385).

Acknowledging the divergence between eye movements and internal cognitive processing, a number of theories have been advanced to explain how phenomena such as fixation placement and duration relate to the task of reading (Rayner 388). Though countervaling theories argue that eye movements reveal little to nothing about internal processing, a general model of eye movement control emerges that provides a starting-

point for an empirical theory of reading able to address both verbal reading and the reading of visual texts or scenes. Building on a framework laid by R.E. Morrison[6] and further developed by several others, John Henderson elaborates what he calls a "Sequential Attention Model". The basic assumptions of this model are as follows:

> The sequential attention model contains five basic assumptions…. First, at the beginning of each new eye fixation visual attention is allocated to the stimulus at the center of fixation. In reading, the attended stimulus is likely to be the word…, though in the case of longer words it may be just one part of the word. In scene perception, it would presumably be at the level of the object. Second, attention is reallocated to a new stimulus when the foveal stimulus is "understood." The simplest interpretation of "understood" here is that attention is reallocated when the foveal stimulus is identified…. However, attention could be reallocated when activation from the foveal stimulus reaches a critical threshold prior to recognition, or alternatively could be reallocated when a process following identification such as syntactic parsing (in reading) or semantic interpretation (in scene perception) is imminent or completed. Third, the reallocation of attention is coincident with two aspects of eye movement programming: (a) when attention is reallocated, the system begins to program the motor movements necessary to bring the eyes to a new location, and (b) the new locus of attention is taken to be the location toward which the eyes should be moved. Fourth, the reallocation of attention to a new location gates higher level analysis at that new location. Finally, the eyes follow the shift of attention to the attended location following the eye movement programming latency. (Henderson 263-4).

To summarize: Attention aligns with the foveal focal-point of the eyes to get high-resolution information from a particular spot or object in the visual field. When the information from that spot has been processed sufficiently (whether simply to the point of word/object-identification, or to the point of threading that word or object (as sign) into a larger project of construal) attention moves off of the spot even while the eyes remain there. Using something like a "preattentive map" (Henderson 264), a peripheral awareness of the rest of the visual field, attention chooses a new spot to focus on, and begins perceiving what it can there without the extra acuity of ocular fixation. At the same time, the oculomotor system receives neural commands to relocate to the position chosen by attention, and when the system is ready the eyes shift the high-acuity core of vision to align with attention and complete the information gathering from that spot.

Such an account, as Henderson and others make explicit (Henderson 266; Rayner 402; Underwood 116), rough as it is, should apply equally to reading and to scene perception or visual information processing more generally. In both cases,

movements of the eyes and attention are taken to serve functions of sequential uptake, parsing and construal, and to offer a view-from-without onto the internal processing taking place at each stage. As such the model offers us a promising basis for an intermedial theory of reading. From the cognitive standpoint of eye movement research, reading and viewing are basically equivalent, or more to the point, viewing *is* visual reading. This equivalence would presumably be made even more apparent if, in addition to the bulk of work done on object recognition and "scene perception", more research were focused on more semiotically "articulated" types of visual text, for example the pictogram writing I discussed in the first section. The differences between reading and viewing, as revealed by eye movement research, concern mainly the unique requirements of linguistic processing as opposed to "simple" perception and recognition, and it would be interesting to observe whether eye movements on articulate, "text-like" stimuli show up as notably more like verbal reading than eye movements on dense, "picture-like" scenes.

The possibility of using eye movement research to ground a theory of reading rests on some version of what is called the *eye-mind assumption,* which applies to both reading and scene-viewing, namely "the assumption that the direction of our eyes indicates the contents of our mind" (Underwood 111). The limitations of eye movement research for this purpose arise with the margin of error in that assumption, namely the discrepancy between the easily-perceived direction of gaze and the harder-to-perceive direction of attention. If attention can move independently of the eyes, and it seems it can wander even farther in picture viewing than in reading text, and not just left-to-right, but in any direction (Rayner 399), then the most meticulous recording of ocular fixations and saccades may or may not tell us anything about what gets read. As it is, even where the eye-mind assumption appears justified, the only direct link of any strength that can relate eye movement data to inner experience is the duration of fixation, which in normal reading situations is likely to respond to difficulty, or simply amount of processing (Underwood 111); hard words or words in hard sentences require longer processing times, and should correspondingly produce longer fixations, though extended fixation on a given word may also be motivated by retrospective processing of previous information, or even by integration of information noticed peripherally, but not yet fixated (113). Beyond that, eyetracking can tell us little about reading, without some means of observing the conceptual activity that accompanied the fixations; and what could even this tell us about poetry?

We can imagine an experiment observing fixation duration as an empirical measure of an elusive reader-response phenomenon such as "delayed categorization" or "extended exploration of weak implicature", which Reuven Tsur and Adrian Pilkington, respectively, identify as central to poetry as a kind of thought experience. Such an experiment might give us a behavioral angle on poetry as a cognitive effect or experience. But such an experiment would require an elaborate methodology of compensatory testing, probably relying on subject interviews or other retrospective reporting, to gain any insight into the crucial semantic aspects of processing, and because pictures tend to be informationally denser than text it would be exponentially

harder to constrain for useful results in studying viewing as opposed to verbal reading.

A number of researchers have questioned the usefulness of eye movement research to yield insights into viewing and scene perception at all. The fact that viewers, unlike readers of text, seem to "get the gist of a scene very early in the process of looking" has seemed to leave researchers with little to study, and to make eyetracking methodologies "a high-cost, low-yield endeavor" (Rayner 398). Furthermore the main liability of eyetracking (the marginal non-coincidence of eyes and attention) is presumably exacerbated in general viewing. In reading we can at least presume that attention to a word is attention to its meaning, whereas in viewing attention to an object or area could indicate attention to any range of perceptual properties, category identifications or semantic roles. If the "scene" or "picture" is a visual poem, however, the case is an intermediate one, where every object is to be taken as a sign, and we can never tell, especially after the very first fixations, whether the "text" was being viewed as a dimensional, scenic whole, examined as a flat field of objects, or read as articulated code for thoughts.

Even when verbal script is integrated into a scenic environment, as in the case of Arnold's *Situations*, it has something of a different mode of appearing than objects or scenes as a whole. Isidore Isou, founder of Lettrisme, commented on this difference, observing that linguistic signs always overpower images and scenes. This may only have meant that words attracted his attention more than visual perceptual detail, yet there is a substantial difference in the "feel" of each class of signifiers. I observed that in Arnold's work as a flicker between modes of perception. Through millennia of reading text, the visual experience has been one of dark marks on a white ground, excluding other visual variables from the area of focus in reading. The visual background, all depth dimension, has been whited out, so to speak, eliminated to aesthetically support the ideality of print transmission. The visual background noise, so to speak, of reading has been reduced to a strictly limited palette and texture of perceptual variables, discrete dark markings on a white-to-tan ground, or occasionally the reverse. Something of this experience remains in the characteristic feel of attending to textual components of a visual poem or scene, which almost inevitably elicit a sudden "nearing" or "focusing in" on the spot of the reading, as well as a different ratio of visual perceptual to inner conceptual attention in the experience.

Though a record of eye movements is clearly useful in determining viewing order, to observe anything about reading requires us to take further steps, confirming by performance in an experimental task, or by verbal report, whether and how a fixated area also received attention, and suggesting how information from that area might have figured in construal. As a result, eye-movement research must tackle very basic questions about reading if it is to have any strong results. According to the research review I have been citing by Rayner, for example, through the late 90's a major question in eyetracking studies of reading was still what factors, informational or perceptual, had the greatest influence in guiding eye movements. Certain influential studies suggested that the most "informative" regions drew the eyes first, and others that out-of-place or incongruent elements did, amounting to much the same thing. Other studies, however,

questioned these results on the basis that "informative" was often unintentionally confused in the studies with perceptually "distinctive", and suggested that visual factors of distinctiveness and salience may actually be more influential (Rayner 398-9). Such questions and their answers are of course far from producing anything like a theory of reading at the cognitive level.

3. Attention Tracking

Figure 2. Eyetracking and Figure 3. Attention tracking results on a page from John Riddel's *Criss Cross*.

The study I conducted with ******* in 2001/02, on a grant from the Center for the Study of Language and Information (CSLI),[7] a research institute affiliated with Stanford University, took a major open question of eye movement research as its point of departure. Interested in reading order and reading paths in visual poetry, I assumed that visual factors could play a determinate role in attracting and guiding attention within a visual text, and thereby in influencing the process of construal and the outcome of visual reading. By observing the viewing behavior of subjects "reading" visual poems, I hoped to discern patterns explicable by the spatially constraining influence of visual factors. Where a majority of reader viewing paths overlapped, taking in the same visual elements in the same sequence, the piece would be revealed to have a *de facto* reading order, a layer of textual structure not visible to the "naked eye". Furthermore the visual features that showed up as the most influential in constraining viewing order would by that token reveal potential *devices* for creating visual rhetorical or poetic effects.

In 2001 I had conducted a pilot study with similar aims. For that study I used a conventional eyetracking approach, showing 25 subjects a series of 17 visual poems on a computer display, and recording the eye movements and fixations they made as they read/viewed each piece. The results, predictably, were hard to interpret. The jerky scatter of fixation-points showed little strict repetition between viewings, and the majority of fixations fell ambiguously on spots not easily identifiable with distinguishable semantic units, nor immediately explainable on principles of visual salience. As in the example above, on some stimuli there was a marked preference for fixation at or near the edges of objects, but there seemed no consistent way of explaining what edges or what objects. Subjects reliably fixated certain types of elements, notably text, and in some cases there was substantial consistency in what objects of a particular piece got fixated even where the order was different. Elsewhere, particular regions of the field seemed to reliably guide viewing along roughly invariant paths, even where the sequence of fixations along that path was logged by different viewers at different points in the viewing process, contained different numbers of fixations, and did not touch on precisely the same "landmarks" along the path. It was

these cases of sporadic and approximate invariance that seemed most promising among the results of the study, but without a more focused, statistical analysis to target the constraining power of, say, three-line convergences, maximum brightness areas, or other pre-selected features, the research questions could not be convincingly answered.

One reason eye movement research has not focused on visual poetry, not the main one, is that the difficulty of interpreting the results rises exponentially with the detail and complexity of the stimuli. To limit the complexity of the stimuli, or narrow the scope of enquiry, would have merely been to reproduce studies better conducted by psychologists. It would have been possible to narrow in on the perceptual constraints involved in determining first fixations, for example, but the issue of reading and of the semantic sequencing of visual elements would have had to be abandoned to make the eyetracking results more determinate. And there still would have been the problem of distinguishing between where the subjects were looking, and what they had in mind.

With questions as to the value of its results, eyetracking is a hard methodology to recommend for cross-disciplinary applications such as mine. The technology is extremely expensive and therefore hard to access, and requires sophisticated programming and statistical analysis to produce useable results. As an alternative to this, I devised a vanishingly simple method that would allow subjects themselves to record their reading path by marking up the on-screen image after an initial viewing. In the planning stage of our CSLI study, ******** observed that this technique would likely give the results we were interested in, and probably more clearly than in eyetracking data. Crucially, this technique, despite or partly because of the inevitable inaccuracies in subjects' reporting, promised to improve our experimental focus on what the readers attended, rather than merely what they looked at. Both for this reason and for the ease of collecting the data, we used this methodology for the entire experiment.

Though subjects would clearly be unable to precisely reproduce the sequence of their fixations, the error that would result would simplify in favor of those items that were actively attended. Instead of remembering exactly where they looked, we expected the results to show us what they took as significant, what they noticed consciously and involved in making sense of the piece, telling us more about the "text" as they experienced it than precise eye movement records could. In a number of eyetracking studies it has been shown that, while impossible to predict a subject's viewing order, the "scanpath" established on first viewing is encoded in the memory of a scene and tends to be repeated in subsequent viewing for recognition, even where subjects were not instructed to do so (Rayner 399). Thus there was reason to presume subjects would be reasonably successful in recalling the general path of their viewing. What would differ most from the data an eyetracking method would collect would likely be the number and specific placement of fixations. And since memory is classically a function of conscious awareness – we remember best what we were most conscious of – the likelihood of a subject remembering a particular fixation should correlate directly with the amount of attention and conscious processing they applied to that spot. What

we would get, therefore, rather than a record of eye movements, would be a record of the movements of attention, the elusive goal of eyetracking methodologies. Attention tracking, as we called the procedure, would trade the technical complexity and objective certainty of eyetracking for a method any grade-school teacher can apply and a measure of subjective error that promises actually to reveal more directly than the precisions of eyetracking what most such research is ultimately after.

4. The Study

Stimuli

The stimuli I selected consisted of visual poetry and related visual art. The pieces, covering a range between very flat and very dimensional, were selected for their spatial articulation, or the degree to which spatial effects were integral to the meaning. Aside from Haroldo de Campos and Jiri Kolar, the visual poets represented were all "post-concrete", engaging visual space as such more actively than the poets of classical concretism or even much avant-garde work. Jiri Kolar's piece represented a transitional case between concrete and visual poetries and yielded interesting results. The Arakawa painting, while not generally associated with visual poetry, is a verbal/visual text thematizing spatial meanings and viewing patterns explicitly. And Duchamp's "La mariée mis a nu", even further from association with the genre, demonstrates attentional guidance and discursive, textual structure in a visual art context. I included a total of six pieces from David Arnold's *Situations* to prepare a test case for studying the role of attentional guidance within the "very spatial" work of a single artist. And I added three slides representing architectural work by Arakawa and Gins, one a 3D computer rendering of an abstract space, and two photographs of built spaces. The Reversible Destiny project from which they derive activates spatial meanings via architecture as devices within a "built discourse" that represents the extreme development of spatial poetics emerging from experimental trends in 20th Century art and literature.

Procedure

The testing took place in two phases, an initial viewing phase and a repeat viewing and reporting phase. First, subjects were shown a Powerpoint slideshow containing each slide in the order they would appear in the reporting phase. They viewed each one for 10 seconds to familiarize themselves with the piece.

After previewing all of the slides, subjects were instructed in the use of the simple interface I designed for reporting their viewing paths. They were told to view the slides again, this time marking the path they followed using a curved-line tool in the Powerpoint tool palette, and then placing up to seven dots on spots they remembered looking at, in order, starting with the first. The dots were color-coded to mark the numerical order.

For the first eleven slides these were the only instructions. For the rest, there was an extra step of verbal reporting. For five of the David Arnold pieces, subjects responded briefly to two questions after each slide: "Please narrate where you looked from spot to spot?" and "What was most interesting about the space?" These questions were designed to elicit verbalized corollaries to their graphic reporting, allowing me to confirm what subjects were looking at for a given dot-placement, and to observe how features or objects were identified and preliminarily construed. For the abstract structural piece by Arakawa and Gins, and for the sixth David Arnold piece, the follow-up prompt was switched to "Describe the scene in your own words". And for the last two Arakawa and Gins slide, instead of tracing their viewing path on first revisiting the slide, subjects answered the question "If you were here, where would you go?" using the curved-line tool to answer, and in a follow-up slide responded verbally to the question, "Why?" The choice of questions for follow-up, verbal reporting can make a great difference in what kind of information is gleaned from the graphically reported attention paths, offering the possibility of comparing two very different modalities of response. In this study, the last variation proved unclear and did not produce useful results.

Data

The data produced took the form of graphical records of the subjects' recollected viewing paths, plus the verbal reporting from the later slides. Each treated slide represents an individual "reading" of the piece, and collectively, a composite of all readings of a single slide provides a statistical indicator of the piece's structure as experienced by a community of readers. By limiting the marking task to a maximum of seven dots, I necessarily constrained the results to reveal only the initial portion of the viewing. In considering the possible perceptual factors affecting attention, it is these early moments that promised to be the most revealing, as later exploration is presumably increasingly motivated by developing thought and observation patterns unrelated to gestalt perceptual cues. The same method, however, could be used to study an extended reading, though in that case it would be important to design the interface such that dots and lines disappear from the subject's screen during marking, so as not to crowd the screen and distort viewing (a revision that would also improve the present study).

The first question of interest in reviewing the data is whether the viewing patterns appear random or motivated, and if motivated, by what factors. Jiri Kolar's piece, "Hommage [tribute?] to Ladislaw Novak" presents a convenient case for studying the role of strictly perceptual factors, as the wavy field of i's is what Steve McCaffery would call a "proto-semantic" construction; it presents nothing to read at the lexical level. The first image presented below is a composite of the viewing paths recorded by all 21 subjects. While chaotic, certain patterns stand out even to an initial visual analysis. Clearly a majority of all first placements coincide in the region, center right, where the letterforms are most widely dispersed, creating the impression of a

raised, spherical form.   A slightly narrower majority of second placements are concentrated in a region up and to the left at an angle of about 45° from that focal center, in a direction accounting for all first placements not falling in the central region. And most third placements landed directly below the region of majority first placements, though percentage deviation increased further between second and third placements.   The other notable pattern is that most viewings took a clearly circular pattern, moving off that first region and circling around it; figure 2 below shows the counterclockwise viewings.

Clearly the subjects responded to this piece as a specific topography, a field of material resistance, and not as a screen of white noise.   The three regions mentioned consistently drew early attention, regardless of the exact order.   Though the pattern was more likely for viewers who scanned in a counterclockwise trajectory (2), the constraining influence at work at those points becomes even more interesting when we notice that some of the viewing paths with nearly identical results for the first three placements were moving in opposite directions (3,4).   In the absence of distinctive objects at those locations, we have to consider the field properties of density and shaping.   The piece creates the spatial impression of a field of raised spherical embossures and sunken troughs between them.   What the viewing records suggest is that the gaze is engaged in construing this shaping *as terrain*, and thus follows paths responding to visual features as constraints on imagined movement.

A full statistical analysis of the viewpaths, based on an information analysis of the stimulus field, would be required to formalize the factors prompting attentional response, e.g. relative density, rectilinear versus curvilinear alignment, formal salience over a given area and apparent depth or elevation. The central lesson for a strategy of visual poetic composition, simpler than that, lies in the connection between viewing and imagined moving, which I will return to at the end of this chapter. As regards this particular poem, however, the movement itself turns out to be a meaningful interpretive response, when we relate the piece to its literary reference. "Individualista" is the name of a concrete poem by Ladislaw Novak. It consists of a rectangular, strictly rectilinear grid of i's in the same typewriter font we see in Kolar's poem. One of the i's, at an unremarkable position in the grid, is turned upside down, in what the title leads us to read as a gesture of individualism and non-conformity. Kolar's piece, by recasting the i's in a more liquid formation redefines identity and social relation as phenomena of field dynamics. Each "individual's" position is distinguished along smooth gradients of proximity and overlap, rather than according to the rigid assignment of coordinates. The field of individuality is "dense", to extend Goodman's terms, rather than "articulate", and characters occupy all possible positions and degrees of relatedness with each other. The prominence of the embossed regions appears a property of fluctuations in the field, subject to fate and responsive to nature in a way refused by the militarized grid that provokes Novak's character's act of resistance. The viewing paths, by noticing certain regions over others, individuate the field, yet respond fluidly and non-hierarchically to its contours. The circular movements of attention the piece invariably provokes are themselves a refutation of the authoritarian coordinates of

Novak's grid, not to mention of the linearity of conventional text, and convey in the very process of reading at this proto-semantic level, an "exemplificative" reference to the subtle blendings between separateness and connection, individuality and crowd.

5. Analysis: Reading Reading Order

                Figure 4. Composite of 21 viewings   Figure 5. Clockwise
only

          Figure 6. Order:

Where the visual elements are semantically invested, we get something more explicitly informative. As attention takes up unit after unit, we observe something equivalent in visual terms to the "chaîne parlée" or "verbal chain" (Saussure) in linguistics, the sequence of signs syntactically ordered and available for decoding. We might call it the "chaîne visée" or "attentional chain", though as I will continue to explain shortly, the parallel is of course not exact.

         Figure 7.   Figure 8.

In the case of a spatialized verbal poem, evidence of the order of reading has obvious value in gauging the determinacy of the verbal sequence in the composition. In reading the page from Jed Rasula's *Tabula Rasula* (1986), below, just as many subjects started from the large text at bottom left as did from the text beginning in the upper left. Both approaches can be seen as accommodations of the top-down, left-right reading conventions for standard text, though other visual factors also played a role: a number of the subjects starting at upper left registered their first gaze in or adjacent to the large circular form of the "G" rather than at the actual start of that line, and nearly as many subjects looked first at the central conjunction of the main lines, where two adjacent O's serve as a similar focal attraction, as did at either probable sentence beginning.

The significance of the indeterminacy in where to start reading comes down to the possible differences in meaning between the two ways of sequencing the lines. Would Rasula care whether his readers parse the page as "The distortion is prior to the text/ where she's pure gloss", or "Where she's pure gloss/ the distortion is prior to the text?" More likely the ambiguity is evidence of a successful device employed by the author, mixing signals to remove reader certainty: "Where she's" is highest and leftmost, but "The dist.." is actually further left and larger. If not, it is evidence of a failure to constrain attention more precisely. Either way, the ambiguous reading order is part of the distortion the text says is prior to itself, wrapping the reader in a knot that cannot be untangled from without. For this particular poem the simultaneity of

possibilities is more important than the question of where one is supposed to look first, but the same strategies are available for a case where precise order and timing are more crucial.

<div align="center">Figure 8.   Figure 9.</div>

Where the significant elements are all or primarily visual, the importance of viewing order is not so clear. The more semantically articulated the visual elements, the more like reading we can expect the viewing to be. Certainly the pictograms in Lars Arrhenius' "The Man without Qualities" are meant to be read "in order", and it is interesting to note how readily we project the expectations of left-right, top-bottom reading into the visual context. Visual texts not so explicitly sequenced present more difficulties. Duchamp's "La mariée mise a nu", for example, casts the question of reading order in a different, and very interesting light when we consider the discursive semantics undergirding its visual forms. Though wordless itself, every element in the piece has a verbal label, representing a focus of 'pataphysical references elaborated in the characteristically Duchampian musings of his "box" projects, notes and interviews[1]. This supporting structure of verbal meanings, no less suggestive or resistent to interpretive closure than the imagery, amplifies our experience of the work, particularly when charged with the non-random specificity of a subjective reading order. Translated according to Duchamp's own labels, the perhaps confused viewing experiences of this enigmatic artwork yield articulate, if no less enigmatic texts:

> 1. Chocolate grinder necktie/ malic mould of the stationmaster/ crossing the horizon, the Bride's garment/ (unlabeled support behind) the Bride/ central draught piston/ back through the Bride's garment at the vanishing point of perspective/ scissors

> or

> 2. The Bride's stem/ central draught piston/ milky way/ the Bride's wasp/ crossing the horizon, the Bride's garment/ chocolate grinder rollers/ sieves (or parasols)/ towards the malic moulds/ past the ocular witness, around the chocolate grinder/ up past the revolution of the bottle of Bénédictine in the sleigh/ malic mould of the waiter's assistant/ crossing the horizon, the Bride's garment again/ past the wasp, towards the Bride.

The second reading is clearly more spiritual.

<div align="center">Figure 10.   Figure 11.</div>

6. Attentional Analysis

Barring a sufficient immersion in the Duchampian esoterica, such a demonstration may be more entertaining than informative. There is obviously a fallacy involved in assuming, outside of certain highly specialized cases, that visual elements as signs align in a definitive mental order once fixated, that a sequence of visual attending amounts to the firm syntax of words concatenated to form sentences. If the *chaîne parlée* is a one-dimensional sequence of words strung end to end, the *chaîne visée* is a two- or three-dimensional threading of distributed points into a fabric, looping, crossing, and linking in many directions. Though specifics of the temporal sequencing, and qualities of the movement of the gaze (direction, arc, rhythmical patterning) can play a meaningful role in the textual experience, the more basic question of syntax comes down to the network of relations established in a free exploration. Kepes and other commentators on compositional theory in the visual arts stress this non-linear, exploratory character of visual reading:

> The ultimate aim of plastic organization is a structure of movement that dictates the direction and progression toward ever new spatial relationships until the experience achieves its fullest spatial saturation. As new relationships progressively unfold, the spatial integration of the image gains momentum until it finds final clarification in the plastic image as a whole. (Kepes 52)

Saint-Martin, observing that eye movements are of limited value in elaborating a visual semiotics from the perspective of the viewer/reader – "since these movements are potentially infinite and open to aleatory unfoldings leading to opposite conclusions" (Saint-Martin 188) – similarly turns her focus to the pattern of interrelationships established through free exploration:

> Visual semiotics proposes that the composition, or rather the structure of the work, can be deduced only from a series of equilibria established between the elements. The [optical] energies and the regions they form, which are taken up and modified with a view to producing superior and more complex equilibria, can finally produce a state where the ensemble of movements and transformations produces a system which can then be offered provisionally as an adequate synthesis. (189-90)

While basically a restatement of Kepes' point, Saint-Martin articulates this notion of compositional structure beyond the basic gestaltian observations. For her, the "ocular circuits" manifested in viewing, rather than an additive concatenation of significant units, reveals a topological structure of relationships. The notion of topology allows Saint-Martin to consider the spatial structure of viewing without positing a definitive order or measure to that structure. While any and every spot in the visual field may

receive attention, in any possible order, and while every perception associates the current spot of attention with everything previously attended, at least to test it for relations, perceptual equilibria (balances of light and dark, relative positioning, etc.) eventually establish a relative invariance in the structure experienced. Tensions and relations become apparent and emerge as the structure of the piece. Saint-Martin, true to the boundaries she draws for visual semiotics, discusses this process only at the level of primary perceptual processes, but clearly something similar happens at the semantic level, with items linking up in a network of possible iconic relationships and conceptual associations. Kepes makes this point explicitly:

> As one searches for spatial order, and through the interrelationships of the plastic forces creates a unified spatial whole, one also searches for a meaning-order and builds from the different association-directions the common, meaningful whole. (Kepes 202)

So, except in special cases, what attention tracking reveals should not be thought of as the reading order, but rather as the attentional terrain of the piece in a viewer's experience. Since my experiment concentrated on the viewer's first few moves in each piece, the examples I have given reveal only the most salient aspects of this structure. Another approach would be to let viewers keep looking and marking their attentional path until they feel they have seen everything. Most likely this would not cover the screen with dots and lines uniformly; rather a distribution would emerge thoroughly marking the topology of interesting and uninteresting areas. The frequency of returns to a certain region would give a topographical articulation of this space, registering intensities of interest. Most likely such a map would reinforce the predominance of the first items attended, though it might equally reveal the importance of items only noticed later.

The first useful information from such an attentional analysis is simply whether a particular element was or was not attended. Where items consistently evade attention, they can hardly be said to figure in the reading of a piece, though unattended items can impact a reading peripherally or subliminally. Looking to the test results for a confirmation of my reading of David Arnold's pieces, for example, I discover that in the case of "this falling, tumbling, etc" (***** 2004 40-42) I was wrong, at least as regards the five white dots at the end of the hallway. While nearly every subject focused obediently on the bull's-eye of spray-painted rings, only six out of twenty-one subjects recorded a gaze on or near the spot in question. In the written follow-up, only two subjects (one of whom had not marked the spot) mentioned the dots directly, referring to "the three [sic] white dots in the background", or "the far dots of light". Two others mentioned the "hall" or "corridor", while one other identified "dark doors at the back". What spatial effect or meaning these few subjects perceived the dots to have is largely irrelevant to a formal reading of the piece, since statistically almost no one took them as significant elements. If everyone who did notice them had interpreted them the same way, we might argue that the detail is meaningful but hidden, and likely to be noticed

by more subjects upon longer viewing, but the one subject I asked about them read them precisely the opposite way, i.e. as deepening rather than collapsing the hallway. Admittedly, there was no elaborate interpretation riding on the issue of these few dots, but the example goes to show how subject-specific perceptual responses can be, and how useful an attentional analysis that can take a larger community of responses into account

Figure 12. David Arnold, *Situations*: "this falling, tumbling, etc"   Figure   13. "because"

A second level of information revealed by this kind of method involves seeing whether one particular item was associated with another. If both items were attended, we know the association was possible, but as it turned out in the last case, we need the confirmation of a verbal report to be sure the association happened. In the case of the David Arnold piece, "because", where I read the central forest scene as an ambiguous element, temptingly interpretable as a real space, but possibly or probably only a poster, my reading was widely confirmed. Unsurprisingly, almost everyone (19 of 21) focused on the scene in question, which was at the center of the piece, though they did so at widely varied points in the temporal order. Of the 14 subjects who responded to the follow-up questions, 12 mentioned the scene among the "most interesting" features. So, there is no question as to whether it figured in their reading of the piece. But my reading depended on two other factors: the parsing of the scene itself, and the syntactic relationship that set it in contrast or conflict with the surrounding environment.

Here the verbal reporting proves very useful, in that in addition to indicating whether a subject noticed the scene, the words used to refer to it reveal how it was identified. Of the 13 subjects who mentioned the scene in response to either or both of the follow-up questions, six clearly perceived it to be a poster, while five seemed to take it as a view to a real exterior, and two acknowledged it was ambiguous. Descriptions in the first case used the words "image", "poster" and "cutout of the natural scene". The responses on the "real" side varied in how definitively they indicated the subject's interpretation. I list the expressions here in decreasing order of certainty:

1. "the hole in the wall" / "the row of trees and the bridge you can see through the wall"
2. "window through to the distance"
3. "window"
4. "the trees in the background"
5. "what appears to be a window"

The two unsure subjects each made a different first guess, one referring to "the picture – or is it a window" and the other asking "was it a window or merely a photo?"

So, the ambiguity I ascribed to the poster/window is statistically substantiated. But my reading of this piece relied also on a particular valuation of that ambiguity in the context of other elements. I argued that the question of whether it was a real place or a poster made a difference because of the claustrophobic decay around it, that this semantic framing drew a particular emotional investment in the scene and its possible identifications. I even made the claim that the decay made the viewer *want* to interpret it as real. One way of seeking confirmation for this would be to investigate whether subjects who paid more attention to the elements indicative of decay (e.g. the rubble on the floor) were more likely to read the scene as real, or precisely the contrary. The results, particularly from the attention tracking itself, are inconclusive on this, though of the six subjects who directly mentioned features of decay in their verbal report, pointing to "trash", "messiness", "graffiti", "chunks of wall on the ground" etc, only one of them identified the scene as a window, while one saw both possibilities.

While the results do not support any statistical conclusions as to the prevalence of the reading I offered – a different approach with the follow-up questioning might have yielded more – verbal reports from two of the subjects strongly confirm my reading. One subject, narrating his experience of the piece, wrote:

> The sylvan scene in the center of the frame trying to figure out how it fit, was it a window or merely a photo, the contrast with the tidy peaceful forest creating marked tension within me when contrasted with the disturbed and disturbing space which frames it

The other, asked what about the scene was most interesting, answered:

> The tension that arises from untainted (the picture of woods) clashing with the disorganized room

These responses at least show that the tension I identified as the semantic core of the piece is there as a possible content, and in the similarity of their phrasing suggest that the perception may have been more widespread than reported.

I did not include "and all the whining sounds", David Arnold's "Halloween" piece, in this study, and so cannot comment on the objective validity of my reading there. That reading relied on the timing of perception of the upside-down text along the baseboards of the room, the impulse to invert the picture to read the text, and the changed range of associations surrounding the rectangle of light on the floorboards once the picture was inverted. Reading behavior of this sort was beyond what the testing procedure would allow me to observe, but I want to make a few comments on the notion of time-specific reading effects before concluding this section. The first aspect of my reading would have been easy to test, simply by observing whether attention to the baseboard text was consistently logged after the other, more prominent features I enumerated. Compositional strategies for hiding or delaying detection of an item are obviously just the inverse of strategies to assure that an item is

noticed right away. And, presumably, if it is crucial to a particular rhetorical or poetic effect that an item be perceived after one item but before another, within certain limits of precision the appropriate strategies can be arranged.

Meter and Rhythm

Although visual reading neither relies on nor limits itself to strict linear orders of the kind essential to verbal reading, temporal sequences and effects are both possible and pronounced in visual texts. One kind of significant temporal effect that does not depend on precise viewing order is visual rhythm. The page from Klaus Peter Dencker's *Wortköpfe* below shows a distribution of elements that sews metrical qualities into any pattern of viewing. The space is asymmetrically filled, with a concentration of items in the lower, and particularly lower right portion. An approximate diagonal from lower left to upper right divides this region from the emptier upper portion, characterized by larger figures and more continuous lines. Figure 2 below shows the viewing paths of the first seven subjects, which, typical of the results as a whole, highlight the different visual weighting of these two regions.

Figure 14.   Figure 15.

With rare exceptions, everyone viewing this piece recorded their first gaze at one of two locations, either the large segmented circle at upper left, or the globe-head figure lower to the right. Of those who looked at the circle first, most looked at the head next, but no one who looked at the head looked next at the circle. Invariably two or three further fixations went to items in the lower right portion before attention again found its way up into the "quieter" region of the circle. This suggests two things. First, while viewings followed widely varied patterns, a basic current drew attention downward to the right and kept it occupied in that region, from which it might continue only later to explore the less dense region in the upper half.   Secondly, it suggests that the head stands in "tighter" relationships than the circle, characterized by a greater number of near-neighboring attractors, and shorter distances of movement from one to the other, than is the case for the circle.

 A gaze to the circle is a relatively leisurely gaze. Attention landing there finds less to draw it away, partly because of the focusing effect of the frontal, radial form of the target, partly because of the lines and arrows which do not draw attention so much as offer it traction, and partly because of the distance to cover between the circle and any next point of interest (other than the owl). Conversely focusing on the head, which does not meet the gaze but deflects it in the direction of the clustered elements, immediately leads to a series of fixations elsewhere, on the particular continents (labelled with names of computing languages) covering the scalp/globe, on the portions of text, or the other salient graphical elements. The effect of this difference, on a gaze that will eventually move back and forth between the two regions as it begins re-visiting items already focused on, is a metrical alternation, between close, quick

movements, and a more singularly-directed, protracted gaze to the circle or empty region around it. The pull downward and to the right, even beyond the initial viewing, will be noticeable as a visual weighting whether the gaze at a particular moment is moving with it or against it, and the relative rest or relief of the upper region will counterpoint this, whenever it enters the stream of attentive acts. As the various visual elements are discerned and associated, the topology built up among them will contain these dynamics as part of its articulation. The scanning procedure as it moves from spot to spot, in whatever particular order, will activate them as a meter or rhythm, establishing a baseline of alternating aesthetic qualities to underlie reception of the semantic units, just as sound patterning does in verbal poetry, though more random in its sequencing.

If a kind of meter in visual poetry is conceivable, a sequencing of beats iambic or trochaic, anapestic or dactylic according to the reader's own timing, a more obvious temporal effect is the general flow of viewing among elements. Attention tracking revealed the inherent circularity of viewing in Jiri Kolar's piece, and I suggested a possible thematic relevance for that. Similarly I pointed out a clear directionality in Dencker's piece, drawing attention directed at the upper region down toward the concentrated materials in the lower right. The attentional topology revealed by analysis is not neutral with regard to movement. It contains vectors and conductive potentials that structure the viewing and bias construal. If there is any thematic significance in patterns of attentional flow I observed in Dencker's piece, I would suggest it concerns iconic contrasts that parallel the formal ones. The globe-head, more fully rendered and dimensional, more detailed and "loaded", iconologically bearing the whole world and the bulk of information technologies, is impressively serene, yet more compressed and burdened than the broad, thin outline of a head containing the segmented circle. The one stands out as figure, while the other disperses as field. The one looks down, the other up, buoyed peripherally by arrows and a focus on the perched owl logo, suggesting wisdom rather than processing power. In this context, the downward draw on attention has an effect of gravity, and movements against that pull acquire the semantic valence of release or relief, coming into more spacious territory where the pull is upward and away.

Through analyses of this kind, we can begin to imagine a kind of literary criticism that would engage visual texts in visual terms, not merely as "enhanced" or "materialized" verbal texts, but on the basis of perceptual qualities and semantic functions operating in the visuals. Where visual perception supplies processes of complex semantic construal, seeing *is* reading, and the visual field *de facto* a site of language, whatever the materials. And identifying the process of construal, rather than any category or structure of signs, as the critical factor for a possible poetic experience, a theory of visual reception is well positioned to examine whether and to what extent "poetry" may be claimed of a purely or predominantly visual experience.   The possibility of taking the term "visual poetry" both seriously and literally depends on evaluations of perceptual experience, which in turn depend on articulations supporting

the detailed semantic analysis of such experience. Attention analysis and the visual reception theory it supports help bring us through visual perception to the same domain of conceptual processing where poetic experience of words takes place. It thus allows an integrated assessment of verbal and visual reading, in what I would argue is a more natural, less reductive approach to meaning. If anything, intermedial arts show us the ultimate coinvolvement of linguistic and non-linguistic codes, and a theory of meaning adequate to the demands of an intermedial poetics is also one that answers the challenge art in the intermedial context poses to compartmentalized semiotic discourses.

Section 3 –

ARCHITECTURAL POETICS

6. ARCHITECTURE AND POETIC EFFICACY PART 1: ARCHITECTURAL POETICS

Abstract: This chapter examines the notion "architectural poetics" as it applies to the work of Arakawa and Gins. It seeks a critical grounding for the term in the artists' concept of a "built discourse" and in an understanding of spatial meaning as the semiotic field supplying that discourse. It explores the literary and poetic background of A+G's Reversible Destiny project, tracing the different phases of their development as a path towards an amplified presentation and a heightened efficacy. Finally, it evaluates the relevance of their current (architectural) strategies and priorities to a certain lineage of modern and contemporary poets, assessing to what extent their architectural poetics remains poetics in the sense a poet would mean it.

Keywords: Architecture, poetry, poetics, architectural poetics, efficacy, spatial meaning, built discourse.

Je crois que pour etre bien l'homme, la nature en pensant, il faut penser de tout son corps.[*]

Mallarmé

First off, might not the world exist so that everyone may turn into an architect?[**]

Gins and Arakawa

1. Architectural Poetics

Parallels between the architecture of Arakawa and Gins and the poetics of Mallarmé have been noted in many places, despite what would seem a natural resistance to thinking the physicality of Reversible Destiny constructions and the evanescences of Symbolism in a single thought. But a similar tension is of course internal to Arakawa and Gins' own work, and troubles (or activates) the dialectical path any receiver or participant must take in confronting it; a movement between often elliptical texts and

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[*] *'I believe that to be truly human, nature thinking, one must think with the whole body.'*
[**] It was Mallarmé who wrote: "Tout, au monde, existe pour aboutir à un livre" ('Everything in the world exists to end up as a book').

the published models they comment on, or between theoretical tracts or instructions for use and the physical, visitable sites they aim to purpose. In seeking the maximal thought, Mallarmé was forced back (or through) onto the materiality of thinking and language, just as in aiming to think concretely Arakawa and Gins continue to rely heavily (or rather, with loft) on writing of a very determined abstractness and poetic projection. The problem of the relation between texts and built structures in the work of A+G is certainly the dramatically amplified grandchild of a problematizing of sense first ventured in the visual poetry and book theory of Mallarmé. But whereas with Mallarmé the paradox is an etherealist project that must fall back on a concrete poetics to achieve its aims, with A+G the paradox is somewhat inverted, a concrete, embodied practice that continues to rely on precision indeterminacies and suggestiveness in the language that intends it.

Literary parallels of this sort, and there are others, might be enough to justify using the term "architectural poetics" to categorize the recent work of Arakawa and Gins, though without some clarification it is not obvious that the term is an appropriate one. It is unclear where the term first surfaced, though as a notion it seems to have taken root with the "Transgressing Boundaries" conference at Salamanca in 2000, where a number of the papers later collected in the important volume, *Architectures of Poetry*[1], were first presented. Alternately we can point to Steve McCaffery's online "North American Centre for Interdisciplinary Poetics", which went up in 2001, becoming the term's most visible and status-conferring address; an address at which, as was also the case with the *Architectures of Poetry* publication, Arakawa and Gins are distinguishable as the tenants who receive the most guests.

Interestingly, however, Arakawa and Gins themselves never seem to touch the term. The publication of their *Architectural Body* under Charles Bernstein's and Hank Lazer's "Modern and Contemporary Poetics" imprint at the University of Alabama, Tuscaloosa (2000), and on the rear cover of that book the short list of predecessors which includes Alexander Pope and Rimbaud, (though also Leibniz and Dogen), are perhaps as far as they go in embracing a designation that clearly attaches to them from without. The question I want to ask here is whether it sticks. What substance does the concept have beyond the novel provocation of its grounding analogy? And is it useful? Either for classifying the work of Arakawa and Gins, or any other work one might judge similar, or for answering the more important and interesting question: "How does it work?" Reversible Destiny, I mean. The not dying.

The term is obviously of some use in expressing the cross-over nature of the decades-long project that brought us Reversible Destiny (the promise) and procedural architecture (the practice), a project that began in painting and poetry, or in what for the sake of simplicity we can label this way, and eventually became architecture. Usefully, it serves also to acknowledge the continuity of the project, which did not so much switch media as concentrate and amplify, continuing an original intuition to its

(para-)logical extreme and according to its practical requirements. And finally, it serves to mark the difference of this project, which stands out as distinct in its methods and motivating ideas from most everything else happening in architecture. But "poetic" as a label of praise or distinction within architecture is equally a lever for separation and dismissal, and already here we see where the term will lose its desirability. On the one hand, having chosen architecture as the truly efficacious means, it is no use to go on being called poets, and even within literary or artistic discourse it defeats the purpose of having migrated along this path, if the new landscape continues to be measured according to old coordinates.

If we are going to make use of the term in discussing Arakawa and Gins, it is important to insist on a couple of qualifications. First, we should de-link the idea of an architectural poetics from any expectation that there could or must also be an associated poetry. Poetry can be thought as architectural (and architecture as poetic) in many ways, describing just as many zones of hybridity in which the term "architectural poetics" may be of different uses. But, though I don't discount the possibility of a rigorously defined, intermedial poetry of architecture, this is not what we are dealing with here. Instead, for this work and for many other projects that fall under the loose and recent designation "architectural poetics", we must think poetics as an organizing principle or motivation perhaps characteristically found in poetry, and certainly genealogically grounded in it, but in a real and practical sense independent of literary means or of a literary background on the part of its practitioners. Thus we can think of poetics as a technics of meaning experience mediated through discursive sign systems. Poetics in this sense can be a something applied at work by poets or architects, by gardeners or weathermen, and is necessarily "parapoetics" in the sense Steve McCaffery gives the term[2], not a blending of poetry with other media, but a contamination of its creative/critical principle into other discourses. I would only add to McCaffery's formulation a qualification I think he allows, namely that this spreading need not originate from poetry as an emission, but can move also from within the target discourse as an ingestion.

Sufficiently rarified and transposed, poetics may indeed prove a useful optic through which to explore the A+G project. Yet if the term must be loosened from its genealogical root in order to apply cross-modally, it must also be focused and tightened within its new context if it is to retain any analytic power. The chief difficulty in tracking the poetic as a principle, either into poetry's hybrid unions (intermedia) or along poetics' migratory transgressions (parapoetics), is the difficulty of tracking languaging as a vital role that must be re-filled within each new context. As a term, "visual poetry" means very little without an argument as to how the visuals themselves take up some portion of the language-like function involved in doing poetry. [3] And "architectural poetics" is similarly crippled without an explanation of what discursive base architecture can offer to host the contaminant foreign principle.

2. Spatial Meaning Built Discourse

On this point Gins and Arakawa do go an important step further towards accommodating the label architectural poetics. In a key section of the "Procedural Architecture" chapter of *Architectural Body*, they elaborate their idea of a "closely argued built discourse", and do so precisely in terms that substantiate the analogic parallel with a verbal poetics. They write:

> It is by relying on juxtaposed repeatable and re-combinable items that verbal discourse, with great sleight of mouth (or hand), encompasses and presents sequentially considered events. Modularly constructed areas and the architectural procedures they engender will be the juxtaposed repeatable and re-combinable items of a built discourse. (56,57)

They put significant effort into substantiating this parallel, carefully arguing that their architecture *is* discourse, where they could simply have invoked the looser metaphor of an "architectural language" and moved on. Their argument involves pointing to the systems of differences they mobilize both in the structure and appearance of spaces and in the "information states" these produce in the visitor as awareness. Contrasts between comparable units within the "closely argued" environments, and concomitantly between comparable sensory-motor and interpretive responses in the visitors, underwrite the capacity for inflection, for pointing out intended particulars within the field of features and occurrences and specifying them as the objects of an enunciation that has its own modes of deixis and reference to rely on. Experiencing a range of perceptible variables in an architectural surround would correspondingly articulate the range of perceptual and movement responses as a space of implicature, or in G+A's own terms "thrillingly yield a spectrum of body-wide knowing capable of physically manifesting cause and result or warrant and inference." (58)

> Discursive sequences of tactically posed surrounds, constructed as built propositions, marshal existing logical connectives and position newly invented ones into the "real," steering, regulating, and guiding interactions between body and biocleave through three-dimensional THEREFOREs, BUTs, ORs, ANDs, and built-up WHATEVERs. (58,59)

From the perspective of linguistics or discourse theory, this parallel is still only sketchily drawn, but from the perspective of a strategizing of artistic means the commitment is clear. They are investing in a speculative analogy that will establish their architecture as a discourse, as a kind of building that shares certain crucial capacities with language. This becomes even clearer at the next level of resolution, where they state directly that architectural procedures[4] have the place of words in this discourse: distinct, repeatable elements with specific or general import, "conveying" experiences as unitary moments

in recombinable patterns.[5] The tactically posed surrounds, then, which group procedure-eliciting structures into the experiential sequencing from which meanings emerge, amount to the built discourse's "phrases, sentences, paragraphs and texts".

The discourse Gins and Arakawa are concerned to establish relocates their previous efforts at reference and expression into an alternate field of meaning resources, one as we will see that has important implications for the efficacy of the communication they are attempting. What can be done with words and the vast syntactic infrastructure laid down to support their semantics is not the same as what can be done with walls and volumes and the presiding logics of bodily orientation and geographic suggestion. But the inverse is also true, and it is in the positive capacities of these modes of meaning that the artists have seen fit to invest the evolving poetics of their project. We can refer to the field of resources underwriting built discourse in general as a field of *spatial meaning*, distinct both from the lexical field underwriting verbal discourse and from any framing of a system of meanings based on the nominal identity and use of objects, though both of these also play a role in the total meaning experience of their architecture. Spatial meaning represents the specific novelty and challenge of an architectural poetics, in that any serious use of that term requires us to account for how a something called poetics can be done in the spatial medium proper to architecture.

Precisely what meaning content attributable to spatial modes of presentation or reception could be said to correspond to a phrase or a paragraph, and what precision of enunciation would justify identifying anything as the spatial equivalent of a sentence, it would be very difficult to say. And Gins and Arakawa don't. Attempting to would quickly strain the analogy beyond its usefulness, and certainly detract from the project of discovering and applying the resources of spatial meaning, resources whose value consists precisely in the sub-lexical and proto- (or ultra-) semantic traction they exert on the bodymind of architectural "readers". Having once established the idea of a built discourse, they do not return in this or other writings (so far) to further insist on the linguistic parallel, nor do linguistic terms take up a regular place in the terminology of procedural architecture. Within the larger argument of *Architectural Body*, the built discourse section seems to have served the purpose of an important thinking through of the critical, communicative basis of their practice, which as they explain it counts on a capacity to advance hypotheses, communicate observations, and ultimately effect targeted kinds of transformation in those who engage its products. And since their theorizing involves not just the identification of a communicative base, but also the elaboration of specific, counter-conventional forms and devices (architectural procedures) aimed at producing particular effects, the larger theory served by this investment in a semiotic grounding clearly amounts to a poetics, in both loose and rigorous senses of that word.

3. Poetry and Efficacy

This discourse, built as it is, if it isn't doing poetry what is it? Not poetry, because what it produces are not poems in any conventional sense. Yet it does operate a communication, is a writing, and a communication carried out "poetically" by certain important standards. The know-how behind this is a poetics, then, in several senses. These senses are loose enough to accommodate, without distortion, a serious usage of the term "architectural poetics", and yet robust enough to mean something useful when we allege that Gins and Arakawa have one. I think we can reasonably say that what they do, or the theory for it, is in fact as clear an instance as we could hope to find of this elusive, unlikely thing. But the poetics we are dealing with in their architecture will not be recognized in its genres and forms, but more likely in a certain approach to the question of efficacy. Just as for Kant the aesthetic decides itself from the non-art crafts on the principle of "purposefulness without purpose", for Arakawa and Gins the art of their practice has a lot to do with the particular twist it plays on functionality. What Arakawa and Gins's discourse targets is not a lyricism but first an efficacy, achieved through communication, though that claim to efficacy has a lyricism of its own. What their project has of "poetic", I would say, has primarily to do with the para-logical arc (or spiral) its acts of communication take. While at one pole this angling is performed in literarily-trained, philosophical English, at another the communication propagates in and through matter, building materials, to effect changes at the most elemental levels of our embodiment and of our wiring for personhood. In their newest project, the "*Reversible Destiny* HOTEL", the last work they foresee completing in their lifetime[6], they envision lodgings for transient architectural bodies, given to a form of "architectural meditation" which will "in short order have you 'talking' for your great benefit with your own genes" ("*REVERSIBLE DESTINY* HOTEL" project description, Spring 2006).

If there were any doubt remaining as to the legitimacy of bringing this discourse and the communication it serves under the rubric of poetics, right where they draw the architecture-language parallel most tightly they go yet one step further, and actually refer to their constructions as poems:

> "Surely, as well, tactically posed surrounds will factor out as those poems that have ever eluded poets, poems through which those of us who wish to can save our own necks, poems that could only heretofore be intimated by an insufficiently procedural biocleave." (57)

If I have read carefully, this is the only place in *Architectural Body*, and one of only a few in all of their architectural writings, where cognates of the word "poetry" appear, and here four times in one sentence. The sentence seems to contradict my earlier assertion. If Nagi's Ryoanji or Yoro or the Mitaka appartments will factor out as poems, then certainly their creators are poets, and what they do is poetry, architectural poetry. But where Gins and Arakawa are fully literal about calling their mode of building a

discourse, and both need and defend the implications of that claim, I think their calling their buildings "poems" here serves a more strictly rhetorical purpose. It even hints of being a nod towards those who launched the discourse on architectural poetics at Salamanca and the NACIP, a nod that both takes up the terms of that discussion and redirects it. Because, what they identify their constructions with are precisely poems that have never existed, poems of a kind intimated but never accomplished in the history of poetry as such, poems categorically beyond the reach of poets.

The distance separating poetry as traditionally (even experimentally) conceived and what Arakawa and Gins are doing now is described precisely by the path they took to get there. What they believe they are able to make as architects, what they hope already to have made, if these factor out as poems, factor out as those poems that had previously eluded them as well. For before they were architects they were, at least in part, poets. Madeline Gins' experimental writings in *Word Rain* (1969), *Intend* (1973/78), and *What the President Will Say and Do* (1984)), the script of their jointly authored film, *For Example (A Critique of Never)* (1971) and the philosophical "lyrics" of their *Pour ne pas mourir/To Not to Die* (1987) can be identified quite unproblematically as poetic texts. *Word Rain* (1969), for example, Gins' brilliant first book, is identified as a novel but is experimental, self-reflexive, even lyrical enough to qualify as poetry by many standards, and clearly deserves to be seen as one of the gems of 20th Century experimental literature. Even Arakawa's early painting and their long-run joint work *The Mechanism of Meaning* (1969-1988), have been received in certain cases as poetry[7], and have had some influence in literary circles. So the logic behind their move into architecture, and behind their decision sometime around 1988 to commit exclusively to architecture, should articulate quite precisely what's different about the new practice that suddenly makes this marvelous, elusive and neck-saving kind of poem achievable.

The logic of that movement, as I suggested earlier, is a logic of increasing efficacy. Between *Word Rain* and the full-blown Reversible Destiny constructions, it is possible to trace a substantial continuity of themes and strategies; what changes most notably is the scale of sensory impact in the presentation. *Word Rain*, to start there, takes the process of reading as narrative premise for a playful, disorienting and hyper-reflexive rehearsal of the process of reading itself. It does with verbal reading much of what the later architecture will do with orientation and the construal of physical spaces. The narrator, who is constantly addressing the reader in the first person, is herself a reader interminably working her way through a manuscript that may well be the manuscript of *Word Rain* itself, though through prominent and frequent quotation it always seems she is reading something else, a something else we are of course reading with her. As she reads we are led to confuse not only her "I" with ours, but also all the frames required for keeping the world of the manuscript distinct from the world of the narrator, one usage of a multivalent word from the others, perceptions of the narrator's physical surroundings from her perceptions of the inner, mental environment of reading, her reading from her thinking, and her reading from her thinking about reading.

Furthermore the act of reading is depicted as something intensively physical, both in bodily terms (sweat, eye movements, indigestion, sitting posture, the positioning of furniture in the room, the smell of paper) and in the palpability of the material metaphors she deploys to narrate the inner workings of reading (waft, platform, quay, rostrum, ropy gas shavings, fibers, and of course the word rain).

In these themes and strategies we can see much of what is kept as the migration proceeds from literary text to verbal-visual panels and then to architecture. The invention of puzzles to force awareness and active claiming of the processes of meaning making, the interest in making the embodied, sited nature of thought and awareness not only apparent but inescapably felt, the tactic of systematically canceling and contradicting one set of frames or interpretive/orientational hypotheses by another, the mixing and conflictual address of different sensory/cognitive modalities, the interest to track attention (and with it contextualization) in its instantaneous, category-collapsing movement across scales, the long-range strategy to neutralize subjectivity, even the central theory of landing sites, which emerges in the 90's to undergird their emerging architectural body theory but is already present in 1969 in the metaphor of platforms. These amount to core interests and concerns that are not displaced by the move from one set of means to another, but rather motivate it. Separated from the specifically literary enterprise of an experimental novel, or from the painterly enterprise of Arakawa's work during the same period, they reveal themselves as facets of a poetics that can continue to animate works designed for different modes of presentation. And as the pedagogical/transformational import of these themes and strategies clarifies for both Arakawa and Gins, ultimately becoming the earnest of their radical proposal that not dying is an attainable outcome of what had formerly passed for aesthetic contemplation, they gain the clarity of a critical standard for evaluating the available artistic means according to efficacy.

Of Arakawa's foundational large-format philosophical paintings, and of the abstract graphical language they feature, Madeline Gins writes in *Helen Keller or Arakawa* (1994): "Jottings and memos having to do with what anything in the world consists of should be made large, even enterable" (*Helen Keller*, 89). With embodiment a key to unpuzzling the puzzles these paintings present, efficacy clearly correlates with scale and perceptual immersiveness. This principle also serves to explain Gins' own participation in the *Mechanism of Meaning* project, where her writerly strategies of provoking reflexive awareness in the reader meet Arakawa's painterly ones, and are retooled with a fuller range of meaning materials (graphics, images, textures, objects, gadgets) and a mode of presentation on large-scale canvas panels that are literally and necessarily *enterable* texts. And while this project may still be the best-known phase of their work, and continues to serve them as a core fund of conceptual formulations, the 3rd and final published edition of the panels from 1988 ends with a "Review and Self-Criticism" and with architectural drawings that express their conclusion that even this project has proven its insufficiency. They say the need they feel to shift results from a

reconceptualizing of their project, and from a redefining of what they had been after all along. Before, they strove to produce "a model of thought", after to construct a "field of sensibility" (*Mechanism* 6), requiring them to expand the dimensionality both of their presentation and of the participation they expect and illicit from the "reader".

This field of sensibility and the art/construction that will serve it, because of the philosophical issues concerned, but also because of the transformative efficacy desired, is necessarily architectural, and architecture is seen as the inevitable next step in a presentational logic that had previously committed them to over-sized painting and mixed-media works. In *Architectural Body* we read an updating of the earlier formulation concerning Arakawa's paintings:

> We contend that philosophical puzzles cannot be solved short of a thorough architectural reworking. It is necessary to track how a world comes to be organized in the vicinity of the human organism. Questions need to be asked in a three-hundred-and-sixty-degree way. Context is all, and all contexts lead to the architectural context, newly conceived. (*Body* xiv)

In the introduction to *Architectural Body*, we read that architecture is the human race's "greatest tool for learning how not to die", and so it is the obvious and only choice of medium for a project that conceives this as its goal and meaning. It is also, a little less obviously, the medium in which the true ambition of poetry is to be realized, and for the same reason. This claim, which is what that provocative sentence equating tactically posed surrounds with poems amounts to, asks us to locate the unfulfilled dream of all poets in the project of not dying. It will probably not be long before someone, responding to this provocation, will write the history of poetry as the pre-history of Reversible Destiny; a project half completed in the tradition that reads literature as the history of lamenting death. All I propose to do in the space remaining is to suggest how the core themes and strategies of Arakawa and Gins's (now architectural) project, their (architectural) poetics, connect to core ambitions of modern poetry, and how those in turn can be linked to the project of reversible destiny, and the peculiar efficacy it seeks. Then we can start asking how it works.[8]

4. Efficacy's Legacies

The theme of reflexive awareness is our *fil conducteur* here, our connecting thread. As I said, it represents a core continuity of their project from *Word Rain* and the early paintings, through *The Mechanism of Meaning*, and on to the most recent formulations of their architectural theory. What they write of projected reversible destiny parks within future reversible destiny cities may stand here as a slogan for their whole body of reader-resistant, reader-enhancing work since the beginning:

"Comfort is no longer a factor. That it might take several hours to go from one room to another in a reversible destiny house is of no importance as long as the sensibility of the person traversing the room flowers and catches on itself in transit" (*Reversible* 241).

This formulation lands their theorizing of reading and its epiphanic rewards in direct line with the key literary precedents. For Mallarmé, too, awareness of awareness was the motivating theme and the object of his technical innovations. For him the reflexive epiphany made possible through the mobilization of a language reflecting language, of devices of disappearance enabling a poem like *Un coup de dés* to mean nothing but meaning, was what remained of mystical ambition in an age beyond the death of God and the Christian promise. The hope motivating his poetry and informing his poetics was that of a revelation of the Word through words, of Logos as a principle of cosmic and cognitive order palpably manifest in the logic and patterning of meanings achieved through poetry, "à fin qu'un jour … le Verbe apparaisse derrière son moyen du langage, rendu à la physique et à la physiologie, comme un Principe, dégagé, adequat au Temps et à l'Idée. ('in order that one day… the Word may appear from behind its medium of language, delivered into physics and physiology, as a Principle, extricated, adequate to Time and the Idea') (*Igitur* 384). Minus some of the hieratic tone, but without substantial distortion, we could name this Principle "the mechanism of meaning", especially as that re-incarnates more physiologically in the sited awareness of an architectural body, of a thinking with the whole body as Mallarmé himself intimated. Like Arakawa and Gins, Mallarmé was after a model of thought that emerged as a field of sensibility.

The literary legacy of concern to observe the workings of consciousness connects back to even more distant roots in the past of experimental poetry. With Wordsworth, for example, at the height of the romantic poetics, a poet's introspection onto the function of his own mind claimed status as the epic narrative of its ((post-)revolutionary) age, promising, in line with the romantic logic, the emergence of a new heaven and a new earth through powers inherent in the perceptual processes. Scrutiny into the mechanism of meaning as that manifested particularly in the phenomena of subjective coloring and symbolic communion emerged during the romantic period as a concern that would prove nearly permanent in Western poetry thereafter. And central to that ongoing concern is fascination with the transformative efficacy attributed to adjustments to sentience; for example Blake: "The eye altering alters all". As language was ascribed the capacity to sharpen and shift perception, allowing an experience to have its transformative impact, poetry was credited with the power of altering concrete realities. Where Wordsworth or Blake or Shelley dreamed the changing of earthly regimes and human society, another strain of this logic invested in hopes of – no need to phrase it differently – not dying. Such canonical poetic moments as the Ancient Mariner's vision of the sea snakes in Coleridge's poem, or the effortful epiphany of his "Dejection: an Ode", or the despondent Keats' encounter with the nightingale in that

other famous ode, are all moments where the poet's ever-threatening destiny of death by despair and loss of meaning is reversed in the clarity and penetration of a simple perception. Rilke's requiem for the suicide Wolgang von Kalkreuth and Sylvia Plath's "Black Rook in Rainy Weather" show how robustly the poetics of this salvational efficacy continue up to more recent times.

                        had someone occupied,
        occupied in the inmost of his being,
        but quietly met you on your dumb departure
        to do this deed; had even something led you
        to take your journey past some wakeful workshop
        where men were hammering and day achieving
        simple reality; had there been room
        enough in your full gaze to let the image
        even of a toiling beetle find admittance:
        you would have read the script whose characters
        you'd slowly graved into yourself since childhood,
        trying from time to time whether a sentence
        might be formed: alas, it seemed unmeaning.

                            – O ancient curse of poets!
        Being sorry for themselves instead of saying,
        for ever passing judgement on their feeling
        instead of shaping it …   Invalids,
        using a language full of woefulness
        to tell us where it hurts, instead of sternly
        transmuting into words those selves of theirs,
        as imperturbable cathedral carvers
        transposed themselves into the constant stone.
             That would have been salvation. Had you once
        perceived how fate may pass into a verse
        and not come back, how, once in, it turns image,
        nothing but image, …
        you would have persevered.
                                    But this is petty,
        thinking of what was not….

        Who talks of victory? To endure is all.

                    (Rainer Maria Rilke, from "Elegy for Wolfgang von Kalkreuth", tr.
J.B. Leishman)

It is some continuance of these metaphysics that informs the more formally radical tradition of literary experimentalism that links Gins and Arakawa back to the late Mallarmé by way of Language poetry and the early modern avant-garde. The notion articulated famously by Edward Sapir and Benjamin Whorf, that "the 'real world' is to a large extent unconsciously built up on the language habits of the group"[9], informs a tactics of poetic innovation that sees in radical play with language a radical leverage for changing reality by way of the intervening mentality of human beings. Viktor Shklovsky's seminal "Art as Technique" (1917) plays the role of linking the revolutionary romantic logic of freshness of perception with the 20th Century (constructivist) task of resiting artistic effort and innovation in the technical means of art production, so in this case in the constructive mechanics of language itself. The promises of the romantic model of poetic efficacy could be said to turn largely on the role of the image, enabled by an enhanced perception, to *stand for* something whose power is effective inherently. The image, perceived adequately for it to function in its capacity as symbol, thus transmits something (real) into reality by means of an appearance. The experimental modernist model, by contrast, where that can be distinguished from the romantic model which persists, identifies reality as merely a mode of appearance, and ascribes to the mechanics that mediate appearance an efficacy over the production of reality. While Shklovsky, like Imagism in its way, is still concerned with enhancing perception of the image, the instrumentalization of poetic language to which he contributes is part of a branching that seeks transformational efficacy not in the power of an image to "bring about" some reality, but in the possibilities of modulating reality through affecting the mechanics of its constitution via appearances. As strategies for poetic efficacy the one model invests in semantics, the other in syntax; the one in meaningful objects, the other in meaning systems.

The apotheosis of this latter model, certainly relative to our purpose of contextualizing the poetics of Arakawa and Gins' architecture, is to be found in the writing of the "Language" poets. Language poetry is the immediate literary fact that conditions reception of their work since the 80's as poetry or poetry-related[10], though individually and as a team they start before Language and pursue the overlapping concerns within a critically distinct framework. Despite the differences, considering parallels with the Language movement offers us useful ways of understanding how the poetics that persists in their architecture compares (in terms of priorities and strategies) to poetry proper. But also, contextualizing their poetics this way may provide useful assistance in coming to understand the fabulous, by now notorious claim of reversible destiny. That claim, rather more than any oddness in the fact that they are applying their poetics in/as architecture, is the thing that sets Arakawa and Gins so far apart from all the other poets and artists we might relate them to. And yet I think the same basic claim is alive in the background theory and in the metaphysical unconscious of the poets they leave behind. Heirs to both romantic and constructivist dreams of efficacy, to Coleridge and Shklovsky, the Language writers cannot help but mix a little semiotic millennialism in

with their rigorous formal experimenting, and in one way of seeing things, Arakawa and Gins are only taking this latency to its fullest explicit conclusions.

Language writing claims and is ascribed many "liberatory" properties. At the same time it is often accused of being academic and esoteric. Where its claims to a liberatory impact outstrip its obvious social and political relevance, I would say, is where the efficacies it seeks to mobilize are most clearly parallel to those of Arakawa and Gins. In defining the paratactic "new sentence" he sees as emblematic of Language writing, for example, Ron Silliman specifies its function of disrupting readerly procedures of semantic integration so as to draw attention to those procedures themselves, to the mean*ing* where the meant is never confirmed.[11] In the essay "Migratory Meaning", Silliman examines devices that effect an equivalent disruption at semantic levels below that of the full sentence, and goes on to generalize the use of such devices as the defining poetic strategy of his generation[12]. The strategy as he defines it consists in deploying semantic elements that project reference frames for an eventual integration that is then systematically frustrated by the failure of subsequent elements to confirm those frames, and by the new, contradictory frames they project instead. Taken a little bit out of context, Silliman's technical description of these devices might easily be mistaken for an explanation of the disorientation effects allegedly experienced in a Reversible Destiny construction. Both strategies deploy elements that illicit expectations and the tentative projection of frames promising a coherent integration of subsequent elements, and both focus the tools of their craft on destabilizing each frame in turn so that no integration is possible beyond the sheer continuity of attention and effort at construal.

What Lyn Hejinian, in an analysis closely parallel to Silliman's, calls "the rejection of closure"[13] is a widespread poetic priority of Language (and of its precedents and post-scripts), with more than a superficial similarity to the architectural-poetic priorities of Arakawa and Gins. In line with the experimental-modernist model of efficacy I referred to above, rejecting closure can be understood not merely as isolating a new range of poetic effects in the play of disjunctive language, but as intervening in the mode of reality-formation over which language presides. Semantic closure is of course not just the end of a certain kind of reading experience; it is also a core engrained coping device for knowing the world and acting within it. Refusing the readerly demand for closure, learning to leave coherence and determinate integration suspended, is seen not merely as a source of alternatives to the apparent, objectionable coherences in which reality currently manifests to us, but even more significantly as a way of intervening in that reality by retraining the cognitive mechanisms we apply or don't apply to its formation. This is the efficacy on which Language writing's more esoteric claims to relevance rest, and if language truly plays the constitutive role Language writers tend to ascribe to it, and if literary reading/writing are effective means of retooling the mechanisms of constitution, then their writing might truly be expected to change things.

Rejection of closure, called by another name, lies at the heart of the poetics which Arakawa and Gins transport into, and develop as architecture. Their name for it is "tentativeness", which in some of their writings appears as *the* key to the trick or promise of not dying:

> "staying current with bioscleave, remaining alive as part of it, involves keeping pace with the tentativeness it brings to bear…". (*Body* 49)

Elsewhere they make the same point more directly, calling tentativeness "authoritative for human life". Authoritative for human life, therefore, tentativeness is at the heart of their poetics understood both as their tool-kit of devices and techniques, and in the sense of the meaning experiences their work targets. Only, where the postmodernism of Language poetry risks applying indeterminacy to little purpose beyond supply of a few by-now standardized "Language" styles, in the trans-humanism of Arakawa and Gins it points the way straight to not dying.

The devices Arakawa and Gins employ in targeting tentativeness parallel the literary devices of Language writing, of experimental poetics in its Language moment, as does the analysis suggesting these devices could prove efficacious in changing life and the world we co-constitute. These devices, architecturally applied, are "poetic" not only by virtue of this family resemblance with experimental literature, nor just because at least one of the artists used to do poetry. Rather they and the project they are applied in are poetic also because they share something fundamentally "linguistic" with the poetics of poets who use words. Devices produce effects (perceptual, emotional), and you have aesthetics. Devices produce meanings, and those meanings string into tactically constructed patterns, and you have poetics. The architectural devices applied in Reversible Destiny buildings operate not only on the spatial *feeling* of a surround, the values of volume, angle and placement as they interface us in the sensory array, but also on the spatial *meaning*, on the implicature effected percept by percept as body encounters construction. Percepts accrue not merely to a shifting whole of presentness (image or atmosphere), but impinge also into the process, into our articulate and systematized construal of the space as space, our reading it. If feeling and meaning involve separable levels of cognitive response, and this is disputable, there is a use to distinguishing aesthetics from poetics, and in view of this divide the "art" of Arakawa and Gins' architecture, the "technics" that diverges it from conventional functionality to deliver a surplus of meaning or a twist, a meta-level meaning about meaning in general, would have to be considered a poetics. Because this poetics is being applied in architecture, and could not be applied in language alone, it is proper to call it an architectural poetics.

Viewed this way, the architecture of A+G's built works is (or involves) a poetics in the same sense that a writer's design-activity and know-how are a poetics. But if there is an

evolution, there is an exponential leap, and these poetics are not equivalent. A+G ascribe an efficacy to their built constructions that steps them and their communication a whole scale beyond writing in the sheer potential of the mediality. While A+G have left, in the course of their development, (strictly) literary practice behind, this persists not just in habits of thought and language, but more by design in their positioning of their new modes as in fact the culmination of literary experiment. They do not make this claim directly, and as artists they are strikingly uninvested in the detailing of any literary, or even artistic legacies (linkage to Duchamp being the prominent exception), yet to think their (current) relation to literary poetics is to acknowledge that the architectural (poetic) efficacies they claim for their work put them a substantial step beyond literature along the path of one of literature's own favorite self-fabled development narratives, that of an increasing efficacy in poetic means. Poetics as a cousin to rhetoric has sought the key to total medial efficacy since its dawnings, along trajectories traced by the magical or rationalist, religious or constructivist logics of efficacy that have underpinned it at various stages. Wordsworth's "lyrical ballads" experiment and Imagism are both knots in the rope connecting A+G to a core longing of European poetics in the modern period. The theory inherited along these literary root-lines, and along root-lines that branch equally through the visual art and design cultures informing Arakawa's practice, involves a transformation soteriology that has never been phrased so largely, claimed so explicitly and formally evolved towards, as in the work of Arakawa and Gins. What remains vague aesthetic mysticism in Mallarmé and critical-theoretical assertion in Language poetry, stands out in strange brash explicitness as this architectural theory and practice claiming a key to not dying.

Whether I am right to project Reversible Destiny back as a latency into the developmental desire of experimental literary practice, whether G+A's statement about tactically posed surrounds being the poems that have always eluded poets is support enough for me to do so, may still need deciding. But that an epochal step must be acknowledged between the main currents of experimental poetics and this practice, I think this is clear. How these unprecedented claims to efficacy are taken, and to what extent the works for which they are made are successful at fulfilling them, these are other questions. As an aesthetic strategy to operate a transformational efficacy, though, we can say that Arakawa and Gins' Reversible Destiny architecture has reset the bar for claims of efficacy in "poetic" practice. The parallelism relating their architecture to experimental verbal poetries, however close, diverges on one fundamental point that, apparently, makes all the difference. Without making an independent evaluation of the efficacy of Language writing to change reality, we can read Arakawa and Gins' project as a rejection, on principle, of any such claim. In their view the true poem of the overcoming of dying, the poem they claim all poets are after, will continue to elude those who rely on language's limited efficacies to achieve this ultimate of all outcomes. Only the body – that which does/is the living, as opposed to that which articulates it and describes – presents a medial base broad and deep enough to change life in the one way they claim every poet, and person, really wants.

7. From Literary Device to Architectural Procedure[1]
Arakawa and Gins and the Becoming-Architecture of Literary Method

Arakawa and Gins, Site of Reversible Destiny, Yoro, Japan. ©Madeline Gins/Reversible Destiny Foundation.

"Excuse me, architecture, you have not been listening. Remember your job: to preserve the body. Extend life. Make the world habitable and habitants thrive. You are the best tool out there for us learning how not to die. We have to. Before you, life averaged little, today, well housed, we live to be 80 or 90. You've done so much. But why did you stop? Do more for the body. In fact, do everything for the body. What are you waiting for? What else have we got?"

The Challenge

This is my paraphrase of Arakawa and Gins' attitude to architecture today, the stance they take in practicing and theorizing what they call „procedural architecture". The attitude is that architecture needs to get back on topic. The centuries-old thrust of industrial development has allowed architecture to advance at a tremendous rate of

innovation, with stunning accomplishments in many sectors, without ever making any better on its original promise, to win shelter from what's out there, to store forces in order to increase them, to make more life. It challenges architecture to recall that its task is something more fundamental, and radical, than the function-filling it performs (however brilliantly) as an arm of industrial urbanization. The task Arakawa and Gins challenge architecture with would, if accepted, clearly set architecture at odds with industrial urbanization. Building for life and building to current measures of cost and profit are irreconcilable if you take building for life seriously. The procedural architecture I want to discuss with you is not a frontal attack on the political economy of urbanization in the age of biopower, but it is indirectly revolutionary, in the scale of its change in priorities, and in the radically alternate modulation it brings to being/becoming human, organisms inter-personing, architecturally embodied.

Madeline Gins and Arakawa, Reversible Destiny Office, New York, NY. 2005. Photos: Alan Prohm.

Procedural architecture is dedicated to our learning how not to die. If you have heard about Arakawa and Gins' unusual, even in the history of the avant-garde, project, then this is probably what you have heard. „We have decided not to die" – this slab of a sentence was the title and conceptual centerpiece of their retrospective at the Guggenheim in 1997, and of the broad-ranging catalogue from that exhibition. At that time, they were already a decade or so into a career turn – their „architectural turn" we can call it – which for much of the art world amounted to their disappearance from the

scene. Today, 16 years of ceaseless work and two immensely regrettable deaths later, (Arakawa died in 2010, Madeline in 2014) the full scope and coherence of their endeavor is clear, and their central legacy even clearer – this challenge: do everything you/we can for the body. Procedures for increasing/extending life via engagement with/by/as the architectural surround are available. What Procedural Architecture calls for is a dedicated creative industry, with a deep research base and infinite funding, for developing and constructing our architectural surroundings procedurally. In this talk I will show how this architecture, and the theory and practice of its efficacy, emerged, via a radically intermedial conceptual practice with at heart, a literary method.

Literary I Architectural

This paper, and the conference that precipitated it[1], are structured along a line – a seam or suture convened for intermedial discourse – separating and joining the literary and the architectural. The conference theme brings us to this seam with a mission and a direction: identify methods born on the one side and applied on the other, methods from literary theory and practice applied in architectural research and design. The interest in this jointed pairing, then, is directed, not symmetrical.

This is worth establishing at the outset. Because, if we are deciding to meet at the juncture of these two fields, it is important to say why. Why are we spending time, time that could otherwise be spent doing architecture or better than architecture, exploring the literary? From a perspective that sees literature as less efficacious, less relevant than architecture, this could be seen as retrograde, flight in the wrong direction, away from the realness and import poetry envies in architecture. Unless, in going back to literature, we are doing so to recover an advance that has been lost – an aheadness literature may still have in store for architecture, which otherwise, it seems, can do so much more.

Between the literary and architecture, my concern is not so much to get the academic framing right, as it is to secure the ethical relevance. The literary, like the artistic, are in my eyes activities worthy of the utmost detachment. And yet, the history of literary practices does contain invaluable insights and principles, applicable across different fields and domains to the species-wide urgency of staying alive, which, as we shall see with Arakawa and Gins, is architecture's business.

Literary Effect

The literary is known by its effects. This is an important starting point for thinking how anything literary could get into architecture in the first place. Attempts to understand the literary – that which makes something literary literary, or something poetic poetic –

as an essential property inherent in the linguistic materials or in definable ways of structuring them, do not hold up. For one thing they never really answer the question of what poetry has that everyday language doesn't, since it's all the same stuff. But the recognition that „literary" and „poetic" are effects, i.e. cognitive phenomena, is vital. This recognition, and the focusedly cognitive study of literature, dawned already with early modernist perspectives on aesthetic experience (e.g. Shklovsky, whom I will talk about); was formalized further by reception theorists (e.g. Wolfgang Iser) in the reader response tendency of the 70's and 80's; and has now come to full maturity with cognitive-science-informed linguistics and literary theory. I will take the Relevance Theory pragmatics of Adrian Pilkington as an example of this approach.

By shifting our conception of the literary from essences to effects, we are adding a new dimension to the cognitive model we use for thinking this. Reception as an experience occupies a split horizon. Not just us with our gaze vanishing on language, but us with one gaze on language, and another on a conceptual stage where consistencies are being built from the impulses produced through the encounter with language. This addition is essential. It gives us room to manoeuver when explaining how, with the same linguistic materials and structuring repertoire, one text may be prosaic and another poetry. And, just as momentously, it paves the way for every kind of cross-medial hybriding. This is the birth of intermedial poetics. The separation of the spirit of poetry from its body (language) and its coming to life in others (visuality, sound, code, architecture, events).

Once the poetic is a phenomenon of describable effects triggered in a reader by language, we see immediately the possibility of triggering the same, or similar-enough, effects in the reader via different triggers, delivered in a different medium and in different materials. This is true because the conceptual layer is common to all sense modalities. All the senses feed into, and feed off of, constructions at the conceptual level. Conceptual structures built up through exposure to language share space, as it were, with assemblies built from the input of vision or hearing. In fact, of course, input and instructions from various sense modalities flow in together, building together on common projects, in particular on the common project of perception in general, sense-making, world construction.

So what effects are literary? What impacts in readerly experience, and what results in the construction of meaning at the conceptual level, register as literary, or more particularly, as poetic? No single effect is definitive, and there is no total list of effects that qualify, but some effects certainly play a much more central role than others in defining what is and has been poetry or poetic in a given era.

A good place for us to start is with Viktor Shklovsky. At the moment of avant-garde opening in the field of literary/artistic practices, he applied a psychologically informed analytic formalism to theorizing the literary, and in so doing set the problem of the

poetic firmly in the realm of readerly experience. His articulations retain a currency and relevance among theorists and, more significantly for our argument, among practicing experimental poets to this day.

Shklovsky approaches poetry as a certain experience of thinking, and asks what defines this experience and what produces it? He locates it first in an effect some texts have on perception, as it functions in the act of reading. The effect, which Shklovsky identifies as the end in itself of aesthetic pursuits, is the prolongation of perception, a slowing and roughening of the encounter with language, for the sake of the effects this makes in the experience of reading. For Shklovsky, methods in language that extend the duration of perception within reading are literary methods.

> Poetry is work created „'artistically' so that its perception is impeded and the greatest possible effect is produced through the slowness of the perception.

But let's be more precise. What is this effect, that it is so poetic? And how does this slowness, obstructed reception, produce it? Shklovsky's valuation here is structured according to a mental mapping implicit in the model of experience he is working with. Perception (sensation) and cognition (concepts) are valued oppositely because they lie at opposite ends of the basic movement underlying reading.
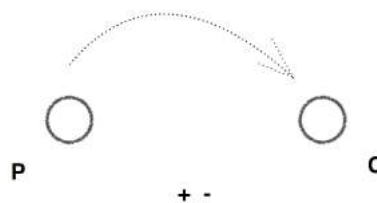
Perceived word material (a live visual experience) arcs across and dies into fixed meaning, concept. What was spontaneous live emergent becomes set and fit for automaticity. The cognitive principle Shklovsky invokes to first establish his theorizing on the poetic effect is this, that „as perception becomes habitual, it becomes automatic", and the concept, as a phenomenon, is precisely this hardening of perceptions into a form for automating process. At the core of experience, there is this rhythm, understood as a kind of entropy, even a law of mortality, the infinitely reiterative arc of decay of everything from percept to concept. Reading at every point, like experience, requires the whole process, but its two basic stages exhibit an inherent antagonism, and they are valued differently. In Shklovsky's language, percepts come out as more real, more alive, and more free than concepts, and more poetic by virtue of the human drama implied in the situation this depicts.

The effect of obstructing reception, then, is to delay readerly awareness up at the early, perceptual end of the arc of reception, attention straying distracted among its own first acts of discernment and sensing, winning us as readers more time in the undecided state, before the irrevocable projects of construal and consistency-building complete. This time is inherently poetic for Shklovsky. More real, more alive, more free, more potential, more possible. And poetic is any writing that manages by its methods to give us this more.

The intuition Shklovsky captures at the start of the 20th Century gets cyclically rediscovered by generation after generation of poets and artists through into the 21ˢᵗ. The avant-gardness LANGUAGE poetry could claim at the end of the 20ᵗʰ Century was based quite centrally on indeterminacy as a special means and end, and it was LANGUAGE poetry that recovered Shklovsky for literary discourse. But movements from Cubo-Futurism to Dada to Imagism to Surrealism to Fluxus to any contemporary trends that follow similar instincts in their experimentalism with language and media return to the concept, and the practices that trigger the effect.

Through this cycling, which is a lot of repetition, acuity also grew, as did the theoretical grounding. Formalist linguistics supplied Shklovsky and his generation conceptual framework for formalising their articulations on the mechanisms for producing literary effects. LANGUAGE poetry rediscovered formalist linguistics, but also grew with the great blossoming in the cognitive sciences, and of a new cognitive linguistics that could do ground empirically what formalism could only ever advance propositionally. The scientific study of experience had come of age.

Relevance theory is one perspective in linguistics, in a pragmatist lineage, that embraced the new explanatory resources of cognitive science, returning to many of the same articulations as the linguists of the early avant-garde, but now with a new empirically grounded analysis, and so the ability to put experience in the center of study. Distinctive of this new orientation is the view, anticipated by Shklovsky, by which literary properties are seen, "not as properties of texts, but as cognitive properties, resulting from the effects of texts upon readers" (189).

Adrian Pilkington, in his Poetic Effects: a relevance theory perspective, writes:

> I have argued that, theoretically, literariness should be defined in terms of cognitive events triggered in minds/brains by linguistic stimuli. (Pilkington 189)

What this approach to language and thought offers, which formalist, structuralist, poststructuralist, …, approaches do not, is the possibility of characterizing poetic thoughts as distinct kinds of thoughts (or poetic thinking as a distinct kind of thinking).(45) Poetic thinking "can be characterized in terms of a distinctive kind of

mental process involving extensive guided exploration of encyclopedic entries, which results in the marginally increased salience of a wide range of assumptions…". (189)

Pilkington's description here relies heavily on the pragmatist linguistic notion of "weak implicature", which for him helps differentiate the poetic meaning experience from a prosaic one. "I have characterized poetic metaphor here in terms of complex thoughts communicated as a wide range of weak implicatures." (106)

The "art of creating a successful creative metaphor (or other rhetorical device used for poetic effects)" (109), according to Pilkington in a formulation Shklovsky would have recognized, consists in providing direction in the reading, along paths that provoke "intense subtly discriminated and precise qualitative states" (191), without allowing the field of implicature to consolidate into simple, prosaic thoughts.

Literary Device

Literary effects are produced by literary devices. The study of literary method comes down to what devices can be employed to produce what effects, and how does this work? What produces this more that means so much?

The device Shklovsky made famous with his 1917 article „Art as Technique" he called „defamiliarization", estrangement, ostrananie, elaborated mainly on examples from Tolstoy. This is a device (defamiliarization and estrangement are of course effects; devices in general are named after their effects and so may be synonymous with them, leading sometimes to confusion), that do precisely the poetic thing Shklovsky describes: „attenuating" „roughing" or „torturing" the verbal delivery, making it difficult, slowing down the process of reading to delay construction of clear understandings, definite grasps or specification. Shklovsky's first example from Tolstoy is the technique of simply not naming or referring directly to a thing you're writing about; writing literally „about" a topic while deferring establishment of a focus on it. Khlebnikov is also mentioned in the article, though just in closing, representing a whole other stage of the modern experimentation with literary method, one closer to the experimental tradition were are ultimately concerned with here. Shklovsky mentions him as working on a „new and properly poetic language"; properly poetic, no doubt he meant, because of the special resources it musters for estrangement, the cubo-futurist repertoire of what the poet called „Zaum". Between the revolutionary avant-gardist Khlebnikov and the landed anarchist Tolstoy, we see Shklovsky sketching an account of „defamiliarization" in the literature of the great modern Russian masters.

The idea of poetry as an art of techniques for producing effects, and the characterization of these effects in cognitive terms, came of age in the experimental modernism of Shklovsky and the constructivists. Later in the 20th Century, the

experimental agenda set forth by newer generations of writers remained occupied with many of the same problems.

The L=A=N=G=U=A=G=E poets of the 1970's and 80's, for example, staked their claims to a new avant-gardism (highly self-theorized, with Shklovsky-era formalist linguistics as an important underpinning) on techniques for achieving much the same effects. Ron Silliman's The New Sentence (1987), Charles Bernstein's Artifice of Absorption (1987), and Lyn Hejinian's „The Rejection of Closure" (1984) all located the experimental front edge of language art in developing techniques, devices, for delaying grasp and construal in the language experience. Indeterminacy emerged as a focal value for identifying the added something a poetic text seeks to achieve, that quasi-magic effect. A decade earlier, Umberto Eco's *The Open Work* (1962) had traced this same theme through 20th Century culture from a semiotic perspective; and appeared in English translation in 1989. For Marjorie Perloff, a chief recuperator of the experimental avant-garde at the end of the last Century (*The Poetics of Indeterminacy*, 1981), this was nothing less than THE defining ambition of 20th Century poetry and experimental art. A generalization she returns to again in her latest writings.

Lyn Hejinian explains:

> We can say that a „closed text" is one in which all the elements of the work are directed toward a single reading of it. Each element confirms that reading and delivers the text from any lurking ambiguity. In the „open text", meanwhile, all the elements of the work are maximally excited; here it is because ideas and things exceed (without deserting) argument that they have been taken into the dimension of the work. (Rejection of Closure, Hejinian 1984, 28)

Hejinian takes up the cognitive assessment of literary effects from a similar perspective as Shklovsky, but with an articulation advanced since his times. Shklovsky's mechanical dichotomy of percept and concept, with its implicit tragedy of experiential entropy and informational collapse, is reinflected in the post-modern, more rigorously cognitive, poetics of the LANGUAGE writer, as a nuanced cosmogonic variable, an as-if-eternal emergency tipping, like gravity or balance, between two asymptotic poles: total order and total openness. In her exploration of the question of openness/closure, Hejinian lays out not a morality, manichean distinction, but more neutrally, if still epiphanic, a field of play with hidden invariables and dynamic constraints. Poetic is not perception's trumping of an inevitable concept-formation, but rather the degree of tension (and twist) achieved and maintained in the invisible physics of this field, the holding that keeps tense the line bridling acts of sensing to the constructions of knowing they are used to assemble, refusing automaticity by filling every inch of the action with intentionality.

She makes clear openness is not itself the value-point, but rather the balance, the improbable middle between collapse determination and total openness where meaning dissolves, a middle she finds in devices for managing dynamic form.

> I want to say this at the outset and most emphatically, in order to prevent any misunderstanding. Indeed, the conjunction of form with radical openness may provide a version of the „paradise" for which the poem yearns – a flowering focus on a distinct infinity. (Rejection, 27)

At stake in this game, we discover, is a „paradise". The poem yearns for this, and achieves it only through the subtle risk acrobatics of keeping its focus flowering/its flowering focused, infinities distinct in a non-excluding grasp. This field of play, realm of the poetic, Hejinian articulates through formulations always tending to the state of landscape, meaning assessed in a space of effects and construction, a world through which language ranges. In the poetics she defines and practices, abstracted, disjunctive, serial but not narrative, we see that the ambition here is bigger than it was in Shklovsky. The motivation not just for inducing „effects", but, more, for realizing a state, (state of knowledge/of things), effecting a world:

> The mind, said Keats, should be a „thoroughfare for all thoughts." My intention (I don't mean to suggest I succeeded) in a later work, „Resistance" (now subsumed into „The Green"), was to write a lyric poem in a long form – that is, achieve maximum vertical intensity (the single moment into which the idea rushes) and maximum horizontal extensivity (ideas cross the landscape and become the horizon and weather). To myself I proposed the paragraph as a unit representing a single moment of time, a single moment in the mind, its content all the thoughts, thought particles, impressions, impulses – all the diverse, particular, and contradictory elements that are included in an active and emotional mind at any given instant. For the moment, as a writer, the poem is a mind. (Rejection, 29)

The method this speaks to involves an almost athletic exertion, an effortful coordinating of opposed exertions, vertical, or better said, „saggital", forward intensity (diachronic/narrative) and horizontal (synchronic/parallel) extensivity. The competence it demands lies in the sensing of effects along the axes of these differentials, and the modulation of expressions using the viable resources. The goal it shows the poet theorist pursuing, a little surprisingly, comes down to creating a space, called a mind, almost architecture, certainly a landscape, in which this world can take place. Writing about Gertrude Stein, as a mentor in the arts of balancing openness with form, it was inevitable that Hejinian should come to formulate the questions of poetics this spatially:

> ...although the synchronic is obviously a temporal concept, it projects a spatial figure – one could say a landscape – „a moment of time that has gotten into position" ...

This, because of Stein's use of simultaneity and parallelism, of devices for slowing the intensive rush of diachronic argument and opening the moment extensively for perception to explore, while avoiding a dispersal of the energies of interest for reading on. This is slowing-for-perception in just the way Shklovsky meant it, but here in a poetics where the devices themselves, the technicity itself, has become the content of the writing:

> The „going slower" becomes obsessive. The movement, if one can put it this way, becomes a fixation. The activity that maintains between events is arrested and detail is flattened out, becoming monumental. It is in this sense that Stein could observe, as she put it in „Plays," „A landscape does not move nothing really moves in a landscape but things are there." (2SteinTalks 128)

Literary Method

And the purpose of all this?

Hejinian's poetics is not cognitive for the sake of commenting on work done for other reasons, expression or narrative. It is at heart a cognitive pursuit, working the same field of observation, if within a different culture of questioning, as cognitive psychology or laboratory neuroscience. In tracing her modernist inheritance to Gertrude Stein, Hejinian sets Stein beside William James as natural fellow bedrock for supporting an advanced, experimental, what she calls „phenomenological" literature. She reveals Stein's abstraction for a kind of „realism", a devotional, inquisitive meticulousness in depiction – but of cognitive phenomena. Hejinian inherits this realism and pursues it, not as a style, but as a research agenda. Literature is a mode of knowledge production for Hejinian and the LANGUAGE poets more generally, first-person inquiry, and poetics is the development and application of devices for conducting this inquiry in the field of meaning experience.

For Hejinian's generation, however, and not only for Shklovsky's, this world, in whose forming poetics has a special hand, is not only mental. The poem's yearning extends out into the social and political, their underlying philosophies of language tacitly ambitioning big impacts in the concrete, real world. In the revolutionary moment of Russian modernism, this world-view gave some poets confidence that their texts, through sense or non-sense, could effect the revolution. Others, under the same value regime of efficacy, lost confidence in poetry, limited to language, and came to favor architecture and engineering in their hopes of having an impact. At work in the revived

avant-gardism of LANGUAGE writing, in its more politicized aspects, is a post-formalist, but pre-revolutionary ideology of the power of language. The linguistic turn in philosophy and criticism, persisting in all kinds of code and systems theories, as well as in their critical deconstruction, gave credence around this time to the idea that language in some way constitutes everything that we are, think and do. The poet, therefore, in handling language, is seen as handling the fundamental principles and forces behind the ordering of experience, consciousness and reality. Literary method and the use of literary devices, viewed this way, engage the promise not just of having effects, but of transforming situations and shaping the world. Hejinian connects explicitly to this current of belief, and this earnest of potential efficacy, when she quotes Benjamin Whorf, identifying the ordering principle language embodies:

> „Every language is a vast pattern-system, different from others, in which are culturally ordained the forms and categories by which the personality not only communicates, but also analyses nature, notices or neglects types of relationship and phenomena, challenges his reasoning, and builds the house of his consciousness." (Whorf, in Hejinian, Rejection 36).

How might the house of consciousness get built differently, through a different practice in language? What change would a poetry practically strive for that thought it could impact world- and consciousness-building at these levels? This is often left rather vague by proponents of the efficacy in principle. What impact can a poetry have on the world? This is an old question. We're still looking for evidence. What impact can a text, observed to effect readers in this or that way, traceable in the language to this or that device, be imagined to have on language as such, in its purported capacity as structurer of mind and world? This is the speculation underlying 20th Century experimental poetics as we can trace it through these authors and beyond, the dream of efficacy underwriting ongoing experimentalism in Hejinian's late, not-really revolutionary age, and still for us a fundamental question demanding attention. It is a question of the fundamental goal of a poetics with this sort of research agenda: development and deployment of (these poetic) devices for what, ultimately? It's a question we can't necessarily expect a definite answer to from everyone, but I think there is a radical simplification available in both Shklovsky and Hejinian's cases, as to how their underlying valuations are anchored, what poetics is for.

In one statement of the great research aim (with reference to Stein's *Tender Buttons*), Hejinian sees her as questioning

> the nature of knowledge relative to meaning, in an attempt to discover, in so far as possible, the nature of poetic language as a locus of meaning and of primary being, lest, in mediating between us (thought) and the world (things) language become instead a barrier. (2SteinTalks 131)

The terrain is ontological, but what is at stake is a contact, and what comes through it, a wager at „reachieving a direct and primitive contact with the world," as Hejinian quotes Merleau-Ponty, defining phenomenology under a thinly veiled vitalism. Ultimately what this notion of realism seems to come down to, the value underlying its exertions, is life, the value of life firing in real time. Hejinian ascribes this, aliveness, to Stein as a fundamental value and aim of her aesthetics. She cites it as an explanation of Stein's critique of theater, which Stein sees as „devitalizing", obstructing our ability to be engaged and emotionally in-time with events.

> In blocking participation, [conventional theater] is devitalizing, where for Stein vitality is a moral category. She had expressed in innumerable ways her position that the value of anyone (or anything) lay in their „being completely living ... (2SteinTalks, 135)

So, vitality, at least vaguely. It's not a key term for Hejinian, but as with perhaps every poet, it's this that seems, when you boil down the language, to underly the moral universe her poetics projects. What else ultimately can underlie an aesthetics of any sort? Her opening definition of „openness", in "Rejection of Closure" zeroed in first on this: excitement.

> In the „open text", meanwhile, all the elements of the work are maximally excited.

And this is precisely what is at risk in writing, at stake in the venture of finding and giving form:

> Can form make the primary chaos..., articulate without depriving it of its capacious vitality, its generative power?

Shklovsky's implicit paradise, time and place of „deautomated perception", is also a vitalist vision, conceived in a more concretely utopian climate, where questions of open or closing form, of power realized or deprived, were of daily real-world urgency. Valuing perception over conception comes down to the measure of literal nervous aliveness, we might say „excitation", and in a political reading to concrete potentials for human life. Accomplishment in a poetics with these commitments, to say nothing of heroism, would then come down to managing aliveness in language, or by one's devices increasing vitality in experiencing readers. This, it is perhaps neither too simple nor too far-fetched to state, based on a review of these texts, is as much as anything else the aim of literary method and practice.

> The liveliness of anything recurs artistically within the scope of a radical force of attention. (2SteinTalks, 131)

Literary's Limit

The study of literary method in experimental modernism and its continuances shows us, among other things, an art (literature) yearning beyond what its own medium can achieve, or has yet been used to attempt. Both the Constructivist desertion of poetry in favor of industrial arts, and the LANGUAGE-era overstatement of poetry's import as tantamount to world-making, challenge poetics and the activities of literary inquiry to assume spatial dimensionality. Poetry at one experimental and theoretical extreme comes to reveal an underlying architecture envy.

> ...In Stein's work...both space and time are primarily psychological and interior, and structural when triangulated with language, which remains exterior, as the site. Time is jammed into and spread over the imagined spatial plane, and it is in language that details, and especially temporal details, are specified and, as it were, made physical. Distinctions must occur – activity takes place – across the language plane itself. In terms of spatial syntax, configuration and relationships occur in sets rather than in sequence, so that the perceptual activity, which has taken the form of writing, makes essential comparisons, oppositions and distinctions.
> …
> Language generates sentences, which taken as forms of frontal grammar, are the verbal planes from which consciousness constructs that of which it is conscious. That is, one realizes consciousness by positioning sentences in the landscape of consciousness... (2SteinTalks, 137,139)

Poetics comes to a point where it needs architecture to think itself, yet still has only words to pursue the discoveries it makes when doing so. Here we come, I think, to a limit in Hejinian's ambitions as a poet, and of LANGUAGE practice as an artistic program. The sustained exploration of poetic effects, experimentation with devices and definition of a method, performed with the sensitivity & (flowering) focus of someone of Hejinian's abilities, comes in the end to involve the whole body.

> The progress of a line or sentence, or a series of lines or sentences, has spatial properties as well as temporal properties. The meaning of a word in its place derives both from the word's lateral reach, its contacts with its neighbors in a statement, and from its reach through and out of the text into the outer world, the matrix of its contemporary and historical reference. The very idea of reference is spatial…. Getting from the beginning to the end of a statement is simple movement. Following the connotative by-ways (on what Umberto Eco calls "inferential walks") is complex or compound movement. (RoC 34)

But the ideology or craft bias tying Hejinian, like most poets, to her medium blocks her from following vital directions these discoveries might suggest. Another way of saying this is that there exists such a thing as artistic genres, and Hejinian is a poet. But there is another sense of poet, already made available by the avant-gardists of the 1910's, in which the pursuit of certain (poetic) effects is free to break with generic boundaries, or the purism of perfecting in a single medium.

I think we can see the tug of this limitation in a very interesting sentence from Hejinian's essay on indeterminacy, where she quotes Ponge on an interesting point and then overstates him, with reductive consequences:

> Language is one of the principal forms our curiosity takes. It makes us restless. As Francis Ponge puts it, "Man is a curious body whose center of gravity is not in himself" (47). Instead it seems to be located in language, by virtue of which we negotiate our mentalities and the world; off-balance, heavy at the mouth, we are pulled forward. (My emphasis) (RoC 33)

That we as creatures are not centered is a certainty, as it is that language in particular pulls us off-balance. But to then locate our center of gravity in language is to carry on a fallacy, one natural to the LANGUAGE moment, still not entirely overcome. Language's ubiquity in our experience of the world obscures the clear fact that it is not the totality, of either experience or world. Vagueness on this point allows the bias to go unchallenged, the assumption within poetry that literary means are the best for achieving poetic ends.

Hejinian expresses this sense of sufficiency with language in what amounts to an explanation of why Stein was or anyone might be an artist in language. She says of Stein that she was:

> directed toward the study of reality and of our perceptions of reality … and the study of language which, on the one hand, apparently mediates between us and reality and, on the other hand, is for most of us the constant, ready, everyday, and natural medium for discovering, defining, and asserting reality – making use of it, expressing it, and perhaps creating it. (2ST 129).

But not every poet will agree with the view of language as primary, or even most convenient, constitutor of reality. In fact, importantly, the opposite has also been asserted:

> Architecture is the simplest means of articulating time and space, of modulating reality, of engendering dreams. It is a matter not only of plastic articulation and modulation expressing an ephemeral beauty, but of a

> modulation producing influences in accordance with the eternal spectrum of human desires and the progress in realizing them. (Ivan Chtcheglov, *"Formulary for a new Urbanism", my emphasis*)

This is Ivain Chtcheglov, poet, latter-day surrealist, who in 1952 co-ignited with Guy Debord the life adventure destined to become the Situationist International, thriving on a rejection of literary means in favor of architecture, and then ultimately on a rejection of even architecture as still not effectual enough for realizing the true poetry, which only activism and the direct practical alteration of everyday life can achieve. For him, and the early situationist project, it was precisely because literature cannot change the world, really, that poetry must be entrusted to architecture.

> "Whereas surrealism in the heyday of its assault against the oppressive order of culture and daily life could rightly define its arsenal as 'poetry without poems if necessary, it is now a matter for the SI of a poetry <u>necessarily</u> without poems." (Guy Debord, "All the Kings Men")

The other principal form our curiosity takes, our other, probably even primary, source of restlessness, is space – exploring, making, making sense of and living space. Another term for this is having a body. The claim to primacy here, to space and body being even more fundamental than language as factors/engines of world-constituting, can be substantiated in the fact that without them, Hejinian would have no way of conceiving language or its action, even in language. "Off-balance, heavy at the mouth, we are pulled forward." The sense of this articulation is entirely indebted to bodily and spatial articulations that pre-date their metaphoric use in any statement. In other words, the emerging embodiment we are discovering with Hejinian's help in poetics is actually already primary and latent there. Architectural poetics, we may find out, has always been already there in language, just waiting to come out.

Extra-Literary Devices

It would have been ridiculous to ask why Hejinian, if she sees language the way she does, didn't become an architect, were it not for Madeline Gins, her contemporary, who, seeing it that way, became one.

With Madeline Gins, we see 20th Century experimental poetics take a turn available before but not taken, a turn in pursuit of poetic efficacy, but out of the bounds of literary genre and medium, into architecture. Gins' starting point, as a poet and student of literature (and painting and physics) at the beginning of the 60's, is similar to Hejinian's, a language-centered, experimental writer with strong cognitive grasp, also in the LANGUAGE moment and circles, but never as centrally identified there. Gins' first book, *Word Rain* (1969), is in my opinion one of the great works of 20th Century experimental writing, and more precisely of the kind of "phenomenological literature"

Hejinian proposes, on the model of Stein's *Tender Buttons* (1914). *Word Rain* is a masterpiece of self-referential, language-centered, experimental fiction, and at the same time a poetic/philosophical inquiry yielding tremendous evidence towards a cognitive theory of reading, perceiving and meaning. Like *Tender Buttons*, or a Ponge poem, it is an intensive object study, only where here the object is the act of reading itself. Like in Stein's work, and true to Shklovsky's definition of the poetic, the reading experience is highly defracted by an estranged, non-transparent use of language conventions and literary devices, producing a highly altered economy of attention and process of construal. In *Word Rain* we see Gins arriving at that same limit Hejinian reaches, the medial limit poetics hits in the becoming-architecture of its own articulations. Then we see her stepping over.

Let's just look at the opening paragraphs for an example:

> I induce a sly birth with my eyes the lines of creases. (Delete) I massage geometry with a scented oil. The maintenance of lips. The battles of containers. I speak in the midst of a sifted reticence. Over there in the center, I am imploded as the size of a fly. Words fall off the curls of nothing after I have left for the next moment.
> I am folded into her. I am involved in the curves of her grey folds. I know how to use them. I know better now than at first but I knew then too. She moves as I shift. Words rain on a molded juncture which you might mistakenly call my head.
> I fill her up at the typewriter. I move her femininely as befits her body. I take her with me. I introduce the tensile subject into her. I am her introduction to the room, to the word rain, to the waterfall pummeling down over membranous rocks. I find her room. I move in the damp ocean. Words cannot say how I am she. (*Word Rain*, unpaginated)

The first device that confronts us in the text is a defamiliarizing technique very close to Shklovsky's first example from Tolstoy. The book starts up in obsessive first-person address, with a very forward "I" talking straight to the reader. Paradoxically this insistence has the effect, after a while, of anonymizing the speaker even further, progressively destabilizing the assumptions that come up as to who this "I" might be, if there is one in particular. The voice, playing on this variable in how determinately or indeterminately it may be construed, toys with and teases the reader who is thus drawn into a game of guessing, and thinking through the clues, by now spreading out "a wide range of weak implicatures":

> I must say that (even though it is entirely possible that I originate a million miles from here) I am closer than this book which is very close. I give you this book as a present. It comes with a room, light, a country,

sky and weather. I will arrange for you to be made aware of these in detail.

Following the clues, we are led to detailed, if indeterminate and repeatedly destabilized, awareness of things, ideas and an environment, in a book that is also a room that is also our room, in a time and weather that is also our time and weather, hosting a narrative that is also the actuality of our present awareness, here, holding this book in our hands with things happening, both in the book and around us. The phenomenological situation has rarely been so adequately and complexly, because immersively, portraited. And in her investigation, the language Gins is compelled to, like Hejinian's, projects landscape and architecture almost necessarily, even, or especially, where it is most abstract and non-representational.

> As I <u>directed</u> the centering <u>axis</u> of my being according to the cryptic instructions for my operations through at least three different platforms, levels, in a matter of ten minutes, the phenomenon of <u>parallax</u> took place somewhere between myself and the page in front of me. Within and without a pause there was always room for one thing in place of another.

The self-narration of the "I" of attention, in the act of reading, gives voice to what Wolfgang Iser, echoing Kandinsky, calls the "wandering viewpoint" (Iser, *The Act of Reading* 108), as it shifts in a text across horizons and along zooming vector arcs from "chunk" to "chunk", making up the basic cognitive pulse of reading: intake then act of construal, intake then act of construal. The "I" comes up with ever new metaphors for explaining what and how she is making us see and think the things we then see ourselves seeing and thinking, and some of these metaphors stay, get established as concept/object protagonists in the text, framed through repeated use and in some cases defined explicitly into a sort of lexicon, conceptual construction materials: *platform*, *quay, rostrum*, *mist*, *cyst*, *waft*, *ropy gas shaving*, *ropy gas fiber*.

> Grey and taupe vapors composed a mist. As the grey mist swirled, for a moment, the taupe vapors were missed, until the grey parted and the taupe vapors strained themselves through. The sky, led through the end of the reader's line of sight (the quay), was seen as mist. Mist scene. The <u>quay</u> at the tip of the sighted pier hardened into a sighted touch of the body of mist which the reader saw. (?) My lips touched it too.

As we try to receive this text, and the thought-experiences it affords us, *Word Rain* concretises in an amazing way Hejinian's principle that "for a moment, as a writer, the poem is a mind", with the extended implication from the rest of the writing that the

mind is also a room, actually a suite of rooms, and by now certainly it must also be clear, a body.

The other key device we encounter straight from the beginning in *Word Rain* is the confusion of planes, the frequent doubt as to whether what is being described obtains in the "real" world of the fiction, in the "inner" mental world of the narrator, or the real world of the reader reading. This strengthens the dynamic identity that develops between the experience of reading (understanding) and its spatialization in theory or self-reflection. Objects are ideas, or less than ideas, objects taking position in thought, about which ideas form. The poem is a mind is a room, and at the core of all this there is the body.

> When the speaker speaks at the <u>rostrum</u>, enunciated words are made
> to fly. They bounce off her, stream forward and fall back to her face
> and body.

Gins not only draws this conclusion, encounters the immanence of the body and its space in language, as Hejinian will later, she also, unlike Hejinian, follows the full thrust of the implications into new territory and new practices.

Already in *Word Rain* there are gestures to externalize the architecture of the narrative and its thematic structure; the inside front cover-spread gives a floorplan of the apartment in which the narration of the book takes place, and inside the back cover is a concept diagram showing key terms in an elastic grid of reference. The visual and material design of the book show in practice how Gins' literary effort to defamiliarize her content and extend exploration of the text reaches beyond strictly literary means to all other available materialities useful for extending the efficacy of its (now intermedial) poetics. The white dust jacket has printed on it a slightly scaled-down photo image of the same book in a white dust jacket, building the recursive referentiality of its literary style into the cover design - making this of all books one it is safe to judge by its cover. Similarly, in her exhaustless effort to involve the reader in this narrative of involved, delayed, obstructed reading, Gins goes so far as to include the hand of the reader, photographically, on the page. In two places at the left gutter margin, i.e. in the fold of the book, we see in black and white the photo image of a thumb holding the page, right there in the middle of the book, suddenly rupturing our technical expectations as to the nature of these pages, and flagrantly contradicting the materiality of how the pages are actually bound. Between these two incidences, we notice, the thumb (our thumb?) has twitched or shifted slightly up-page. If we compare the pages, we can feel how much. Literally, in addition to symbolically, the body of the reader, the reader's experience of body, is inserted into the text.

Pursuing certain (poetic) effects of meaning, Gins exploits signifying resources beyond the material limits of a strictly literary practice. Gearing for more poetic effect, in this

sense, means turning to less literary tricks. In *Word Rain* we see the author's signifying gestures jump the fence, so to say, into graphic and material fields, with minimalist visual devices discretely integrated in a still very literary printing style. Later we will see the devices fully externalized, the main tools of her evolving (poetic) craft and method shifting through graphic, to haptic, to gestural, to built devices, all the way to a full-blown architectural practice, by now long-established.

Architectural Device

Decisive for Gins not adhering more to the limits of a literary identity and practice, of course, was the lifelong creative partnership with painter Arakawa. Together they pursued the intuition that not language is the prime constitutor of meaning and world, but rather principles of unreduced world-constituting as integral process – language a dimension and a force, but within a body-wide cognition involving all perception, all modes of decoding and cognition. Another way of saying this is that they, as a team, embodied early on the intention to radically reverse the reductionisms (incl. body-mind dualism) we inherit from the 17th Century, the kind that support a literary tradition with such strong genre-fidelity and tendencies to overestimate language's centrality to things.

> We contend that philosophical puzzles cannot be solved short of a thorough architectural reworking. It is necessary to track how a world comes to be organized in the vicinity of the human organism. Questions need to be asked in a three-hundred-and-sixty-degree way. Context is all, and all contexts lead to the architectural context, newly conceived. (Body xiv)

And set on solving puzzles they were, the puzzles of our humanity and our mortality. Architecturally.

> Who or what are we as this species? Puzzle creatures to ourselves, we are visitations of inexplicability. What is in fact the case? (Body xiv)

During the late 60's Arakawa, with already a decade of painting behind him, in a style extremely reduced, abstract, conceptual and focused on "blank", was intensively investigating precisely this hinging between modalities, image and word, space and language. Emblematic is his 1967 piece reading "A LINE IS A CRACK", which he entitled "Landscape". Koan-like it pins down the irresolveable coincidence, like a seam in the möbius strip, between space as world and space as representation, triangulating that further via a doubling of the planes of representation, word and image, image and thing, the word that means the mark that means a fissure that might really open. This intermedial thinking and obsession to understand the mechanisms of constitution underlying meaning and reality, are there from the start for Arakawa, as a neo-Dadaist in Tokyo, then as an acolyte of the elder Duchamp in New York, with examples such as

Magritte, Klee, De Chirico, Man Ray and Mallarmé for orientation. As it advances, we see more and more clearly that the body is at the core of his investigations, and how deep the commitment is to techniques of semic and perceptual destabilization, fully in the legacy of defamiliarization and indeterminacy poetics, but with a more extreme vision of the efficacies available in these techniques.
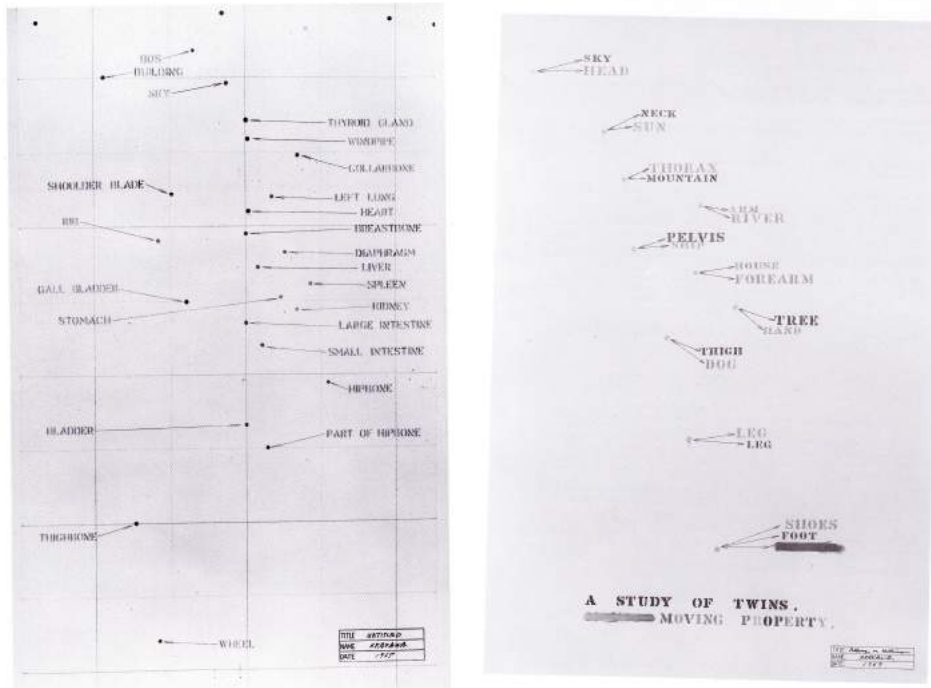
Arakawa, "Untitled" 1967, and "A Study of Twins – Talking and Walking" 1969, in *Constructing the Perceiver*, pp. 129, 136.

From 1963 to 2010, Arakawa and Gins, in parallel then increasingly together, conducted a highly persistent inquiry into the processes of making/unmaking meaning, and into artistic/poetic techniques for challenging, disrupting, and possibly reordering those processes. They applied, as media learned at various stages for use in a rigorous practice, language, visual language, touch, gesture and, progressively, installation and construction, ultimately engaging "readers" at the scale of full-bodied movement and habitation. At each stage of this investigation, and today in the architecture they have since arrived at and that Gins and her team kept vigorously forwarding until 2014, they have pursued a single, sustained artistic program with radical ambitions, based on an idea of efficacy based in the body and in devices for engaging it architecturally. The program has both a heuristic aspect, as a mode of knowledge production, and a transformational aspect. The latter in particular involves an architectural method, evolved through literary and painterly practices, employing precisely the kind of devices Shklovsky identified as defining poetry, devices for delaying perception and postponing closure within a process of reading and construal. But here, an architectural process of

reading and construal, a process conducted as/towards becoming "architectural bodies".

The aim of these techniques is, as it was for Shklovsky, to supply more perception, but here perception is understood more fully in its functional intermeshing with cognition and all the processes of embodiment, subject- and world-formation. The benefits Shklovsky sees in a delayed perception, more freedom (because less automaticity), more openness, more possibility, and more vitality, are multiplied exponentially by the greater contact and access architectural devices achieve in the interface with how we think and are. The shift in medial degree achieved by the move from literary method to architectural method compounds poetry's potential to serve humanity in the ways it has said. Both humanity and mortality here are in question, and radically at play.

> Think of what it would mean to elementary school children to be greeted thus by their new teacher at the beginning of the school year:
>
> Children, I can fairly well promise you that if you study hard and always strive to know the full range of the body's capabilities, you will in all probability not have to die.

This, hugely proleptic, hypothetical, is their claim for what this field of knowledge, a full-bodied puzzling of what is in fact the case with humanity, can promise. What we would be right to call their architectural poetics, although it's unlikely they would ever use such a term, is presented as a mode of knowledge production with transformational consequences, which can be opened to children from a very young age. The efficacy this optimism banks on, to be unlocked through experimentation with and application of embodied, architectural devices, starts just where the ambitious formulations of the linguists and LANGUAGE poets started, in the principle of a code-determined reality-plasticity:

> … a way to reverse the seemingly irreversible destiny of the modern subject. The structures through which we create worlds are not our eternal destiny. Though we are thrown into existence in such a way that conformity to a previously constituted symbolic order is unavoidable, the codes that condition perception and cognition are open to deliberate transformation. (HkoA 250-251)

The phrasing in that last line sounds very close to Whorf's, only "codes" here is plural, and holds no special bias for language. The codes that condition perception and cognition, what A + G call summatively the "code of automaticity", are not primarily linguistic, in fact vital sections are necessarily infra-linguistical, and only engageable below, or around, the activation states of language. On the other hand, so much of what transpires as us transpires precisely in the hand-off back and forth between language and somatics (including perception and the steps of thinking that happen in

perception and affect). From this perspective, a serious engagement with the challenge of overturning automaticity, of radically thwarting closure, necessarily forces a critical appraisal of the medium employed. Certainly remaining a poet is less important in this game, as it is in most, than staying on top of the devices and the efficacy that may allow you to achieve your ends.

What is needed? First of all a mode of presentation capable of addressing the whole body, in which size, or at least volume, matters. The writer thinks:

> "Jottings and memos having to do with what anything in the world consists of should be made large, even enterable." (HKoA)

> I would prefer not to have to go down at all in scale to enter a notebook.
> It would be best to have notebook pages that were no smaller than a wall of an average-sized room. (HKoA 232)

Another crucial step in the expansion arc of Gins and Arakawa's poetics is the employment of devices, at the body-scale, that reach out to the reader/viewer for interaction; we can call these gestural. The extended project of large panels, The Mechanism of Meaning, crucial in the cementing of their collaboration and in the discovery of their method, involves an impressive exploration of the intermedial, intra-linguistic function of gestural signs and meanings in a mixed medium of text, image, object and interaction gesture. This brings not only an expansion in the amount or kind of perception employed in the "reading", the way simply adding texture does, or sound would. It up-shifts the modality of perception altogether. Once perception is engaged in active gestural processes, functioning as full-loop, sensory-motor sub-routines in the act of reading, reading becomes a bodily construction.

The next step in their path toward a full-blown methodology of architectural devices, sketched here schematically rather than biographically, can be seen in their first installation concepts and constructions, and most emblematically in their extensive terrain studies. More than adding walls, engaging the floor represents the step all the way into architecture, "throwing" (in the Heideggerean sense) the body all the way into its dependence on the built for its own possibilities of posture, balance and movement. At this point, we have a properly architectural device, and can begin to observe its use in a method for producing effects, architectural, capable of the old traditional poetic effect, now on another level.

Arakawa and Gins, Ubiquitous Site X, 1987-91. ©Madeline Gins/Reversible Destiny Foundation

In their Ubiquitous Site X, we see the body drawn out, by architecture, into architecture, toward becoming architecture. The architecturality of the devices is so insistently the point in this effort, that they went to the length of inventing the drape ceiling, a device to curtain off sight except where it is nearest-at-hand, or directly under foot, undercutting vision's habitual way of seeing ahead to shape space before we get there. We now read Ponge, whom Arakawa and Gins quote too, and in connection with just such devices, differently, concerning the "curious body whose center of gravity is not in himself". Now this center would seem rather, even in its language-like aspects, to be located in space, and the underlying, world-constituting perception/cognition dynamics "by virtue of which we negotiate our mentalities and the world; off-balance, heavy at the [foot], we are pulled forward".

Architectural Procedure

The architectural device is neither a new invention, nor a new adoption by poets or literary-minded architects. There are architectural discourses for discerning and assessing devices in buildings and on plans. In the hands of certain architects, the conscious, artistic use of devices may also be said to have led to "poetic" constructions, so called on one basis or another. The basis for calling the use of an architectural device "poetic" is not well established. The theory of how architectural devices have poetic effects is far less developed than visual poetics, where an indisputable body of "visual poetry" exists in connection with literary tradition. The idea of a built, architectural

poem, or poetry, meets with a lot of skepticism, and I think it should. But even short of that, there are plenty of examples of literary impulses finding embodiment in architectural forms. King Ludwig II's Bavarian castle at Neuschwannstein (1886) is an explicit translation of poetic content (literary romanticism via Wagner's operas) into architecture. Ian Hamilton Finlay, a concrete poet, "writes" his landscape and the architectural elements at New Sparta (since 1966) in a poetic diction continuous with his typographic works on paper. Both can be called poetic architecture without much controversy. Another type could be found by looking for the "poetic" at a more structural level. Here, rather than the content, we see the way of handling it, the syntax and use of the language as bearers of the "poetic" extra value. Here we can speak properly of architectural devices structuring architectural content being applied in arguably poetic ways, whether or not one is struck by the final effects as poetic. In an understanding of architectural poetics at this level, as conventions of building bent poetically, we could include both Eisenmann with his deconstructed grids, and Hundertwasser, with his war on the straight line. This still leaves unanswered the question of how anything built could be called poetry or poetic in a rigorous sense competing with or reestablishing literature. But, remember, this has not been our question here. In tracing the fate of this quintessential poetic device into architecture, I have not been concerned to show the survival of literature in new forms, but rather to trace the progress of action on this impulse, the impulse to grow effective means for opposing closure in the formulation of things, followed out of literature where necessary.

With Arakawa and Gins, what we see is an artistic program with a serious grounding in experimental literary method and tradition, setting up shop in architecture, building a method of applying architectural devices in built surrounds. Their "procedural architecture" announces the full, successful, rigorous transmission arrival of an age-old poetic program into architectural practice, and has produced highly original works with strong claims to be read, and lived, seriously. But this project, remember, had promised to do more than poetry. So, how do we evaluate this method of devices in relation to its claims to efficacy? What makes the rejection of closure, waged by architectural means, more effective than waged in words?

The answer comes down to the defining term for this architectural method, procedurality. If in a first degree the Reversible Destiny project remediates the program of experimental poetics into architectural terms, in a second it extends the program, and poetics altogether, based on its new resources for realizing the transformative efficacies literature has always dreamed of. The procedure is, in its formulation here, new to poetics, neither impossible nor unknown in literary work[2], but realized only in a remediation that ups the ante of the aesthetic encounter through full-body, active engagement, i.e. architecture.

An architectural surround that is functional, such as a space capsule, and such as the greater part of the built world of our day, facilitates an organism that persons in its actions, extending the senses no questions asked, whereas an architectural surround that is procedural, a tactically posed surround, fills an organism that persons with questions by enabling it to move within and between its own modes of sensing. (AB …)

The efficacy of the device is two-step: device-effect. A procedure coordinates devices, and builds complex perception-action cycles by joining and sequencing them, in a field filled by the embodied conscious dynamics of an architected subject with presence, sense and action. More steps are built in to the poetics, and the efficacy penetrates. In a procedure it goes: device-effect-action-effect. The impact becomes a process, and one actively engaged in by the "reader" body. The ordering of devices to a) reflect awareness onto the process and the devices themselves, and b) destabilize our habitual ways of (per-)forming in that process and in relation to those constraints, makes of the devices a procedure. Devices + processual action = procedure. Process + awareness because action = procedurality. And procedurality, applied to counter closure in exercises of construal = a new wager of poetic efficacy.

"Critical Resemblance House" *Site of Reversible Destiny*, Yoro, Japan, Arakawa and Gins, 1995.

Steps four and five of eight from the "Directions for Architectural Procedure Invention and Assembly":

STEP FOUR
Strive throughout your body to imagine sequences of actions (also, if need be, [provisionally] isolated actions) that might lead to or in some way be constitutive of what you seek to put in place, which is to say, assemble a list of bodily actions that could directly get you to your hoped-for outcome even before you have begun to manage the situation architecturally; which is furthermore to say, have at the ready all those actions that could nudge events in the direction of your nascent architectural procedure's hoped-for outcome….

STEP FIVE
Think of how to structure into a built surround the capacity to call forth precisely what it is you seek. Devise architectural elements and features, and various juxtapositions of them, that will help call this forth….(MDI 150)

…

Building a work of procedural architecture has everything to do with positioning architectural features and elements so as to give physical shape to architectural procedures... (MDI 115)

The agencying (agencement) of features and detail into devices, and of those devices into procedures with transformative efficacy, this is the work of the procedural architect. What the procedural architect with hisr method constructs is an architecture, but not one defined by service in a functional/visual/aesthetic integration for comfort and utility, but rather by its service in a procedural, complexly somaesthetic integration for enactment by the user as/towards being an architectural body. Architecture's ability to do this, consciously and effectively, relies on the systematicity of means procedural architecture identifies and exploits, their leveragability in a system of expressions linking tightly to action potentials within the body, a body that understands itself and produces world as sited awareness. Interestingly, this extra accomplishment, this overcoming of the limits of the literary that also shows up architecture on some of its own turf, comes down precisely to the last trace of the literariness procedural architecture as a practice has otherwise left behind. The complexity and possible precision of the architectural procedure hangs on its inherence in a system of assembly with functional parallels to language.

It is by relying on juxtaposed repeatable and re-combinable items that verbal discourse, with great sleight of mouth (or hand), encompasses and presents sequentially considered events. Modularly constructed areas

and the architectural procedures they engender will be the juxtaposed repeatable and re-combinable items of a built discourse.

…Discursive sequences of tactically posed surrounds, constructed as built propositions, marshal existing logical connectives and position newly invented ones into the "real," steering, regulating, and guiding interactions between body and bioscleave through three-dimensional THEREFORES, BUTS, ORS, ANDS, and built-up WHATEVERS.

…Walking along will be discoursing along through an argument of strategic allocations and reallocations. When it stands up to be counted and entered, this built argument or discourse will manifestly turn us inside out, imbuing the ever receptive bioscleave with more of what it is like to be us.

Viewed this way, and given what it is given to doing with this built discourse, procedural architecture can be seen as a culmination of poetics also rigorously understood. While in general Arakawa and Gins have no use for the word poetry, they do say this explicitly:

…tactically posed surrounds, combining … procedures as they do, are … the phrases, sentences, paragraphs, and texts…[of a "built discourse"]. Surely, as well, tactically posed surrounds will factor out as those poems that have ever eluded poets, poems through which those of us who wish to can save our own necks, poems that could only heretofore be intimated by an insufficiently procedural bioscleave. (Body 57)

Though it's not a remark they have spent any time repeating, there is material for substantiating the explicit match, between formulations of their procedural architecture and of "classic" 20th Century experimental poetics – for example between "a flowering focus on a distinct infinity", Hejinian's description of the "conjunction of form with radical openness," and this description of what procedurality does/allows the body to do:

The body moves through a tactically posed town puzzling itself out of focus and then back into it, now with a wider yet sharper focus. (Body 56-59)

All of Shklovsky's promises for what estrangement and a slowed reception can do in literary devices seem finally realized, and all of Hejinian's spatial metaphors for the poetic literalized, when Gins and Arakawa explain:

Comfort is no longer a factor. That it might take several hours to go from one room to another in a reversible destiny house is of no importance as long as the sensibility of the person traversing the room flowers and catches on itself in transit. Reversible destiny houses consist primarily of entrances. One entry having been achieved, another situation of entering commences. The sensorium enters its own signals. (WHDNTD 241)

The body must either escape or "reenter" habitual patterns of action – habitual actions that have customized life into only a few standard patterns. Upon the body's mastering new patterns of action, bioscleave emerges reconfigured. (AB 62)

Reversible Destiny

Architecture will come into its own when it becomes thoroughly associated and aligned with the body, that active other tentative constructing towards a holding in place, the ever-on-the-move body.

…

Architectural procedures can and should be used both to investigate and to alter prevailing conditions. (MDI …)

…

Procedural architecture, understood as the science and skill of constructing architectural procedures, is also the design art of leveraging effects, often at a two- or three-step remove from the devices used to trigger them. This implies some psychology. Architects who do this, procedural architecture, must not only take care of everything at the levels of form, volume, feature and program, but also at the level of how architecture gears into the human organism and the dynamics of its creating world and moving through it. As a project, reversible destiny, having invented procedural architecture, is based on a claim to efficacy that has not been claimed before.

The Three Hypotheses of Procedural Architecture

1) What stems from the body, by way of awareness, should be held to be of it. Any site at which a person finds an X to exist should be considered a contributing segment of her awareness. – Architectural Body / Sited Awareness Hypothesis

2) It is because we are creatures of an insufficiently procedural bioscleave that the human lot remains untenable. - Insufficiently Procedural Bioscleave Hypothesis

3) Adding carefully sequenced sets of architectural procedures (closely argued ones) to bioscleave will, by making it more procedurally sufficient, reconfigure supposed inevitability. – Closely-Argued Built-Discourse Hypothesis (AB …)

…

In a rephrasing of the hypothesis under discussion here, a closely-argued built discourse can foster fundamental reconfigurings of bioscleave that will constitute or lead to a restructuring of viability, to be translated immediately into life on new terms. (AB 61)

The validity of this claim, any earnest of its ability to positively impact viability, in turn depends on pathways of cognitive engagement and activation that may not yet have an explanation. The psychology of embodied cognition and biological accounts of how cognitive dynamics impact processes of organic function (life), have a lot for procedural architecture to learn from, and more than a little to learn from procedural architecture.

Understanding the efficacy wagered by procedural architecture not only depends on insights emerging from cognitive science, but also itself advances an original jargon, rigorously (or as the jargon itself would specify, "approximative/rigorously") defined, which gets out ahead of the field on many important topics. Gins and Arakawa's formulations concerning the architectural body in particular represent an advanced stage in our understanding of the interplay/codetermination between architectural and somatic dimensions, a stage cognitive neuroscience is in many cases still catching up to, (e.g. recent debates in the fields of extended cognition and radical embodied cognition; cf. Clark 2008 and Chemero 2011), and that even architects, whose central subject of study this should be, have for the most part not yet reached.

A very welcome exception to this delay is the new book (2013) by Angelika Jäkel, called *Gestik des Raumes: zur leiblichen Kommunikation zwischen Benutzer und Raum in der Architektur* (*Gesture and Space: on the bodily communication between user and space in architecture* - unofficial title translation). It shows up, in the slow stream of German phenomenology, strikingly near in its formulations to Arakawa and Gins' architectural body theory, and the sited awareness hypothesis of procedural architecture.

Räumliche Gesten haben also einen zweifachen Charakter: Sie sind gleichzeitig kommunikativ und mittels ihrer Bewegungen erzeugen sie Kraftfelder, Richtungen und Bezogenheiten, d.h. sie selber sind es, die

> Raum zu gliedern vermögen und – daraus folgend – bestimmte
> Bewegungen der Benutzer motivieren. In dieser Charakterisierung der
> Geste sind parabelartig alle diejenigen Kompetenzen angesprochen,
> welche auch die architektonsiche Geste zum ersten Ausrdrucksmedium
> des Raumes macht. (Jäkel 186)

> Ich habe im Abschnitt über den Gestischen Raum: die Gestalten des
> Herum haben ein "Verhalten" …von dessen Ausdruck das Subjekt
> ergriffen wird, mehr noch: Subjekt und Herumn'verschmelzen' im
> Hinblick auf Bewegungseinstellungen zu einer Ganzheit, wie Durkheim
> sagt. Diesen Gedanken habe ich um den dialogischen Aspekt der Geste
> erweitert, indem ich die Art und Weise des "Antwortens" in der
> möglichen und wirklichen Bewegung des Benutzers lokalisiert habe.
> Nicht der Körper des Benutzers allein ist der Ort dieses Dialogs, sondern
> sein im Raum und an den Dingen 'hängender', in Situationen verankerte
> Leib mit seinen vielfachen Kompetenzen des Spürens und des Agierens.

> …
> Insofern wäre im Konzept der architektonishen Geste der Zwischenstatus
> der leiblichen Intentionalität zwischen Subject und Objekt entfaltet, der
> favorisierte Zugang zur Welt wäre dann das Ineinander von Spüren und
> Sich-Bewegen. (Jäkel, Gestik des Raumes 180)

These passages can stand to mark a state of the art in architectural theory of space today, a rigorous thinking anchored clearly in a strong/subtle terminological framing of the gestural dimension in architecture, an understanding seemingly backed by real personal intuition for space on the part of the author. A state of the art, however, still short of procedural architecture.

What permanently distinguishes procedural architecture in its Arakawa and Gins formulation from even the best phenomenological theory, is the aim of its efficacy: the wager of parlaying more life out of the surroundings through a researched tactical shaping of them. What makes it unique as design are the devices it develops and employs, and the way it employs them in two- and three-step strategies for leveraging this newly-theorized efficacy, latent in the architectural body, "both to investigate and to alter prevailing conditions."

What distinguishes procedural architecture in its Arakawa and Gins style from anything else right now, will not permanently distinguish it. Somehow, the field will catch up. There are a million ways to approach the invention and assembly of architectural procedures, and as many different scales and angles for aiming an architectural practice, via the optimization of procedurality in its creations, at life-forwarding, life–transforming and life-extending effects. The hypothesis of sited awareness, and of a

"closely-argued built discourse" able to "reconfigure supposed inevitability", ground a new practice and a new science, a first-person science that redoes phenomenology in new and more open, more approximative/rigorous terms. Exemplifying an immanentist approach, aiming at the articulation of "a complexity of within rather than one of beyond" (AB xiii), Arakawa and Gins' biotopology, and landing site theory in particular, give us an intuitive vernacular for doing our perceptual psychology from the inside out. Phenomenology rediscerned the body in the emptied space of Western philosophy. Landing site theory is built to do it.[3]

The elaboration of procedures, and the construction of architectural surrounds tactically posed to hold them is the work of procedural architects, or of architects – you - who decide to learn to design procedurally, or already are.

The method

> In fielding her surroundings, she makes use of cues from the environment to assign volume and a host of particulars to world and to body, complying with what comes her way as best she can.

This theory, subsumed under the name "biotopology", supplies something new in the development path of experimental poetics, and also something long-overdue in the architectural theory of space. It is also a something that has met with serious interest among philosophers and critical theorists. To the programmatic, functional, volumetric, and visual understandings of space generally expected of architects, procedural architecture adds understanding of the architectural body and of the dynamics of sited awareness that subtend it. And to philosophy, which has generally not addressed such questions in such ways, it adds these same forms of knowledge and practice, as tools for understanding, and for resolving fundamental questions.

> We contend that philosophical puzzles cannot be solved short of a thorough architectural reworking. It is necessary to track how a world comes to be organized in the vicinity of the human organism. Questions need to be asked in a three-hundred-and-sixty-degree way.
>
> …
>
> Only subsequent to there having been an architectural revolution, a thorough re-visioning of architecture, will difficult questions such as those above call forth answers in the bodies of our contemporaries. (AB xiv, xv)

This is the challenge procedural architecture poses to architectural practice today, especially to an architecture tempted to look back to literature for inspiration on methods. With all the knowledges of body, building and mind at our disposal, how much could we

do for the body, if we were to do everything for the body? In times as serious as ours, with our viability as a society/species/planet rapidly slipping our grasp, there is not much of poetry I would say is worth reaching for right now. But this we can take, I would say, this radical upping of historical antes on the project of thwarting closure, by all means necessary, and necessarily by all means. Get to it, architecture. Thank you for listening.

8. BUILDING BODY: TWO BRIEF TREATMENTS ON LANDING SITE THEORY

First published in *The Funambulist Papers: Vol. 2 Body* ed. Léopold Lambert (Punctum Books, forthcoming May 2015)

> When the social body is wired by techno-linguistic automatisms, it acts as a swarm: a collective organism whose behavior is automatically directed by connective interfaces. (Berardi 14)

The variable that in the end prevents happening, defined as the swarm on-rush of events through presence, from collapsing totally into automaticity, destiny, is landing, the surface and voluming of it, and the voluming full of tentativity and potential that flowers in its wake, imaging along. The degree and mode of awareness (reflexivity, imaging) on the landing as it happens, or you/we have it happen as. And world becomes.

> Perceptual landing site: visual, tactile, kinaesthetic, auditory, gustatory, olfactory.

> Imaging landing site: visual, tactile, kinaesthetic, auditory, gustatory, olfactory.

> Dimensionalizing landing site: perceptual to imaging, imaging to imaging   (cf. *Architectural Body*, Chapter 2)

Landing Site Theory (a) – supercession of phenomenology, or some on-the-fly theory of everything happening

Landing site theory[1], thinking the landing and imaging constituting world, is the (more than just a) theory of perception at the core of what artist-theorist-architects Madeline Gins and Arakawa call *biotopology*, an "art-science" defined as less a field of knowledge than a "meadow of knowing"[2], knowing about/in/as sited awareness, architectural body, life in sapient-sentience plus the diagramming. Biotopology establishes itself as a way of thinking for doing that can address the eventning that is/decides life, and inform the urgent and speculative practice of a procedural architecture, designed to extend it.

"If you study hard and always strive to know the full range of the body's capabilities, you will in all probability not have to die." (*Making Dying Illegal*, cover)
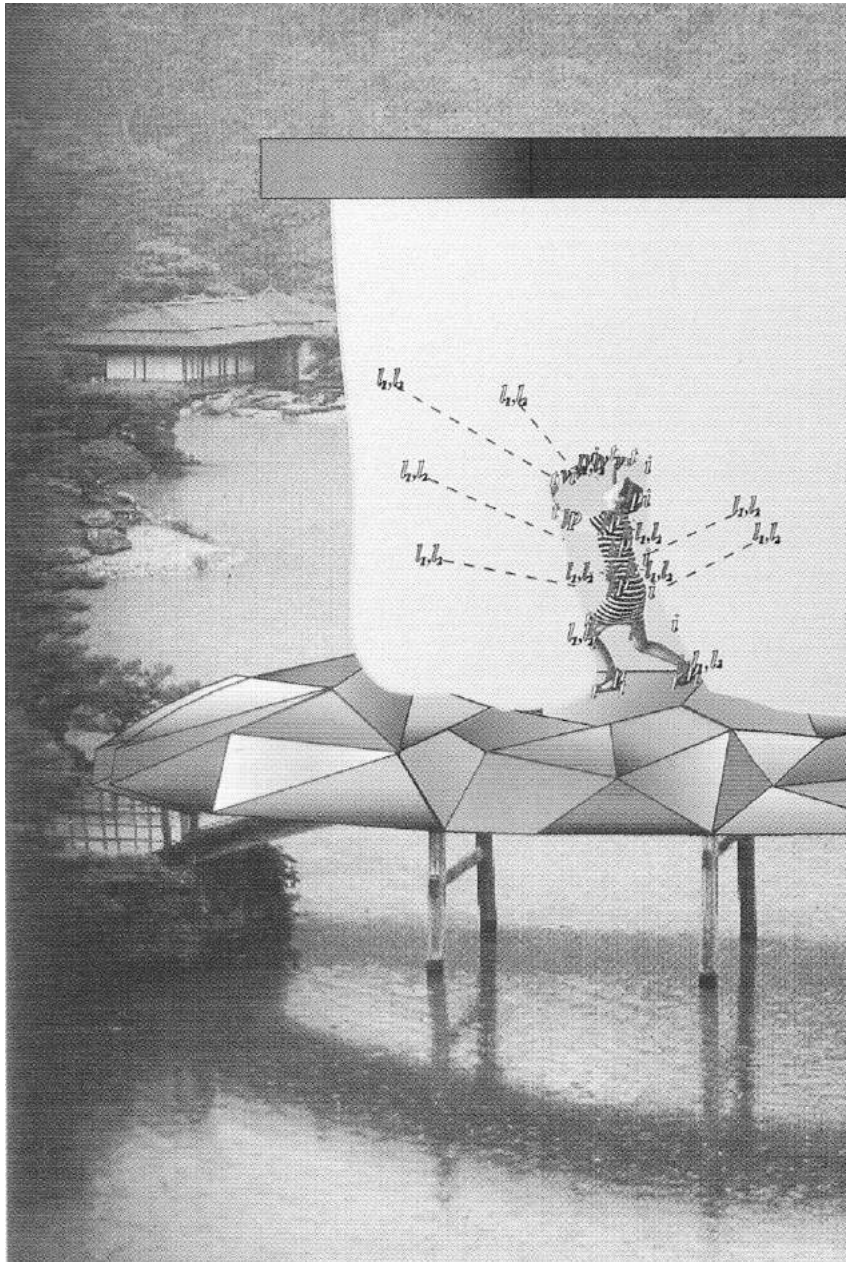
"Ubiquitous Site X Chart 4, at Takamatsu, Kagawa-ken", 1987, in *Constructing the Perceiver*, page 219. (C) Madeline Gins/ Courtesy of *Reversible Destiny* Foundation.

Landing site theory, at the core of these efforts, staying alive through living as an architectural body, amounts then both to an epistemology, a theory of first-person knowledge building, and to a consciousness practice, a discipline for firming and

loosening our hold on landing, happening. Both as epistemology and as consciousness practice, landing site theory is essential for building body. And most probably for not dying. The study of the body, the organism that persons, landing, is the study of how the body can land further, inner, wider, longer, also.

Where its promise seems greatest, landing site theory offers keys to the secret of holding the tentativeness of events and everything open. Not to stop time, but at least to not die, now, or at any point. As oneself always the core of one's events, how not to be had by the collapse that happening just passes off as just happening? Not sacrificing active landing to the automatic. Not excluding a single chance or possibility. Holding as many horizons open as far around as necessary, or expedient. Fine insight on/into the acts of fixing and settling that the deciding of events in the end comes down to. Up at the tip of the formation of facts, landing fielding landing into events, we can study the collapse of wide to tight in slowed time with our own eyes and find the points/joints where fate may be made to take the different turn, and as-if Destiny reverse. Help it happen that way. It's all yours.

Reversible Destiny as a project(ile) looks to the extension of consciousness (or sapient-sentience) outward and in every direction, into a more, into a further that is inherent/implicit/potential in the embodied happening of landing and imaging and building. The body has it within it. Everywhere that isn't disinhabited and lost to the automatic, is living. Bios is the cleaving. The topology is a system or knack for keeping track. Procedural architecture is the vision of building for the body in bios cleaving, with a topology for staying and staying alive.

Through(out) the body, architectural, cast wide, informed by the theorying of its own landing sites, sapient-sentience's complicity in the infinite visceral intricacy of all the things happening, at once, in line, is strengthened, dispersed and intensified. It is with us, and also within. Everything is more, there is less less. Here all reductions and automaticities run for the hills and hide. Maybe including dying.

Body, a having membrane and holding organs, is architectural, is in Bioscleaving the cleaving that most supports us being a we, or me being the I I says I am. Body claims its space as sapient sentience shaping personing out of places, and takes, a container containing, life lived out into every eventning as limbs or patches of skin, all of it her, or him, happening. Body is what we have of it, and what we take as us. Like each other. Grow.

So, body is among other things its channels of intake – the more hardwired the more I – what intervenes in the channeling costs and charges - fields collapse from fences and fences grow tight to wire – what does the wiring wins – win the wiring, ladies & gentlemen, that is the only way – and the only way is from within - Out – you are the wiring, ladies & gentlemen, win from within – cast wide. Field. And the fences go flying.

> The spreading of the connective modality in social life (the network) creates the conditions of an anthropological shift that we cannot yet fully understand. This shift involves a mutation of the conscious organism: in order to make the conscious organism compatible with the connective machine, its cognitive system has to be reformatted. Conscious and sensitive organisms are thus being subjected to a process of mutation that involves the faculties of attention, processing, decision, and expression. (Berardi 122)

Landing site theory. Allow it to introduce you to the receptive/reflexive texture (landing channeled but untrammeled) "this texture that is a distance", "this as-if-woven breathing web of landing sites", through which we/you enter ourselves as the events that seem to contain us, when in reality it is we that field them into place. Beware: the infrastructure that interfaces us is us, Ladies & Gentlemen, including the channels and the diagramming, and currently they, who?, those who own, own a disturbingly large portion of this, us. There is a problem here. Our bios. Their power. Unless ours.

/

What would it take to grow a body that could stop dying? Madeline tried.[3]

/

Landing Site Theory (b) - a supramodal science of active happening

Landing site theory, core concern of the art/science biotopology, takes the stage of phenomenology and just stands up and starts talking, all in its own accord, at first as a team of two (A+G), using new language with little stop to reference or correlate, new words and ways with words emerging convergent with meeting all the new challenges of this happening actively, that actively. How we happen. How to happen. What and how to happen as. This, ladies & gentlemen, is the challenges. And facing such challenges the conscious body wins.

With Arakawa and Gins, landing site theory suddenly comes along in seed form offering to articulate the whole soft interfacing between person as organism and as environment. It provides, rule-of-thumb-like, a science of how the happening that's happening appears to happen and how it can be brought to happen actively. It is supramodal in that its base articulations are primordial to the separation of senses and sensory modes, in a dimension of the world-constructing going on within consciousness that all senses draw from and feed into. Landing locates the initial thinking/eventning, the first of its first philosophy, infra- to the physio-chemico-electric differentiation of sense modalities, in the impact/impulse of anything happening at all in a sensorium, to
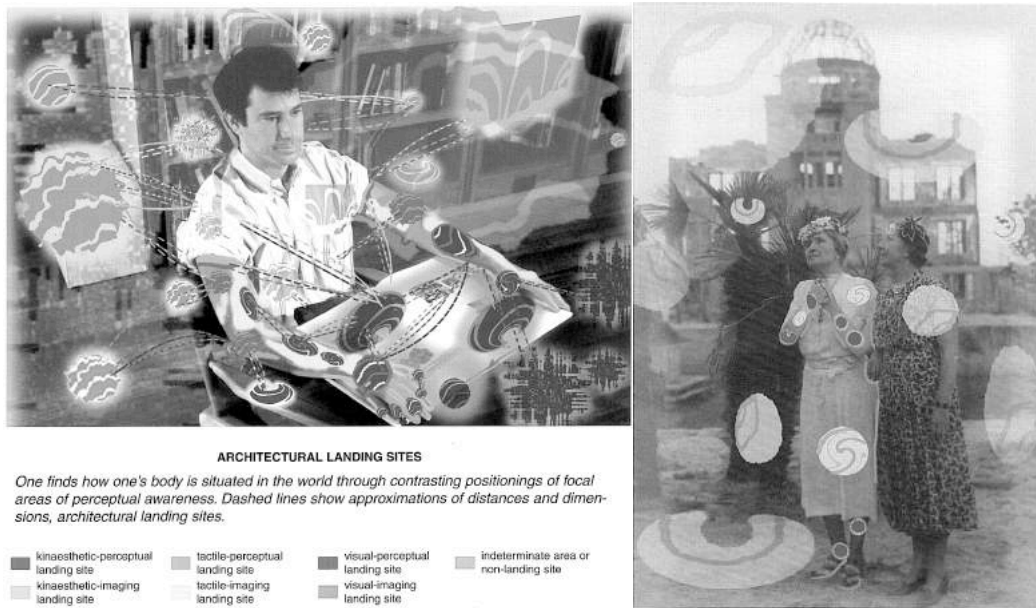
an awareness. Even the notion of imaging, it must be noted, is supraordinate to the individual modes of imaging as differentiated within the sensory net – and here the word image's general immediate association with visual image, in fact just one of its many sub-varieties, must be overcome. Imaging, too, as a term and a force, is beyond the distinction between senses, and points us beyond that, or better infra, near-side, en-deça of that, to simply the aftering of an impact/impulse of anything happening. What gets built up from there is another story.
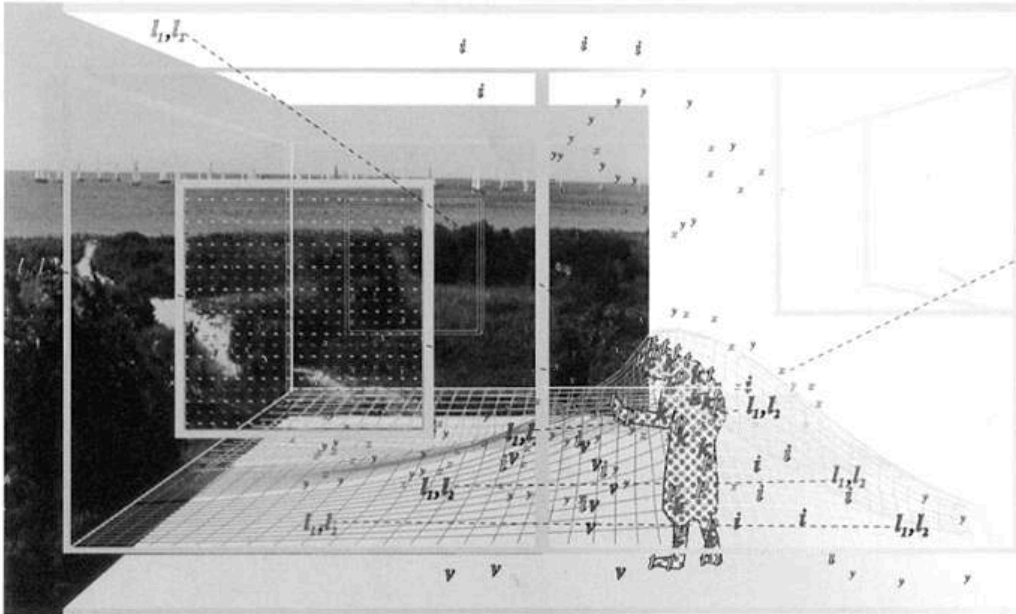
Arakawa, detail from "Critical Holder Chart 2", 1985-91, in *Constructing the Perceiver*, page 221. (C) Madeline Gins/ Courtesy of *Reversible Destiny* Foundation.

The fact of an impact/impulse/tacting/landing/act of happening after-ing at all is of course of great importance in the history of consciousness. This is in fact its birth crisis, as some see it.[4] The capture and seconding of an intake, this, more than just the channeling of physio-chemical-electric impulses along the specialized nerve and organ pathways, is the functionality that really makes mind, including body, a quantum leap within the un-foldment of bioscleave through organising. Imaging is the retain function that allows for forwarding of any kind and all. So, life, imaging along.

As a phenomenology or the supercession of phenomenology, landing site theory is rigorous about anchoring its construction in the now of current landing, assuring maintenance of the phenomenological reduction, *epoche*, a permanent disclaimer at the basis of any approximative-rigorous thinking practice, holding the world as posited real off in brackets from the alone knowable, the world-in-constitution-as/within-sapient-imaging-along[5]. In phenomenological terms[6] the point is keeping the needle on noeisis. In landing site theory terms, it is sapient imaging along that never gives up on the landing.

ARCHITECTURAL LANDING SITES

One finds how one's body is situated in the world through contrasting positionings of focal areas of perceptual awareness. Dashed lines show approximations of distances and dimensions, architectural landing sites.

Arakawa and Gins, visualisation of landing sites, 1997, from "Landing Sites in Relation to Phantom Limb Formation", in *Reversible Destiny: We have decided not to die*, pages.156-63. (C) Madeline Gins/ Courtesy of *Reversible Destiny* Foundation.

The strange flavor of this theory, as some may sense it, is I believe a by-product of it targeting traction on a complexity of within, as Madeline and Arakawa call it, rather than mastery of one from without.

Phenomenology: **EGO – NOEISIS – NOEMA**

Biotopology: **ORGANISM THAT PERSONS – SAPIENT IMAGING ALONG – BIOSCLEAVE/-ING**

What landing site theory lets go of to go forward is the disinterested and hands-off stance in this older mode of thought, and what must be acknowledged as a lethargy common to philosophy quite generally. Phenomenology as a style/profession of theory shows no particular need of going further, toward the realization, becoming lived world, of the better knowing it promotes. Biotopology, as the art-philosophical-scientific project outer-lying landing site theory and underlying Reversible Destiny, arises from and carries within it the need to go further, urgently, to actively happening. More. As more architectural bodies. Wider. As organisms-that-person-not-dying.

Landing site theory, which you must build, promises to put this, this short-hand, rule-of-thumb, intuitive, fresh (re-)start phenomenology in your hand, supramodally speaking, of course; so, to undo this reductive metaphor and start over with that sentence we could say: landing site theory puts this less reductive, more more-adducing and acuter

mode of knowing in your hand, chest, foot, shoulder, forearm, small of the back, thigh, cheek, liver, tongue, abdomen, base of the skull, left hip, metatarsal tissue, cartilege of the right inner ear, eyeball muscles, soft grey matter, heart, hair, etc., all there, free of charge, ready for you to use. For what? Worlding. That's your job. Where else is it going to come from?

> "Sapient/purposive imaging takes impressions everywhere of the various parts of the whole it encounters and, in so doing, delivers up world." (*Alive Forever*, MS, 2013)

Landing site theory equips us as worlders, thinkers with a simple set of terms for articulating the worlding we do that way anyway, and for becoming conscious agents within it.

> "…an organism that persons organizes, transforms and redirects bioscleave, countless bioscleavings, step-by-step, by degrees, to constitute world, her world of each moment as imaged." (*Alive Forever*, MS, 2013)

To catch landing and land on purpose, knowingly, aim. Sapience in the sensing. Sentience as the active intelligence of perceiving. Perceiving to world. A theory of perception will allow you to explain how impressions are taken in. A theory of landing sites empowers the knower/thinker/body to create the world more consciously by embodying it into place. Procedurally. Because the difference between a world happening as it happens and a world happening as you have it happen, better, forever, is procedurality.

And the difference between a world built to happen, and one built to support you from every angle and at every step in having it happen, happening it more, is procedural architecture.

> Architecture will come into its own when it becomes thoroughly associated and aligned with the body, that active other tentative constructing towards a holding in place, the ever-on-the-move body. (*Architectural Body* 49)

> …an architectural surround that is procedural, a tactically posed surround, fills an organism that persons with questions by enabling it to move within and between its own modes of sensing. (*Architectural Body* 52)

> The body must either escape or "reenter" habitual patterns of action – habitual actions that have customized life into only a few standard

patterns. Upon the body's mastering new patterns of action, bioscleave emerges reconfigured. (*Architectural Body* 62)
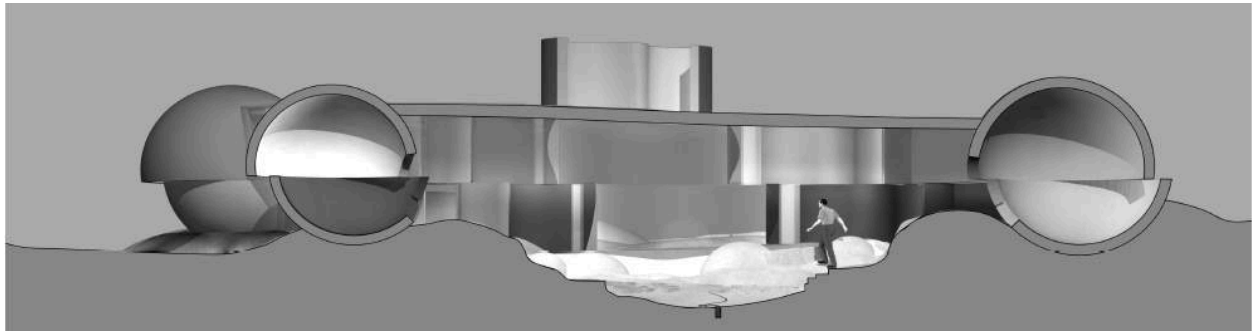
Arakawa and Gins, *Reversible Destiny* Healing Fun House, Palm Springs, California, section, computer rendering 2010. (C) Madeline Gins/ Courtesy of *Reversible Destiny* Foundation.

Procedurality as an enterprise and a tool involves architecture taking this challenge to build for bodies' ability/agility to catch landing and imaging as they land, and handle the happening that landing that way advances. It is using this handy/leggy/torsoey/etc. jargon to think then build the happening of the world in event/acts of landing and imaging in the full range of modalities. And to make more life. The premise/promise of this art-science – behind procedural architecture biotopology, and behind biotopology landing site theory – is that procedurality in the activity of happening, supported architecturally, activates the body to greater life and longer. In landing and imaging actively, in constituting world on purpose. Building world by being a body architecturally. Fill it out, and be. More.

So, let's. Yes thank you.

Afterword

A Chronology of Anthologies (not exhaustive):

Anthology of Concrete Poetry, ed. Emmett Williams (New York: Something Else Press, 1967)

Bory, Jean-François. Once Again, trans. Lee Hildreth (New York: New Directions, 1968)

Concrete Poetry; a Worldview, ed. Mary-Ellen Sollt (Bloomington: Indiana University Press, 1970)

Visual Literature Criticism: a new Collection, ed. Richard Kostelanetz (Carbondale: Southern Illinois University, 1979).

Elementar Poetry in USA East & West, DOC(K)S No. 35, ed. Julien Blaine (Marseille, Fall 1981)

Pattern Poetry: Guide to an Unknown Literature, ed. Dick Higgins (SUNY, 1987)

Core: a Symposium on Contemporary Visual Poetry, ed. John Byrum and Crag Hill (Cleveland, Mill Valley: Generatorscore Press, 1993.

Poesure et Peintrie: D'un art, l'autre, ed. Blistene et al., Musées de Marseilles, 1993.

Visuelle Poesie: Anthologie, ed. Eugen Gomringer (Reclam Verlag, 1996).

Experimental-Visual-Concrete: Avant-Garde Poetry since the 1960's, e.d. K David Jackson, Eric Vos, and Johanna Drucker (Amsterdam: Rodopi, 1996).

Proliferation 5: The Visual Visible Issue, e.d. *Burger, Mary and Chris Vitello*
 (San Francisco: Durham, 1998-1999).

Poetry Plastique, curated by Jay Sanders and Charles Bernsetein (New York: Marianne Boesky Gallery and Granary Books, 2001)

Last Vispo Anthology: Visual Poetry 1998 – 2008, ed. Crag Hill and Niko Vassilakis (Seattle: Fantagraphics Books, 2012)

Optische Poesie: von den prähistorischen Schriftzeichen bis zu den digitalen Experimenten der Gegenwart, ed. Klaus Peter Dencker, (Berlin: De Gruyter, 2012)

Visual Poetry: L'avanguardia delle neoavanguardie, ed. G. Allegrini and L. Vinca Masini (Milano: Skira, 2014)

Renegade a collection of international visual poetry & language arts ed. Andrew Topel (San Diego University Press, forthcoming 2015)

Bibliography

Apollinaire, Guillaume. *Calligrammes* (1918). Paris: Gallimard, 1970.
--. "L'ésprit nouveau et les poetes", *Mercure de France. 29*. Nr. 491, Paris: 1918,
 p.385-396.

Arakawa, *Constructing the Perceiver: Arakawa – Experimental Works*, Tokyo: The National Museum of Modern Art, 1991.

Arakawa and Madeline Gins, "Study for *Reversible Destiny* House 1", in *Architecture: Sites of Reversible Destiny*, London: Academy Editions,1994.

—. *Architecture: Sites of Reversible Destiny* (Architectural Experiments after Auschwitz/Hiroshima). Ed. Nicola Hodges. London: St.Martin's Press, Academy Editions, 1994.

--. *Reversible Destiny: We have decided not to die*, New York: Guggenheim Museum Press, 1997.

Arnold, David. *Situations.* San Francisco: Trike Press, 1983.

Arnold, David, Patty Arnold and Karl Kempton (eds). *Café Solo 2 3/4* 1979. San Luis
 Obispo: Solo Press.

Arrhenius, Lars. "The Man without Qualities" (2001). In *Stories: Erzählstrukturen in der zeitgenössischen Kunst. Eine Austellung im Haus der Kunst.* Ed. Stephanie Rosenthal. Köln: Dumont, 2002. pp.?

Barthes, Roland. *Elements of Semiology*. Trans. Annette Lavers and Colin Smith. New York: Hill and Wang, 1977.

Berardi, Franco "Bifo", *The Uprising: on Poetry and Finance*. Cambridge: MIT Press, Semiotext(e) / Intervention Series (Book 14), 2012.

Bernstein, Charles. *Content's Dream* (Los Angeles: Sun and Moon Press, 1986).

--. *Artifice of Absorption: an Essay* (San Diego, Singing Horse Press, 1987).

Berthoz, Alain. The Brain's Sense of Movement. Cambridge: Harvard University Press, 2002.

Blaine, Julien (ed.) *DOC(K)S* n.27-28-29-30-31-32-33-34. "Le Grand Virage". Ventabren, 1980.

Blistene, Bernard et al. *Poesure et Peintrie: D'un art, l'autre.* Musées de Marseilles, 1993.

Bohn, Willard. *Modern Visual Poetry,* Newark: University of Delaware Press, 2001.

Bory, Jean-François. *Once Again.* Trans. Lee Hildreth. New York: New Directions, 1968.

Bowerman, Melissa. "Learning How to Structure Space for Language". *Language and Space.* Ed. Paul Bloom, Mary A. Peterson, Lynn Nadel, and Merrill F. Garrett. Cambridge: MIT Press, 1996.

Byrum, John and Crag Hill, eds. CORE: A Symposium on Contemporary Visual Poetry. Cleveland, Mill Valley: Generator Score, 1993.

Castellin, Philippe. *DOC(K)S mode d'emploi: Histoire, formes & sens des poésies expérimentales au XXe siecle.* Paris: Al Dante/&, 2002.

Chtcheglov, Ivan. "Formulary for a new Urbanism" in *Situationist International Anthology,* ed. Ken Knabb (Berkeley: Bureau of Public Secrets, 1981).

Cohn, Robert Greer. *L'Oeuvre de Mallarmé, Un coup de des.* Paris: Librairie Les Lettres, 1950.

Debord, Guy, "All the King's Men" " in *Situationist International Anthology,* ed. Ken Knabb (Berkeley: Bureau of Public Secrets, 1981).

de Campos, Augusto, Decio Pignatari, and Haroldo de Campos. "Pilot Plan for Concrete Poetry" (1958) in Mary Ellen Solt (ed.). *Concrete Poetry: A World View.*

de Campos, Augusto. Questionnaire response. *Experimental/Visual/Concrete: Avant-Garde Poetry Since the 1960's.* Eds. K. David Jackson, Eric Vos and Johanna Drucker. Amsterdam – Atlanta: Rodopi B.V, 1996, p.376.

Dencker, Klaus Peter. *Visuelle Poesie* 1965-2005. Weitra (Austria): Bibliothek der Provinz, 2007.

--. "Ein Wort zur visuellen Poesie". *Visuelle Poesie*. Ed. Klaus Peter Dencker. Stuttgart: Reclam, 1996. pp.?

--. Questionnaire response in *CORE: A Symposium on Contemporary Visual Poetry*. Ed. John Byrum and Crag Hill. Cleveland and Mill Valley: Generator Score Press, 1993, p. 47.

—. *Wortköpfe:Visuelle Poesie 1969-1991*. Experimentelle Texte 26–28. Siegen: Presse der Universität Siegen, 1991. Also viewable in part at www.thing.net/~grist/l&d/dencker/kdwk01.htm.

Díaz Sánchez, María Eugenia and Dworkin, Craig Douglas, eds. *Architectures of Poetry*, Amsterdam: Rodopi, 2004.

Drucker, Johanna. *The Century of Artists' Books.* New York: Granary Books, 1995.
---. "Experimental/Visual/Concrete", in *Figuring the Word*. New York: Granary Books, 1986.
---. *The Visible Word: Experimental Typography and Modern Art, 1909-1923. Chicago: University of Chicago Press, 1994.*
—. *Figuring the Word: Essays on Books, Writing, and Visual Poetics*. New York: Granary Books, 1998 .
--. *The Word Made Flesh*. New York: Granary Press, 1996.

Umberto Eco, *The Open Work* (Cambridge: Harvard University Press, 1987).

Ernst, Max. *Une semaine de bonté: a surrealistic novel in collage*. New York: Dover Publications, 1976). (1st Paris: Editions Jeanne Bucher, 1934).

Fenellosa, Ernest. *The Chinese Written Character as a Medium for Poetry*. Trans. Ezra Pound. 1918. San Francisco: City Lights, 1936.

Garnier, Pierre. *Spatialisme et poésie concrète*. Paris: Gallimard, 1968.

Gins, Madeline and Arakawa, *Making Dying Illegal*, New York: Roof Books, 2006.

--. *The Architectural Body*, Tuscaloosa : University of Alabama Press, 2002.

Gins, Madeline. unpublished manuscript, *Alive Forever; Not If But When*, 2013.

--. *Word Rain: or A Discursive Introduction to The Intimate Philosophical Investigations of G,R,E,T,A, G,A,R,B,O It Says* (New York: Grossman, 1969).

--. *Helen Keller or Arakawa* (New York: Burning Books, 1994).

Glazier, Loss Pequeño. *Digital Poetics: The Making of E-Poetries.* Tuscaloosa: University of Alabama Press, 2002.

Gomringer, Eugen. *Kontellationen, Ideograme, Stundenbuch.* Stuttgart: Reclam, 1977.

-- "Some Remarks on the Notion 'Visual Poetry'". In *Visual Literature Criticism.* Ed. Richard Kostelanetz. Carbondale: Southern Illinois University Press, 1979. 153–4.

Gomringer, Eugen, ed. *Konkrete Poesie.* Stuttgart: Reclam, 1972.
--. *Visuelle Poesie.* Stuttgart: Reclam, 1996.

Goodman, Nelson. *Languages of Art.* Indianapolis: Bobbs-Merrill, 1968.

Gustafson, Per. Interview with Jens Karlsson. *Nervous Room.* Ed. Jens Karlsson. <http://nervousroom.com/interrogation/019/main.php>. Accessed June 30, 2004.

Grumman, Bob. "An Attempt at a Full-Scale Taxonomy of Visio-Textual Art". *Comprepoetica On-Line Dictionary of Poets and Poetry Critics.* (www.geocities.com/SoHo/Cafe/1492/index.html)

Hejinian, Lyn. "Two Stein Talks" in *Temblor no. 3,* ed. Leland Hickman, 1986.

. "The Rejection of Closure" in *Onward: Contemporary Poetry & Poetics*, ed. Peter Baker (New York: Peter Lang, 1996.

Helfand, Jessica. *Screen: Essays on Graphic Design, New Media, and Visual Culture.* Princeton: Princeton Architectural Press, 2001.

Henderson, John. "Visual Attention and Eye Movement Control During Reading and Picture Viewing". *Eye Movements and Visual Cognition: Scene Perception and Reading.* Ed. Keith Rayner. New York: Springer-Verlag, 1992. 260-283.

Higgins, Dick. "The Strategy of Visual Poetry: Three Aspects." in *Visual Literary Criticism.* Ed. Richard Kostelanetz. Carbondale: University of Southern Illinois Press, 1979. 41-50.

-- "Intermedia" in *A Dialectic of Centuries*. New York: Printed Editions, 1978. pp.?

Ihde, Don. *Experimental Phenomenology: an Introduction*, New York: Putnam Sons', 1977.

Iser, Wolfgang. *The Act of Reading: a Theory of Aesthetic Response*. Baltimore: Johns Hopkins University Press, 1978.

Isou, Isidore, Alain Satié and Gérard Bermond. *La peinture lettriste*. Paris: Jean-Paul Rocher, 2000.

Angelika Jäkel, *Gestik des Raumes: zur leiblichen Kommunikation zwischen Benutzer und Raum in der Architektur* (Berlin: Ernst Wasmuth, 2013).

Jakobson, Roman. "What is Poetry?" in *The Semiotics of Art*. Eds. Ladislav Matejka and Irwin R. Titunik, Cambridge: MIT Press, 1976, pp. 164-75.

--. "Closing Statement: Linguistics and Poetics". 1960. *Style in Language*. Ed. T.A. Sebeok. Cambridge: MIT Press, 1960. 350-377.

Kepes, Gyorgy. *Language of Vision*. Chicago: Paul Theobald, 1944.

Krauss, Rosalind. "Rauschenberg and the Materialized Image". *Robert Rauschenberg*. Ed. Brandon W. Joseph. Cambridge: MIT Press, 2002.

La Charité, Virginia A. *The Dynamics of Space: Mallarmé's Un coup de dés Jamais N'Abolira le Hasard.* Lexington: French Forum Publishers, 1987.

Lindholm, Andreas, and Anders F. Rönnblom. *Metalheart [a brainreactor emBOX project].* Corte Madera: Gingko Press, 2001.

Lupton, Ellen. "Visual Dictionary". *The ABC's of   : The Bauhaus and Design Theory*. Eds. Ellen Lupton and J. Abbot Miller. London: Thames & Hudson, 1993.

Malevich, Kazimir. "Form, Color and Sensation". *Malevich: An Art & Design Profile*. No. 15, vol. 5. Ed. Andreas Papadakis. New York: St.Martin's Press, Academy Editions, 1989.

Mallarmé, Stephane. *The Collected Poems*. Trans. Henry Weinfield. Berkeley: University of California Press, 19??

-- *Igitur, Divagations, Un coup de des*. Ed. Yves Bonnefoy. Paris:

Editions Gallimard, 1976.

Mayer, Peter. "Some Remarks Concerning the Classification of the Visual in Literature". *Dada/Surrealism* 12, 1983. 5-13.

McCaffery, Steve. "Parapoetics: a Soft Manifesto for the Nomad Cortex". Published in late 90s on the website of The North American Centre for Interdisciplinary Poetics, since removed and rewritten. http://www.poetics.yorku.ca/article.php?sid=5&mode=&order=0.

--. "Parapoetics and the Architectural Leap" in *Architectures of Poetry*. Ed. Maria Eugenia Diaz Sanchez and Craig Douglas Dworkin. Amsterdam/New York: Rodopi, 2004: 91-108.

--. *Carnival, Second Panel* (1970-75). Toronto: The Coach House Press, 1999, p.7.

Mitchell, W. J. T. *Iconology: Image, Text, Ideology*. Chicago: University of Chicago Press, 1987.

Mon, Franz. *Gesammelte Texte 1: Essays*. Berlin: Gerhard Wolf Janus Press, 1994.

North American Centre for Interdisciplinary Poetics. Dir. Steve McCaffery. www.poetics.yorku.ca

Perloff, Marjorie, *The Poetics of Indeterminacy: from Rimbaud to Cage* (Chicago: Northwestern University Press, 1999).

Peterson, Mary A., Lynn Nadel, Paul Bloom, and Merrill F. Garrett. "Space and Language". *Space and Language*. Ed. Mary A. Peterson, et al. Cambridge: MIT Press, 1999, pp.554-555.

Pilkington, Adrian. *Poetic Effects: a Relevance Theory Perspective*. Amsterdam and Philadelphia: John Benjamins Pub Co, 2000.

Prohm, Alan. *Visual Poetics: Meaning Space from Mallarmé to Metalheart*. PhD Dissertation. Stanford University, 2004.

--. "Resources for a Poetics of Visual Poetry" in *Orientations: Time/Image/Word/Space*. Ed. Claus Clüver, Véronique Plesch, and Leo Hoek. Amsterdam: Rodopi, 2005.

--. "Architecture and Poetic Efficacy Part 1: Architectural Poetics" in *Arakawa and Gins: Architecture Against Death*. Amsterdam: Rodopi ,2008.

--. "Constructing Poeisis: Storyboards for an Immersive Diagramming", in *Inflexions* Issue 6 The Arakawa and Gins Issue, 2013, http://www.senselab.ca/inflexions/n6_prohm.html

Rayner, Keith. "Eye Movements in Reading and Information Processing: 20 Years of Research. *Psychological Bulletin*, Vol. 124, No. 3 (1998): 372-422.

Rühm, Gerhard. *Visuelle Poesie*. Insbruck: Haymon, 1996.

Saint-Martin, Fernande. *Semiotics of Visual Poetry*. Bloomington: Indiana University Press, 1990.

Sanders, Jay, and Charles Bernstein, curators. *Poetry Plastique*. New York: Marianne Boesky Gallery and Granary Books, 2001.

Seaman, Bill. "Recombinatory Poetics". 2000. http://digitalmedia.risd.edu/billseaman/textsRecomb.php

Shklovsky, Viktor. „Art as Technique" *Russian Formalist Criticism: Four Essays*, ed. Lemon and Reiss (Lincoln: University of Nebraska Press, 1965).

Silliman, Ron. *The New Sentence* (New York: Roof Books, 1995).

Situationist International. *Situationist International Anthology*. Ed. and trans. Ken Knabb. Berkelely: Bureau of Public Secrets, 1981.

Solt, Mary Ellen (ed.). *Concrete Poetry: A World View.* London: Indiana University Press, 1968.   http://www.ubuweb.com/papers/solt/index.html

Spatola, Adriano. "Vers la poésie totale". Presented and Translated by Philippe Castellin. Marseille: Editions Via Valeriano, 1993. (1st Salerno: Rumma 1969)

Steiner, Giuseppe. *Drawn States of Mind*. Tr. Guy Bennet. Los Angeles: Sun and Moon Press, 1994.

Strandberg-Ringh,   Jonas.   *The   Versus   Project*.   Cubadust,   2001-2003. www.cubadust.com/versus

Todorov, Tzvetan. *Qu'est-ce que le structuralisme? 2. Poétique.* Paris: Editions du Seuil, 1968.

Torey, Zoltan. *The Crucible of Consciousness: an Integrated Theory of Mind and Brain*, Cambridge: MIT Press, 2009.

Tsur, Reuven. "Aspects of Cognitive Poetics" on "Cogprints" website, http://cogprints.esc.soton.ac.uk/archive/00003239/.

Underwood, Geoffrey and John Everatt. "The Role of Eye Movements in Reading: Some Limitations of the Eye-Mind Assumption". *The Role of Eye Movements in Perceptual Processes*. Ed. E. Chekaluk and K.R. Llewellyn . n.p. Elsevier Science Publishers B.V, 1992. 111-167.

Valéry, Paul. "On 'A Throw of the Dice'". *Leonardo, Poe, Mallarmé*. Trans. Malcolm Cowley and James R. Lawler. *The Collected Works of Paul Valéry*. Ed. Jackson Mathews. Vol. 8. Princeton: Princeton University Press, 1972, p. 314.

Vos, Eric. "On Concrete Poetry and a 'Classification of the Visual in Literature'". *Verbal/Visual Crossings 1880-1980*. Ed. Theo D'haen. Amsterdam: Rodopi, 1990. 241-280.

Notes

1. Visual Poetry: Writers' Art in a Para-Literary Age

[1] This article was originally commissioned to accompany an exhibition of artists' books at the Lönnström Art Museum in Rauma, Finland: http://www.lonnstromintaidemuseo.fi/kirjahduksia/files%20fin/lisat_fin.html. For a useful scholarly introduction to the world of artists' books, see Johanna Drucker's *The Century of Artists' Books*

[2] "Dirty" is a designation often used to proudly distinguish the material range and aesthetic diversity of the generation of visual poets that broke the "clean" stylistic orthodoxy of Swiss concretism.

[3] The Italian term for visual poetry, also used to distinguish an important Italian current of visual literary production triggered in the 60's by Lamberto Pignotti and Eugenio Miccini. The movement, which also used the term "*poesia totale*" to describe its approach, was characterized by a highly intermedial practice (relying heavily on found visuals from popular print media) and by an inherently intermedial understanding of language. See for example Adriano Spatolo's "Vers la poesie totale".

[4] Another term coined to express the practical idea that poetry is a something that can be made of the signifying potentials inherent in any media, this time in the context of a major French movement spawned in the 70s by Julien Blaine and advanced in his vastly inclusive and highly international journal, DOC(K)S (1976-2001). The journal is catalogued at http://www.sitec.fr/users/akenatondocks/DOCKS-datas_f/larevue_f/la_revue.html#, and eulogized in the excellent and informative book, Doc(k)s mode d'emploi, by Philippe Castellin.

[5] A pun on Langue D'Oc, the name of a region of France, the term was coined to characterize the widely intermedial language resources used by the poets featured in DOC(K)S. During its first long phase, Blaine devoted DOC(K)S to gathering visual poetic texts from the various regions of the world (Latin America, Italy, the US, France, Japan, USSR, etc), making the subsequent volumes of the journal invaluable as portraits of the creative networks behind visual poetry in the 70s and 80s.

2. Renegade: a recent anthology

[1] This piece written at the invitation of Andrew Topel for his anthology of contemporary international visual poetry, *Renegade a collection of international visual poetry & language arts* ed. Andrew Topel (San Diego University Press, forthcoming 2015).

3. Cut Paper Thinker: a Few Thoughts with Klaus Peter Dencker

[1] Adrian Pilkington, *Poetic Effects: A Relevance Theory Perspective* (John Benhamins Publishing, 2000).

[2] E.g. Marjorie Perloff, *The Poetics of Indeterminacy: from Rimabud to Cage* (Chicago: Northwestern University Press, 1999).

[3] This poetics has a classic history of elucidations: for example Mallarmé's "Préface" to *Un coup de dés* (Paris 1897), Paul Klee's *Das denkende Auge* , Gyorgy Kepes' *Language of Vision* (1947), and Franz Mon's "Zur Poesie der Fläche" (1963).

[4] Black and white in the test because it simplifies the stimulus, but primarily because in the early 2000's that's all there was visible in print (cf. *Visuelle Poesie,* Hrsg Eugen Gomringer 1996). Re-running the test with the color version in Volume One of the collected works, and comparing the results, would tell us precisely the impact of color on the direction of attention in reading these texts.

[5] Concerning the thematic concern of the Denkköpfe series, Klaus Peter Dencker writes:*"So ist die Visuelle Poesie, wie ich sie verstehe, neben dem kalkulierten Spiel, dem gegen die Tradition gerichteten Experiment und dem mit ihren Erfahrungen entwickelten künstlerischen Entwurf, neue Sensibilisationsprozesse einzuleiten, einerseits Spiegel und Antwort auf die Entwicklung der*

Medienlandschaft, auf die in diesem Jahrhundert besonders starke wechselseitige Befruchtung und Durchdringung der Künste. Anderseits ist sie eine Kunstform in der Entwicklung unserer Informations- und Kommunkationsgesellschaft, eine Kunstform, die im besonderen Maße auf neue Formen der Medien reagieren kann, eine literarische Form unabhängig vom Buch, die sich kreativ und innovativ in interaktive Kommunikationsmodellen einzubringen vermag." Klaus Peter Dencker, *Visuelle Poesie* 1965-2005, Berlin: Kunstbibliothek/Staatliche Museen zu Berlin, Preußischer Kulturbesitz, 2006, p. 197.

[6] Alan Prohm, *Visual Poetics: Meaning Space from Mallarmé to Metalheart*, Dissertation Stanford University, 2004. The essay, "Attention Tracking: Some Empiricism for a Visual Poetics" is a reworked chapter section dealing with this empirical test and the original methodology developed for it. The paper is available at https://alanprohm.files.wordpress.com/2013/08/attention-tracking-prohm.pdf

[7] "As we take, in fact, a general view of the wonderful stream of our consciousness, what strikes us first is this different pace of its parts. Like a bird's life, it seems to be made of an alternation of flights and perchings." (William James, *The Principles of Psychology*, New York: Henry Holt, 1890, Dover Edition 1950, p. 243)

[8] Steve McCaffery, *Prior to Meaning: The Protosemantic and Poetics*, Northwestern University Press, 2001.

[9] *ARAKAWA – UNDER CONSTRUCTION – Sequence & Progression*, Klaus Peter Dencker, Ahrensburg 2009.

Klaus Peter Dencker's note on the text: "ARAKAWA – UNDER CONSTRUCTION, was made in 2009 as a work to honor the 85th birthday of Eugen Gomringer's in January 2010, and also at the request of Alan Prohm, for AG3: ONLINE – The Third International Arakawa and Gins: Architecture and Philosophy Conference, March 12-26, 2010 (Griffith University, Brisbane/Australia). Shusaku Arakawa had already in the early 60's produced a remarkable project, „The Mechansim of Meaning", as a Work in Progress, which in many of its elements came close to visual poetry."

[10] *AG3, 3rd International Arakawa and Gins Conference: Architecture and Philosophy* conference on the work of artists Arakawa and Gins, on-line 14-26 March 2010 at http://ag3.griffith.edu.au/ (currently offline).

[11] Arakawa and Madeline Gins, *The Mechanism of Meaning – work in progress (1963-1971,1978). Based on the method of Arakawa,* New York: Harry N. Abrams, 1979.

[12] Arakawa and Madeline Gins, *Pour ne pas mourir / To not to die*, Tr. François Rosso, Paris: Éditions La Différence, 1987, p. 10.

[13] Madeline Gins and Arakawa, *Architectural Body* (Tuscaloosa: University of Alabama Press, 2002), p. 49.

[14] "From Literary Device to Architectural Procedure: on Arakawa and Gins and the Becoming-Architecture of Literary Method", forthcoming in Journal of Poetics Research at http://poeticsresearch.com, originally for *WritingPlace*, 2nd Int'l Conference on Architecture and Fiction, Dept't of Architecture, Technical University of Delft, Nov 2013.

[15] *Architectural Body*, p. xiv.

[16] *Visuelle Poesie eine Anthologie* Hrsg. Eugen Gomringer, Reklam, 1996.

[17] Including in 1992 by the poet himself: "From Concrete to Visual Poetry, with a Glance into the Electronic Future", published in translation on Thing.net

[18] About this journal and these networks, cf. Philipple Castellin, *DOC(K)S mode d'emploi: histoire, formes & sens des poésies expérimentales au Xxe siècle*, Paris: Al Dante, 2002.

[19] One strong statement of the totality claimed by poetics confronting media, visual and beyond, is Adriano Spatola's 1978 *Verso la poesia totale*, published in translation as *Toward Total Poetry*, Los Angeles: Otis Books, 2008.

4. Resources for a Poetics of Visual Poetry

[1] I would like to thank Pr. Claus Clüver for generous help in clarifying certain key concepts in this chapter in an earlier version.

[2] See, for example, Steve McCaffery's and Karl Young's responses to the CORE questionnaire (Byrum and Hill 110, 149). This publication is a very useful resource, compiling the responses of 63 contemporary visual poets to a set of 12 questions concerning visual poetry in theory, culture, and practice.

[3] Bob Grumman, visual poet and theorist, has elaborated an extensive taxonomy along this verbal-visual scale. His taxonomy, with its highly idiosyncratic nomenclature (e.g. "vizlature" and "textual illumagery"), provides much detail for a narrow range of text-only and low-visual hybrid forms, but does not extend into the higher range of visual-text hybrids or "pure visual" works.

[4] Notable examples are the work of Klaus Peter Dencker, e.g. "Wortköpfe" (Dencker 65–70), and the *poesia visiva* tradition in Italy, typified by the photo-and-text collage work of Luigi Pignotti.

[5] This is the case with Willard Bohn's work, e.g. *Modern Visual Poetry*. While a valuable contribution to the understanding of "calligrammatic" and concrete poetry, it treats almost exclusively work below this first threshold, and so does not deserve the comprehensiveness of its title.

[6] Giuseppe Steiner, Futurist colleague of Marinetti, was one of the first to formulate ambitions for a pure visual poetics, taking Marinetti's "words in freedom" a controversial step further, toward a poetry free from words (cf. Steiner 17-21).

[7] "With Strings", a work by Richard Tuttle and Charles Bernstein included in the 2001 exhibition *Poetry Plastique*, is described in the catalogue as "a poem-sculpture composed of letters strung from a spiraling brass line and grounded in a terra-cotta font filled with the poem's roots" (Sanders and Bernstein 40).

[8] For a leading artist's statement on letterpress poetics, see Drucker, *Figuring* 146–63. For an excellent historical/critical overview of typographic poetry in the avant-garde period, see Drucker's *The Visible Word*.

[9] For an iconologist's discussion of these levels, not including the last, see Mitchell 27.

[10] Malevich's "suprematism" sought a visual language at this level (Malevich 45); and G. Steiner's "Drawn States of Mind" sought to make poetry of it.

[11] "If any domain has a plausible claim to strong language-independent perceptual and cognitive organization, it is space" (Bowerman 387).

[12] Paul Valéry's reaction was the most telling: "It seemed to me that I was looking at the form and pattern of a thought, placed for the first time in finite space" (Valéry 309–310).

[13] Graphic designers Andreas Lindholm and Anders F. Rönnblom, producers of *Metalheart*, typify the spatially-charged realm of much current typographic experiment. The *Versusproject* by Cubadust designer Jonas Strandberg-Ringh is both a virtuoso display of high-spatial visual text design and a medlied anthology of exemplary projects.

[14] Seminal critical discussion of this field can be followed at the website of the North American Centre for Interdisciplinary Poetics, hosted by Steve McCaffery: www.poetics.yorku.ca

[15] This study, entitled "Spatial Meaning Constraints in Visual Reading", was funded by a grant from CSLI, and conducted from September 2001 to September 2002.

[16] Conventional, computer-aided eye-tracking technology can record visual attention with great precision. Since a person knows what she is thinking, but can be only roughly aware of her actual eye-movements, the subject-reported method we devised actually yields a closer approximation of mental attention.

5. Attention Tracking: Some Empiricism for a Visual Poetics

[1] The research behind this chapter was funded in part by a grant from the Center for the Study of Language and Information, at Stanford University (2001-2). Editing and publication supported by a grant from the Finnish Cultural Fund (Suomen Kultuurirahasto 2008).

[2] The corpus of works for which claims to visual poetry are made covers a broad spectrum, from word-only texts with some degree of visual inflection (starting from, say, William Carlos Williams and e.e.cummings, and increasing through George Herbert, Eugen Gomringer and F.T.Marinetti), through texts that mix verbal and visual elements (Klaus Peter Dencker, b.p.nichol and Julien Blaine are good examples), to works consisting exclusively of visual elements (e.g. Max Ernst's collage poems, the "other" futurist Giuseppe Steiner or the recent Flash poetry of Rainer Strasser). A prominent example of this partiality in framing visual poetry is Willard Bohn's *Modern Visual Poetry* (2001). Similarly, Marjorie Perloff received criticism from visual poets in the US for a 1997 graduate seminar on visual poetry at Stanford, in which she foregrounded slightly-visual work by predominantly verbal poets.

3 For example, the fact that for an individual focusing of visual attention, peripheral vision is effective in gathering meaningful information at a significantly wider radius when viewing scenes than when reading text; cf. Rayner, p.399.

4 I'd like to thank David Arnold for a generous gift of books that included these two volumes.

5 From the Eyetools, Inc. website, http://www.eyetools.com/new/applications/htm. Accessed July 27 2004.

6 R.E. Morrison, "Manipulation of Stimulus-Onset Display in Reading: Evidence for Parallel Programming of Saccades", Journal of Experimental Psychology: Human Perception and Performance, 10, 1984, 667-682.

7 This study, entitled "Spatial Meaning Constraints in Visual Reading", was funded by a grant from CSLI in the first year of what is now the Media X project, focused on interdisciplinary research involving new media and interface technologies; see www.stanford.edu/mediax. It was conducted from September 2001 to September 2002.

6. Architecture and Poetics Efficacy Pt.1: Architectural Poetics

1 *Architectures of Poetry*, ed. María Eugenia Díaz Sánchez and Craig Douglas Dworkin. Amsterdam: Rodopi, 2004.

2 Steve McCaffery, "Parapoetics and the Architectural Leap", in *Architectures of Poetry*.

3 I lay out one version of this argument in my article "Resources for a Poetics of Visual Poetry" in *Orientations: Time/Image/Word/Space*. ed. Claus Clüver, Véronique Plesch, and Leo Hoek. Amsterdam: Rodopi, 2005, and in my dissertation, *Visual Poetics: Meaning Space from Mallarmé to Metalheart* (Stanford, 2004).

4 An architectural procedure is both the movement-coordinating or orientating response of a bodymind to a tactically constructed space, and the affordance that space presents for calling forth that response. Architectural procedures, of which the "disperse to contrast" and "tentativeness cradling" procedures are the most established, are the central functional elements in A+G's architectural strategy. "An architectural procedure is a tool, and so too is the architectural surround into which it gets embedded" (*Interfaces* 18).

5 Identifying architectural procedures with words seems misleading in at least this respect, that they are not the visible, legible elements of a built construction, but the invisible, potential construal responses supplied by the visitor/reader. Formulations concerning architectural procedures, therefore, would benefit from an articulation of the signifier-signified type.

6 In a telephone conversation between New York and Helsinki, December 26, 2005, Madeline Gins mentioned that this hotel would probably be the last project they accomplished in their life-times.

7 For example in the *Poetry Plastique* exhibition of visual poetry curated by Jay Sanders and Charles Bernstein; Marianne Boesky Gallery, New York City, 2000.

8 Part 2 of this essay, entitled "Spatial Meaning / Poetic Mechanism", will address this question intensively.

9 Edward Sapir, quoted by Benjamin Whorf in "The Relation of Habitual Thought and Behaviour to Language", in *Language, Thought, and Reality*.

10 Witness Charles Bernstein's ongoing witness to their work, reviewing *The Mechanism of Meaning* for L=A=N=G=U=A=G=E in 1971, devoting a substantial essay to Arakawa's painting, "Words and Pictures", collected in *Content's Dream*, interviewing Madeline Gins for the *Linebreak* audio series, and including their work in the visual poetry exhibition *Poetry Plastique,* curated together with Jay Sanders in 2000. Other language poets who have written about their work include Steve McCaffery, Nick Piombino, and Hank Laser.

11 Ron Silliman. *The New Sentence.* New York: Roof Books, 1995.

12 Ron Silliman, "Migratory Meaning", in *The New Sentence.*

13 Lyn Hejinian, "The Rejection of Closure", (first published in *Poetics Journal 4*, 1984), repr. in *Onward: Contemporary Poetry & Poetics*, ed. Peter Baker. New York: Peter Lang, 1996

7. From Literary Device to Architectural Procedure

[1] First published in *Journal of Poetics Research* 09/2015 - http://poeticsresearch.com/article/alan-prohm-arakawa-and-gins/ - From a paper presented at *WRITINGPLACE* - 2nd international conference on Architecture and Fiction: TU Delft, Faculty of Architecture, 25-27 November 2013.

[2] In fact, it would seem the whole tradition of thinking the literary device will need to be re-sorted in light of these new articulations. Certainly there are many articulations writers have made in terms of devices, that in view of the complexity and reflexivity of the strategies they employ ought rightly to be put forth in terms of procedures. Mallarmé, in the full version of his ambitions, would certainly be a candidate, for the genre of a possible procedural, at least proto-procedural literature. Oulipo's "operations" dedicated to generating chance meaning are probably proto-procedures, certainly missing a vital step or three. Procedurality or proto-procedurality could also no doubt be analyzed out of the writings and behavior of the College of 'Pataphysics.

[3] For more on Landing Site Theory, see my "Building Body – Two Treatments on Landing Site Theory", in *The Funambulist Papers: Vol. 2 Body* ed. Léopold Lambert (Punctum Books, 2015); also online at http://punctumbooks.com/titles/the-funambulist-papers-vol-2/

8. Building Body: Two Treatments on Landing Site Theory

[1] The concept landing sites derives from the work of Arakawa and Gins, cf. *Architectural Body,* 2002, Chapter 2, "Landing Sites".

[2] *Making Dying Illegal*, 56.

[3] Madeline Gins died on January 8 2014, and continues.

[4] cf. Zoltan Torey, *The Crucible of Consciousness.* The notion of "reflexive awareness", as what distinguishes human conscious thought from animal modes, is based in a mechanism of impression-retention and recallability, permitting "the endogram's accessibility to itself". This conception provides a very important link between Arakawa and Gin's landing site theory and academic neuroscience and theory of mind. cf. Chapter 6, "Reflection: The Key to Human Awareness".

[5] This thinking, on world-constituting, sapient-sentience, imaging along, is articulated fullest in Madeline Gins' still unpublished manuscript, *Alive Forever: Not If but When* (MS 2013. Permission Madeline Gins/Reversible Destiny Foundation.

[6] A helpful, simple text of reference here is *Experimental Phenomenology: an Introduction* (1977), by Arakawa and Madeline Gins' good friend, Don Ihde