Vera Frenkel’s String Games and the Germination of New Media Art in Canada

Published by

Tremblay, Pierre and Louise Poissant.
Ensemble ailleurs - Together Elsewhere.
Presses de l'Université du Québec, 2011.

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https://muse.jhu.edu/book/20354
In 2005 I began research for my dissertation Shifting Polarities: Electronic Media Art and Institutional Space 1970-1990. My intention was to contribute to a reconstruction, or perhaps construction, of the excluded history of early new media art, or electronic media art (my term of preference), through an acknowledgment of the work’s triangulated ontology as derived from the histories of art, science, and technology. My own experience in Science drew me to kinetic and early digital practices in art while a student at OCAD in the 1980s. My belief was that the work being produced during the analogue/digital shift was at the vanguard of art practice, and the computer would insert itself rapidly into those practices either as a tool or as content. Unfortunately, this was a naïve assumption and the promise of electronic media waned into invisibility, at least until the domestication of PCs in the mid-1990s. Consequently, the rise of new media has affected modes of curatorial practice and exhibition of this interdisciplinary genre. This enthusiasm is welcome, precipitating much-needed and long-overdue institutional change. However, the lag between the initial phase of experimentation with new technologies and its acceptance as a legitimate method of art production has resulted in a historical gap in museum collections, and a
dearth of literature dealing with art incorporating new technologies between 1970 and 1990. This is not to say there weren’t exceptions. The Electric Gallery in Toronto, owned and run by Sam and Jack Markle, emerged as a champion of electronic media art, showing such artists as Michael Hayden and Norman White. But the exhibition of this genre within the museum was all but absent. Fortunately, there were exceptions.

In 1977 Mayo Graham curated the exhibition Another Dimension at the National Gallery of Canada. This exhibition included works by Norman White, Ian Carr-Harris, Murray Favro, and Michael Snow. For Graham this exhibition was an experiment to probe the mechanics of perception, but it was also a showcase for artists who were drawing from the scientific disciplines of physics and engineering to produce work that foreshadowed interactive new media. Now the fact that there were no women represented in this show is not that surprising. It was 1977 after all. The pressure was felt, but the guerilla girls were not yet on the scene scrutinizing museum institutions through their canny feminist critique of gender representation in collections. But what is surprising is that Vera Frenkel’s ground-breaking work String Games was not represented in some way, considering it was produced three years prior, in 1974.

String Games: Improvisations for Inter-City Video drew its form and its content from the fixed arrangement of seats in Bell Canada’s early teleconferencing centres. The company developed the facilities for face-to-face discussion with out-of-town colleagues, and Frenkel was fortunate to be invited to test their capacity. The physical setup at the two teleconferencing sites incorporated five studio chairs that sat like knuckles behind semi-circular tables, acting like wrists, facing four fixed cameras, three to take in the visual field and one overhead. The centre seat had access to a hidden control panel that enabled the operation of the cameras. A Faxcom machine was on site, but coincidentally inoperable during the sessions, hindering the plan to exchange text and images during the performance – an indication of how early this endeavour was in terms of art and technology.

Cat’s Cradle is a game existing in similar form across cultures, using tied string linked between the two hands. Looping the string back and forth produces various figures that have different names in different cultures, such as Soldier’s Bed or Fish in a Dish for the same configuration. Frenkel’s decision to perform a non-string version of Cat’s Cradle with bodies standing in for digits required choreography based on the string figures. As in the original game, the “hands” would face each other, one in Montreal and one in Toronto. Frenkel explains how “each player would learn the movements of a particular finger in all the figures, and could contribute to the improvisation in the same order as that finger would manipulate the string, if we were playing with a string loop rather than a video connection at a distance of 350 miles. The eight...
string figures meant eight sets of movements for ten players to learn. These sets of movements were the ordering principles for the piece” (1978, p. 13). Prior to the studio performance, Toronto performers learned the movements using a large rope, on the street in front of Fifteen Dance Laboratorium. The players then shifted positions in order to achieve the new figures. Previously, the players had been asked to choose nine components: a number, a letter, a word, a name, a sentence, a fragment of a poem, a visual image, a gesture and a sound. This ensured personal contributions from each player, but it also added to the indeterminate nature of the piece itself. Physical movements were replaced with words, names, gestures, and it was at that point that play could begin.

Once play had ensued, the group was able to participate in a call-and-response manner that Frenkel described as “somewhere between a square-dance, sound poetry and prayer. The combination of these was at times surprisingly moving; surprising perhaps because of the openness of presentation” (ibid.). During the performance it was possible to play “each figure in two ways; according to where the fingers are when a figure is achieved, or according to what they do while transforming one figure into another. In both these modes players in one city were seemingly facing players in another. We could see each other frontally on studio monitors. We were shown to each other via fixed cameras” (ibid.). Reading the descriptions of this complex work one experiences an odd déjà-vu. As I, and we, struggle to define newer media Frenkel’s grasp on technology’s effect is shockingly prescient for 1974. She states, “The piece was located at a nexus between two formats; a very old universal one, the string game, was re-enacted and transformed via a newly developed one; video transmission” (ibid.) – not just video, but video transmission between cities in real time. The potential for interaction and learning offered through this technological nexus was fully evident to Frenkel.

Steven Johnson argues that the defining experience of new media is a combination of the medium, the message and the rules (2001, p. 158). Games come with rules, and Frenkel’s was orchestrated to comply with a particular set of protocols. In Emergence: The Connected Lives of Ants, Brains, Cities and Software, Johnson discusses emergence as fundamental to new media structures and programs. Beginning with biologist Evelyn Fox Keller’s and the mathematician Lee Segel’s groundbreaking research into aggregate behaviour in slime molds, now seen as a “classic case study in bottom-up behaviour” (ibid., p. 16), Johnson shows that the paradigm of emergence exists across numerous systems. From ant colonies to the sidewalk-generated designs of urban centres to the movement of news stories through the media, emergent behaviour is a “mix of order and anarchy” (p. 38). Katherine Hayles defines this dynamic of complexity and self-organization:
The idea is to begin with a few simple rules and then, through structures that are highly recursive, allow complexity to emerge spontaneously. Emergence implies that properties or programs appear on their own, often developing in ways not anticipated by the person who created the simulation. Structures that lead to emergence typically involve complex feedback loops in which the outputs of a system are repeatedly fed back in as input. As the recursive looping continues, small deviations can quickly become magnified, leading to complex interactions and unpredictable evolutions associated with emergence (Hayles, 1999, p. 225).

The non-hierarchical nature of emergence is based on the establishment of rules that generate a system of increasing complexity.

Vera Frenkel

String Games: Improvisations for Inter-City Video (Montreal-Toronto) 1974-2005
1974/2005
2 60-minutes DVDs (1/3), 10 digital prints mounted on panels
1 hand-bound catalogue (String Games: Improvisations for Inter-City Video) and
2 1974 event posters
Collection of the Agnes Etherington Art Centre, Queen’s University
Gift of the Artist, 2006
49-026

String Games was an emergent art work, predicting all the elements that would eventually compose future new media projects – rules, emergence, interactivity, and, of course, the ever-present phantasmagoric screen, with which for some reason we cannot bear to part. In reading the original catalogue for the 1974 “happening,” what struck me was not just the exploration of modes of play, but also the respect for participants, who were invited to make their own contributions to the work. Formal structures put in place as rules in String
Games provided a means to recognize how our individual characteristics – likes, dislikes, gestures, habits – can intervene and manipulate the technology with which we have co-evolved.

In order to determine the raison d'être behind the initial exclusion of String Games from early institutional narratives of electronic media, and its resurgence as a work of note that predicted the millennial fervour of new media art, I will analyse qualities of the work that lead both to its exclusion and to its present renown. Is it a coincidence that Frenkel is not included in Another Dimension? I begin this argument with two exhibitions curated by Mayo Graham that took place sequentially in 1977 and 1978 at the National Gallery of Canada (NGC). The first, Another Dimension, included works by Ian Carr-Harris, Murray Favro, Michael Snow and Norman White, as well as a performance by Toby McLennan, and a video series that included work by the artist collective General Idea. The opening featured Michael Snow’s improv jazz band, the CCMC, as well as the London, Ontario-based Nihilist Spasm Band, of which Murray Favro was, and still is, a member. The four artists featured in the NGC exhibition proper were each invited to produce one new work, making up the elements of the travelling exhibition Another Dimension II, which toured to the Vancouver Art Gallery, the Alberta College of Art in Calgary, the Southern Alberta Art Gallery in Lethbridge and the London Art Gallery in London, Ontario. There is also a good chance that the curator, Mayo Graham, was unaware of String Games in any substantial way. All the artists included in the exhibition had work within the collection of the National Gallery of Canada, whereas Frenkel did not. Also, the documentation existing within the realm of the artist-run centre would place the work outside the institutional parameter within which Graham was functioning. But one can also consider a gender analysis of Frenkel’s exclusion that cuts two ways. First, her exclusion from the exhibition acts as evidence of the narrow representation of women within the collection of the National Gallery of Canada in 1975/76 when Another Dimension and Another Dimension II took place. Second, the exclusion of women from both supported a “boys with their toys” stereotype that was aimed at artists working with technology during the shift from analogue to digital, arguably as detrimental to men as to women. Frenkel articulated her position as a woman working with technology:

I’ve arrived at the way I work in great isolation partly because of the generation I am a member of, partly because women, during most of my working life, were meant to be invisible and treated as such, and some of these projects never saw the light of day until long after they were created.¹

¹. All quotations attributed to Frenkel are taken from my interview with her on June 6, 2006, at Akau Gallery in Toronto, Ontario, unless otherwise noted.
With respect to *String Games*, references to innovation are most often tied to the medium itself, telecommunications technologies that send information and knowledge across time and space. This particular medium was a digression for Frenkel from her œuvre, which had, until that time, been based in the more traditional medium of printmaking. Her longstanding involvement with video was subsequent to this work. In my interview with her she states the following:

Video, I kind of backed into. I had been invited by Véhicule [an ARC] in Montreal and by Espace 5 [a commercial gallery] and I wanted to circuit a relationship between the two exhibitions, and discovered that Bell Canada would charge fifteen thousand dollars to lay a cable, but that didn’t include getting the necessary permissions and licenses…. For me it was the equivalent of what fifty thousand dollars would be today. Over the course of the conversation with the engineers, when I explained what I wanted to do, one said that I might be interested in their new teleconferencing centre. They were just finished developing it and it turned out that they were interested in testing it. It was a black and white, real time, teleconferencing facility with studios in two paired cities, and I was interested in Toronto and Montreal… I’m lucky that I had a chance to work with that, and really I was responding, not so much to the technology, but to the configuration of the facility itself as they had designed it – permanent semi-circular consoles with five seats behind them, and in the middle was the interface, the control panel, [which] faced a wall of monitors that allowed you to see whatever image you were transmitting and whatever was being received. So, you had this instantaneous mapping of those exchanges, and when I saw that semi-circular console I thought, oh, it’s like a hand, five fingers. I can put a hand in each city and we can play *Le berceau* in French, *Cat’s Cradle* in English, as a matrix for the performance. That way I can connect, not the two galleries, but the two cities and we can then replay both sides of this exchange; in the gallery that’s what we did.

Following Frenkel’s train of thought we witness the evolution of the work and of her decision to use the teleconferencing facility to play a game.

Theories of communication emerging in the 1950s and 1960s from theorists Harold Innis and Marshall McLuhan provide reinforcement for the prescient nature of *String Games*. In *The Bias of Communication* (1951), Harold Innis emphasizes that the medium of communication influences the distribution of knowledge over space and time. He points out that it is the study of the characteristics of the medium that will enable us to consider its cultural influence. “The relative emphasis on time or space will imply a bias of significance to the culture in which it is embedded” (p. 33). What has so often been attributed to Marshall McLuhan – the medium is the message – is really the fruit of Innis’ analysis. In *Marshall McLuhan: Cosmic Media*, Janine Marchessault
extrapolates from the philosopher's sweeping application of this concept, from art history to philosophy, to physics, and experimental medicine (p. 173), to point out that media produce environmental effects in conjunction with the messages they are transmitting, thus extending Donald McKay's theory of the context of transmission. In *Understanding Media* (1964), McLuhan argues that “it is the medium that shapes and controls the scale and form of human association and action” (p. 9). McLuhan supports this argument with several examples, beginning with the electric light bulb, suggesting that the activities being lit are perhaps the content of electric light. For Marchessault lack of tangible content in electric light weakens McLuhan's position. But the discovery at IBM that it was in the business of processing information, rather than producing business machines, led Marchessault to realize the veracity of McLuhan's “medium as message” tenet. Further, in her discussion of McLuhan's reading of media, Marchessault states that ultimately it was not how technologies were used that interested the philosopher, but “the uses that technologies create” (p. 175). She supports this through a quotation from his letters: “All I am saying is that any product or innovation creates both service and disservice environments which reshape human attitudes” (McLuhan, quoted in Marchessault, 2005, p. 175).

Frenkel is acutely aware of her own lack of interest in technology itself:

For a very long time I was very grumpy about technology, and I might have been grumpy about the hype around it, and I was surrounded for a long period of time by the work of artists who assume that technology is an important aspect of their work, who were enthralled to it. I always thought of it as a moveable feast. I always thought of it as rapidly changing, subject to all kinds of myths and notions and overly respected.

Frenkel recalls a statement by McLuhan, made during an interview on the television series *This Hour Has Seven Days*:

And I was delighted to hear him say that he didn't particularly care for technology, but he saw it as this large creature rolling over him that he wanted to examine as it rolled over him, and he saw both technology, and his relationship to it, as a form of inquiry, and that has made me, in some ways, marginalized in relation to much of the ongoing practice in Canada. I'm disrespectful of technology per se, but I am very respectful of what can be done with it.

The arms-length position taken by Frenkel belies her current practice embedded in new media, a legacy that began with *String Games*. The trajectory of Frenkel's work from print, to video, to installation, to interactive web works is suggestive of the artist's adaptation to media, but the reality is quite the opposite, with the media instead adapting to the artist:
I must say that the first time I did a project online, which was Body Missing (1995), I felt completely at home. And I realized that I had been doing multiple narratives, and multiple exchanges, and open-ended outcomes in all my work. I thought “they’ve invented the Internet for me.” I took it very personally. I felt like it was the water I had always swam in. Not altogether true, but that’s how it felt; it was reciprocal. The work evolved in ways that the technology made possible, but I also sought out technology as a way to do certain things.

As Frenkel moved from video into cyberspace her work migrated from one medium to another, quite seamlessly. Fragmented narratives (Body Missing [1995]), cheeky stories of deception and fictive personalities (The Secret Life of Cornelia Lumsden [1979/86]), as well as invented institutions for the future welfare of artists (The Institute, or What We Do for Love [2003]) find an easy home in digital technology, with lives both in the gallery and online. This process of media migration has preoccupied the centre for Documentation and Conservation of the Media Arts Heritage (DOCAM), for some time. Situated within the Daniel Langlois Foundation for Art, Science and Technology in Montreal, it focuses on the present crisis in media preservation, paying particular attention to art works in media that become obsolete within a few years of production. Invited to speak about her ease with media migration, Vera Frenkel was the keynote speaker at the 2006 DOCAM summit. Rather than succumbing to the obsolete, Frenkel’s works embrace new platforms as they become available: what was a video on a monitor is now a QuickTime movie online. The following provides a more concrete example: “A voice-over text for the ‘cargo-cult’ passage in a performance work (Mad for Bliss, Toronto, 1989) becomes the narrative armature for a videotape (This Is Your Messiah Speaking, Newcastle, 1990), which in turn, transmutes into an animation sequence for the Piccadilly Circus Spectacolor Board (Messiah Speaking, London, 1991)” (2005, p. 146).

While her process of media migration may create challenges of articulation for Frenkel, it makes her exemplary in terms of how an artist might consider adapting to the rate of change of technology. She expresses her frustration:

And yet, the truth is that it’s nearly impossible for me to talk about my work. Not only because the projects travel and each different venue requires that the work be physically reconfigured; not only because the conceptual climates into which the work is received are in constant flux; not only because the media I place in combination and allow to interrogate each other invite destabilizing contradictions; and not only because once an exhibition is over, the work disappears […] But the most elusive aspect of my practice, the characteristic that is both its strength and its nemesis resides in the transitions that occur as a work migrates from one medium to another, reemerging, like any mischievous shape-shifter, as something else (2005, p. 143).
Frenkel’s reference to the shape-shifter in this passage is an apt metaphor, not only for her work but also for herself as an artist, easily mutating as the work requires her to do. Not just a shape-shifter but also a trickster, Frenkel eludes categorization. And what was she doing as a printmaker and a woman, dabbling in telecommunications in 1974? In fact, not just dabbling, but playing games, using monuments of technological nationalism as a vehicle for a cat’s cradle. The irreverence this suggests takes us back to Frenkel’s identification with McLuhan and his relationship to technology as a creature rolling over him. When Frenkel has the opportunity to work in the telecommunications studio, a facility bound up with protocols and rules, she makes the decision to use some of the first protocols we are introduced to as children, the protocols and rules of games and gaming. Once again, her instincts are dead on, and we find evidence of such in McLuhan’s analysis of games in relation to technology:

Games, like institutions, are extensions of social man and the body politic, as technologies are extensions of the animal organism. Both games and technologies are counter-irritants or ways of adjusting to the stress of the specialized actions that occur in any social group. As extensions of the popular response to the workaday stress, games become faithful models of a culture. They incorporate both the action and the reaction of whole populations in a single dynamic (Frenkel, 2005, p. 235).

Artists are often intuitive in their decision making, responding in the moment to something that has the potential to carry meaning, in this case five chairs representing five fingers. According to Graeme Sullivan, this is the artist’s methodological strength (Sullivan, 2005, p. 201). To base an artwork on a game also invites indeterminate outcomes, especially when the “players” can insert their own texts as part of the rules. For McLuhan, the uncertainty of the outcome of the game provides a rational excuse for the rules and procedures. In Emergence: The Connected Lives of Ants, Brains, Cities and Software, the cultural theorist Steven Johnson sees rules as the defining structural shift in new media. Although his discussion focuses on emergence as observed in biology, urban planning, media journalism and artificial life, Johnson proposes a re-framing of new media, and does so by examining the procedures incumbent on users of certain Internet sites such as Slashdot.

In String Games the rules determine the mode of play, but more than that, they are elements of the work itself. The distributed network of actors, the studio/corporate space, the attendant technologies, the transmitted images and responses, and the rules of play all comprise the art that is String Games. The following characteristics of the work demonstrate how prophetic String Games was for new media art practice: the distributed network of actors, the real-time transmission of images, the use of a program as governor, the incorporation of randomness into the system through user contributions, the
interdisciplinary nature of the work. But I believe it is the decision to create rules, open to user interpretation, that catapulted this work out of a 1970s video/performance mode into the new media realm.

There were three transmissions. The first transmission, named the “Rehearsal” (October 30, 1974), was a test of the facility. The second “Enactment” (November 6, 1974) had the performers playing freely, and the third (November 13, 1974) was an opportunity for the “hands” to meet in Toronto, while Frenkel remained in Montreal, reviewing the event from that position through commentary and on-screen drawings.

The nine-hour document of the “Enactment” was shown at Espace 5 in Montreal during November 1974. Excerpts from the original documentation were also shown at the Film/Vidéo/Ordinateur festival in Paris, as well as in a larger program focusing on Frenkel’s work at the Images Festival in Toronto. Most recently, the work was included in the exhibition this is the place at InterAccess in Toronto, September 2005, as part of their twenty-fifth anniversary celebrations.

Within Canada there are few artist-run centres (ARCs) which include the exhibition of electronic or new media art as part of their mandate. In the 1970s there were even fewer, since it was the decade during which the ARCs emerged. One such centre, Western Front, was launched in 1972 when composer Martin Bartlett approached a collective of artist friends – Mo Van Nostrand, Kate Craig, Henry Greenhow, Glenn Lewis, Eric Metcalfe, Michael Morris, Vincent Trasov – to become shareholders in the former Knights of Pythias Hall in Vancouver. Zoning of the building allowed only non-profit activities to occur there, which suited the collective well since all were artists looking for a place to work or, as stated in the acknowledgements of Whispered Art History: Twenty Years at Western Front, looking for a place to create their own culture. As well as being shareholders in this experimental venture, the above-listed artists were also participants in the Eternal Network, a term used by Fluxus artist Robert Filiou to illustrate his belief that artists should “be in communication at all times in all places without dependency upon the art establishment” (Wallace, 1993, p. 2). The network proposed by Filiou was a means to counter the notion that the artist must live in a metropolis in order to maintain contact with the community.

Filiou’s prescient ideal later came to fruition with networking web technologies, but when he first proposed the network in 1963 communications technologies were still in the analogue phase, at least for the general public. In fact, activities at Western Front did not reflect this communications initiative until well into the 1970s, since video was the medium initially embraced by the Front. This was also the legacy it inherited from its progenitor, the
artist-run collective *Intermedia*, which purchased an early Sony ½-inch reel-to-reel Portapak in the late sixties, placing the artist-run collective at the vanguard of Canadian artistic practice. In 1973, the Vancouver Art Gallery hosted the Matrix Conference, enabling video artists from around the world to meet, exchange ideas, and screen work, causing local artists to re-evaluate the direction their own work was taking (Knights, 1993, p. 165). Western Front emerged this same year and the eventual preoccupation with video is reflected in the chronology listed in *Whispered Art History*. The chronology also demonstrates the interdisciplinary nature of the centre as events from music, dance, visual art, literature readings, and performance are part of the repertoire. With only one video event – Michael Goldberg’s *Chain of Kisses* – amongst the fifty-three listed in 1974, one can assume there was a lag between the will to make such work and the technological capacity to produce it. In 1975 the Front purchased its first editing system and hosted six screenings by Canadian artists, as well as several by American artists, programming a blend of video and performance – and eventually new technologies – a blend that was, and still is, Western Front’s exemplary contribution to Canadian art.

Piecing together the history of art utilizing telecommunications from the record that Western Front provides, along with the persuasiveness of the “official” chronology, one might be led to think of the Western Front, and the artists it hosted, as the vanguard of new media in Canada. Under the year 1978, in *Whispered Art History*, the following appears: *For Continuous Use League*: an exhibition by four artists – Bill Bartlett, Peggy Cady, Jim Corte, Tom Gore –, all of whom were investigating image regeneration, and transformation through transportation, communication, and transmutation. Accompanying this listing is the following statement, “Bill Bartlett was the first person to organize artists’ telecommunications projects in Canada.” There is no doubt that Bartlett’s and the contribution of others were unprecedented in some ways, but Frenkel produced *String Games* four years prior to the 1978 exhibition. In fact, in Western Front’s chronology, it is not until 1979 that an events category is devoted to telecommunications. Bill Bartlett’s *Direct Media Association*, based at Open Space in Victoria, connected twenty-two artist-run centres in cooperation with I.P. Sharp Associates computer mailbox to transmit incoming and outgoing messages that the recipient could print as text, or intercut.

I have described this early history of Western Front to situate *String Games* within the larger history of art incorporating new technologies in Canada in the 1970s, and to establish the pioneering nature of Frenkel’s work relative to broader artistic experimentation with communications technologies.

Networked-collaborative artworks utilizing telecommunications technologies were sporadically practiced into the 1980s. Roy Ascott’s *La plissure du texte* was one such project that included the participation of Canadian artists
acting as one node in an international network of collaborators. There were fourteen nodes including Vienna, Amsterdam, Hawaii, etc. Ascott describes the process herein:

And to each node I ascribed an archetypical fairytale character [...] Over a period of three weeks started a narrative, that could be either in English or in French, it wasn’t a matter of translation, had to be just English or French because it was IN Paris, and so forth. To start it off – I played the part of a magician in Paris, so I would naturally say, “Once upon a time...” and then others from their point of view – the Wicked Witch or whatsoever – would pick up the narrative, and develop it online. So what was happening was you would go on line, and you would see the story so far, and then input (Ascott, n.d.).

These were curious projects shifting the universe in the direction of the domestication of networked communications technologies. Robert Adrian X, an artist who participated in La plissure du texte in Vienna, shared this thought regarding the work being done by artists at that time and I share it with you here to close this discussion:

I’m inclined to think that we need new models. After doing a few telecomm projects (early 80s) and trying to cope with the (apparent?) incommensurability between traditional (industrial) art practice and the figurative practice of working with electricity, code and telephones, I began to wonder if “art” was the right word to describe the stuff we were doing with telecomm. I mean, there was not discernable product or material substance – nothing collectible – nothing for the critic to get his/her teeth into, no tradition or history. Just a few Polaroid snaps, and fading faxes, low-res video, chit-chat printout. Machines are on: its here – machines are off: its gone!²

Works Cited


FRENKEL, Vera (2005). Intermédialités, no. 6, fall.


INNIS, Harold (1951). The Bias of Communication, Toronto, University of Toronto Press.

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² E-mail communication between Ihor Holubizky and Robert Adrian X. I am indebted to Holubizky for making this text available to me.


WALLACE, Keith (1993). Whispered Art History: Twenty Years at Western Front, Vancouver, Arsenal Pulp Press.