

# The Shape of the Stone was Stoneshaped

## *Between the generations of Dick Higgins and David Rokeby*

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Whereas my body, taken at a single moment, is but a conductor interposed between the objects which influence it and those on which it acts, it is nevertheless, when replaced in the flux of time, always situated at the very point where my past expires in a deed.

*Bergson 1991: 78–9*

At first glance it may seem that a programmer and builder of multi-media surveillance-to-sound systems in the current São Paolo Biennale has little in common with the dematerializations of a Fluxus artist, or in the direct experiential forms of the Happenings art movement. However, the fundamental gestures within interactive art of the 1990s can be found in the corporeal work of Fluxus, performance art, Situationism, process art, participatory works and Happenings generated in the 1960s. The notion that the viewer completes a work manifested itself literally with the emergence of interactive art. This notion, idealized in literature and art throughout the 20th century, had prior origins evident in participatory art produced globally in the 1960s, including the work created within performance art, Happenings and Fluxus.

Co-founder of the Fluxus movement, Dick Higgins (1938–98) coined the term Intermedia in the 1960s; artist/programmer David Rokeby (b. 1961) first spoke of interactivity as an art form 10 years before he pioneered the popular genre in the 1990s. Leaving behind the generation of the modernist artists whose romantic genius creates works from scratch, Higgins fueled the media artist generation which critiqued the media, history and art world

clichés, through collage techniques in time and space. Rokeby, although working in new media tools, consciously broke from the philosophy of the media generation and worked distinctly as a software artist, who romantically makes art from the scratch material of code (**Manovich page 4 ‘Generation flash’**). An examination of a selection of work by these two artists, and their relevant contemporaries, provides a point of convergence regarding the mechanical transference of ideas from the body to the computer and the transformation of the subject through empowering the spectator to participate as content provider. This empowerment questions the inventive role of the artist since he or she is not the primary producer of content. Through paradigms of what Higgins coined ‘blank structures’ and Rokeby referred to as the exoskeleton, the inventive roles of these artists may be examined.

A utopian promise of technology is one of a direct experience through a ‘calm technology’ (Mark Weiser, former chief technologist at Xerox PARC in Horizonzero, Thinking about MIT’s Tangible Bits, Tom Sherman) where the interface is so transparent and intuitive that it acts on what we think without it being apparent that it exists. Rokeby dispels the notion that interfaces are navigational structures for

directly experiencing or even accessing content. On the contrary, interfaces are the content for interactive works, and we will miss the point if we are cognitively unaware of them. Rokeby explains that ‘the rush to stuff content into interactive media has drawn our attention away from the profound and subtle ways that the interface itself, by defining how we perceive and navigate content, shapes our experience of that content. If culture, in the context of interactive media, becomes something we “do”, it’s the interface that defines how we do it and how the “doing” feels.’ Because the entertainment industry is leading the field, ‘The interface becomes a hardened and brittle perceptual exoskeleton which we can’t easily question or redefine’. If interfaces do replace our direct experience to negotiate content with people, information or knowledge, then that experience is fundamentally altered by the interfaces we engage in. Interfaces, though not necessarily of any skilled quality, offer information, wisdom or an experience from one form (system, person or people) to another form (system, person or people). Therefore, by redefining the exoskeleton of the interface, Rokeby has deepened the participatory relationship between the artist and the viewer as well the presentation and perceptual experience of art.

Redefining the interface between producer and audience is a fundamental goal in the diverse body of work produced by the late Dick Higgins. Human characteristics, such as intelligence, empathy, sensitivity and responsiveness, thinking, feeling are always used to describe Rokeby’s art machines. His art machines can be threatened, they like things or can be stimulated, they even have visceral poignancy and an intangible spirituality, or they can be shamanistic. The art of Dick Higgins, on the other hand, is described with terms such as intermedia, modules, matrices, blank structures, random chance, exemplarist work and variable outcomes. These mechanical/human-like descriptions are ironic in that Higgins used people in his early productions and Rokeby uses

machines in his installations. Higgins mechanized his performers in the same way that Phillip Glass mechanized his musicians or Merce Cunningham mechanized his dancers. Bergson’s discussion of memory relates to how performers were used as transitory conductors of Higgins’s art system. At each moment the performers describe the art by acting out content of their own invention. Change the performers and the content is changed but the art system remains the same. This approach is precisely the distinction between the paradigm and syntagm that Lev Manovich describes. The paradigm is a database organized by ideas, concepts, literary or technical figures, while a syntagm is a narrative with linear grammar chronologically producing concepts. The artwork of Higgins, Alison Knowles, Alan Kaprow, Ken Dewey, Robert Bozzi, Wolf Vostell and other Fluxus and Happening artists of the 1960s sometimes allowed participation from the audience into the art paradigms. The 1960s art paradigms that emerged complete with modules, loops, cueing systems, feedback, random chance and variable outcomes were picked up in the form of computer code materialized from these same conventions by 1980s and 1990s software artists (Manovich). With the same nervous energy that propels today’s software artists to work through the night writing code that will automatically execute all the permutations of a composition, Higgins worked straight through several days without sleep, typing, editing and collating all the permutations of his compositions. The overlap came to full fruition when Higgins wrote code on a Fortran IV software program between 1967 and 1970, producing scores of poetry, scripts and even a novel. With James Tenney, Higgins’s partner Alison Knowles wrote the first computerized poem ‘The House of Dust’. It is no coincidence that when, from the 1980s on, art systems were fully replaced with actual machines, the body’s obsolescence and a romantic notion of its loss became a fixture in theories of embodiment. Precedence for this transference occurred between even earlier

generations such as Experimental Art and Technology's (E.A.T.) 1966 performance series 'Nine Evenings: Theater and Engineering' at Armory Hall, which included John Cage, David Tudor, Merce Cunningham, Robert Rauschenberg and Frank Stella. Cage used photo cells to interpret the movement of dancers, and in Rauschenberg's interactive piece 'Open Score', tennis performers used wireless rackets to trigger the lights off in the audience, one light at a time, until the theater was dark. When the theater was dark, infrared cameras recorded hundreds of performers whose haunting greenish images were projected on a screen. The transference from body object to simulated subject was complete, and when the lights were turned on the stage was as blank as Rauschenberg's famous white paintings. Other pivotal artists who cross between the generations of media artists and software artists include Peter Weibel, Jeffrey Shaw, Stelarc and Lynne Hershman. These artists and others, such as Diana Burgoyne, moved from doing performance work themselves to creating interactive installations, exchanging their own bodies for that of the audience's. Naively or with foresight, Higgins's curiosity that led to mechanizing his performers in the first place differs significantly from the results of the complete transference of body to machine in Rokeby's work.

Higgins was inspired by a set of belief systems that he understood to be fully modern (what he called post-cognitive). These included a desire to rethink subject-matter; to accept a logical and mechanized culture through a Zen filter that is both real yet irrational; to end the subjugation of the text in theater; to create an art that brought relational experiences from both the performers and the spectators as content. This last important objective is what Katherine Hayles calls the introduction of reflexivity into the human-machine relationship, meaning that the audience or observers of art are part of the art that they observe. Higgins used these post-cognitive tools to produce works that exemplified his central objective, the dramatic

alteration regarding the expectation of the roles in both the artist and the viewer.

Rokeby also sees the world as a fully modern system of interrelationships; he sees the mechanics of these interrelationships as abstract and, therefore, not subjugated by names; he sees that the computer, not dissimilar to Higgins's view of theater, is a way to create an alternative world where interrelationships can be freshly defined; he believes that the experience is allowed entry into that world through interactivity and that the mirroring effect inherent in interactivity is central in producing spectator-driven content. In fact, Rokeby first saw these relationships through an art school exercise, reminiscent of Zen studies, in which he was instructed to stare out of his classroom window for two hours.

#### BLANK AS CONTENT

Dick Higgins theorized that the exploration of 'blank structures' has had a profound effect on artists' approach toward subject-matter in the latter half of the 20th century, just as form and the object had on the earlier part of the century. The concept of the blank structure has to do with the notion of systemic paradigms, which grew from Higgins's interpretation of the work of his contemporaries and the work of former avant-garde artists, such as his mentor John Cage. Blank structures are primarily shells, forms without content, always locating themselves outside the dominant paradigm. In the latter half of the century, the subject-matter was wholly explored and new structures developed as an accepted conceptual practice for generating both narrative and non-narrative works.

These blank structures imply a comprehensive ideology and result in challenging the assumed relationship between the artist and art-making, confronting the viewers' perceptual role. Higgins describes comprehending this process as finding 'the poem within the poem, the word within the word - the process as process, accepting reality as a found object, enfolding it by the edges, so to speak without

trying to distort it . . . The work becomes a matrix.' His earliest examples of blank structures appeared in the late 1950s with the goal to transform what he believed was the appalling state of theater. By deferring control of the content from artist, director, producer to the performers who brought to it whatever they believed to be relevant, Higgins centered his attention on the construction of a paradigm to embody this deferment, believing it was more important than the execution of the work: 'Why not simply give the rules if, for the moment, that's the point? Then let the individual performer work out his own performance . . .'

(p. 19, DOC).

Higgins describes *Lecture No. 7 (On Employment)* as another example of a blank structure. The 23 May 1963 score read: 'What do you have to say? Tell me about yourself.' At first glance the score seems to be neither a lecture nor a

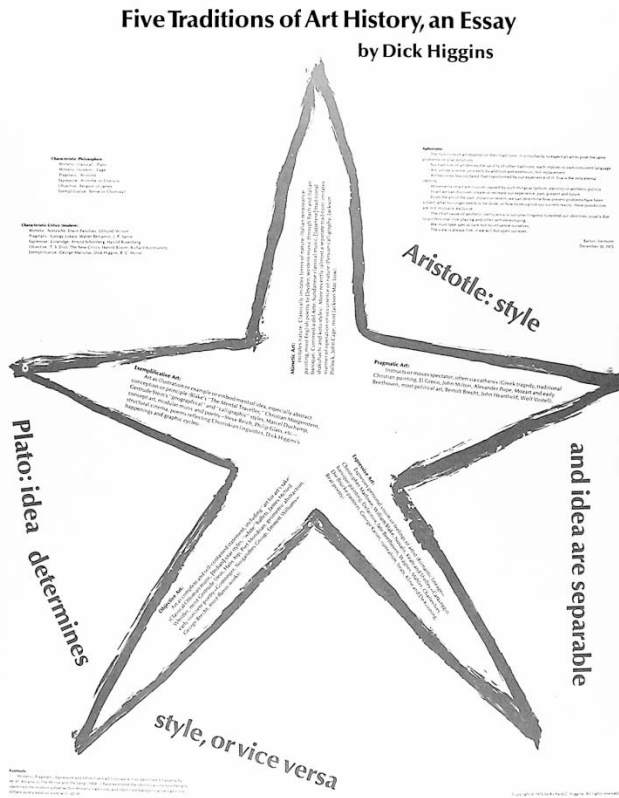
performance in any obvious sense. It is not instructional like a typical event score; however, it implies that the participant act out responses. An interview is both a real-life situation and an act, and once a spectator stumbles upon the score, an interview will always be aware of itself as a performance. Once such a paradigm is offered the relationship between art and artist, viewer and audience no longer exists in any conventional sense. Higgins explored the invented blank structure to get away from illusions and things that weren't grounded in an objective reality. 'The point - the real meaning - is not to tell us here but to show us things actually being as they are (not standing for something else . . .)' (p. 79, DOC). This is the reason John Cage's influential *4'33'* has been called the greatest piece of the 20th century. In this infamous piece in three movements, Cage rests at a piano for four minutes and thirty-three seconds, doing nothing and playing nothing for that duration. It is significant as a work in which blank content (that is content full of unabated listening) allows blank structure (or the form itself) to illuminate. *4'33'* is a work that doesn't represent anything other than what it is. Higgins attempted such illuminations in his 1967 *Scholarship* score: 'I would like to build a room where the more you put in it the emptier it becomes'; and in his more inviting 1962 piece *Danger Music No. 6*, which reads simply: 'There is nothing here'.

EXEMPLATIVIST ART

In his poster essay 'The Five Traditions of Art History', Dick Higgins outlines five categories for interpreting art: Objective, Exemplificative (later changed to Explanativist), Expressive, Pragmatic and Mimetic. Under exemplativist he describes:

Art as illustrations or example or embodiment of idea, especially abstract conception or principle (Blake's 'The Mental Traveller', Christian Morgenstern, Gertrude Stein's 'geographical' and 'calligraphic' styles, Marcel Duchamp, concept art, modular music and poetry - Steve Reich,

• Poster essay *Five Traditions of Art History*, by Dick Higgins (1976). Courtesy of the Estate of Dick Higgins



Philip Glass, etc. - structural cinema, poems reflecting Chomskian linguistics, Dick Higgins' Happenings and graphic cycles). (Footnote: It should be noted that in Higgins' poster essay he does not include most of Fluxus, many of the concrete poets, most of Gertrude Stein and George Brecht as 'exemplativist art', he instead names their work in the 'Objective Art' category. John Cage is under 'Mimetic Art.')

Exemplativist work is an example of a possible outcome of an idea, form or model. For instance, a Fluxus event score that can be considered exemplativist is the participatory score by Alison Knowles *SHOES OF YOUR CHOICE*. Here the audience is invited to come forward and describe his or her pair of shoes and why he or she likes them. Each performed outcome is an exemplativist series of descriptions and anecdotes that are both connected and unconnected, the diverse expressions are derived from a single object category – a random shoe in the audience. Knowles's paradigm pointed the audience to their own stored information and expressions relevant to their shoes. The audience provides narrative content (a syntagm), and for Higgins they also perceive the underlying exemplifying structure of the work 'not merely as an end in itself, but as a communication of the entire range of possibilities' (DH-DialecticsOC p. 157). The narrative content has been described as remarkably fascinating as to what one can learn about people through their shoes.

By creating flexible blank structures and multiple examples of work based on them, the resulting matrices form the underlying arrangement of Stein's example in which nothing breaks down into meaning something. Higgins offers insight to an experiment in exemplativist thinking when he quotes his work side-by-side Stein's in his book *Jefferson's Birthday*:

'I always remember during the war being so interested in one thing in seeing the American soldiers standing, standing and doing nothing standing for a long time not even talking but just standing and being watched by the whole French

population and their feeling the feeling of the whole population that the American soldier standing there and doing nothing impressed them as the American soldier as no soldier could impress them by doing anything.'

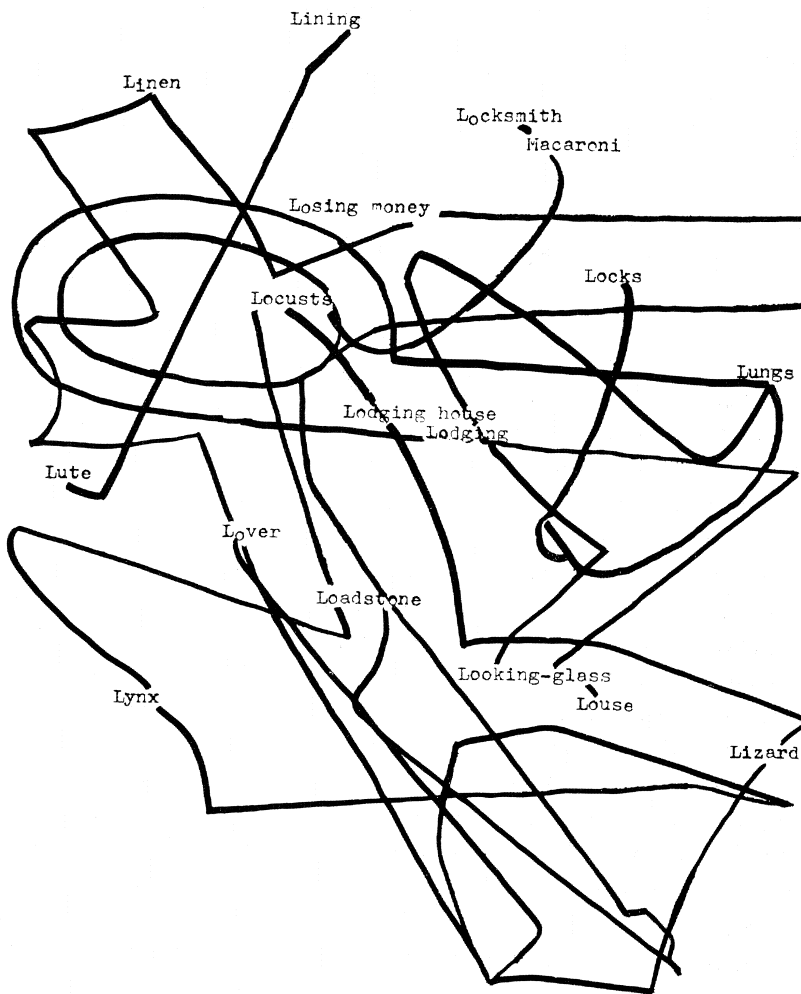
(Gertrude Stein, 1935, as quoted in *Jefferson's Birthday* by Dick Higgins, SEP, 1964)

A saint a real saint never does anything, a martyr does something but a really good saint does nothing, and so I wanted to have Four Saints who did nothing and I wrote the Four Saints in Three Acts and they did nothing and that was everything.

(*Jefferson's Birthday* by Dick Higgins, SEP, 1964)

#### RELATIVITY AND CHOICE: MANUAL MODULES OF A FINELY TUNED MACHINE

At the heart of Higgins's work is the idea that the presented work serves the spectator's received experience. These types of experiences are reference points for participation. He called these relationships 'horizons' where the work acts as a node for experience teetering between the author/artist, performer/inter-actor (if there is one) and spectator/viewer. By inverting these presumed roles, he demanded the constant flux of spectators and their experiences play a key role in developing meaning. In 1958-9, prior to his involvement with Fluxus, Dick Higgins wrote and produced new models for theater in his avant-garde pieces *Stack Deck* (along with composer Richard Maxfield), *Graphis 82* and *The Tart*. The works premiered at New York's Kaufman Auditorium, the Living Theater and Sunnyside Gardens boxing ring between 1959 and 1965. These works brought together casts that included Alison Knowles, Meredith Monk, Ettie Eisenhauer, Florence Tarlow, Ay-O, Daniel Spoerri, Philip Corner and composer Richard Maxfield, who produced the first fully computerized music score for *Stacked Deck*. These 'performance art' pieces or 'Happenings' were abstract forms of collage theater with media references such as Marilyn Monroe and Cecile B. De Mille. These examples show the experience of art-making shifting from the subjective



• The Score for *Graphis 82* by Dick Higgins (1959) performed 1962 at the Living Theater NYC. Courtesy of the Estate of Dick Higgins

position of the artist to the relative contribution of the performer and, to a lesser extent, the audience.

After studying extreme experiments in notational music from John Cage and Henry Cowell, Higgins started producing automatic notations for theater, which led to creating ready-made notations out of things he found on the street. He called these notations the *Graphis Series*: 'I stopped the more anarchistic *Graphis* where each person performed a range of possibilities so wide that only a nervous confusion prevailed, and I began to give people lists of things which

were placed in relationship to other things. . . . These activities had to happen in space and I started to draw . . . very large notations on the stage so that the performers could follow the lines and share these as well as materials.' For instance the plan for *Graphis 82* was a 20 × 24 foot polyethylene sheet laid on the performance stage. 'In this it served as set, script and script (or score) for the performance' (pp. 125-6 LE). The performers began with the word 'lung' and had to come up with an action related to the word, resolutions ranged from pantomimes to dictionary definitions. For instance, 'lung' prompted a fish pulling itself up on the land, the word 'linen' prompted someone to sew some giant bed linen, and the word 'lodge' prompted someone to sleep in it, while another described the architecture of a Scottish Abbey. Daniel Spoerri was noted for his quiet, slow walking from station to station amongst the bustle of his fellow characters (126 LE and conversation w/AK). Hence the performers brought ideas from their lives into the production. Artist Al Hansen, roommate of Higgins at the time these projects were written, described the endurance of his labor: 'It would be typical for Higgins to lie awake one morning, composing over a period of an hour or so several hundred pieces. During the next few days, working straight through, he would edit and type up all the permutations, cut stencils, mimeograph same, collate same, staple same, and by the next Sunday would be mailing a book of 100 notations all over the world' (pp. 77-81).

Cage taught Higgins that chance operations and indeterminacy were methods for producing - without exerting oneself on the natural process of the world - musical compositions free of ego. Higgins explains his chance process used in *Stacked Deck* 'in which any event can take place at any time, as long as its cue appears' (Intermedia 1966). In *Stacked Deck* each performer is cued by chance in relation to what another performer is doing; chance is further cued in relation to lighting, color, sound, phrase, etc. Not only the order of the performance but



much of the original score and the repetition within the score are subject to a complex system of cues triggered by chance. The important introduction of choice in this relative system cannot be understated. Without the insertion of an indeterminate element, the performance would have a finite situation of possible progressions and outcomes (albeit there might be thousands of them). Therefore, the concept of the ability to 'choose' became Higgins's answer to indeterminacy. In the opening remarks of the 22 1/2-minute production of *Stack Deck*, the performers are instructed in over half-a-dozen situations where they must choose: 'Lighting cues given by combinations of such colors as blue and green are to be interpreted as giving both sets of cues. The performer chooses which to follow.' Performers are prepared to recite their lines 12 different ways and enact their actions in five. 'Each performer must be prepared to make split second choices' (*Stacked Deck*). Going

beyond setting up indeterminacy and choice by the performers, Higgins also introduces audience participation. 'Since the colored lights could be used wherever they were put and audience reactions were also cueing situations, the performance-audience separation was removed . . .' (*Intermedia* 1966). The colored lights were intensified by an especially dark theater; the experience of overlapping lights intersecting on stage and on costumes such as the brilliant reflection on a red sequin dress was very abstract and mesmerizing (AK-interview).

Higgins's following experimental play *The Tart* was even more modular in its structure and was further systematized to intensify the collage effect. Each performer was symbolized as the burly man, the hungry woman, etc. Thirty-six nonverbal phrases were randomly assigned to each performer in the form of one sentence, one action, and one special effect: optical, acoustic or kinetic. He wanted the relevance to

• Still image from *Stacked Deck* by Dick Higgins (1958) performed, 1960 at the YMHA Kaufman Auditorium, NYC. Courtesy of the Estate of Dick Higgins



• Still image from *The Tart* by Dick Higgins (1965) at the Sunnyside Garden Ballroom and Arena (Boxing Ring), Queens NY.

photo: Peter Moore  
© Estate of Peter Moore/VAGA, NYC

be determined by the performance's social context, that is the people and the place in one moment in time (Happenings, Darko Suvin p. 131). Higgins also put forth a pragmatic Cage notion that psychology was an illusion and that the only meaningful qualities were tangible and physical (foew&ombwhnw, p. 51). This coincided with Higgins's desire for a post-Artaudian theater utilizing movements, words, harmonies and rhythms as a modular formula creating a single expressive gesture. Artaud dreaded the simulations of theater, such as binding a logical costume to its character, and believed that an objective and concrete language would substitute narrative illusion for a paradigm that would 'surround the organs' as it 'flows into the sensibility'. Higgins therefore avoided the explicit craft of stories and acting but one to pursue a theater where phrases, symbols and gestures were retrieved randomly from a manual database triggered by a system of cues. The phrases, symbols and gestures were derived from the media and popular culture while the cue system voided the performers' ability to create an improvisation of a compelling narrative or illusion. Narrative illusion was given up in order to resolve an Artaudian

dilemma and transcend the theater away from illusions and simulations to one that was concrete and 'realistic' (footnote: Higgins was clearly aiming at an estrangement-effect of the Brechtian type, which would prevent the audience from empathizing with the persona. -Happenings, Darko Suvin p. 131). The performers were never in dialogue with each other. They were instead engaged with what Artaud manifested as a theater of symbolic gestures whose 'innumerable meanings constitute an important part of the concrete language of the theater - evocative gestures, emotive or arbitrary attitudes . . . all the impulsive gestures, all the failed attitudes, all the slips of the mind and the tongue which reveal what might be called the impotences of speech' (Artaud). Higgins's use of chance collage was to encourage empathy with the performers, denying any possible audience empathy with their personas. 'My hope was that the audiences would sympathize with the performers (not the characters) in their social contexts' (Happenings, DH p. 131). In order to follow the modular collage format manifested by Higgins designed a chance cueing system dominated by lights. The colored stage lights initiated a data storing and retrieving system, while the technical insertion of choice (indeterminacy) redirects any loop or finite predictability the fixed database system might create. However, theoretically, choice also defied rationality by creating the compelling notion that the relevant interrelationships offered by the performer, participant, or interactor should be empowered. Higgins asserts his deferring of content to the viewer in his Fluxus event score *Danger Music No. 13*, which offers the ultimate empowerment of the viewer; it simply reads: 'Choose' (Dick Higgins, 13 April 1962).

By allowing the performers to choose, Higgins placed them within the fabricated mechanism of his rule set, allowing an engagement of the world as it is experienced by both performers and viewers (osmith). Amongst his rules were that no one spoke to each other. Further estrangement developed when recited phrases,



speeches or improvised actions were often attributed to another performer on stage. By creating a superimposition of lines and characters, objects of unusual proportions, the composition of the performance appeals to the senses. A complexity of visual richness, rhythm, asymmetry and even confusion were all desired outcomes of Higgins's early work. 'I was trying to set up a form that was unsemantic, even choreographic, in conception' (Graphis by D. H. and Letty Eisenhauer, p. 122) putting an end to Artaud's deadening simulations falsely binding actors with phrases, costumes and characteristics. He proposed a dynamic expression that named and categorized 'objects, movements, attitudes, gestures, but provided their meaning, their physiognomy, their combinations extended until they become signs and these signs become a kind of alphabet'. This ambitious system was for Artaud 'purely material', a language that 'utilizes movements, harmonies, and rhythms, but only insofar as they can converge in a kind of central expression, without favoring any particular art'.

Beyond the relative contribution of the performer being part of the art, Higgins vanguarded the notion that relevant content could also be derived from the time and location of a particular art object or event. Higgins may have derived this idea of time and space from Cage, for whom the audience and the auditorium were a unit that brought content to his performances. Higgins expanded the idea to integrate the connotation of unconventional performance spaces with his Happening 'The Tart' which was performed not in an auditorium but in a boxing ring. As Higgins described it: 'Here people come expecting combat between two men, if we have developed an aesthetic expectation in theatre, there is little of that in boxing. Style is theatre's mark while catharsis rules prize fighting. Furthermore there is something marvelous about the ring: a pedestal onto which one mounts, enacts a ritual act of (implied) violence, and goes away. The light, heavy with smoke, is broken up by the movements of the fighters, like

"atmosphere" in an impressionist painting. The setting is free from the traditional trappings of theatre and the mind is free to wander among the pillars, lights, and hot dog stands.' This romantic integration of the boxing ring is in stark contrast to Happening artists who performed that same evening but used the space as substitute for the white cube. This distinction points to Higgins's conscious validation of the importance of relativity over 'fixity' when producing meaning (Iblom p. 17). Relativity in time and location is as significant for producing meaning as the performer's subjective participation.

It would be misrepresentative of Higgins to portray him as an artist centered in theater. The interdisciplinary Higgins, who coined and theorized Intermedia art, implemented the viewers', participants' and readers' relativity into his performances, books, objects, prints, poems and paintings as well as his own bureaucratic systems, such as dating ordinary letters. A formal letter to a Hungarian curator is dated 'Alison's 36th Birthday', as if the reader, as well as Higgins, might attach some importance to what he was doing that day; in similar fashion, Higgins notes that *The Tart* was performed on Easter Sunday, 1965. Via these labeling gestures, he suggests that the triggering of a religious meal or a birthday celebration is more meaningful than the more opaque forms of indexing, titling and cataloging. Rather than cataloging his works, he offers the audience his life; rather than expressing himself, he catalogues a blank index for the audience to do so. This type of repositioning of art and audience challenges the familiar paradigms of how art is presented and perceived based on a shared responsibility of creation and reception. 'At the heart of these new roles is how the viewers' experiences can deliver the content of art . . . He calls upon us as participant observers to consider how we create and/or relate to art as well as what comprises our expectations of it' (Owen Smith, Lecture: Danger, Boredom and other

Traditions: thinking about the wor(l)d of Dick Higgins, UMBC, Oct. 14, 2003).

Occasionally this indexing of creativity backfires, and the automation of the work loops and creates other interesting technical problems. Higgins's second 1962 *Two Contributions for the Theater* included several performers carrying out short performance gestures (footnote: Nikolaj Church in Copenhagen, November 1962). The last two gestures were by Eric Andersen who chose to leave when the last performer exited the stage and by Emmett Williams who chose to leave after a certain number of audience members had left. For 50 minutes the two artists stood, one in the center and one behind a lectern, until Emmett had to relieve himself and left the stage, thus breaking the loop. (conversation with AKnowles, email from EAndersen). A more complicated, but interesting piece is *Idle Walk* by Eric Andersen. Andersen organized a participatory piece on manners to be held at the Royal Palace in Copenhagen. 165 invitees were to be well acquainted with at least five but not more than ten other invitees. Each of the invitees was permitted to bring a guest, and each participant could veto up to two other participants and companions. Many conveniences were provided and participants were offered many choices, among them 34 dishes, 40 drinks, 25 types of entertainment, 13 means of transportation and 15 newspapers. By an extreme coincidence, the number of participants who were vetoed equaled minus 23 invitees. Therefore it was impossible for the Copenhagen Royal Palace to host the performance. (EAndersen)

#### PARTICIPATION: FROM PERFORMER TO AUDIENCE

Early participatory art can be understood as *physical participation*, *closed content participation* and *open content participation*. Physical participation is where the physical body of the viewer is used as a material within the making or completing of the art. *Closed content participation* is where the viewer is invited to participate in the content within a controlled or limited

environment or even a finite set of possibilities. *Open content participation* is where the viewer brings his or her subjectivity as content to the art. This work allows a broad interpretation of voices to produce outcomes not expected by the artist.

Central to the Happening is the art of participation as it manifested to break any active/passive hierarchy within the audience. The mantra of Happenings was to force the spectators into an active position creating a circular dialog within the work. The concept of open content participation further allowed something unexpected to happen, thereby blurring art with life. However, this open participation with the Happening format often confused spectators into believing they could participate more than they were truly meant to. Sometimes participation meant the audience was physically controlled, such as in Allan Kaprow's first Happening of 1958 *18 Happenings in Six Parts*, where spectators were given instructions on how to interact with the environment. These spectators, who moved from room to room and bent in awkward positions in order to see variations of the work, were more *physical participants* than true content providers. Another piece utilizing *closed content participation* is *CHOICE 18* by Robert Bozzi that used mirrors to show the audience to itself. In this 1966 score performed by Ruckus (2001) (footnote: at UMBC Fine Arts Recital Hall), the musicians panned the audience horizontally and slowly with four full-length vanity mirrors. The combination of the panning and the mirror angles left the viewers in a perpetual state of simultaneously watching and being watched. This experience differs from a closed-circuit video in which the audience members encounter the moment they are watched. Such a moment was dispersed in *choice 18* as audience members watched friends, students, colleagues and strangers, each with a distinct view from their neighbor's view, while at the same time never being sure when their own image was being watched and, if it was, by whom. In fact an assortment of reflections of

each audience member was seen at varying moments by other audience members, and each individual had his or her own unique panoramic perspective in which to draw content. The result was a fascinating loop of voyeurism, a self-reflecting loop without feedback, with the performers on stage subservient to a window to the audience whose conscientious presence perpetually acknowledged both watching and being watched.

*Open content participation* also occurred and included physical and mental expectations beyond the artist's original intent. Because of the sometimes violent nature of the Happenings, as when a girl accidentally fell through a glass ceiling with blood spilling everywhere, many audience members believed the accident to be part of the performance (Hansen). Happenings such as Wolf Vostell's *You* provided the audience with participation cards that read: 'Consider China', 'Whistle five times', 'Say the word "banana" forty times', or 'Go to another part of the room and kiss someone . . .', etc. For the most part these *closed content participations* were safely controlled within the artist's expectations. Although *You* made no direct references to WWII, 'a small Eastern European man focused his remarks on what he believed to be the concentration camp aspect of the piece. Was this the content of the Happening or did he project this notion onto the piece?' (Hansen). Happening artists were delighted by such content projections as they blurred into the work the subjectivity of life in that moment of time and location. In Higgins's early, most experimental Graphis Series, *open content participation* allowed such a wide relative range to be input from the performers 'that only a nervous confusion prevailed', and he began making more directed pieces. As had Knowles in the earlier *SHOES OF YOUR CHOICE*, Happening artists soon learned the need for directing audience participation by balancing meaningful content with an overall performance experience. Ken Dewey's *Action Theater* began with the audience being directed into such a



*closed physical participation* - a tug-of-war - that they nearly revolted against being used as material, calling the Happening 'tyrannical and dictatorial'. One of the participants artist Al Hansen was at first disturbed by the heavy objection to the open process on the part of the audience. However, once the spectators were given the simple parameter to approach the rope as slowly as possible, the mood changed. 'Some people sat on the floor and edged toward it; others crawled slowly; some wriggled on their stomachs; some walked on tiptoe; some walked three or four abreast making a huge arc towards the rope; it was very beautiful' (Quote by Hansen?). When the participants were kneeling in the low lighting on either side of the rope, they were further instructed to consider the rope while raising it gently. Attendants raised a large triple-folded net enclosing the participants. It was described as a beautiful piece, and participants felt 'a religious experience or a ritual act of religious nature. . . . Some people wondered why the whole evening hadn't been spent doing this - it seemed so positive, so rich and unique' (56 Hansen).

• Still image from *Action Theater* by Ken Dewey (1965).  
photo: Peter Moore © Estate of Peter Moore/VAGA, NYC

An open content participatory performance assumes that a compelling illusion or gesture can be improvised from the spontaneous behavior of an unrehearsed participant. Happening artists acknowledged these unlikely moments, even referring to the shepherd's crook when speaking of unwanted participants. Artists in the 1960s observed that participation that was too specific led to feelings of tyranny and control on the part of the performer; and works that were too open led to a nervous confusion. In order to produce a rich participatory experience, the traditional spectator needed a balance of open content participation, but with direction. Direction came via a multi-subjective imagination of a single object, an instruction or a connotation that was open enough to produce indeterminate content, but focused enough to avoid a nervous confusion.

#### DAVID ROKEBY

While many third-party artists such as Toni Dove use *Very Nervous System*, an interactive hardware/software system that translates motion (changes in light) into sound to produce content, it was, however, David Rokeby who created and implemented the concept, in place of spectators dancing to music forms in response to a spectator's motion, thus clearly inverting the presumed role of observer and observed. The result is a self-reflecting loop where a person's image is mirrored repeatedly through sound. By both perceiving and responding, spectators are encouraged to become more aware of their body and the space around them. In this sense, *Very Nervous System* is a sophisticated version of Bozzis' *CHOICE 18*.

Rokeby explained that 'Part of the desire that drove me to produce *Very Nervous System* was a desire to slip out of my own self-consciousness into direct, open experience of the world . . . The feedback loop of *Very Nervous System* effectively neutralizes consciousness, and can occasionally lead to states that could best be described as shamanistic. It can be intoxicating and addictive.' Curiously similar to Rokeby's

description, Artaud lyrically describes the outcome of his hypothetical theater that is concrete, non-illusionistic and systemically modular:

this objective and concrete language of the theater serves to corner and surround the organs. It flows into the sensibility. Abandoning Western uses of speech, it turns words into incantations. It extends the voice. It utilizes vibrations and qualities of the voice. It wildly stamps in rhythms. It pile-drives sounds. It seeks to exalt, to numb, to charm, to arrest the sensibility. It releases the sense of a new lyricism of



gesture which, by its rapidity or its spatial amplitude, ultimately surpasses the lyricism of words. In short, it ends the intellectual subjugation to language by conveying the sense of a new and more profound intellectuality which hides itself under the gestures and signs, elevated to the dignity of particular exorcisms.

• Installation view of *The Giver of Names* by David Rokeby (1998).  
photo: courtesy of the artist

Rokeby later describes the neutralizing of consciousness in *Very Nervous System* as a reflex and an undesired state where participants become true McLuhan extensions of technology. A preferred state is an interface that inspires conscious reflection. Although influenced by Artaud, Higgins too preferred an art where the spectator was aware they were part of a system and reflected on their newly provided roles.

#### DIRECTION AND FILTERS

The concept of direction was adopted by interactive artists to set a balance of parameters for participation. However, software can upset that balance by adding filters to regain control. Thus, undesired participation enacted by spectators can be redirected or filtered out completely. Filters can distort or delete the participants' input, reducing content diversity rather than expanding it. Filtering is, therefore, a kind of automated shepherd's crook that can diminish a spectator's 'actual' voice so that it appears closer to that of other participants and to the intentions of the artist. To avoid a new tyranny of control, Rokeby mellows the concept of direction even further by calling it an encounter. In *Very Nervous System* he noticed that the spectators approached the work with a test. They reproduced a gesture multiple times with increasing confidence that the system was indeed responding to their movements. However, the increasing confidence slightly altered the participants' gesture, thereby potentially altering the reaction of the system. Instead of filtering out these gestures for more control, Rokeby used them to serve as information for more relative reflection.

#### THE TEXTLESS EXPERIENCE OF GIVING NAMES

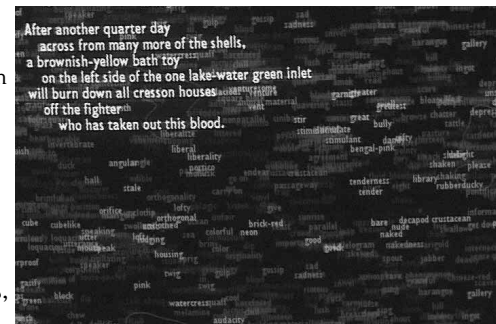
*The Giver of Names* follows Rokeby's *Very Nervous System* and is also a 10-year project that Rokeby exclusively programmed. *The Giver of Names* is a computer system that 'sees an object' and names it. A spectator is invited to place an object on a pedestal; objects are often

provided to direct content. A camera observes the object or objects and the system analyzes its color, texture, shape, scale and relationship to other objects on the pedestal. The analysis includes a dictionary, knowledge of grammar, and patterns of written behavior by Rokeby himself. To 'teach' the system, Rokeby scanned scores of literature so that textual interrelationships could be established. The result is a system operating with technically correct grammar:

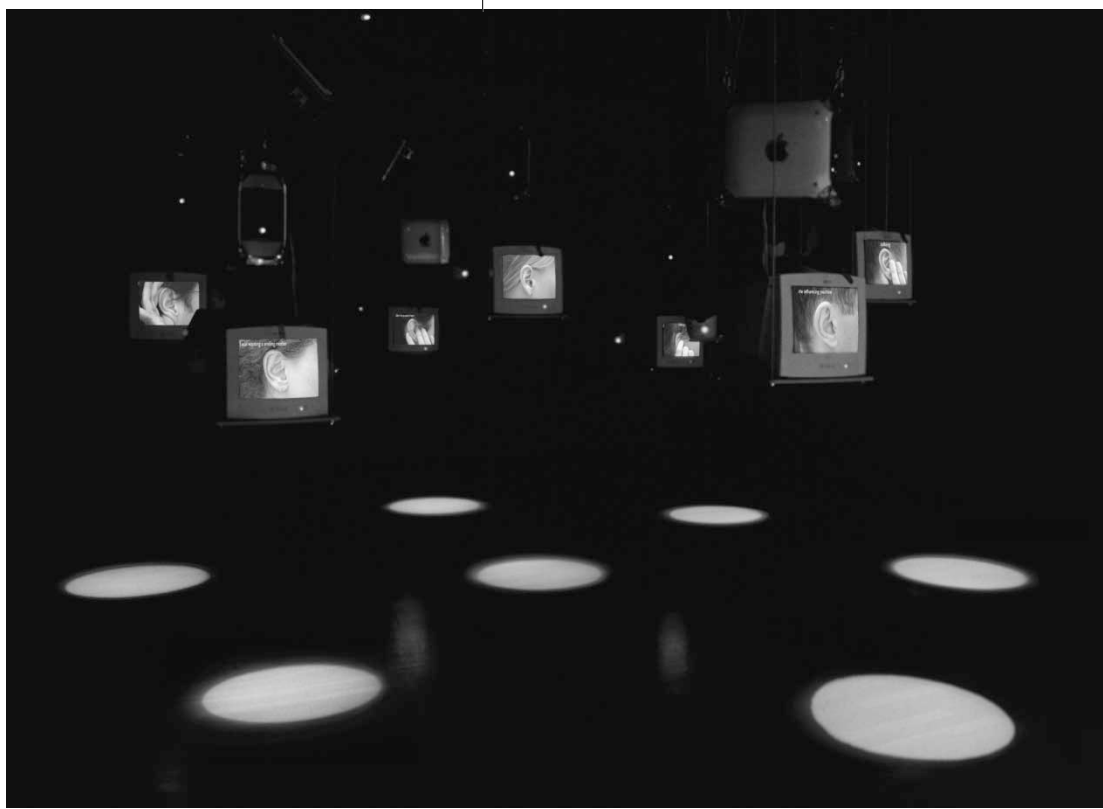
After another quarter day, across from many more of the shells, a brownish-yellow bath toy, on the left side of the one lake-water green inlet, will burn down all cresson houses, of the fighter, who has taken out this blood.

When bubbling intellectual spirit Ernestine Daubner was on his way to see *The Giver of Names*, he 'pondered how Cartesian dualism provided us with the means to consider even our own body like a thing, like a neutral object outside of oneself. With my minds-eye, I became aware . . . [h]ow much our cultural constructs influence the way we experience things, the way we conceptualize them, I wondered? To what extent was I still grounded in the aesthetic ideals of Western tradition?'

In *Very Nervous System*, Rokeby stripped and rebuilt the interface. In *The Giver of Names*, his ambition was to strip and rebuild language itself. 'It seems that we stop seeing, hearing, smelling as soon as we have positively identified something. At that point, we may as well replace the word for the object.' He re-evaluates the subjugation of language in the hope of discovering a fresh discourse mingling between gesture and thought. In this ambitious process, language itself becomes pure material and the manner in which language acts on our sensibilities is fundamentally redefined. In *Very Nervous System*, Rokeby learned that the faster any symbolic identification is comprehended, the



• Screen shot from *The Giver of Names* by David Rokeby (1998).  
photo: courtesy of the artist



• Installation view of *n-Cha(n)t* by David Rokeby (2001).  
photo: courtesy of the artist

more likely individuals will live in 'a world of predigested and abstracted memories'. The efficiency of speed moving from thing to thing inhibits the consideration of the gaps which are being skipped. He didn't want to build an experience in the world of symbols; he wanted to point to the relative gaps that the symbols represent. For his language, he favored a relative means for sensing the environment as it existed both within the system and within the daily lives of the spectator to the system. For example, after *The Giver of Names* responded to Daubner's choice of a yellow toy Volkswagen with 'Lemons, more eyeless than other beady sectors, would pardon no optical drops', Daubner began to put meaning together relative to his earlier-mentioned thought process: 'Do these words not deal with the very issue I had been thinking about a few minutes earlier: about being eyeless, oblivious or blind to my perception of genuine beauty?'

Rokeby exploits this 'tight conspiracy between perception and language' in *The Giver of Names*, enabling the content of each and every viewer to bring meaning to his structure. In turn the interactors receive a fresh yet abstract interpretation that speaks to their yearning to close the gap between word and

object. The shape of a stone for example already has a name, but Rokeby reinforces that the word stone has been substituted for the actual stone. (footnote: This is also the fundamental concept behind Toby MacLennan's *The Shape of the Stone is Stoneshaped*, who authored another book published by Higgins.) Rokeby's system offers a broad interval between word and object. He asks his audience to imaginatively infuse fresh meaning into the familiar object-symbol relationship. The emphasis in *The Giver of Names* is on what Rokeby's system does not make explicit, and that is a perception between symbols, whereas the participants' imaginative leap is both their *naïveté* and illumination. In the same way that Higgins's characters were never in dialog with each other, Rokeby's chance retrieval collage discourages compelling narrative or illusion. Instead *The Giver of Names* encourages the real life of spectators such as Daubner where the art exchange becomes a dialog with oneself, not with the art object - the interactive objects such as the toy car. Here the database paradigm is given material existence while the narrative syntagm is dematerialized in Daubner's imagination. 'Paradigm is privileged, syntagm is downplayed' (Manovich). Both Higgins and Rokeby reverse

the expected illusion (or syntagm) in favor of a paradigm that is concrete and realistic. As Manovich says, the ‘paradigm is real; syntagm, virtual.’

THRICE SEVEN XIX - The Wind  
A child shouts into the wind  
And the wind  
Plasters his words all over his face.

(Dick Higgins)

In Rokeby’s exploration to produce new paradigms for subject matter, he created works that organize learned ideas and literary and syntactical relationships as modular retrieval categories, not dissimilar to Artaud’s manifestation where objects, and movements and gestures can be categorized into symbols and retrieved modularly - similar to an alphabet - which in 1938 he thought of as a language that was ‘purely material’. Artaud’s statement foresaw the software artist utilizing the pure material of software code in much the same way. Rokeby’s code precisely distinguishes both what Artaud was trying to get away from and what he was manifesting. *The Giver of Names* points to the limitations compared with human dialog. Artaud, who was so influential to Higgins, prioritizes the expressive possibilities of database paradigms because they are free from the deadly illusions of narrative dialogs. Rokeby points to human narrative while avoiding the simulation of theater. Instead he calls upon spectators to make use of his paradigm as a stand-in for observing in order to point to the rich perception of human dialog in real life.

#### FEEDBACK LOOPS

The installation *n-Cha(n)t* (2001) is an extended exemplative of *The Giver of Names*. When entering *n-Cha(n)t* one finds a room full of computer monitors with images of ears listening to the words spoken by visiting spectators. The participatory input is facilitated by a microphone and by speech recognition software. If the viewer speaks, the computers begin chattering first individually, then in a linguistic chorus within the room

full of networked computers. Without further input, the computers gradually find a common voice, their chattering subsiding into a sonorous, collective chant. ‘Coming across them at this moment, it is as if the viewer has entered a medieval cloister in which a haunting chorus of words fills the space with a sacred residue.’

*n-Cha(n)t* predicates its content on an audience that is part of a generation that has to a certain point accepted the logic of science, and other cultural mechanizations as generators of governing truth. Through Rokeby’s subversion these belief systems can actually be seen for what they are when left to their own prejudicial devices. Under these conditions, the spectator’s rational belief systems are delighted, shattered and possibly haunted by the logical patterns of behavior. When the participant enters Rokeby’s systems, all familiar namings of roles are rewritten. If the spectators allow their raw perceptions to embrace Rokeby’s modular system of logic, they are subjected to a slippery subversion of rationality that alters their understanding of the tools that are supposed to logically filter the world. Under these conditions, the spectator’s rational belief systems are delighted, shattered and possibly haunted by the logical patterns of behavior. When a participant enters Rokeby’s systems, all familiar naming of roles is rewritten. If the spectators allow their raw perceptions to embrace Rokeby’s modular system of logic, they are subjected to a slippery subversion of rationality that alters their understanding of the tools that are supposed to logically filter the world.

#### CONCLUSIONS

Rokeby defines interactivity as a leap from the context of John Cage’s systems of chance and indeterminacy: ‘The structure of interactive artworks can be very similar to those used by Cage in his chance compositions. The primary difference is that the chance element is replaced by a complex, indeterminate yet sentient element, the spectator. Whereas Cage’s intent is

to mirror nature's manner of operation, the interactive artist holds up the mirror to the spectator.' Higgins's chance compositions, such as the chance dialog triggered by colored lights in *Stacked Deck*, are also similar procedurally to chance systems used by Cage. Through Cage, Higgins's chance cueing system alone, once set in motion, had the undesired predicament of having a pre-determined outcome, like a domino effect. Also because of the 'if cued by x, then execute y; if cued by y, then execute z' statements written into the *Stacked Deck* script/score, the chance cueing element system creates a finite number of procedural outcomes. Higgins doesn't replace chance; he supplements chance with indeterminacy in the form of choice offered to the performers and spectators. Higgins distinguishes himself from Cage's mimetic approach by developing an exemplarist approach, where the choice of first the performer, then the audience is reflected in the final content. Furthermore, when Higgins holds the mirror up to popular culture, including the actual boxing ring that holds the art, he is reflecting the relevant time and space as well as the participation of people.

Rokeby further distinguishes his mirror from that of Cage. Unlike Cage's work, Rokeby's interactive work involves a dialogue between the interactor and the system making up the artwork. 'A feedback system is created in which the implications of an action are multiplied, much as people are reflected into infinity by the two facing mirrors in a barber shop.' In Higgins's experiments in theater, the performer's response is engaged and affected by the actions of other performers. A feedback loop was possible and easier to control in a manual system. For instance, while Higgins worked out feedback loops during rehearsal, loops did occasionally happen as in 'Idle Walk' when the parameters of the art canceled the performance at the Royal Palace (email, Eandersen).

Dick Higgins and David Rokeby brought the ordinary life expressions of participants into their art. Both artists created a form of

scripting, which often generated a form of non-narrative poetry. They both subscribed to the notion that art is always relative to the spectator's ideas, thoughts and expressions, and their works were literally incomplete without the performance of others who provided content to their pieces. Their aim was to create carefully directed blank structures or exoskeletons within which content could be inspired. Choice or interactivity was the method for inviting content. Furthermore, they both gave direction within choice to avoid solely depending on the participation of an uninspired performer and, therefore, risking clichéd content. While both artists freely gave or sold their work for others to perform, they engaged in exemplarist thinking, continuously providing examples of their own content for their conceptual structures.

The main distinction within this discussion is that once Higgins's manual, mechanical process was transformed and his performances were replaced by the computer, intercepting the unnatural stigma of having created a closed system was no longer necessary. What Rokeby saw was that once the computer became a household representation of a rational world, then exposing the prejudicial flaws of what culture created could be a subversive and poetic asset. Avoiding intercepting that world with indeterminacy is what Rokeby exploits. Both artists offer a poetic exposition of how our cultural capital promises to make us modern. The distinction of *n-Cha(n)t* is that it builds on the compositional and experiential knowledge of a previous generation but lives within a computer generation able to observe and expose the flawed product manifesting that cultural promise, a computerized reflection of our own desire.

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