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Juliette Bessette

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abstract:

The article traces the approach to television at work in the major exhibition Video Art (1975, USA). Starting from the texts of art and media theorists Jack Burnham and John McHale for the catalog of the exhibition, the aim is to understand their cultural conception of television as a “continuum” between (mass) media and the artistic (medium). The difficulty therefore consists in applying distinct standards of judgment to one or other of these types of production, standards out of step with what was circulating in the cultural practices of contemporary daily life. The article then focuses on the potential future developments in television as they were imagined at the turn of the 1960s and 1970s – before the generalization of the personal computer and the “digital revolution” – notably in terms of the knowledge economy in this Information Age.

Juliette Bessette - Juliette Bessette is a Ph.D student in Art History (Sorbonne University, Centre André Chastel). Her research focuses on the impact of technological and scientific changes on artistic creation and history of ideas in the post-World War II era in the UK and the USA. She is part of the research project “New Media: myths and experimentations in the arts” (DFK – Paris). She recently co-edited the book The Machine as Art / The Machine as Artist (2020, with Frederic Fol Leymarie and Glenn W. Smith). She also is a lecturer in Art of the XXth century and in Contemporary art at the École du Louvre, and led the project "À la recherche du musée" with the museologist Vanessa Ferey at the Musée du Louvre (Centre Dominique-Vivant Denon).

Telefutures: 1970s Television Through the Prism of Its Expanded Potential

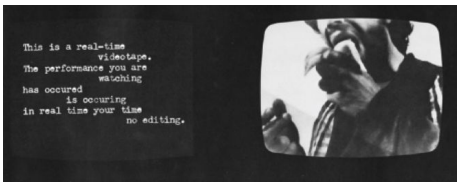

Fig. 1. Excerpt from the exhibition catalog *Video Art*. Works by Douglas Davis (left) and Antonio Dias (right). © Institute of Contemporary Art, University of Pennsylvania, Philadelphia

"If one were to announce to a group of art historians that television is one of the inevitable and logical successors to a thousand years of the Western Art Tradition the statement would be greeted with incomprehension, benign amusement, or angry denial."[1] In this tirade from his essay "Sacrament and Television," in the catalog of a major video art exhibition presented in the United States in 1975, the American art theorist Jack Burnham immediately seizes on an obvious ambiguity: what distinguishes video art from television? This article focuses on a period-specific understanding of a "continuum" between mass media and a specific artistic medium, as embodied in television. If television could be put forward as a new medium with the birth of video art, the argument here, on the contrary, consists of questioning the aesthetic efficiency of television in symbolic (video icons) and cybernetic (environmental vision) terms in the 1970s. At the time, the dissolution of the television "medium" in artistic practices was the corollary of an attempt to dissolve the border between "high" and "low" culture, which was subsequently seized on by cultural studies.[2] This historical perspective fosters a current of reflection that lives on in both the fields of television studies and video art. I will first deal with the connections, distinctions, and hierarchies established between television and video art from different points of view in the 1960s and 1970s. I will then proceed to evoke the "inclusive theory" of media proposed in the catalog of the *Video Art* exhibition, which tries to be more in line with the reality of contemporaneous cultural practices. Following this,

I will go back in time to the roots of this non-hierarchic cultural theory, which finds its origins in the thinking of English pop art in the 1950s and its approach to popular cultural practices such as television and other mass media. Finally, I will look at the conception of the future of television as envisaged in the 1960s and 1970s, in relation to theories on the future of art and the role of the artist in the new information technology environment.

Media rescue

Materially speaking, the distinction between television and video art is sometimes tenuous: one or more televisions, an electronic signal.[3] The differences, however, are immediately operative on the cultural level (aim, production, distribution, consumption), where the truism of the demarcation between art and mass culture appears very quickly. But to draw a distinction is also, in a way, to invite a comparison. This is one of the questions explicitly posed by the *Video Art* exhibition,[4] which presented the works, installations, and videos of various contemporary artists (Douglas Davis, Lisa Steele, Andy Warhol, etc.) [fig. 1], but also, as if to provide grist for the mill in this comparison, a selection of 22 commercials broadcast on television in Germany, Japan, Spain, and the United States between 1948 and 1973. In the 1970s in the United States, video art was connected to experimental cinema, but also partly built its cultural identity based on – or even as an antithesis to – television and its commercial output.[5] However, the criteria of judgment deployed to examine these artistic works are often closer to those of television than painting or sculpture.[6]

Fig. 2. Nam June Paik and John J. Godfrey, *Global Groove*, 1973. Videotape, 1-inch NTSC 4/3, color, sound, 28'30". © MNAM-Centre Georges Pompidou, Paris, broadcast as a digital file. Shown in the exhibition *Video Art* (1975)

This predicament actually comes from the ambivalence of the binary differentiation which essentially suggests that video art, an artistic medium, is an evolved form of television, a mass media. In the *Video Art* exhibition catalog, Jack Burnham's text is elaborated on by another art theorist, artist, and sociologist, John McHale. McHale's research is oriented toward the topic of the future, in particular toward future developments in cultural consumption.[7] In his text, entitled "The Future of Television: Some Theoretical Considerations," he regrets the dichotomous and hierarchical vision that assigns avant-garde video art the ambition "to rescue the medium from 'the wasteland'." The rescue plan criticized by McHale attempts to appropriate an assumed agency specific to the medium, positively valorized, and transfer it into the artistic sphere. Television would then try to compete with more traditional works of art.[8] Once part of this sphere, solely due to its originality as a medium, television could produce something new and interesting. For McHale, this attachment to the novelty of the medium is a total misreading in artistic terms.

Without generalizing about the varied contemporaneous output or calling into question the interest of certain initiatives, video art must find its specificity in relation to what has already been proposed in the history of art. Yet, "much of its output so far has been somewhat conventional. In all too many cases, the actual products tend to be mere animated versions of what has already been prefigured in abstract painting, kinetic sculpture, light shows and films."[9] Video art cannot claim to be relevant as

contemporary art simply for its technical novelty, an aspect that McHale considers secondary to the aesthetic experience.

The Korean artist Nam June Paik, one of the pioneers of the use of television "in art," referred to the television screen as the artist's new canvas:

Excerpt from Nam June Paik's and John J. Godfrey's *Global Groove*, 1973.

> As collage technique replaced oil paint, the cathode ray tube will replace the canvas. Someday artists will work with capacitors, resistors, and semiconductors as they work today with brushes, violins and junk. There are 4,000,000 dots per second on one television screen, just think of the variety of images you can get. It's so cool. It's like going to the moon.[10]

But his enthusiasm is about television as a communication media rather than a medium. Paik's work unfolds within the conceptual framework of Marshall McLuhan's "Global village," in which television is conceived as the media element most likely to stimulate movement toward the constitution of a world tribe.[11] In the exhibition *Video Art*, Paik presented his "work" *Global Groove* (1973), which is in fact a program broadcast by an American television channel[12] [fig. 2]. Video sequences of various kinds are frenetically superimposed within it: extracts from other television programs, videos made by the artist, contributions from other artists, documentary sequences, dance videos, etc. Paik thinks of *Global Groove* as a global music festival that reflects a future where all cable TV broadcasts can be linked to one another. He announces in the credits: "This is a glimpse of a video landscape of tomorrow when you will be able to switch on any TV station on the earth and TV guides will be as fat as the Manhattan telephone book." Any dividing line between consumers of mass

media and those of avant-garde video art is blurred. "If we could compile a weekly TV festival made up of music and dance from every county, and distributed it free-of-charge round the world via the proposed common video market, it would have a phenomenal effect on education and entertainment.

"Cultural smorgasbord"

Nam June Paik's artistic production, situated within the framework of the everyday social and cultural practices of his potential viewers,[13] seems like an exemplary response to the theoretical approach defended by John McHale in the *Video Art* catalog. McHale calls for an "inclusive theory" as a common tool for understanding all of the works shown in the exhibition – a theory responding to actual practices in which art and popular culture come into contact. For example, such exchanges were recently shown in the exhibition *Revolution of the Eye – Modern Art and the Birth of American Television* (2015), which traced the impact of contemporaneous artistic production on television in the post-WWII era and up to the mid-1970s.[14] Since then, sociologists have rendered these exchanges even more explicit. Éric Maigret in particular took note of the presumed contradiction between the experience of mass communication and artistic work, the contradiction itself collateral damage of the "hierarchy of values" still determining culture, while stressing that "this Manicheism does not hold up for long against the analysis of the history of ideas nor against the study of program content and viewer practices."[15]

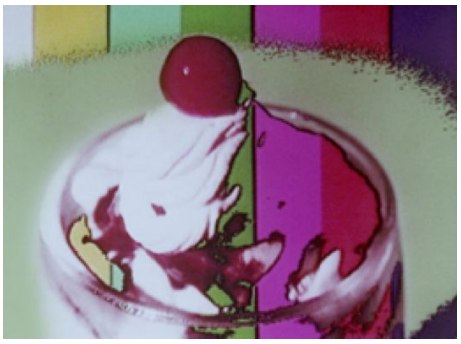

Fig. 3. Andy Warhol, still from *Underground Sundae*, TV ad for Schrafft's Ice Cream, 1968. © Kramlich Collection, San Francisco

Thus, as interesting as avant-garde video art experiments may be, John McHale regrets the strong tendency to place them "on a higher plane than ordinary programming. What is particularly apparent in such overvaluation is a denial of the larger symbolic and ritualistic functions of both the manifest and latent 'content' of television – as even extending to the commercial break."[16] Here, McHale highlights the very specific perception of airtime in television consumption, divided between commercial breaks. These breaks are themselves traditionally viewed by television itself as not being of equal interest to the rest of the programs broadcast.[17]

The *Video Art* exhibition, as has been mentioned, featured advertisements. One of them was Andy Warhol's *Underground Sundae* (1968), produced for the Schrafft diner chain [fig. 3]. As one would expect for a frozen dessert ironically described by Warhol as "underground" (i.e. uninterested in commercial circuits), the work plays with the codes of advertising rather than reproducing them – the soundtrack records the film being shot, color test bars are visible in the background. In the exhibition catalog, this "artist's advertisement" enjoys a special status in comparison to other ads: the catalog gives relatively detailed information (format, sponsor, lender) in the same arrangement as for other videos or installations shown in the exhibition. The "anonymous" ads, on the other hand, are ostracized and crammed into a generic "Commercials" section, designated on the basis of rudimentary information (title and date only). One of these ads, *Help Unsell The War* (1972) [fig. 4], may provide a perfect example of what John McHale is

interested in in these advertising works, an interest relative to the symbolic significance of metaphors produced by television within society.

Fig. 4. Advertisement *Help Unsell The War*, 1972. © Committee to Help Unsell the War: Clergy and Laymen Concerned about Vietnam. Shown in the exhibition *Video Art* (1975).

This is an anti-Vietnam War public service announcement, sponsored by organizations dedicated to ending the conflict. We see Uncle Sam distributing portions of apple pie to characters personifying categories of American citizens (a child, an elderly man, an African American, a worker, etc.). "When they divided the pie in Washington, did you even wonder who got the biggest slice?" the voiceover enquires, as a cigar-smoking general frantically gobbles up almost all the pie in front of the other, aggrieved characters. Your tax dollars go toward war, and this "buys you bombs instead of schools."[18]

The ad is an incarnation of what John McHale calls "video ikons": "Secular by definition but mythopoetic in function, the video ikons afford both the recurrent stability and ritualized predictability of the standard format series and the changing topicality
(and fantasy) of the 'specials', the news, and other shows."[19] From a more anthropological standpoint, he underlines the affinity of these icons with the plasticity of the information environment – constantly changing – and therefore the possibilities, offered by television, of processing socio-cultural upheavals in progress. McHale reverses the focus by reassessing television in terms of its popular use as a producer of symbolic content in a society, a role traditionally assigned to the fine arts. "The collective symbols of the society are to be found here rather than exclusively in the fine arts."[20] He approaches popular television productions according to their own qualities,

without any cultural value judgment about either their content or mode of consumption.

For him, such judgments can only lead to pitfalls: reproaching popular television productions for being ephemeral, for mass audiences, etc., is actually tacking the canons of video art onto television. Being derived from the canonical moral standards of "high culture," these canons cannot be valid, in McHale's eyes, for judging contemporary cultural consumption. Conversely, judging video art with the use of the canons of television, it is criticized for being boring. If one were to get rid of these obsolete criteria, it would be possible to consider this medium in an open and non-exclusive way: "In terms of the future of art or the future of television, or indeed the future of culture, we are patently moving towards the cafeteria style of a cultural smorgasbord rather than the formal stages of an eight course dinner!"[21]

Vidiots

This conception of cultural consumption as a widely varied buffet, which ignores the crude divide between art and mass culture, was born in the 1950s in London. At the time, McHale was part of a group of artists, architects, and theorists known as the Independent Group. Together, they elaborated the cultural theories of English pop art. For them, art had to be taken out of its ivory tower through the acceptance of the aesthetic significance (in the broad sense) of everyday life and the environment.[22] Their cultural theory was based on the notion of a "continuum," that is to say, on the absence of exclusivity and hierarchization between "high culture" and "popular culture," in

particular within American culture, on which they were primarily focused for socio-historical reasons (including the Cold War alliance between Great Britain and the USA, as well as a shared language).[23] Television, alongside display advertisements, Hollywood films, industrial design, pop music, and other outputs of contemporary cultural industries, was the object and place of sharing popular mass-cultural experiences of which Independent Group members claimed to have been happy consumers before being theorists. As Reyner Banham – another member of the Independent Group – noted in a pop index compiled in the early 1960s, they admitted to being "vidiots": "formerly a term of pejoration, now purely descriptive – one trained in the use of the mass media, originally TV (*Video* in US usage)."[24]
This portmanteau word first referred to television as a privileged popular cultural instrument; then, by specifying that the word became "purely descriptive," Banham ironically moved TV consumers from an old status (being considered idiots) to a new one: trained, educated consumers, i.e. smart consumers. In his colorful writing style, Banham detailed the evolution of this "training" toward what he caustically qualified with the oxymoron of "pop connoisseurship":

> At first it meant "trained" in the Pavlovian sense of "equipped with reliably conditioned reflexes" – people who developed uncontrollable leg-actions whenever a commercial said "... don't walk, Run, NOW to your dealer for giant family sized pack". Then followed a subtle change of meaning to pick up the sense of "one so conditioned to the medium that she can eat, knit, smoke, talk and read a book, all at the same time as watching the screen". From this only a further shift of emphasis was required to make "trained" carry the sense of "one skilled in the use of the medium" and thus, by extension to anyone trained to extract every subtlety, marginal

> meaning, overtone or technical nicety from any of the mass media. A Pop Art connoisseur.[25]

Besides being happy TV consumers, some of the Independent Group's members also created for the medium. John McHale made commercials for English television in the 1950s, among them one for a shampoo and another for EMI Records.[26] In his artistic works of the period, principally collages, television also played a key role. For the collage *Machine Made, America* (1956) [fig. 5], the television became the heart of his humanoid robot, which was made up of different elements of contemporary mass culture.

Fig. 5. John McHale, *Machine Made, America*, 1956. Original collage not located/lost, dimensions unknown, reproduced on the cover of the magazine *Architectural Review*, May 1957. © Architectural Review

A television set also appeared in the background of the famous collage *Just what is it that makes today's homes so different, so appealing?* (1956) [fig. 6], conceived together with the famous pop artist Richard Hamilton, who was also part of the Independent Group. The collage used images considered to be indicative of the contemporaneous social issues concentrated within it: "Man, Woman, Humanity, History, Food, Newspapers, Cinema, TV, Telephone, Comics (picture information), Words (textural information), Tape recording (aural information), Cars, Domestic appliances, Space."[27] For Independent Group members, television was an exemplary pop medium, on the one hand for what it represented in popular cultural consumption, and on the other hand for its communicational role in the new Information Age, which was an important focus of the group's theoretical considerations on pop culture. Finally, it interested

them on the technological level. In the late 1950s, in his lecture, "Glorious Technicolor, Breathtaking Cinemascope and Stereophonic Sound," Hamilton analyzed the impact of the technological developments of the time on entertainment industries.[28] He then evoked some of the latest experimentation undertaken with the medium of television, such as the multi-screen device that designers Charles and Ray Eames had just developed for the Moscow World's Fair of 1959, displaying a montage of nearly 2,000 images reflecting the experience of contemporary daily life in the United States[29] [fig. 7].

Charles and Ray Eames sat within a canonical pop approach – that of the pleasure of technology, visual communication, and the ephemeral, as detailed by Justus Nieland in his recent book, *Happiness by Design*.[30] As early as the 1950s, the Eames's work with television embodied a new media conception of the extension of sensory experience, and the understanding of media as a global environment. In the same vein, in the 1960s, a number of artists using this medium did not consider their practice within the closed category of video art but in undefined uses, installations, performances, etc. During this period, John McHale reflected on the topic of the new context of the information society and the hypertechnologized environment in which it operated. Free of technical determinism, he envisaged a shift in cultural and artistic experience: from now on, human beings would have an informational relationship with their environment. What consequences would this have for art? In an entirely cybernetic conception (what matters is the flow of

Fig. 6. Richard Hamilton, *Just what is it that makes today's homes so different, so appealing?*, 1956. Conceived in collaboration with John McHale. Collage, 26 x 25 cm, Kunsthalle, Tübingen. © Courtesy the Estate of Richard Hamilton and Cristea Roberts Gallery, London.

information), he described the overflowing of the work into its environment based on the different uses of television:

> As the apparatus of cultural diffusion becomes increasingly technological, its "products" became less viewable as discrete, individual events, but rather more as related elements in a continuous contextual flow, i.e., the book-novel as compared to t.v. The artwork, as for example, in Rauschenberg-type "Combines," moves toward a continuous format, juxtaposing "still" images with live radio and t.v. sets in the same piece, which characteristically spill out of the frame into the general environment.[31]

Taking the *Combines* series by neo-Dada artist Robert Rauschenberg as a reference –which, as its name suggests, merges several mediums – McHale described the dynamics of the overflowing of art into practical life via a "continuum" between different mediums, artistic or otherwise.[32] This is what theorist Dick Higgins would soon call "intermedia."[33] Intermedia environments became common in American artistic production as early as the 1960s.[34]

Telefutures: the informational aesthetic experience[35]

John McHale, who, as mentioned, focused his sociological research on the theme of the future, imagines a total implosion of the notion of medium in that future:

> The future of art seems no longer to lie with the creation of enduring masterworks but with defining alternative cultural strategies, though series of communicative gestures in multi-media forms. As art and non-art become interchangeable, and the master work may only be a reel of punched or magnetized tape, the artist defines art less through any

> intrinsic value of art object than by furnishing new conceptualities of lifestyle and orientation.[36]

In this broadened conception of the aesthetic experience, artistic agency goes through the actuation of the information itself, via its media (the punched card is the first input-output system of computing; magnetic tape refers to analogue or digital recording). Television will therefore only be meaningful as a carrier of information, and not due to the medium research with which certain video artists are engaged. McHale in fact rejects the visual, even sensorial integrity of the artistic experience – taking it a step further, he proposes a complete detachment from all materiality, to settle on the particular concept of "lifestyle": "The boundaries between the art work and life become permeable. The painting on the wall is not the important thing, it's the total environment, the range of experiences."[37]

Fig. 7. Charles and Ray Eames, immersive installation *Glimpses of the U.S.A.*, 1959. 12', seven screens (each 20 x 30 inches). Installed in a geodesic dome created by Richard Buckminster Fuller, Moscow World's Fair, 1959. Image used by Richard Hamilton in "Glorious Technicolor, Breathtaking Cinemascope and Stereophonic Sound". © Charles and Ray Eames

Jack Burnham, who opened his text in the *Video Art* catalog with a sarcastic remark about television's inevitable succession in the linear sequence of Western art, was a close friend of John McHale's and also worked with this concept of "lifestyle" in the sense of a detachment from materiality, toward the invisible, the dominant paradigm of the information society. He developed his theory of "systems aesthetics" in the late 1960s from this same cybernetic basis. This was at a time when machines, in the broad sense of hardware, were being overtaken by dematerialization due to technological upheavals, notably advances in electronics in the information technology sector. As a consequence, many artists

showed a growing interest in the system and in software.[38] From this approach, more conceptual initiatives emerged, along with the happening – artistic forms expressing certain cultural and social transformations of the 1960s, as has been very well spotlighted by art historian Edward A. Shanken.[39] Burnham's reasoning is as follows: since it is the system of art that is used to produce information, and information is sufficient to make art, it suffices that an artist continues to support the idea of art (even without an object) for art to exist, and attention can then shift from the artwork to the experience of living in the everyday environment.[40] "Avant garde art during the past ten years has, in part, rejected inert objects for the 'living' presence of artists, and by that I am referring to Conceptual Art, Performance Art, and Video Art. In the case of such artists [...] art and life activities have become deliberately fused, so that the artist's output is, in the largest sense, *life-style*."[41]

With this conception in mind, it is easier to understand Jack Burnham's sarcasm: for him, the return to the question of the medium is actually deeply dull. It amounts to limiting reasoning to the confines of a so-called "art sphere," even though the shift within this sphere causes the production in question to lose the ingredient necessary for its artistic effectiveness: spontaneity. At first glance, he explains, one might think that the post-formalist medium of television/video art preserves, more than others, a form of spontaneity in the process of reception, which is, in a certain respect, in line with that of human perception. "Without too much difficulty, it is easy to envision television as a kind of human eye attached to a purposeful brain. The electron beam scanning the phosphor on the inside of a video tube has all the ephemerality that we ordinarily associate with the ever shifting light falling on the mosaic of receptors in the human eye." Yet, in reality, "Are not these images on videotape just as destructive to true spontaneity and creativity as the miles and miles of masterpieces seen in museums?"[42]

It is precisely by ignoring the horizon of expectation associated with artistic production that television can escape this pitfall of neutralization due to a lack of spontaneity. As Burnham writes elsewhere, "The most important artist best succeeds by liquidating his position as artist vis à vis society."[43]

In the mass-market cybernetic system of the 1970s, television was still considered the privileged tool for establishing the global village: the personal computer was not yet widely used, the digital revolution not fully underway. Consequently, the question of television's uses was not (or not solely) presented in technical or mediumistic terms, but also in terms of the knowledge and information economy.[44] This was particularly the case in future-oriented research circles. With utopian accents comparable to those of Nam June Paik's *Global Groove*, John McHale was interested in the implications of television as an "open network" beginning in the mid-1960s, and its potential prospective uses in creating a future virtual planetary society.[45] He saw television as one of the key tools for the circulation of knowledge on a worldwide scale, between university centers.[46] These centers would become the heart of international scientific cooperation and, more generally, of social activity, in the service of the establishment of a "global 'consciousness'." McHale died in the late 1970s without witnessing subsequent changes in the use of this medium. His television media theory remained rooted in the pre-internet utopia of planetary communication and the knowledge economy, in a US period in search of a new global ideology.[47]

1 Jack Burnham, "Sacrament and Television," in: *Video Art*, exh. cat., ed. Suzanne Delehanty (Philadelphia: University of Pennsylvania, 1975), 90–95 (quote p. 91). Exhibition taking place in: Philadelphia, Institute of Contemporary Art, University of Pennsylvania; Cincinnati, The Contemporary Arts Center; Chicago, Museum of Contemporary Arts; Hartford, Wadsworth Atheneum.

2 Colin MacCabe, *High Theory/Low Culture: Analysing Popular Television and Film* (Manchester: Manchester University Press, 1986).

3 Lev Manovich, "Post-Media Aesthetics" (2001), online: http://manovich.net/index.php/projects/post-media-aesthetics.

4 This question appears clearly in the catalog's texts, such as the one by David Antin entitled "Video Art: The Distinctive Features of the Medium," in: *Video Art*, 57–73.

5 On this point, see: Curtis L. Carter, "Aesthetics, Video Art and Television," *Leonardo* vol. 12, no. 4 (Autumn 1979), 289–293.

6 Antin, "Video Art: The Distinctive Features," 66.

7 Beginning in 1968, he heads a future-oriented research center, the Center for Integrative Studies (CIS), affiliated with Binghamton University, New York, and subsequently with the University of Houston, Texas.

8 See: Dominique Chateau, "La télévision au défi de l'art," *MEI* no. 16, *Télévision. La part de l'art*, ed. Gilles Delavaud (Paris: L'Harmattan, 2002), 27–38.

9 John McHale, "The Future of Television: Some Theoretical Considerations," in: *Video Art*, 103.

10 Nam June Paik, *Manifesto*, New York, October 1965, cited in: Jasia Reichardt, *The Computer in Art* (London: Studio Vista, 1971), 95. Paik's 1963 installation *13 Distorted TV Sets* consisted of thirteen televisions stacked on the floor, broadcasting an image scrambled by frequency generators (*Exposition of Music – Electronic Television*; Galerie Parnass, Wuppertal).

11 Marshall McLuhan, *The Medium Is the Massage: An Inventory of Effects* (New York: Bantam Books, 1967).

12 *Global Groove* was broadcast on January 30, 1974 by WNET-TV.

13 See: Bill Klüver, *Cable Television and the Artist: Statement Prepared for the Sloan Commission on Cable Communications* / Experiments in Art and Technology, April 1971, in: *Collection de documents publiés par Experiments in Art and Technology*, Fondation Daniel Langlois pour l'art, la science et la technologie [cote CR+D : EAT C12-12 / 3 ; 227].

14 Maurice Berger and Lynn Spigel, *Revolution of the Eye – Modern Art and the Birth of American Television*, exh. cat., New York, The Jewish Museum; University of Maryland Center of Art, Design, and Visual Culture (New Haven: Yale University Press, 2014).

15 Éric Maigret, *Sociologie de la communication et des médias* (Paris: Armand Colin, 2003), 130.

16 McHale, "The Future of Television," 103.

17 In his catalog text, Antin also questions the easy separation between these two kinds of content, when many programs in fact share the segmented structure of advertising. Idem, "Video Art: The Distinctive Features," 66.

18 For further details on this propaganda campaign, see: Mitchell Hall, "Unsell the War: Vietnam and Antiwar Advertising," *The Historian* vol. 58, no. 1 (1995), 69–86.

19 McHale, "The Future of Television," 104.

20 Ibid., 103.

21 Ibid., 104.

22 Anne Massey, *Out of the Ivory Tower: The Independent Group and Popular Culture* (Manchester: Manchester University Press, 2013).

23 Lawrence Alloway, "The Long Front of Culture," *Cambridge Opinion* no. 17 (1959), 41–43.

24 Reyner Banham, "Who is this 'Pop'?," *Motif* no. 10 (1963), 5–13 (quote p. 5).

25 Ibid., 5.

26 Martin Harrison, *Transition: The London Art Scene in the Fifties* (London: Merrell, 2002), 132. John McHale found these work opportunities in particular thanks to his friend Frank Cordell, then rising in the commercial world. The works have not been found; this description by his son remains: "I remember that Silvikrin shampoo ad Frank and Dad did: Two transparent sheets with black wavy lines on them (to represent hair) which they filmed while moving one of the sheets over the other one. So you got the impression of moving hair. Seemed to work all right. The other one I remember was a bake [sic] bean ad where the cans popped up and disappeared then popped up again, and the knives and forks moved around the plate. Simple but effective." (e-mail from Julian McHale, Jr. to John McHale, Jr., June 1, 2007).

27 Richard Hamilton, *Collected Works 1953–1982* (London: Thames & Hudson, 1982), 24. For details on this collection's conception of a work, see: John-Paul Stonard, "Pop in the Age of Boom: Richard Hamilton's 'Just what is it that makes today's homes so different, so appealing?'," *The Burlington Magazine* CXLIX / 149, no. 1254 (September 2007), 607–620.

28 Richard Hamilton, "Glorious Technicolor, Breathtaking Cinemascope and Stereophonic Sound," lecture, Newcastle and London, 1959, in: Jeffrey Shaw and Peter Weibel, *Future Cinema: The Cinematic Imaginary After Film*, exh. cat., Karlsruhe, ZKM/Zentrum für Kunst und Medientechnologie (Cambridge, MA: MIT Press, 2003), 88–95.

29 Commissioned by the United States Information Agency. An excerpt is available online: https://www.youtube.com/watch?time_continue=84&v=Ob0aSyDUK4A&feature=emb_title

30 Justus Nieland, *Happiness by Design: Modernism and Media in the Eames Era* (Minneapolis: University of Minnesota Press, 2020).

31 John McHale, "The Plastic Parthenon," lecture, February 16, 1962, ICA, London, published in: *Dot Zero* no. 3 (Spring 1967), 4–11 (quote p. 11).

32 See: Paul Schimmel, *Robert Rauschenberg: Combines (1953–1964)*, exh. cat., New York, MET; Los Angeles, LACMA; Paris, MNAM-Centre Pompidou; Stockholm, Moderna Museet, 2005–2007 (Paris: Éditions du Centre Pompidou, 2006).

33 Dick Higgins, "Intermedia," *Something Else Newsletter* vol. 1, no. 1 (February 1966).

34 Gene Youngblood, *Expanded Cinema* (New York: E. P. Dutton, 1970). Youngblood elaborates extensively on the subject of television. See also: Teresa Rizzo, "Expanded Television: Making sense of Gene Youngblood in a digital age," *Australian Journal of Communication* vol. 40, no. 3 (December 2013), 85–96.

35 This title is used by John McHale for a text closely associated with "The Future of Television," published two years later in the book *The New Television: A Public/Private Art*. This publication resulted from a conference held at MoMA on the subject of the future of television, "Open Circuits: An International Conference on the Future of Television" (January 1974, MoMA, New York). John McHale, "Telefutures – Prospective Observations," in: *The New Television: A Public/Private Art*, eds. Douglas Davis and Allison Simmons (Cambridge, MA: MIT Press, 1977), 262–277. Douglas Davis, who co-edited the book, was one of the artists exhibited at *Video Art* in 1975, so it was perhaps on this project that he met McHale. He had previously published a reference book on the future of art through technology: Douglas Davis, *Art and the Future* (London: Thames & Hudson, 1973).

36 McHale, "The Plastic Parthenon," 11.

37 John McHale and Alvin Toffler, "The Future and the Functions of Art," *ARTnews* vol. 72, no. 2 (February 1973), 26.

38 Jack Burnham, *Software – Information Technology: Its New Meaning for Art*, exh. cat., New York, The Jewish Museum; Washington D.C., Smithsonian Institution, 1970–1971 (New York: The Jewish Museum, 1970). The artist Roy Ascott wrote in 1967: "When art is a form of behaviour, software predominates over hardware in the creative sphere. Process replaces product in importance, just as system supersedes structure." Roy Ascott, "Behaviourables and Futuribles," (1967), in: idem, *Telematic Embrace* (Berkeley: University of California Press, 2003), 157. On systems thinking and creative practice, see: Francis Halsall, *Systems of Art: Art History and Systems Theory* (Bern: Peter Lang, 2008).

39 Edward A. Shanken brings an enlightening critical perspective to the separation that has been made in art history between trends in "technological" art and conceptual art, particularly on the basis of Burnham's work. Shanken defines the art-and-technology trend according to different axes: 1/ the aesthetic consideration of visual forms that result from science and technology; 2/ their use in creating visual forms: 3/ the use of technoscientific concepts and means in questioning the very functions of science and technology, or in developing new aesthetic models. In the latter case, it is the systems which directly structure scientific methods or aesthetic values that are called into question. Shanken speaks of a "meta-critical process" which he links to the process of conceptual art. Edward A. Shanken, "Art in the Information Age: Technology and Conceptual Art," *Leonardo* vol. 35, no. 4 (2002), 433–438.

40 Jack Burnham, "Systems Esthetics," *Artforum vol. 7, no. 1* (September 1968), 30 sqq.

41 Jack Burnham, "Art and Technology: The Panacea That Failed," in: Kathleen Woodward, *The Myths of Information* (Madison, WI: Coda Press, 1980), 213. This later text is indeed about the failure of initiatives using communication and information technologies to ensure the future of art.

42 Burnham, "Sacrament and Television," 93.

43 Jack Burnham, *Great Western Salt Works: Essays on the Meaning of Post-Formalist Art* (New York: George Braziller, 1974), 16. The dilution of the artistic core in the medium of television was theorized by art historian Rosalind Krauss in: *A Voyage on the North Sea: Art in the Age of the Post-Medium Condition* (London: Thames & Hudson, 2000).

44 See, for example, Daniel Bell, *The Coming of the Post-Industrial Society* (New York: Harper, 1973).

45 Jenny Andersson, *The Future of the World: Futurology, Futurists and the Struggle for the Post-Cold War Imagination* (Oxford: Oxford University Press, 2018), 204. "[...] [John and Magda McHale] worked with cable TV in the form of an interactive television course called *Tune in to the Future*. Cable TV (an "open network") and personal computers led to hopes among futurists that the prized world organization could now be replaced by a virtual planetary future society. If participation could be enabled by satellites, then future world conferences could become true planetary events."

46 John McHale, "Towards a World University," *Architectural Design* no. 35 (October 1965), 481.

47 See: Philippe Breton, *L'Utopie de la communication – Le Mythe du "village planétaire"* (Paris: La Découverte, 1992).

Bibliography

Alloway, Lawrence. "The Long Front of Culture." Cambridge Opinion no. 17 (1959).

Andersson, Jenny. The Future of the World: Futurology, Futurists and the Struggle for the Post-Cold War Imagination. Oxford: Oxford University Press, 2018.

Ascott, Roy. Telematic Embrace. Berkeley: University of California Press, 2003.

Banham, Reyner. "Who is this 'Pop'?" Motif no. 10 (1963).

Bell, Daniel. The Coming of the Post-Industrial Society. New York: Harper, 1973.

Berger, Maurice and Lynn Spigel. Revolution of the Eye – Modern Art and the Birth of American Television, exhibition catalog. New Haven: Yale University Press, 2014.

Breton, Philippe. L'Utopie de la communication – Le Mythe du "village planétaire." Paris: La Découverte, 1992.

Burnham, Jack. "Systems Esthetics." Artforum 7, no. 1 (September 1968).

Burnham, Jack. Software – Information Technology: Its New Meaning for Art, exhibition catalog. New York: The Jewish Museum, 1970.

Carter, Curtis L. "Aesthetics, Video Art and Television." Leonardo 12, no. 4 (Autumn 1979). Crary, Jonathan. "Spectacle, Attention, Counter-Memory." October no. 50 (Fall 1989).

Chateau, Dominique. "La télévision au défi de l'art." MEI no. 16, Télévision. La part de l'art, ed. Gilles Delavaud (Paris: L'Harmattan, 2002).

Cramer, Michael. Utopian Television: Rossellini, Watkins, and Godard beyond Cinema. Minneapolis: University of Minnesota Press, 2017.

Davis, Douglas, Allison Simmons, eds. The New Television: A Public/Private Art

. Cambridge, MA: MIT Press, 1977.

Davis, Douglas. Art and the Future. London: Thames & Hudson, 1973.

Delehanty, Suzanne. Video Art, exhibition catalog, Philadelphia: University of Pennsylvania, 1975.

Hamilton, Richard. Collected Words 1953–1982. London: Thames & Hudson, 1982.

Hall, Mitchell. "Unsell the War: Vietnam and Antiwar Advertising." The Historian 58, no. 1, (1995).

Harrison, Martin. Transition: The London Art Scene in the Fifties. London: Merrell, 2002.

Halsall, Francis. Systems of Art: Art History and Systems Theory. Bern: Peter Lang, 2008.

Krauss, Rosalind. A Voyage on the North Sea: Art in the Age of the Post-Medium Condition. London: Thames & Hudson, 2000.

Higgins, Dick. "Intermedia." Something Else Newsletter 1, no. 1 (February 1966). New York: Something Else Press.

MacCabe, Colin. High Theory/Low Culture: Analysing Popular Television and Film. Manchester: Manchester University Press, 1986.

Maigret, Éric. Sociologie de la communication et des médias. Paris: Armand Colin, 2003.

Manovich, Lev. "Post-Media Aesthetics," published online, 2001, http://manovich.net/index.php/projects/post-media-aesthetics.

McHale, John. "The Plastic Parthenon," lecture, 16 February 1962, ICA, London, published in Dot Zero no. 3 (Spring 1967).

McHale, John. "Towards a World University." Architectural Design 35 (October 1965).

McHale, John and Alvin Toffler. "The Future and the Functions of Art." ARTnews

72, no. 2 (February 1973).

McLuhan, Marshall. The Medium Is the Massage: An Inventory of Effects. New York: Bantam Books, 1967.

Massey, Anne. Out of the Ivory Tower: The Independent Group and Popular Culture. Manchester: Manchester University Press, 2013.

Nieland, Justus. Happiness by Design: Modernism and Media in the Eames Era . Minneapolis: University of Minnesota Press, 2020.

Parfait, Françoise. Vidéo : un art contemporain. Paris: Éditions du Regard, 2001.

Reichardt, Jasia. The Computer in Art. London: Studio Vista, 1971.

Rizzo, Teresa. "Expanded Television: Making sense of Gene Youngblood in a digital age." Australian Journal of Communication 40, no. 3 (December 2013).

Schimmel, Paul. Robert Rauschenberg: Combines (1953–1964), exhibition catalog, Paris: Éditions du Centre Pompidou, 2006.

Shanken, Edward A. "Art in the Information Age: Technology and Conceptual Art." Leonardo 35, no. 4 (2002).

Shaw, Jeffrey and Peter Weibel. Future Cinema: The Cinematic Imaginary After Film, exhibition catalog. Cambridge, MA: MIT Press, 2003.

Stonard, John-Paul. "Pop in the Age of Boom: Richard Hamilton's 'Just what is it that makes today's homes so different, so appealing?'." The Burlington Magazine, CXLIX / 149, no. 1254, (September 2007).

Turner, Fred. From Counterculture to Cyberculture: tewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism. Chicago: University of Chicago Press, 2006.

Youngblood. Gene. Expanded Cinema. New York: E. P. Dutton, 1970.

Wolfe, Tom. The Electric Kool-Aid Acid Test (1968). New York: Picador, 2008.

Woodward, Kathleen. The Myths of Information. Madison, WI: Coda Press,

1980.