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The Circuits of Television

UNIL | Université de Lausanne
Section d'histoire et esthétique du cinéma

Fonds national suisse

ASCA

Histories Technologies Imaginaries

The Circuits of Television: Histories, Technologies, Imaginaries

Marie Sandoz, Anne-Katrin Weber (University of Lausanne)
and Markus Stauff (University of Amsterdam)

Television has been conceived as a mass medium that broadcasts a linear program flow to a wide and anonymous domestic audience. Occasionally, the medium is praised for its power of dissemination; more often, it is criticized for centralized transmission of indiscriminate content to distracted or passive viewers. Television, in this perspective, lacks any kind of direct feedback mechanism.

The *Circuits of Television* Conference aims to rethink television history and theory by focusing on the medium's circuits and multiple loops. This shift in perspective brings to our attention television's technological flexibility and interrelations with other media, as well as its sprawling, often hidden, cultural, industrial, and political productivity. Taking as a starting point the Circuits of Television, this conference also aims to inquire the much-overlooked connection between the history of computing, cybernetics, video art, ecology and system theory – where circuits and feedback loops are key concepts – and television's historiography.

WEDNESDAY AFTERNOON, 7 MAY 2025

14:00 Introduction

Marie Sandoz, Markus Stauff, Anne-Katrin Weber

Chair: Audrey Hostettler (University of Lausanne)

14:30 Parallel Circuits: Experimental Dispositifs of Video Pedagogy in Canada, 1965-1975

Zoë Druick (Simon Fraser University)

15:10 Television Computing Itself: Feedback, Mediality, and the Cybernetic Classroom of 1970

Caspar C. Mierau (University of Basel)

15:50 Coffee break

Chair: Léa Dreyer (University Paris 1, Panthéon-Sorbonne)

16:20 TV to TV. Artists' Television in Evolution, from *Open Circuits* to Slow-Scan TV

Clara Royer (University Paris 1, Panthéon-Sorbonne)

17:00 The Closed Circuit in Video Art

François Bovier, Maud Pollien, Stéphanie Serra (University of Lausanne)

THURSDAY MORNING, 8 MAY 2025

Chair: Federico Pierotti (University of Lausanne)

9:30 Radar Ratings: Computing meets Broadcasting in Television's First Decade

Mark Hayward (York University)

10:10 Remote Cooperation: Television, Simulation and the Cybernetic Laboratory of Efficiency

Guilherme Machado (University of Lausanne)

10:50 Coffee break

Chair: Markus Stauff

11:20 Keynote: Boring Television and Why It Matters

Kit Hughes (Colorado State University)

12:45 Lunch

THURSDAY AFTERNOON, 8 MAY 2025

Chair: Anne-Katrin Weber

14:30 Mapping Informational Circuits for the Dissemination of Catholic Television Discourse: The Case of Montreal in the 1950s

Ira Wagman (Carleton University)

15:10 How We Became Posthuman on the Moon. Closed-Circuit Television, Remote Control and the Soviet Lunar Rovers

Sven Grampp (Friedrich-Alexander-University)

15:50 Coffee break

Chair: Judith Keilbach (Utrecht University)

16:20 Closed Circuits of Entertainment: The Pleasures of Television Surveillance

Hannah Spaulding (University of Liverpool)

17:00 How to Advance Set Decoration Circularity: A Situational Analysis of Material Flows in the Czech Television Industry

Miroslav Vlček (University of Ostrava)

FRIDAY MORNING, 9 MAY 2025

Chair: Marie Sandoz

9:30 The Shock of Self-Perception. Reflections on the Challenges of the Therapeutic Television Circuit

Mireille Berton (University of Lausanne)

10:10 Stereo-Color Television. Eye, Screen and Mind in a Feedback Loop

Pierre-Jacques Pernuit (University Paris 1, Panthéon-Sorbonne)

10:50 Coffee break

Chair: Daniela Zetti (University of Lausanne)

11:20 Self-Organization and Collective Infrastructures: Circuits and Feedback Loops in Video Art and Activism

Stefanie Bräuer (Critical Media Lab, Basel Academy of Art and Design)

12:00 Graphic Design and Circuits: Typography, Audiovisual Media, and Feedback in Post-1968 France

Olivier Lugon (University of Lausanne)

Parallel Circuits: Experimental Dispositifs of Video Pedagogy in Canada, 1965-1975

Zoë Druick (Simon Fraser University)

Between 1945 and 1975, alongside the formation of national broadcast television, Canada developed multiple educational television "networks." In my presentation, I zero in on two of the experiments taking place in Canada's westernmost province of British Columbia during the years 1965-1975. On one hand, there was a concerted effort to create broadcast and closed-circuit educational video materials for classrooms through the Provincial Media Education Centre (PMEC). Mediating between the national broadcaster (CBC) and the provincial ministry of education, the PMEC made hundreds of radio and television programmes for schools between 1940 and 1980. On the other, Video Inn (now VIVO), a guerrilla video organization in Vancouver funded by arts council grants, took its videos on the road in the mid-1970s, travelling around the province on a repurposed school bus to share their alternative cultural visions with a variety of educational and cultural groups.

My presentation considers the modernist, cybernetic visions of both groups and their connection to broader systems and policies of technological education that were taking shape at the time. Taking inspiration from Katherine Groo's dialogical approach to film archives, I consider the range of work undertaken under the banner of educational TV in the postwar period and position their experiments in relation to both cybernetic theory and the emergence one of the first Communication Studies programs in Canada, at Simon Fraser University (1973). My research investigates the particularities of educational TV in Canada, while also situating it within larger postwar dispositifs of technology and education.

Television as an educational *dispositif*. Provincial Educational Media Centre photograph, n.d., n.a. PEMC fonds, Royal BC Museum.

Zoë Druick is Professor in the School of Communication at Simon Fraser University. Her research considers histories, theories and trajectories of documentary and reality-based media with an emphasis on their intersection with biopolitical projects. Her work on these topics has been published in numerous anthologies and journals, including the The Documentary Book and Blackwell Companion to Documentary History. She is author or editor of five books of media studies, including *Projecting Canada: Government Policy* and *Documentary Film at the National Film Board and The Grierson Effect: Documentary's International Movement*. She is currently Principal Investigator on *Distributed Networks*, funded by a major, multi-year Social Sciences and Humanities Research Council (Canada) grant, that investigates the intersecting histories of cybernetics and educational TV in Canada.

Television Computing Itself: Feedback, Mediality, and the Cybernetic Classroom of 1970

Caspar C. Mierau (University of Basel)

In 1970/71, West German public television aired a 26-part educational series titled Introduction to Electronic Data Processing. At a time when almost no one had direct access to computers, this program opened an experimental media space: a televised cybernetic classroom that intertwined television and computing not just thematically, but structurally.

Two male IBM employees acted as expert hosts — one theoretical, one practical — while a female moderator, later revealed to be a leading IBM executive, asked questions and embodied the outsider's view. Viewers received print materials and were invited to submit test answers via machine-readable forms, processed by IBM computers. Certificates were automatically generated and mailed back — marking a recursive loop between home, television studio, and data center.

This talk argues that the series exemplifies an overlooked televisual imaginary: television as a computational circuit. Drawing on archival materials from SWR, BR, and WDR, it examines how computing and broadcasting formed a hybrid system of feedback and media pedagogy. By rethinking the history of computing through television — and vice versa — the presentation contributes to current debates around media archaeology, feedback cultures, and the epistemic circuits of media technologies in the postwar era.

Press photo from the 1970 IBM-backed educational TV series Introduction to Electronic Data Processing, showing the studio setup with an IBM System/360 and three presenters

Caspar Clemens Mierau studied Media Culture at the Bauhaus University Weimar from 2000 to 2007, focusing on digital cultural techniques. Since 2019, he has been pursuing a part-time PhD at the University of Basel on the history of learning to program around 1970, based on the television series Introduction to Electronic Data Processing. Although he has not followed a traditional academic career path, he continues to engage with topics such as media and computer history, the representation of hackers on television, and the culture of computing in Germany. He is also the co-host of Versionskontrolle, a podcast on digital history, which he launched together with MIT researcher Katharin Tai.

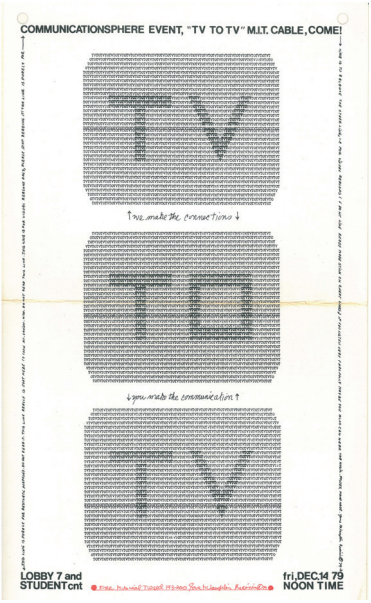
TV to TV. Artists' Television in Evolution, from *Open Circuits* to Slow-Scan TV

Clara Royer (University Paris 1, Panthéon-Sorbonne)

At the turn of the 1980s, as faith in traditional broadcast television waned among artists — seen by many as increasingly rigid, centralized, and unresponsive—a marginal technology began to capture the imagination of the avant-garde: slow-scan television (SSTV). Originally developed in the 1950s to transmit still video images over narrow-band channels such as radio waves or telephone lines, SSTV occupied a liminal position between closed and open-circuit systems. Technically gated and point-to-point, yet low-cost, non-proprietary, and globally accessible in principle, it emerged as a hybrid system — closed in form, but open in potential — well-suited to support alternative televisual practices.

This presentation explores how SSTV's hybrid circuitry offered artists a compelling alternative to the top-down logic of broadcast and a fertile ground for reimagining televisual communication. Situating this shift within the broader discursive and artistic context inaugurated by the 1974 Open Circuits conference at MoMA, it will trace the emergence of SSTV in the works of artists Aldo Tambellini, Douglas Davis, and Willoughby Sharp, showing how, through their experiments, SSTV emerged not merely as a workaround but as a speculative blueprint for a "new television." In their hands, it became a medium for intimate, decentralized, and transnational exchange — redefining television as communicative system in which TV sets could, in effect, speak to one another.

Far from a detour, artists' engagement with SSTV will be shown as marking a pivotal movement in the evolution of televisual communication; one that challenges the conventional alignment of communication with open broadcast and casts closed formats as generative sites for collaborative and multidirectional exchange.



Aldo Tambellini, TV to TV (We Make the Connections, You Make the Communication), 1979, print on cardboard. Massachusetts Institute of Technology Librairies, Center for Advanced Visual Studies Special Collection.

Clara M. Royer is a PhD candidate in Art History at Université Paris 1 Panthéon-Sorbonne. Her dissertation offers the first historical account of artists' use of slow-scan TV (1977-1991), examining this practice through the lens of the economic, legal, and geopolitical implications of the late 20th-century global distribution of the frequency spectrum. Clara holds a Dual MA Degree in Modern and Contemporary Art from Columbia University and the Sorbonne. In recent years, her work has been supported by grants from the Institut National d'Histoire de l'Art (INHA), the Terra Foundation for American Art, and the Institut des Amériques. In 2024-2025, she was a research fellow in the New Media department at the Centre Pompidou.

The Closed Circuit in Video Art

François Bovier, Maud Pollien, Stéphanie Serra (University of Lausanne)

This talk, structured in three parts progressing from general to specific, explores the use of closed-circuit systems in video art and installations. It approaches the circuit in video primarily from a media, technical, and aesthetic perspective.

First, we will outline the various modes through which video circulates — television, exhibitions, festivals, and open encounters. Closed-circuit systems, feedback loops, and the immediate restitution of electronic images are all technical features systematically explored in video art, distinguishing this medium from film and analog photography. The history and stakes of the closed-circuit system will be explored through specific practices such as studio performance and intermedia environments.

Second, we will turn to a specific technical form: the closed-circuit system, which is based on the immediate (or slightly delayed) broadcast of recorded images through feedback mechanisms or reflexive structures. In Europe, video practices are diverse, follow different chronologies, and rely on various technical tools; nonetheless, the closed-circuit system acts as a common ground or point of convergence. A range of examples and configurations will be presented in connection with the research project "*The Emergence of Video Art in Europe*", jointly supported by the SNSF and the ANR.

Finally, we will look at concrete examples from the Swiss video art scene, where several artists rapidly embraced video and explored its specificities. G Gérald Minkoff — working alone or in collaboration with his wife, Muriel Olesen — integrated closed-circuit setups into his video works and installations. We will highlight the uniqueness of their approach, drawing from their archives recently deposited at the FMAC.

Gérald Minkoff with Muriel Olsen, Kisses, 1971.

François Bovier is a Senior Lecturer in the Film History Department at the University of Lausanne (UNIL) and a Research Associate at Lausanne University of Art and Design (ECAL/HES-SO). Cofunding editor of the film journal *Décadrages* and co-editor of the *Cinétisme* book series at Les Presses du reel, he is the author of *H.D. et le groupe Pool: des avant-gardes littéraires au cinéma visionnaire* (L'Âge d'Homme, 2009) and *Lettrisme et cinéma: de la lettre au photogramme* (Paris Expérimental, 2023). He has edited academic volumes and published numerous articles on experimental cinema, video art, militant cinema, and performance. He has led several research projects funded by the Swiss National Science Foundation (SNSF) and the University of Applied Sciences Western Swizterland (HES-SO). He is also active as a curator.

Maud Pollien holds a BA in Art History (University of Geneva, 2007) and a Master's degree in Film Theory and Practice (University of Lausanne, 2009). From 2017 to 2021, she contributed to the SNSF-funded research project *From Video Art to New Media : The Case of*

the Video Art Festival, Locarno (1980 —2001), directed by François Bovier. She is currently pursuing a PhD on video festivals under his supervision. Alongside her academic work, she has been active in the cultural scene in Geneva: co-programming at Cinéma Spoutnik (2011 —2015), coordinating the photography triennial 50JPG, and working in communications for the Centre de la Photographie Genève (2015 —2017). Since 2020, she has served as a Research Associate in charge of promoting the video collection of the FMAC — Geneva's Contemporary Art Fund.

Stéphanie Serra is a researcher and lecturer in Visual Arts at the Lausanne University of Art and Design (ECAL). Her work focuses on the relationship between literature and the moving image within the field of contemporary art. Her research projects explore the disjunction between text and image in French films from the 1960s to the 1980s, as well as commissioned exhibitions and films by Jean-Luc Godard (including trailers, filmed scripts, and short commissioned works — advertisements, music videos, or institutional films). She is currently completing a PhD under the supervision of François Bovier and is involved in a transnational research program between ECAL and Paris-VIII on the emergence of video art in Europe. This year, she co-curated the exhibition *Disruption. Early Video Art in Europe* at the FMAC in Geneva.

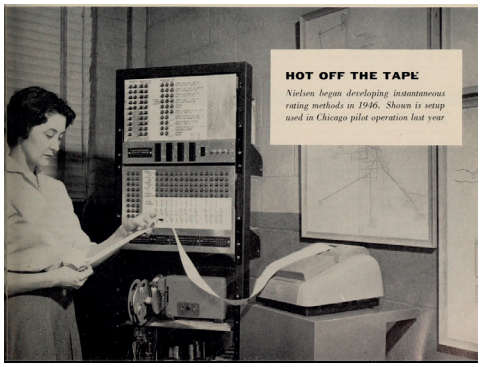
Radar Ratings: Computing meets Broadcasting in Television's First Decade

Mark Hayward (York University)

Accounts of the adoption of computing during the first golden age of television in the United States (1947-1960) focus on the automation of core business operations of the major networks such as payroll or the management of advertising accounts. This paper explores the role that computing played in advances in audience measurement showing how new technologies offered the possibility of transforming the logic of broadcasting that characterized both commercial radio and television in the United States.

The paper reviews the development of television ratings starting in 1947 following the engagement of C. E. Hooper by NBC to develop the first method for surveying the size and sentiment of new medium's audience. I document how, alongside the development of qualitative and quantitative methods for surveying audiences, there circulated plans for "instant" ratings systems. These systems, conceptually and technically based on radar rather than the census, relied upon the increased calculative capacity of electronic computers.

The interaction between early television and the first generation of commercially available electronic computers extended beyond the administration of broadcast corporations and provided the foundations for integrating television into a system capable of the real-time circulation of information. However, beyond this, it also shows how the development of real-time feedback was inseparable from ideas of measuring (or "meter-ing") the broadcast signal. In this way, this history not only speaks to the early adoption of computers but to the development of the cultural and economic logics of digitization that characterize contemporary television and media culture more generally.



Author unknown, *Sponsor Magazine*, November 1st, 1958, p. 37.

Mark Hayward is an Associate Professor in the Department of Communication and Media Studies at York University (Canada). He has published essays in the *Canadian Journal of Communication, SubStance: A Review of Theory and Literary Criticism and Theory, Culture and Society*. He is the author of *Identity and Industry: Making Media Multicultural in Canada* (MQUP 2019). His current research explores the intersection of television, computing and financial services in the middle of the 20th century.

Remote Cooperation: Television, Simulation and the Cybernetic Laboratory of Efficiency

Guilherme Machado (University of Lausanne)

Today, the future of work is often portrayed as a digital environment of remote cooperations. Avatars and other digital agents are part of this imagined future, as are promises of rendering portions of reality visually "portable", constantly updated, and available to human activity via tele-visualization. All this requires a vast media infrastructure where television technologies merge with computer simulation.

This paper aims to tackle imaginaries of the future of work through a genealogical perspective on television-simulation apparatuses as substitutes to the workplace. The question guiding my research is: what makes "virtual environments" convenient to organizations? My hypothesis is that the organizational use of television-simulation apparatuses attests to a convergence of a multitude of workforce control practices: architecture, interior design, the construction of information infrastructures, post-industrial management and simulation-based education. In each of these practices, recent technologies have accelerated the modulation of spatial and social conditions of work. Television-simulation apparatuses thus appear as organizational machines where work can be modulated (in fact, modelled) at low cost and high speed, and where experiments in managing efficiency through aesthetic configurations can be conducted daily.

From the point of view of the media history of organization practices, efficient remote collaboration is not only a technological promise for the future. It is also the product of a convergence of strategies for regulating work. Seeing at a distance seems to be a cybernetic solution to designing human efficiency. It is now a convenient way of setting up computing processes prior to any interaction at work, thereby erasing the difference between real work and simulation.

Remote collaboration platform Microsoft Mesh

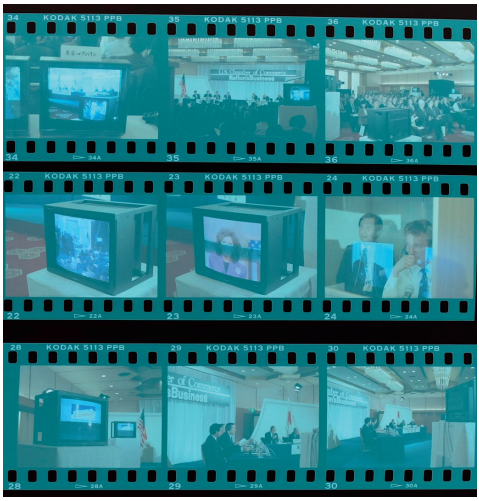
Guilherme Machado is a Junior Lecturer and postdoc researcher at the University of Lausanne, department of Film History and Aesthetics. His research deals with the visual culture of labor and the epistemological implications of visual technologies used to control the production and circulation of labor-related knowledges. He is currently developing research on "labor propaganda" in colonial empires. His publications include *Tacit Cinematic Knowledge. Approaches and Practices* (Meson Press 2024, edited with R. Boguska, R. Puchta and M. Reljic); "Simulation As Training: Work, Cybernetic Instruction and Film" (in P. Brakmann and L. Hilsemer eds., *Instruktive Bilder. Visuelle Anleitung praktischer Fertigkeit*, De Gruyter, 2024); and "Genèses figurales du travail: vers une histoire générale des dispositifs esthétiques de contrôle" (in *1895. Revue d'histoire du cinéma*, n. 103, 2024).

Keynote : Boring Television and Why It Matters

Kit Hughes (Colorado State University)

Using boring television as an entry point, this keynote suggests that turning to television's non-commercial, useful, and other marginalized forms provides an opportunity to "short circuit" television studies. Grounding my remarks in my own research on U.S. workplace and business media, I consider how this more expansive accounting of television's operations and imaginaries productively destabilizes key concepts and modes of inquiry within the field.

To demonstrate this approach, I offer the story of BizNet (1982-1998). A product of the U.S. Chamber of Commerce, BizNet represented the Chamber's quest to build a media empire in order to secure its place as the world's most powerful lobbying organization. BizNet operations included news and public affairs series for broadcast and cable outlets (including ESPN), international videoconferences with U.S. trade partners, live-by-satellite town halls with politicians, interactive meetings, educational seminars, and "grassroots" lobbying events. Certainly, the cross-institutional televisual circuits that the Chamber built — linking partners, distributing information, demonstrating power and access— intervened directly in narrow policy issues. However, in integrating popular and institutional audiences, the Chamber also hoped to achieve its vision for transforming the world by redefining and repurposing concepts like identity and justice, liability and obligation, capitalism and democracy — all longstanding concerns of television studies. In tracing these complex circuits of televisual practice, I argue that we must duplicate institutions' agnostic and simultaneous embrace of the medium's myriad forms — logistical and textual, broadcast and closed-circuit, commercial and non-profit, delightful and boring — to understand television's historical and present capacity to constitute everyday life.



Inverted negatives, "A Nations Business Special Dialogue on Japan/US Trade, video conference, 1989 March", Chamber of Commerce of the United States photographs and audiovisual materials, Hagley Museum and Library.

Kit Hughes is Associate Professor of Film and Media Studies at Colorado State University, where she specializes in useful and workplace media, economic education, and histories of technology. Her book, *Television at Work*, explores how American business developed workplace television as a medium of industrial efficiency, ideological orientation, and corporate expansion. More recently, her research on NYSE educational film, public television consumer programming, and the tech industry's promotion of datafied managerialism in sports asks where our ideas about the economy come from, how they circulate, and how they impact our world.

Mapping Informational Circuits for the Dissemination of Catholic Television Discourse: The Case of Montreal in the 1950s

Ira Wagman (Carleton University)

The Catholic Church has long maintained an interest in media technologies. Like many religious organizations, the church saw tremendous potential in forms of mass communication to spread the word of the gospel across time and space. After adopting a hard-edged tone towards cinema during the 1930s the developments of radio and television caused a change of position. By the 1950s, the Church articulated a more expansive set of policies that saw media as means of communication to distribute church teachings and as a tool to help reimagining its role as a leading voice in teaching media literacy.

To illustrate how the church established different forms of administrative and informational infrastructure both for educating parishioners about television and for making use of television for their own institutional objectives, my paper draws on examples from the Canadian city of Montreal in the 1950s. The city's location in the province of Quebec during a time dominated by the influence of the Church in political and social life makes it an ideal site to account for the relationship between Catholicism and television at mid-century. By focusing on several sites across Montreal in the 1950s my paper shows how knowledge about television circulated from the Vatican to organizations operating at the municipal level. This draws attention to the methodological challenges associated with accounting for non-broadcast circuits of television activity during the medium's early decades. Moreover, it also shows how religious institutions distribute positions on media and act as essential nodes in circuits of television knowledge.


L'ACTION CATHOLIQUE

Serons-nous atteints en profondeur ?

La télévision doit servir la cause de la paix, dit Pie XII

"Television must serve the cause of peace, says Pie XII", *L'Action catholique*, 7.6.1954

Ira Wagman is an Associate Professor of Communication and Media Studies at the School of Journalism and Communication at Carleton University in Ottawa, Canada. He researches and writes on the history of television, particularly in Canada, as well as on questions related to the history of media studies as an academic discipline, the study of media industries, and cultural policy. He is currently working on a book project exploring how the Catholic Church made sense of the "new" medium of television in the Canadian province of Quebec during the 1950s. He is also a Co-Investigation on the project "Distributed Networks: Media Archaeologies of Educational TV and Communication Studies in Canada, 1945-1975", that is supported by a grant from the Social Sciences and Humanities Research Council of Canada.

How We Became Posthuman on the Moon. Closed-Circuit Television, Remote Control and the Soviet Lunar Rovers

Sven Grampp (Friedrich-Alexander-University)

The Soviet lunar rovers, officially known as Lunokhods, were the first remote-controlled vehicles to operate on a celestial body other than Earth. Lunokhod 1 was launched to the Moon in 1970, followed by Lunokhod 2 in 1973, as part of the Soviet Luna space program. The Lunokhods collected geological and geographical data using television cameras and transmitted images "live" – with a three-second delay—back to Earth. A team of 11 engineers at the Korolyov Space Control Center operated the Lunokhods around the clock (Leitenberger 2013). As a result, cosmonauts were withdrawn from their planned lunar missions and replaced by a collective of ground-based controllers who guided the rovers remotely, ensuring that as many televised images as possible were transmitted to Earth.

The Lunokhod projects and their media representations should be understood within the broader framework of the Soviet discourse on cybernetics and its associated visions of a "new mankind" (Groys/Hagemeister 2005), as well as against the backdrop of the Cold War. In this context, closed-circuit television played a distinctive mediating role. Unlike the spectacular live broadcast of the first manned Moon landing in 1969, this form of television operated – and was framed – in a fundamentally different manner, both in terms of its technical configuration and its symbolic function.

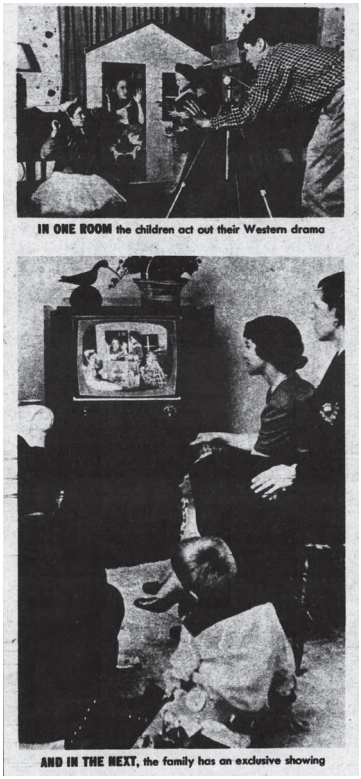
Soviet post stamp for Cosmonauts' Day, 1973

Sven Grampp is Assistant Professor ("Akademischer Oberrat") at the Institute of Theatre and Media studies at Friedrich-Alexander-University of Erlangen-Nuremberg. His research interests include Space Race, media theory, television. Publications (Selection): (ed.) *Messages from the Moon. A Global History of the First Manned Moon Landing* (2024); *Space Race Television. Image Vehicles as Agents of (trans-)global Mediatisation* (2024); *Marshall McLuhan. Vier Lesarten zur Einführung* (2nd ed. 2025).

Closed Circuits of Entertainment: The Pleasures of Television Surveillance

Hannah Spaulding (University of Liverpool)

In "The Closed Circuit," a 1958 episode of The Adventures of Ozzie and Harriet, the titular Nelson family found themselves entangled in the chaos provoked by the appearance of a closed-circuit television set. Built from a kit and outfitted with a camera, this television created a private network in the Nelson's home where the family and their neighbors became (often unwitting) television stars. The construction of closed-circuit television as an instrument of entertainment extends far beyond *Ozzie and Harriet*. In the 1950s-60s, as the medium was integrated into industry, education, and security, journalists, TV producers, and filmmakers imagined how closed-circuit television might also serve as a tool of voyeuristic entertainment and amateur performance. By placing everyday individuals on screen, closed-circuit television offered pleasures and possibilities that seemed to exceed the medium's more explicitly "useful" dimensions. Through an analysis of newspaper reports, magazine articles, promotional materials, and media texts, this paper examines this history, exploring how closed-circuit television was envisioned as a medium of "surveillance entertainment" in the postwar period. It locates this moment within television historiography, connecting it with television exhibitions in the 1930s, video in the 1970s-80s, and viral surveillance media today. Ultimately, I argue that by putting everyday people on TV, closed-circuit television created networks of feedback and exchange that transformed acts of surveillance into sites of entertainment—blurring boundaries between public and private, creator and viewer, performance and audience, practical and pleasurable in ways that have only accelerated in recent years.



Leslie Lieber's "Homemade TV", *Evening Star*, August 22, 1954.

Hannah Spaulding is a Lecturer in Digital Screen Studies at the University of Liverpool and a member of the Centre for Converged Screen Media and Entertainment. Her work examines the relationship between technology, domesticity, and surveillance with a focus on television. She has a PhD in Screen Cultures from Northwestern University and has been published in *Screen, JCMS, Television and New Media*, and the Journal of Sonic Studies. She is currently working on a monograph that traces a history of "useful television" in the American home.

How to Advance Set Decoration Circularity: A Situational Analysis of Material Flows in the Czech Television Industry

Miroslav Vlček (University of Ostrava)

The Czech television industry's set construction has undergone cyclical shifts, moving between prioritizing reusability and focusing on efficiency. During communism, material scarcity forced Czechoslovak Television to reuse as much set decoration as possible. However, in the late 90s and 00s, both commercial and public broadcasters in the Czech Republic began using non-reusable materials, such as Mamuth Glue, which made deconstruction and reuse impossible. This paper analyzes the feasibility of returning to circularity by examining interviews with set designers, construction workers, and producers, along with observations of set-building practices. It explores whether a small industry with relatively few professionals working across different institutions can embrace circularity and identifies the main obstacles to implementing it. Additionally, the paper considers the limitations of circularity and how they could be overcome by repurposing materials beyond television, such as collaborating with art schools and other creative sectors. It is part of a broader research effort on green filming in the Czech Republic and Slovakia. The aim is to create a comprehensive field analysis that addresses how the industry on the periphery can return to practices previously abandoned as ineffective.

Screenshot of the film Burning Bush (2013), directed by Agnieszka Holland.

Miroslav Vlček is an assistant professor in the Department of Sociology at the University of Ostrava, Czech Republic. His research primarily focuses on the sustainability of media industries, particularly the environmental sustainability of the film and television industry and the social sustainability of journalism. He is also developing a journalism study program, which is currently undergoing the accreditation process. He is also working as the project manager of the Platform for Sustainable Audiovision in the Czech Republic, focusing primarily on the implementation of sustainable filmmaking standards and research and development in this field.

The Shock of Self-Perception. Reflections on the Challenges of the Therapeutic Television Circuit

Mireille Berton (University of Lausanne)

From the mid-twentieth century, closed-circuit television — and later video — entered American psychiatric institutions, revealing the heuristic potential of these media for both patients and professionals. For patients, such systems enabled a reflective return to the self-image and made it possible to track psychic changes over time. For professionals, they offered new insights into nonverbal communication, fostered therapeutic introspection, and helped refine clinical practice. More broadly, video recording supported the development of insight — a psychoanalytic concept referring to the emergence of unconscious material into consciousness. How does this "inner gaze" arise through audiovisual tools and their feedback and replay functions? What are the economic, ethical, and ideological stakes of using television circuits as "microscopes of the soul" (Berger 1990) or instruments of "video-confrontation" (Bléandonu 1986)?

This presentation reflects on the persistence of psychic shock as a therapeutic principle. Rooted in nineteenth-century medicine — through cold-water treatments, insulin comas, or electroshock — shock aimed to interrupt pathological states through sudden stimulation. From the 1960s, such techniques were not abandoned but reconfigured. In some video-therapeutic settings, psychic shock merged with the emerging logics of cybernetics and systems thinking. These frameworks offered a way to rationalize and reframe the use of shock, grounding it in three core concepts: feedback loops, behavioral self-regulation, and iterative learning. These "self-systems" mark a key moment in the history of psychiatric technologies — where older interventionist paradigms were reactivated within a new epistemic and technical framework.

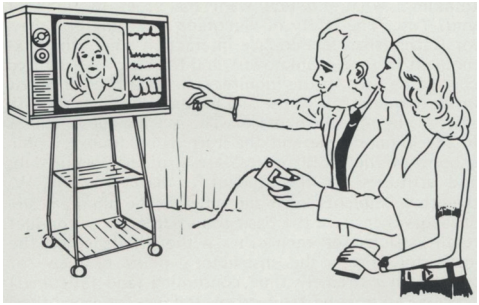


Illustration from: Norman Kagan, "Can Technology Help Us Toward Reliability in Influencing Human Interaction?", *Educational Technology*, vol. 13, n° 2, 1973 p. 44-51

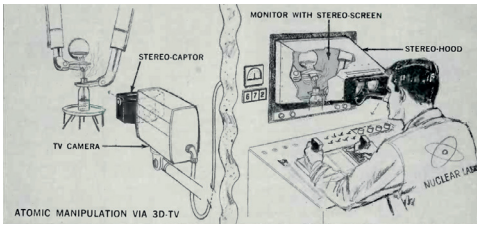
Mireille Berton is a senior lecturer and researcher in the Department of Film History and Aesthetics at the University of Lausanne (UNIL). She is the author of *Spectatrices du cinéma. Aux origines d'un imaginaire* (Classiques Garnier, 2025), *Le Médium (au) cinéma. Le spiritisme à l'écran* (Georg, 2021), and *Le Corps nerveux des spectateurs. Cinéma et sciences du psychisme autour de 1900* (L'Âge d'Homme, 2015). Her current research focuses on audiovisual and psychiatric archives from Swiss hospitals, with special attention to how physicians used film for scientific and therapeutic purposes. More broadly, her research explores the intersections of audiovisual media, cultural history, and gender studies.

Stereo-Color Television. Eye, Screen and Mind in a Feedback Loop

Pierre-Jacques Pernuit (University Paris 1, Panthéon-Sorbonne)

In the late 1960s, American engineer James F. Butterfield (1920-1983) developed a system that created and illusion of color upon watching black-and-white TV images. His "Butterfield color encoder," attached to a standard camera lens, used a rotating disk with cyan, magenta, and yellow filters to produce a black-and-white signal that elicited subjective color perception—an effect known as Pattern-Induced Flicker Colors (PIFCS), which he suggested could be coupled with a stereoscopic television system to be primarily used as a visualization tool in medicine.

A case study in media archaeology and screenology, my paper will situate this experiment in the history of speculative applications of optics in postwar television engineering, at the intersection of the traditions of stereoscopy and "Fechner color" explored by Butterfield. I will show how this unique fusion of science and engineering exemplifies television's connection with the history of computer graphics, not only through shared hardware but also through a cybernetically informed understanding of optics influenced by principles of feedback. The first section of my paper will outline Butterfield's research, its scientific origins, and its "useful" applications during the 1960s and 1980s. In the second part, I will explore the resurgence of Butterfield's integration of stereoscopy and subjective color in early computer graphics.



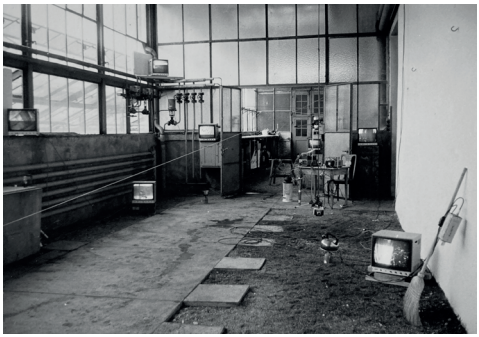
« Typical Stereotronics System Installation », in « Stereo-Color Television », Broadcast Engineering, July 5, 1962, number 7, p. 5

Pierre J. Pernuit is Maître de Conférence at Université Paris I Panthéon-Sorbonne. Pierre research the various regimes of still and moving images in the twentieth century, focusing primarily on cinema, television, and the digital image. Pierre has been a visiting scholar at Columbia University and has held fellowships and postdoctoral positions at the Metropolitan Museum of Art (New York), the Smithsonian American Art Museum (Washington D.C.), the Institut National d'Histoire de l'Art (Paris) and Ca' Foscari University (Venice).

Self-Organization and Collective Infrastructures: Circuits and Feedback Loops in Video Art and Activism

Stefanie Bräuer (Critical Media Lab, Basel Academy of Art and Design)

My contribution looks at circuits and feedback loops in video art with a focus on community building as infrastructural work. I hypothesize that video art and video activism met at an intersection characterized by the creation of technical and social infrastructures. These counter-cultural bottom-up initiatives have been carefully studied regarding the video journalism project *Challenge for Change* which ran in Canada from 1967 to 1980. *Challenge for Change* combined activist with participatory video practice and, for example, resulted in feedback loops where citizens could "see themselves on TV" without any dependency on broadcasting. There is little research though on local video projects which were independent from large institutions and steered towards infrastructure and community building. I center my investigation around Basel, Switzerland, with a focus on questions regarding self-organization, creating a public and collective infrastructures as exemplified by two associations, Videogenossenschaft Basel and VIA. I wish to look closer at concrete projects, such as the activation of video through performance and closed circuits as in *Die kleinen Feuerstellen und die fliegendes Kameras* by Muda Mathis and Käthe Walser, the later co-founders of VIA. This video performance took place at Stadtgärtnerei Basel in 1987 and articulated the closed circuit as a feminist video practice particularly for this local context.



Muda Mathis and Käthe Walser, *Die kleinen Feuerstellen und die fliegenden Kameras*, video performance Stadtgärtnerei Basel, 1987.

Stefanie Bräuer is an art historian and media studies scholar. She studied in Jena, Berlin, Basel, and Siena. After contributing as a research assistant to a project on ultrashort audiovisual forms in Basel and Luzern (2014-2017), she was a guest researcher at the German Center for Art History in Paris (2017-2018). Her doctoral thesis explored the implementation of oscilloscopic imagery in early 1950s experimental film (Schüren 2024). Currently, she is PostDoc at the Critical Media Lab of HGK Basel where she works on a historical network analysis of 1980s and 1990s video practice and net activism in Basel. At Hochschule Luzern, she teaches courses on the history of audiovisuality, on the theory and culture of digital media, as well as a media aesthetics of experimental practices in the arts, science and technology.

Graphic Design and Circuits: Typography, Audiovisual Media, and Feedback in Post-1968 France

Olivier Lugon (University of Lausanne)

From the 1950s onwards, the rise of television and instant communication disrupted the established paradigm of print publishing, which relied on the delayed dissemination of texts and images. This upheaval compelled the graphic arts to reassess their position in light of the new dominance of audiovisual media. The resultant reconfiguration of the mediascape provoked intense debates among typography and graphic design professionals about the future of their fields, while simultaneously inspiring a wave of experimentation aimed at bringing graphic design closer to this new audiovisual regime. These endeavors led to the extraordinary ascendancy of screens and projections in the publishing and graphic production of the time — whether through film strips, slide books, slide shows or multivision. They also prompted the investigation of audiovisual forms designed to offer an alternative to mass telecommunication, which was deemed too impersonal, fragmented and industrialized. In post-1968 France, people like Albert Hollenstein and Gérard Blanchard began to imagine what "live" graphic design might embody, gathering audiences around ephemeral experiences, such as the "cabaret graphique" at the Rencontres de Lure, a major annual meeting of typographers that Blanchard directed from 1969 to 1973. In this spirit, Yann Berriet, a director of still-view audiovisuals, posited that mass communication should be contrasted with "group communication". The latter, he argued, would prioritize the animation of a collective over the one-way transmission of information, thereby more effectively embracing the principle of feedback than the networks of long-distance communication.

Gilles Gheerbrant, René Ponot, Gérard Blanchard et al., *Pour comprendre MMcL [Marshall McLuhan] : quelques explorations, sondages et effractions*, Lurs-en-Provence, Association des Compagnons de Lure, 1969 (graphisme Fernand Baudin).

Olivier Lugon is a historian of photography, professor at the University of Lausanne. A specialist in the history of twentieth-century photography, exhibition design, graphic design and projection, he currently directs the SNSF research project "Graphic design for the screen: slide, filmstrip, cinema, television (1945-1980)". With Christian Joschke, he co-edits the journal *Transbordeur: photographie, histoire, société*.

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