N.E. Thing Co. Ltd.
The Logic of Sensitivity, Part 1

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N.E. Thing Co., *Iain Baxter using Telecopier to Transmit Artwork* (ca. 1969-70). (Photographer: Brian Dyson)

Acknowledgements

This essay was made possible by York University Libraries through its endowed W.P. Scott Chair for Research in e-Librarianship. I would like to thank Cynthia Archer and the Scott family for their support of this Chair as well as IAIN BAXTER& for his encouragement and practical assistance. I also extend my sincere thanks to Dr. Dan Adler, Dr. Ken Allan, Rose Marie Barrientos, Ingrid Baxter, Louise Chance Baxter&, David Bellman, Vincent Bonin, Ariane Cloutier, Christophe Domino, Dr. Dennis Durham, Isabelle Hermann, Dr. Jamie Hilder, Derek Knight, Dr. David Moos, David Silcox, Dr. Sarah Stanners and Paul Woodrow for sharing their insights on IAIN BAXTER& and the N.E. Thing Co. This essay is dedicated to visual informers everywhere.

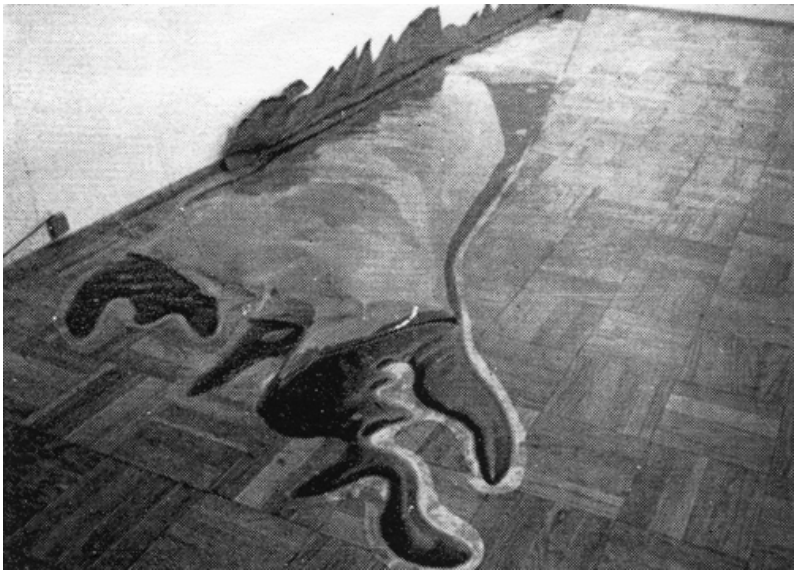
A Note to Users

> N.E. Thing Co. predicts that the new galleries of the future will not be what we know them now [sic.] – but will be *Television Stations*, and *Radio Stations* and *Communications Companies*. (N.E. Thing Co., 1967, "Some Thoughts," u.p.)

The electronic format of the *IAINBAXTER&raisonnE* affords a unique opportunity for experimentation with new modes of interactive, open-ended scholarly communication. This essay—a component part of the *IB&raisonnE—will be*, *is being*, *has been* issued incrementally as an invitation for comment and review by users. The sections comprising Part 1 were initially published online in draft form between June and July 2011. Future sections will similarly be issued as they become available. At a later date, these draft sections will be knitted together into a single, revised manuscript, which will likewise be made available via the *IB&raisonnE* and in print format.

* * *

This paper is structured as a partial inventory of information concepts produced by N.E. Thing Co. "visual informers" (N.E. Thing Co. 1993: 42). It sets out to situate the Company's informatic ventures within their intellectual and social conditions of emergence. The result is a "toolbox" for information users everywhere: a compendium of actions, affects, concepts, effects and "way[s] of using imposed system[s]" which can be reactivated and redeployed anytime and anywhere (de Certeau 1984: 18; Foucault 1994 [1974]).



N.E. Thing Co., *Inflated Streamscape* (1968)

I. The "Information Landscape"

> 'I'm curious about the trout stream you have for sale. Can you tell me something about it? How are you selling it?' (Brautigan 1967: 168)

Floating amidst the flotsam and jetsam of Richard Brautigan's delirious 1967 novella, *Trout Fishing in America*, is the memorably absurd image of a "USED TROUT STREAM" (168). Iain Baxter's dialogue with Brautigan's text is evident in the vinyl landscapes manufactured by the N.E. Thing Co. Ltd.: founded in 1966 as the registered name N.E. Baxter Thing Co., and subsequently co-administered with the artist's first wife, Ingrid Baxter, from 1969 to

1978. In keeping with the commercial logic of Brautigan's trout stream—marketed to anglers by the foot—*Inflated Streamscape* (1968) poaches readymade materials from the leisure industries, inviting viewers to "add[ ] an extra dimension of awareness" to their environment by playing with proprietary information (Baxter qtd. in Cameron 1968: 84).

Iain Baxter—who legally changed his name to IAIN BAXTER& in 2005—has been described as "the visual Marshall McLuhan of our times" (Silcox 2004). Yet, his engagement with themes of ecology and commodification suggests affinities with another member of the Toronto School of Communication: Harold Adams Innis (1894-1952). An Innisian orientation is conspicuous in the artist's neologism "Information Landscape" (Baxter 1999: 4.). Like the "infoscape" of Baxter (ibid), the geography charted by Innis was one defined by conditions of technological dependency—a reliance on technology for economic, political and cultural survival under conditions of competition and scarcity. Arthur Kroker (1984) has evocatively characterized Innis's vision of Canada as "a country formed in the image of the 'staples commodity'": the political economist's preferred term for the unprocessed natural resources which sustained the expansion of colonial interests in British North America (94). In successive studies of staple industries, including fur, cod and timber, Innis documented how Canadian institutions have been shaped in the image of the commodities and technologies which fuelled—and to a degree necessitated—their development. For instance, the celebrated final chapter of *The Fur Trade in Canada* (1999) argued that Canadian federalism was modeled on the governance structure of the Hudson's Bay Company, a commercial entity established by a remote imperial power to extract the primary resources of northern North America in support of domestic manufacturing.

> Concentration on the production of staples for export to more highly industrialized areas in Europe and later in the United States had broad implications for the Canadian economic, political and social structure. Each staple in its turn left its stamp, and the shift to new staples invariably produced periods of crisis in which adjustments in the old structure were painfully made and a new pattern created in relation to a new staple. (Innis 2007 [1950]: 24)

Baxter would have absorbed Innis's ecological approach to the media of communication through his intensive reading of McLuhan, the self-proclaimed heir and promoter of the political economist's ideas following his untimely death in 1952 (in *The Gutenberg Galaxy*, McLuhan (1962) went so far as to claim that his work was a mere "footnote" to Innis). (50)

Long in advance of futurologist Daniel Bell (1973), McLuhan followed Innis's lead in turning his attention to "information" as the primary staple of the postwar economy. "[Innis] became aware that the modern world, having solved the problem of commodification," wrote McLuhan (January-March 1954), "has turned its technology to the packaging of information and ideas" (42). "Technological media," he later asserted in *Understanding Media*, "are staples or natural resources" (McLuhan 1964: 21). In a 1970 radio interview with Charles Amirkhanian, Baxter echoed the Toronto School theorists, stating that, "[s]ome of our ideas are that you really got to look at information as a natural resource like coal, or oil, or water, or anything else—and it's not just an affectation, it's actually a really fantastic resource" (Baxter in Amirkhanian August 8, 1970). Like McLuhan (1964) and Innis, NETCO was interested in how "the business of moving information" was reshaping society (9): "business is interested in pushing information around so that the keenest of its character, the practicality of its energy, results in profit and goods flow. […] This is where the artist enters and with his sense of play and pureness of vision is able to take all this practical information and handle it sensitively" (N.E. Thing Co. 1993: 42). Building on this recognition, NETCO applied an ecological lens to respond to the changing environment of the new information economy.

Baxter's ecological outlook is evident in a 1979 interview with Robin White: "I work very much in terms of the environment," stated Baxter; "it's a way that I've functioned for a long time" (2). New York critic Lucy Lippard (Winter 1969-1970) stressed that Baxter's ecological interests predated those of contemporaries in New York (669). Moreover, in contrast to the static conception of ecology disclosed by the earthworks of Robert Smithson, Baxter's ecological studies at the University of Idaho had fostered an "optimistic embracing of the dynamics of rapid change," according to Lippard (June 1969: 4).

Baxter's putting into practice of ecological principles to cope with the effects of "electric speed-up" parallels the "biological principles of 'growth and decay'" deployed by Innis to study the effects of staples on the long-term evolution of societies (Kroker 1984: 107; McLuhan and Nevitt 1972: 64). Influenced by the "social ecology" of Robert E. Park (1864-1944), Innis applied a naturalist perspective to model the dynamic interaction of economic, social and geographic forces. Robert E. Babe (2008) has compared Innis's holistic approach with the ecological studies of Canadian environmentalist David Suzuki (a former colleague and neighbour of Baxter's during the latter's tenure at the University of British Columbia). Like Innis and Suzuki, Baxter adopted the "outlook of the 'biologist'" in his representations of the contemporary landscape (ibid: 107).

Early evidence of a distinctly ecological perspective is legible in allover drawings by Baxter dating from 1962-63 that simultaneously resemble engineering diagrams and biological systems: spiky but distinctly organic forms suggest the interaction of life-forms and the environment. These drawings fuse the precise draftsmanship of the engineer with Baxter's earlier training in zoological illustration (see Baker, Larrison, Yocom and Baxter 1961).

N.E. Thing Co., "Study for *Bagged Canada Coasts*" (1967)

Much as Innis represented the Canadian landscape as a "big commodity" (Kroker: 118), works by NETCO such as *Bagged Canada Coasts* (1967)—featured on the cover of the June/July 1967 issue of *artscanada* magazine—transformed the transcendental terrain mined by the Group of Seven into a consumer plaything. Brautigan's trout stream here returns as a

commentary on the commodified state of Canada's "technological nationalism": a manifest destiny built on a drive for resources spurred by consumer demand in distant imperial centres (Kroker: 10). Pursuing a trajectory initiated by Baxter's earlier vacuum forms, NETCO's inflated landscapes perform the critical activity of pointing to the informatic processes by which natural resources are converted into profit in a post-industrial economy.

Charity Mewburn (1999) has studied NETCO's exploration of the enduring importance of Canada's resource sector in the information age vis-à-vis the Company's participation in the 1969 project *Arctic Circle*: a tour of Inuvik organized by the Edmonton Art Gallery in tandem with the traveling exhibition *Place and Process*. Ingrid Baxter and Iain Baxter, in the company of Bill Kirby, Lucy Lippard, Harry Savage and Lawrence Weiner, were flown to the Northwest Territories in order execute and document outdoor actions and temporary work over a two-day period. NETCO's intervention in the Canadian arctic, according to Mewburn, "reveal[s] the commodifying practices that have historically constructed 'the North'" (Mewburn 1999: 7). In particular, Mewburn draws attention to the function of NETCO's information sheets as supports for the hypostatization of geographic space (ibid.): the "grid" of information defines a space of calculation in advance of processes of colonization and speculation. Shaw (1993) argued that the Company's engagement with geographic systems underscores the arbitrary and instrumentalized character of cartographic conventions (31). These commentaries on NETCO's critique of spatial technologies recall Innis's (2008) discourse on power and the "monopolies of space" generated by the media of communication (128):

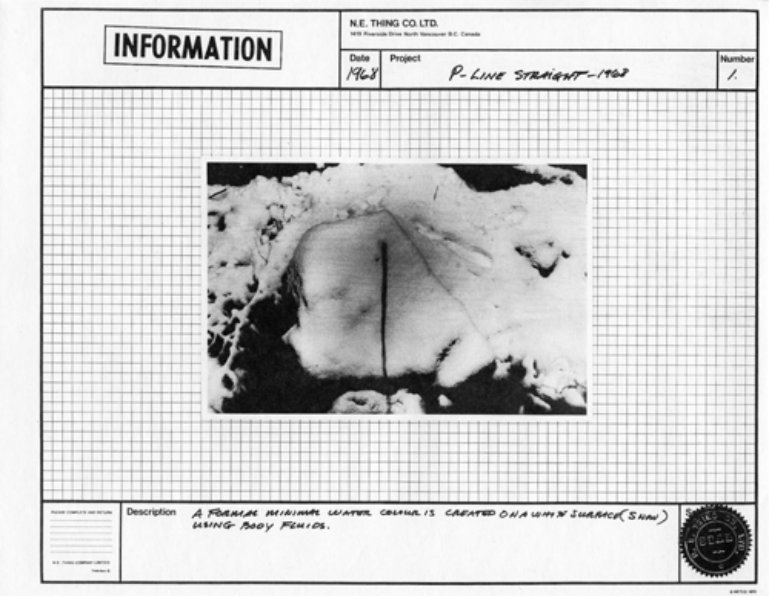
> [T]he modern obsession with present-mindedness […] suggests that the balance between time and space has been seriously disturbed with disastrous consequences to Western civilization. Lack of interest in problems of duration in Western civilization suggests that the bias of paper and printing has persisted in a concern with space. (ibid: 76)

During the period of Innis's communication studies, the monopoly of space that threatened to overwhelm the delicate equipoise of Canadian confederation was the expansionist cultural imperialism of the United States. In late essays such as "A Plea for Time" and "The Strategy of Culture," Innis advocated a policy of cultural protectionism consistent with the goals of the 1951 Massey Report[1] in order to safeguard Canadian interests at the margins of empire. His calls for protectionism pitted the continuity of distinct cultural traditions across time against the threat of spatial monopoly from without.

William Wood's (1993) interpretation of NETCO's marginal tactics as "a resistance to the centripetal pull of artist and the art world into the 'capital cities'" (11) is remarkably consistent with an Innisian framework (although Wood invokes McLuhan): "NETCO adopted a contemporary, McLuhanist agenda […], accentuating how communications systems permit broad access and broadcast possibilities for the margin to speak to the centre" (16). Whereas McLuhan (2002) pronounced that electronic media produce a "centre-without-a-margin" (213),[2] Innis was keenly attentive to the relentless contest for control of space and time played out between metropolitan centre and periphery. In some passages Wood approaches just such an Innisian reading of the margin:

> The Canadian dependence on natural resources—encapsulated so acutely in the clear-cut forests of B.C.—is, one might say, fetishized, disavowed in the bank notes, consoling the carrier of the bill that there is still some exploitable land out there, or, worse, sustaining the illusion that Canadians have not totally dominated and capitalized upon the environment. (Wood 1993: 17)

Whereas Wood ultimately frames NETCO's arctic venture as a deterritorializing gesture, Innis's post-colonial critique reminds us that empire has always derived its power from the margins, and focuses attention onto the processes and structures by which those margins are produced by the centre. Lippard's (Winter 1969-1970) account of her participation in *Arctic Circle* is incredibly attentive to the Innisian genealogy of Inuvik as a product of colonial trade routes and staple industries: "Inuvik is a new town, begun in 1954; it is new, and deplorable, type of town, owned by the government and oil companies, built as a 'showplace' to replace the dying Fort towns, or trading posts" (666). Viewed through an Innisian lens, NETCO's "territorial claim" on the arctic remediates an everyday encounter with the environment (pissing by a rural roadside) as a critique of the neo-colonial regime of resource extraction discussed variously by Lippard, Mewburn and Wood. In particular, NETCO's *Territorial Claim* (1969) equates waste expelled by the human body with pollution generated by primary industries (such as the petroleum concerns whose presence dominate the Inuvik landscape in Lippard's account), insisting that a resource such as oil is not an infinitely exchangeable commodity stripped of context and qualification, but, rather, a material inexorably shaped (literally, "in-formed") by a specific place, ecosystem and history (Taylor in Clough 2004: 11). This point is underscored by Nancy Shaw's (1993) interpretation of *Territorial Claim* as a meditation on boundaries vis-à-vis the work's allusion to Farley Mowat's classic tale of the North, *Never Cry Wolf* (32). Given *Territorial Claim*'s earlier incarnation as a satire of high-modernist pretensions ("a formal minimal watercolour," as Baxter later dubbed the 1968 *P-Line Straight*) (N.E. Thing Co. 1978: u.p.), *Arctic Circle* must simultaneously be read as an ecological counter-reading of formalist constructions of the art object as purged of socio-political content and context: *Territorial Claim* insists that art is inextricable from its environment and from site-specific conditions of reception.

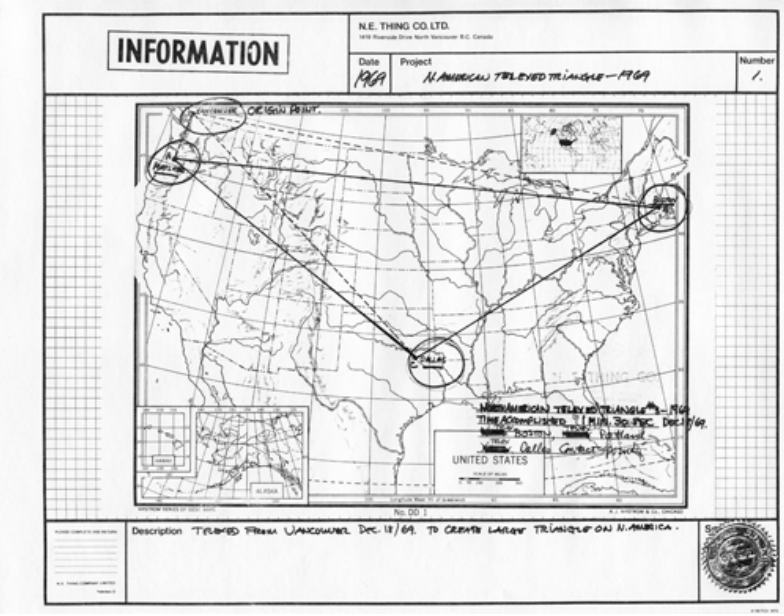


N.E. Thing Co., *P-Line Straight* (1968)

If Baxter's gesture of urinating on the snow draws attention to the environmental byproducts generated by the commodification of staple resources, subsequent integration of documentation of the same action within an informational framework (NETCO's ubiquitous

"information form"—designed by its Director of Information, Brian Dyson, in 1969) brings into representation the dematerialization of commodities in the post-World War Two period: described by Innis (2008) as the emergence of "information industries" (83; Fleming 1982: 36). Similarly, the *Telexed Triangle* series executed by NETCO in 1969-1970—which included a transmission from within the arctic circle addressed to friends of the Company executive in Halifax and Vancouver—gave shape to McLuhan's reading of later Innis as effecting a shift in perspective "from the trade-routes of the external world to the trade-routes of the mind" (McLuhan Autumn 1953: 385). Echoing McLuhan's gloss on Innis, NETCO's *Telexed Triangle* series registered an emergent consciousness of the Age of Information generated by information theory and IT. The everyday experience of long-distance communication among friends as illustrating the impact of globalized information networks on the lives of ordinary people—in contrast to the meta-commentary on art centres posited by Wood—is the true content of what Ingrid Baxter (qtd. in Shaw 1993) termed NETCO's "aesthetic of distance" (33).

Company documentation of these transmissions appropriated medium theory constructions of "information" (as defined by the material characteristics, and limitations, of information technologies), to playfully transform the branching nodes of the Vancouver-based Facsend network into idealized "conduits" resembling Shannon's influential representation of the information channel as a linear corridor (Facsend, "The Facsend Network," 1969; Shannon and Weaver 1962: 5). In advance of the Internet, NETCO employed Telex to define the dematerialized edges of a purely conceptual type of networked drawing (wherein "line" is coextensive with the shortest route between the sender and receiver of a given electronic message), thereby ludicrously equating the medium-specific criteria of formalism with Shannon's diagram. This confusion of disciplinary criteria effectively explodes both sets of values, allowing the pure non-sense of environmental information to emerge as the excess of communication available to the user. NETCO's Telex drawings thereby collapse analytical frameworks to engage in a synthetic ontology of information. NETCO's critical approach to information reintroduces contingency and the agency of the receiver into classical information theory by insisting on the context-dependent nature of information systems as well as the user's ability to redraw the network.



N.E. Thing Co., *North American Telexed Triangle* (1969)

NETCO's *Telexed Triangle* series temporarily actualized the Company's earlier McLuhanesque vision of an imminent "world wide global connectability situation" (N.E. Thing Co., 1967, "Some Thoughts," u.p.). At the same time, the series foregrounded the material and geographic conditions of possibility for that newfound connectivity through maps and information sheets that both processed the environment *as* information and revealed information itself to be inextricably embedded within socially constructed spaces. Documentation of the Company's pioneering Telex interventions thereby visualized the dialogical and ecological dimensions of McLuhan's critical information theory (see Cavell 1999: 349, 356). As noted by Mewburn (1999: 7), this strategy also served to draw attention to the informationalization of the north as a precondition for new monopolies of space (the expansion of corporate and governmental control from centre to periphery). Yet, the resemblance between the information behaviours recorded by NETCO's information sheets and a family scrapbook—a likeness underlined by the Company's incorporation of "seals" derived from *Good Housekeeping*—ensured that its exploration of the politics of information always maintained a personal scale (Fleming 1982: 40). This scale served to emphasize that everyday behaviours and objects function to define a personal information space. The modest scale of NETCO's informational apparatus thereby insisted that actions and objects available to the average user empower them to make sense of, and transform, that space.

Lippard (Winter 1969-1970) was probably the first to draw attention to the curiously temporal overtones of NETCO's spatial art: "Baxter's is not the traditional *occupied* or conquered space in which an object exists. It is a space partially dependent upon the receiver's experience of space and words, and greatly dependent on time" (670, emphasis in the original). For Lippard, this temporal dimension of NETCO's information art assumed a specifically oral character: "Baxter utilizes the oral tradition within the network of technological media" (ibid). Lippard's observations underscore the important role of dialogical communication in the Telex-mediated spatial interventions of NETCO: anticipating the conventions of email communication, transmissions sent by Company personnel to define the edges of its *Telexed Triangles* encouraged the participation of the receiver in an open-ended conversation, or cybernetic *mondo*.

NETCO's deployment of temporal techniques redolent of oral communication to comment on the role of information technologies in forging new monopolies of space in the Canadian north also suggests parallels with Innis's appeal to temporal, and specifically oral, modes of communication as antidotes to the destructive effects of American cultural imperialism in "A Plea for Time" and other late essays. NETCO's deployment of the "secondary orality" facilitated by Telex to define the coordinates of spatial interventions simultaneously underlines the Company's critical approach to, and dialogical reworking of, classical information theory in the mould of McLuhan's explorations (Cavell (1999: 349, 356; Ong 1988: 3). Yet the personal character of these transcontinental communications emphasized the everyday and immediate impact of the new global information network described by the media theorist.

NETCO's intuitive engagement with the Innisian theme of monopoly in its *Telexed Triangle* series—likely gleaned from McLuhan's references to Innis's concept in *Understanding Media*—subsequently resurfaced in full force in the Company's 1973 performance *Monopoly with Real Money*:[3] a monopoly game that substituted legal tender for the play money of the Parker Brothers' board game staged at York University in Toronto, where Baxter was then teaching in the Faculty of Fine Arts. The space of the university amplified the symbolic space of the board—itself a caricatured representation of the

marketplace—as a site of information production. Whereas the *Telexed Triangle* series echoed McLuhan's elaboration of Innis's forecast of a looming shift from a manufacturing base to a knowledge economy, *Monopoly with Real Money* advanced an equally Innisian meditation on the accumulation of information as the engine for monopolies of power in post-industrial society (Innis 2008 [1951]: 83-84). By staging the performance at a university, NETCO followed Innis's lead (via McLuhan) in underlining that—in addition to proprietary spaces—power generates new "monopolies of knowledge" as its byproduct (Innis 2004 [1952]: 74).

Rejecting analytical closure, NETCO's ecological interventions resonate with McLuhan's redemptive gloss on media by harnessing environmental change as a "teaching machine" for the "training of perception"—thereby augmenting users' capacities to act upon, and refashion, their surroundings (McLuhan qtd. in Museum of the City of New York 1967: 4, 52). Rather than promoting an environmentalist agenda per se, the NETCO works explored in this section appropriate information and processes of transformation latent in the environment to enhance the user's capacity for active intervention. Finally, NETCO's documentation of its ecological interventions draws attention to the role of everyday information behaviours such as playing with commodities or scrapbooking as sensitizing the subject to their environment and encouraging a sensitive (dialogical and open-ended) engagement with information ecologies at a human scale. As Nancy Shaw wrote, "the Baxters transformed abstract and instrumentalizing concepts into the realm of the everyday, disrupting the objectivity of the rationalized grid that presupposes a homogeneous subject, and a static space that ignores time and history" (32).

NETCO researchers declared: "We up your aesthetic quality of life, we up your creativity. We celebrate the ordinary" (N.E. Thing Co. qtd. in Shaw 1993: 25). The information landscapes engineered by the Company functioned by amplifying the creative capacities of the user. To the extent that the works discussed in this section engaged in *critique*, they did so in the sense of questioning the capacity of formal systems to contain their symbolic content (be that art object, commodity, or data transmission), rather than as an analytical procedure of assigning limits.

N.E. Thing Co., "President Seated at Telex Carrying Out 50,000-mile Transmission" (1969)

II. Active Information

> The ontological goal of the work of art is always to give the receptor a little too much information. (Moles 1966: 162)

> I'd rather call myself a visual informer. (Baxter qtd. in White 1979: 9)

The aesthetic information theory of French psychologist Abraham Moles (1920-1992) is an overlooked influence on the N.E. Thing Co.'s creative transformation of information theory into the principles of Sensitivity Information. In particular, Moles reinforced NETCO's McLuhanesque understanding of the "work of art as a creator of sensations" (Moles 1966: 2). A photocopy preserved today in the Baxter& fonds at the Art Gallery of Ontario of a cartoon by Alan Dunn reproduced in McLuhan and Fiore's *The Medium is the Massage* (1967), includes the following annotation by Baxter attesting to the artist's early fusion of Moles and Toronto School theory: "BOUNCING INFO INTO RECEPTORS" (Baxter 1967: u.p.). Moles's *Théorie de l'information et perception esthétique* (*Information Theory and Esthetic Perception*) was available in English translation from 1966. Baxter first encountered this text early in his tenure at Simon Fraser University, where he was employed as "University Resident" in the experimental Centre for Communication and Arts from 1966 through 1971 (IAIN BAXTER&, conversation with the author, June 23, 2011). Baxter's sustained interest in, and extended working out of concepts drawn from Moles's *Information Theory and Esthetic Perception* is exceptional among artists of his generation in North America (at least, as reflected in the current literature on Conceptual and information art). Moreover, Baxter's reworking of Moles stands out for having engaged the French theorist's concepts outside the frameworks of computer programming and hardware.

Théorie de l'information et perception esthétique takes as its starting point Shannon's quantitative definition of information as a measure of the *uncertainty*, or degree of choice among variables, in a given message (24), but reintroduces the concept of "value" and its capacity to affect the behaviour of the message recipient (a maneuver that Moles borrows from British cybernetician Donald M. MacKay) (ibid: 19). For Moles, value is synonymous with the "unforeseeable" or *improbable*, which adds to the receptor's existing repertoire of knowledge (ibid: 19, 129). His concept of value is thereby consistent with theorizations of information-as-affect. The more unforeseeable a message is, the more we are affected by it; in turn, the more we are affected by a message, the more it augments our power of acting on the environment: "a postcard of a wide view, no matter how clear it may be, affects us less than a prominent foreground and a characteristic view taken by a talented photographer" (ibid: 62).

This analysis of value suggests analogies with Gilles Deleuze's (1988) discussion of affect in *Spinoza: Practical Philosophy*; namely, that "the capacity for being affected is manifested as a power of acting insofar as it is assumed to be filled by active affections, but as a *power of being acted upon* insofar as it is filled by passions" (27, emphasis in the original). Much as Deleuze reads Spinoza's *Ethics* as an "ethology," wherein ethical values derive from the enabling interaction between the organism and its environment, the information ecology of NETCO (a fusion of Moles's theory of value with Baxter's earlier training in ecology) is properly understood as an ethology of affective information.[4]

In contrast to classical information theory, Moles distinguished between what he termed the "natural" channels of sensory perception and the "artificial," or technological channels which were the exclusive concern of Shannon and followers (1966: 7, 8). This qualification

of Shannon's neutral "conduit" (wherein "noise" arises through interference from an external source—whereas transmitters and receivers are, in theory at least, capable of reproducing message content point-for-point) emphasized the role of the receptor in shaping and constraining the content of messages sent and received (Shannon and Weaver 1962: 3): "the receptor's structure and particularly his [sic.] difference thresholds determine the elements of the sensory message" (Moles 1966: 38). Recalling the ecological orientation advanced by the critical information theories of MacKay and McLuhan, Moles thus emphasized the role of environmental factors and the agency of the receiver in processes of in-forming message content.

Moles's description of the human operator as a "receptor" had important consequences for NETCO's "sensitive" handling of information concepts (ibid: 59). At a basic level, the receptor was posited by Moles as a "scanning apparatus" (ibid: 56). However, human perception rarely operates at this atomistic level. Rather, Moles proposed that "*to perceive is to select*" (ibid: 60, emphasis in the original). Indeed, the nervous system is nothing but "a machine for selecting" in his schema (ibid: 91): the receptor receives information as sensation, from which it selects *form*. Form stands out from the noisy flow of information by virtue of its relative redundancy: "To create an elementary form is to assure in the message a redundancy" (ibid: 65). Form thus implies predictability and foreseeability.

Moles's receptor actively "assembles" a "repertoire of symbols" that, in turn, influences the amount of redundancy, or *knowledge*, which it brings to bear on the selection of form in future messages sent and received (ibid: 62, 124, 161). Consistent with the ecological information theories of MacKay and McLuhan, Moles thus distinguished between linear "scanning pure and simple" and a contingent "human mode of perception" (ibid: 62). He thereby introduced into information theory a recognition of the embodied subjectivity of the receptor, and of its power to shape and constrain message content which is largely absent from the neutral, "conduit" model of Shannon: "each [receptor] has his repertoire," asserted Moles, "and each finds his own redundancy and originality" (ibid: 125). The receptor, in turn, assembles the symbolic contents of perception into larger aggregates, or "super-signs," thereby generating a *hierarchy of forms*, each tier of which is defined by its own repertoire of knowledge (ibid: 125-26, 161).

Perhaps the single most influential dimension of Moles's theory on the informational paradigm of Baxter/NETCO was the distinction which it instituted between *semantic* and *aesthetic* categories of information. Moles argued that the aesthetic value of a given message diminishes in proportion to its redundancy: "[i]f the receptor has complete knowledge of the message to be transmitted to him, that is, if he 'knows' this message a priori, the information is null, the redundancy is 100 per cent, the message is uninteresting and banal as, for example, the pictures on postage stamps" (ibid: 126). Whereas semantic information tends to be logical and structured (high in redundancy), aesthetic information is defined as high in information or "originality" (ibid: 22, 128). Furthermore, aesthetic information is subjective and lacking in utility, while semantic information serves to "prepare *actions*" (ibid: 129, 130, emphasis in the original). This dichotomy reveals striking parallels with NETCO's practice of designating environmental information as either *ACT* (Aesthetically Claimed Thing), or *ART* (Aesthetically Rejected Thing), according to whether it constituted "Practical Information" or "Sensitivity Information" (N.E. Thing Co., "Some Thoughts," 1967: u.p.).

Beginning in 1968, NETCO personnel—acting under the spell of Moles's theories—began to *scan* their environment for actions, objects and documentation which they proceeded to *select* and *assemble* into a corporate system of notarized documentation. Much as semantic information prepares the subject for utilitarian actions in Moles's scheme, NETCO's *ACT*s celebrate everyday activities carried out by ordinary people in the instrumentalized field of the contemporary "defeatured landscape" (Wall qtd. in Wallace

2005: 56). But, whereas in Moles's system "a message becomes personal in the field of esthetic information," for NETCO *ART* designated the condition of passive absorption associated with the reception of traditional fine art objects that was rejected by the Company's visual informers. NETCO's user-driven practice thus appropriated Moles's categorical framework, but read its values against the grain:

> INFORMATION is usually, or tends to be, confronted with and dealt with in either a practical or sensitive manner. Thus INFORMATION which is handled in this pure or sensitivity way culminates in SI (Sensitivity Information) in general context, and eventually leaves its mark on our life as culture. (N.E. Thing Co., "Glossary," 1966: u.p.)

If Moles rejected the banality of semantic information as "uninteresting," NETCO vaunted everyday actions above the "untranslatable esthetic information" privileged by the French psychologist (1966: 126, 136). Yet, NETCO's recuperation of the banal as Sensitivity Information should not be mistaken for a simple reversal of Moles's hierarchy of values. Rather, Sensitivity Information transformed practical activities through the sensitive handling performed by the human operator (or "legal person" of the humane corporation): "This is where the artist enters and with his [sic.] sense of play and pureness of vision is able to take all this practical information and handle it sensitively and end up with *Sensitivity Information* […]." (N.E. Thing Co. 1967, "Some Thoughts": u.p.). A work typical of NETCO's valorization of the banal, *ACT #66 Fire Break, Northern Ontario, East of Dryden, Ontario, 1968* (1968), celebrates the semantic information disclosed by an engineered fire break in a Northern Ontario forest.

N.E. Thing Co., *ACT #66 Fire Break, Northern Ontario, East of Dryden, Ontario, 1968* (1968)

Unlike the "originality" communicated by the personal information privileged by Moles, the schematic figure documented by NETCO in *ACT #66* conveys a high degree of redundancy. Yet, there is nothing utilitarian about the resulting artwork: NETCO's act of selecting a banal subject and integrating it into its corporate assemblage has voided its practical contents,

thereby producing an image which prepares the receptor for creative activity by soliciting participation in negotiating symbolic uncertainty.

Dennis Durham has productively proposed McLuhan's distinction between "low definition" and "high definition" media as a framework for interpreting the Company's engagement with the banal and functional as necessitating viewer participation to complete the "message" of the artwork (Durham 2011: 77; McLuhan 1964: 22-23). McLuhan's formulation of low definition as a measure of the relative degree of user participation necessitated by the greater or lesser redundancy of a given medium was likely derived from his critical reading of information theory—in particular, Shannon's definition of entropy as a measure of information (McLuhan's motto, *the medium is the message*, being a play on Shannon's notorious pronouncement that "semantic aspects of communication are irrelevant") (Shannon & Weaver 1962: 3; see also Gleick 2011: 219). Entropy is properly understood in information-theoretic terms as a measure of randomness or uncertainty (the greater the complexity, the greater the entropy of a given information system)—a definition that is complementary to McLuhan's linking of low definition, or "cool" media, with the relatively greater degree of involvement required of the recipient to interpret message content. Yet, Durham's analysis invokes the thermodynamic definition of entropy employed by American artist Robert Smithson: the dissipation and stasis of heat death (Gleick 2011: 337-38).

Drawing on Smithson, Durham reads an early NETCO light box, *Ruins* (1968), as an entropic landscape lacking in sensitivity information (170). Although *Ruins*—like *ACT #66*—clearly instantiates NETCO's engagement with the defeatured terrain of the information landscape, by conflating McLuhan's notion of low definition with thermodynamic entropy, Durham concludes that the work is low in information. In fact, the functional landscape of *Ruins* brings into representation NETCO's reworking of Moles's hierarchy, wherein the Company's focus on the banal deliberately interrupts conventional conditions of reception: a reversal of Moles's aesthetic values designed to generate new "sensitivity information dynamics" (N.E. Thing Co., "c o n c e p t," 1967: u.p.). Lippard's (June 1969) comparison between Baxter's (ecological) and Smithson's (thermodynamic) uses of entropy further clarifies these distinctions:

> Smithson is from industrial New Jersey; Baxter from the rural West. There are two schools of ecology, the first, associated with Europe, is called 'static,' and is attributed to Europe's restricted areas of study, the long-accomplished destruction or modification of natural communities; the second, associate with America, is called 'dynamic' and is attributed to our remaining vast areas where natural variation can be observed on a large scale and under a variety of circumstances. A basic difference between Smithson and Baxter is found in their reactions to space. Smithson contemplates finity; Baxter welcomes infinity; Smithson's 'primal ooze' is deathlike but time defying; it traps but preserves; Baxter's art is fertile but ephemeral. (4)

Nancy Shaw was probably the first to explore the ambivalent tension between banal subject matter and participatory involvement characteristic of NETCO's *ACT*s: "The N.E. Thing Company filled its Cibachrome signs with images of habitation and detritus; with the nonproductive spaces that bear the traces of an everyday space that is dynamic and heterogeneous" (29). Somewhat contrary to common sense, by privileging banal, low-definition objects, NETCO thereby appealed to an active stance on the part of the beholder. In opposition to the formalist values promoted by Moles, the semantic or "practical" information disclosed by the banal objects documented by NETCO prepared *actions* rather than aesthetic contemplation. Furthermore, *ACT*s instantiated the activity of NETCO's

researchers: their selection of symbolic forms from the "repertoire" of the information landscape. *Ruins* is thus rich in sensitivity information precisely to the extent that SI emerges as a measure of the degree to which an action, image or object prepares the viewer for future activity within the defeatured symbolic field of the contemporary information landscape (hence the eminently suitable designation, "ACT").

NETCO's exploration of the latent value of everyday actions and environments anticipated Moles's later writings with Elizabeth Rohmer on "praxiology" (Moles and Rohmer 2000). Like the earlier *ACT*s of NETCO, Moles and Rohmer's "science of actions" investigated the "*interaction between man* (or men) [sic.] and *the world* in which he is situated" (ibid: 120, emphasis in the original). Similarly, Moles's late writings on design (Spring 1985, Spring 1986, 1988) reveal a focus on actions and functional environments/objects that reverses his earlier prioritization of personal information in *Théorie de l'information et perception esthétique*. Christophe Domino (2005) has drawn parallels between Baxter's engagement with the medium of plastic and Moles's texts on commodity design (74). Like NETCO's *ACT*s, Moles's writings on design "take an inventory of the world of actions, and […] relate it to the sensorial (visual, sound, and so forth) symbols, on the basis of the identifiable forms they contain and which in turn will guide future action" (Spring 1986: 45). Coterminous with NETCO's project of documenting the information affects and behaviours of everyday life as reflected in the utilitarian schema of the contemporary information landscape, Moles sought to bring into representation an "*action landscape*" composed of "everyday life actions" (ibid: 50, 52, emphasis in the original).

Much as Moles (1966) framed the receptor's selection of form from the myriad messages that comprise its informational milieu as a process of "learning from the environment" (60), NETCO viewed the information landscape as incorporating the potential to function as a McLuhanesque "teaching machine" (McLuhan 1960: 75). In NETCO's reworking of Moles, the visual informer operates precisely through a creative, and sometimes critical, deployment of the "stereotype" of *clichés* assembled from symbolic repertoires latent in the environment (ibid: 161). This understanding of the stereotype as a symbolic assemblage complements Dennis Durham's reading of the NETCO *oeuvre* as a McLuhanesque "mosaic" (74).

In stark contrast to Moles's derogatory reading of the banal as kitsch, NETCO affirmed the power of the cliché to inform users about their environment. The cliché's power to inform derives from the fact that the stereotype remains inextricable from the environment from which its symbolic contents have been selected (even once those contents have been incorporated into a new assemblage). Though symbolic information may be lost through processes of assemblage and overcoding, the schema which prepare user actions remain legible and associated with their original context: this "active" information remains a perpetual resource for the user.

Perhaps the most compelling example of this recuperation of the *cliché* in the NETCO *oeuvre* is the 1969 video, *Clichés*. A Bruegelesque tableau of proverbs acted out by Company personnel, *Clichés* literally ACTivates the redundant information of the stereotype through performance. As a collection of such *ACT*s, the work represents a partial fulfillment of Baxter's unrealized proposal, dating from earlier in his tenure at Simon Fraser University, for a "videopedia"—conceived as one component in a "sensory space for [the] community to plug into" (Baxter, "Centre for Universal Information Potential," 1966: u.p.).

While on a first reading the banal objects and textures documented by NETCO researchers in such works as *Ruins* and *Clichés* would suggest, as Durham argued, a relative lack of information (because high in redundancy), the Company's transvaluation of Moles's aesthetic hierarchy voids traditional categorical distinctions of their sense. Paradoxically, by overcoding the redundant objects of the post-industrial environment with nonsense values

culled from disparate symbolic repertoires, the Company augments the uncertainty of message content, the resulting overcoded values resembling the noisy character of information-rich messages in Shannon's writings, or the noisy information milieu analyzed more recently by Tiziana Terranova (2004).

This gesture of enriching the information potential of the environment through a transvaluation (or travesty) of categories echoes Moles's comments on the aesthetic possibilities inherent in combining forms appropriated from incommensurate levels in the symbolic hierarchy: "one of the most general methods of experimental esthetics: studying forms by mixing them up" (Moles 1966: 79, 125). Whereas Durham proposes a linguistic frame for interpreting NETCO's *ACT* and *ART* certificates (as "nomination acts") (43), Moles's (1966) description of the human receptor as "selecting" forms from its informational environment "to accept or reject" holds the key to this series (79). True to the premises of information theory, selection or choice (zero or one) is the operative principle underlying the *ACT* and *ART* certificates: "the structures of esthetic information are primarily statistical rules which restrain choice" (ibid: 172).

Nancy Shaw's reading of NETCO's *ACT*s as "claiming industrial architecture for the aesthetic record" suggests another point of contact between the logic of sensitivity underlying NETCO's *ACT*s and *ART*s and the aesthetic theory of Moles (31). But where Shaw identifies a satire of industrial economies of scale in NETCO's documentation of "the minimal structures of industrial architecture" (ibid), it is the Company's engagement with functional design as registering a diminution of personal information under the impact of "metadesign" that is signaled out for attention here.

Larry Busbea (Autumn 2009) reads Moles's *Théorie des objets* (1972) as instantiating an attempt to apply the principles of semiotic analysis to the "total design" of environments that was a growing trend in 1970s France (104). In contrast to the prevailing system of consumer kitsch, Busbea explains that "Moles envisioned a new system design based in sociology and statistics that would allow functionalism to encompass not just a rudimentary and directly physical notion of use, but a more nuanced idea of semiotic function that comprehended the social and communicative uses of things" (ibid: 112). In keeping with Jean Baudrillard's early critique of metadesign as ideology, NETCO's transformation of *clichés* gleaned from the contemporary information landscape into a McLuhanesque teaching machine may be read as a *jiu-jitsu*-like operation of turning Moles's functionalist project inside out. The Company's activities thereby draw attention to possibilities available to the human receptor for reassembling the designed environment for creative reuse (Baudrillard in Busbea Autumn 2009: 103).

This reading of the N.E. Thing Co. as critiquing emergent systems of metadesign echoes Christophe Domino's gloss on Baxter's use of plastic as a commentary on the contemporary "system of objects" (Domino 2005: 66). But NETCO's engagement with the functionalist spaces promoted by Moles and other exponents of total design simultaneously represents a continuation of the Company's earlier riposte to Minimalism through its informatic "extension" of Dan Flavin's industrial environments.

Notes

1. The 1951 Report of the Royal Commission on National Development in the Arts, Letters and Sciences, commonly referred to in English Canada as "The Massey Report."

2. "Electric speeds create centres everywhere. Margins cease to text on this planet" (McLuhan 1964: 91).

3. See: N.E. Thing Co. Ltd. 1973. *Monopoly with Real Money* [colour Super 8 film], http://archives.library.yorku.ca/iain_baxterand_raisonne/items/show/1743 (accessed June 22, 2011).

4. Lippard (June 1969) linked the artist's affirmation of environmental change to his earlier study of ecology as "external physiology": "[in] the eco-system approach […] animal and vegetable organisms (humans too) are considered as an interacting unit"—a formulation with undeniably ethological overtones (3).

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