

eikones — Centre for the
Theory and History of the Image,
Rheinsprung 11;
Stadtkino Basel,
Klostergasse 5.



OCTOBER 2-3

organized by
David Bucheli
and
Olexii Kuchanskyi

ECOLOGIES OF MIND IN THE COLD WAR

WITH:

Ole Bogner
Orit Halpern
Ute Holl
Occitane Lacurie
Svitlana Matviyenko
Marie Rebecchi
Magnus Rust
Kamila Smagulova
Elena Vogman

Inkblot figure from the cover design of Theodor W. Adorno,
„The Authoritarian Personality“, New York 1954 (1950).

A radioactive imprint of marine algae. Film still: Searching for Strontium-90
(1965, dir. Ilykhorii Koshon, the Kyiv Studio of Popular Science Film).

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STADTKINO
BASEL



Freiwillige Akademische
Gesellschaft Basel
seit 1835

Friday, October 2

12:30-13:15 (eikones) – **Welcome and Introduction**

by David Bucheli and Olexii Kuchanskyi

13:30-15:00 (eikones) – **Panel I:**

Environmental Models of Learning in Technoscience and Psychology

Chair: **Eduardo Luersen (Universität Basel)**

Ole Bogner (Goethe Universität Frankfurt a. M.), *From Stimulus to Ecosystem: Ecological Psychology, Cybernetics and the Emergence of Environmentality*

Although it never became part of the scientific mainstream, there were many influential attempts after World War II to reinvent psychology as an ecological science. The concept of ecology articulates an internal scientific critique of context-free, individualistic, and deterministic psychological theories. However, this incorporation of ecological thinking into psychology should not be understood merely as a methodological and theoretical development, but rather as the emergence of new environmental techniques for governing human behavior.

To reconstruct this link between knowledge and power, the talk presents an experiment conducted in the early 1940s by Kurt Lewin on behalf of the U.S. government. The purpose of the study was to investigate how the food habits of a given population of a small town could be changed in response to challenges such as protein shortages during the war. Lewin concluded that the population's eating habits are the result of diverse ecological cycles that must be controlled. Cybernetics, which was emerging at that time, gave him the tools to develop a vision of ecological psychology that was intended to shape and regulate the behavioral environments of postwar American society.

Magnus Rust (Universität Basel), *Ghost in the Computing Machine*

It is well known that, starting in the early 1950s, a growing number of people, often inspired by the ideas of young cybernetics, began to think of the human brain as a computer and to describe interfaces between humans, machines, animals, and the environment.

Less well known is the diversity with which people from the psycho-sciences (psychiatry, psychology, psychoanalysis), the old guardians of knowledge about the human psyche, thought with and about computers in the USA in the 1960s. Many of them dreamed, in the jargon of the time, of automating the psycho-sciences. But just as ubiquitous as automation was, just as varied were scientists' ideas about what it meant, and even more varied were its practical implementations.

The computer as a research tool in psychology had already been considered in the first computer handbook, "Giant Brains, or Machines That Think," published in 1949. In any case, many saw the computer as a way to reduce bureaucratic paperwork. Others used it as a metaphor for the brain's thinking, as in a well-known prediction from 1958: "[W]ithin ten years most theories in psychology will take the form of computer programs, or of qualitative statements about the characteristics of computer programs." Other psycho-scientists wondered how the process of psychotherapy could be automated. What did this say about psychotherapists and their view of humanity and especially themselves?

It turns out that it was not always technical possibilities that determined the thinking of these dreaming scientists, but rather culturally developed ideologies. With the advance of computerization, those partially divergent ideas were not resolved. Some scientists saw their original hopes exposed as exaggerated through their first hands-on experiences, while others, especially in the fields of artificial intelligence and cognitive science, continued dreaming with each new generation of hardware.

Orit Halpern (Technische Universität Dresden), *The Ecology of the Mind: From Hebbian Synapses to the Neuro-Economics of the Will*

In 1949, Donald Hebb proposed that learning occurs through the strengthening of connections between neurons—"cells that fire together, wire together." This deceptively simple postulate inaugurated a new epistemology of mind, one in which cognition became an emergent,

distributed, and fundamentally ecological process rather than the operation of a sovereign reasoning subject. This paper traces the transformation of mind and brain, particularly after the 1960's, inaugurated by models such as Hebb's cell assemblies through two of its most contemporary heirs: behavioral economics and the neuroscience of free will.

I argue that these fields, though rarely read together, share a common historical episteme. Behavioral economics, from Herbert Simon's bounded rationality to Kahneman and Tversky's heuristics and biases, translated the connectionist decentering of mind into a science of predictable irrationality—rendering the fallible, environmentally embedded decision-maker into an object of governance, choice architecture, and nudging. Simultaneously, the neuroscience of volition, from Libet's readiness potentials to Robert Sapolsky's recent case for determinism, has mobilized the same distributed model of cognition to dissolve the willing subject altogether, relocating agency into cascades of synaptic weights, hormones, and environmental histories. These two transformations have changed how power, attention, and freedom are linked in the present and have much to say about contemporary attention economies, and the automation of decision making in AI.

17:00-19:00 (Stadtkino Basel) – **Panel II:**
Cine-Ecologies: Cinema, Information, Environment

Chair: **David Bucheli (Universität Basel)**

Screening: **Searching for Strontium-90** (15'40'', 1968, dir. Hryhorii Kohan)

Produced in collaboration with the Institute of Biology of Southern Seas in Ukraine, this popular scientific film traces the impact of the nuclear tests and radioactive waste disposal on the ocean ecosystems. The work represents a cybernetic turn in Soviet Ukrainian documentary cinema, which aspired to the transformative power of information in the times of the Cold War-era environmental degradation. Rediscovered and restored by Volodymyr Prylutskyi in Kyiv in 2025, the film is shown internationally for the first time. With the introduction by Olexii Kuchanskyi.

Ute Holl (Universität Basel), *On Appropriating Behaviour: Media of Anthropology*

As anthropologists experienced in studying and possibly predicting processes of socio-cultural change, Margaret Mead and Gregory Bateson were invited to participate in the interdisciplinary Macy Conferences, held in New York and Princeton between 1946 and 1953. The goal of these conferences was to study behaviour across the fields of neurology, anthropology, electrical engineering, mathematics, and other disciplines, in order to eventually establish peaceful and anti-authoritarian post-war societies relying on mental and technical homeostatic processes based on feedback systems. The term "cybernetics" for these processes was coined and established in the course of the Macy Conferences, which incidentally also negotiated the possibilities of digital transmission between organisms, minds, and machines. The transcripts reveal that, for some participants, cybernetics meant nothing other than the implementation of technical control and surveillance.

Mead and Bateson contributed to the conferences mainly by introducing the idea of "schismogenesis," a model of inter-subjective, feedback-based behaviour producing symmetrical or complementary forms — either as rivalry or as mutually appropriate attitudes of interaction. According to their studies, processes of subjectification should be studied through visible interaction, not according to internal psychic dispositions. During their fieldwork in Bali in the 1930s, they had relied on photography and cinematography to discover patterns of recursive social processes. To them, Bali appeared to be a "non-schismogenetic" social system, and the structure of the "Balinese character" could serve as a perfect pattern for post-war social formation. Methodologically, they encouraged anthropologists to learn to perceive patterns of feedback processes as rules of transformation that could change human behaviour on a social scale — individually, and possibly even in a global context.

In my contribution, I will set out from a film by Margaret Mead and Gregory Bateson, *Trance and Dance in Bali* [USA 1951, b/w, 22'], shot in 1937, to discuss the impact of cinematography on anthropological thinking, as well as the impact of technical media in general on assumptions and models of sociopolitical power relations and change. At stake here are the relations between anthropology, cybernetics, colonialism, and epistemology.

Occitane Lacurie (École des Arts de la Sorbonne), “Marienbad is competing with IBM”: French cybernetic films of the Groupe Rive Gauche (1956-1968)

In post-war France, one question preoccupied Marxist thinkers: how to approach the world as bequeathed to us by war and the atomic age, the military and information technology? What are we to make of human beings, who find themselves at the intersection of data streams and machines, dissolving into the sciences of the mind? “Cybernetics”, in this context, takes on an almost mythical quality, having made its way back from the other side of the Atlantic in the suitcases of French exiles (Geoghegan 2012, 2023; Holl 2017). Encountering social sciences at the École Pratique des Hautes Études, or writers and poets in jazz clubs of the Quartier Latin (Le Roux 2018), this word captures the Lazarian feeling (Cayrol 1949) of having returned from the dead that pervades post-war society. Two groups, in particular, have embraced this term in order to redefine artistic practice in the ruins of old categories. They both gravitate around the Éditions de Minuit: the *Nouveau Roman* and its generative novels (Calvino 1967) widely commented by the *Arguments* journal (Majorel 2018), on one side; and the filmmakers of the *Groupe Rive Gauche*, on the other.

This paper proposes to investigate the relationship between cybernetics and the ecology of the mind these two avant-gardes are tracing. Alain Resnais, who worked with three Minuit authors (*nouveaux-romanciers* Cayrol, Duras and Robbe-Grillet) and one cybernetician (Laborit), Chris Marker, who was close to Cayrol through the journal *Esprit* and co-wrote *Nuit et Brouillard*’s commentary with him (Lindeperg 2007), Agnès Varda, who imagined several observational dispositifs aside from collaborating with the two formers. They are the three shiniest nodes in a constellation which tried and built a *cybernetics of film* which aimed at examining the mechanisms of consciousness and the perception of time.

Saturday, October 3

10:00-11:30 (eikones) **Panel III:**

Frontiers of the Cold War Psychopolitics: Psychiatry and Media

Chair: **Pokuaa Oduro-Bonsrah (Universität Basel)**

David Bucheli (Universität Basel), *Rorschach's Masks. Psychiatry, Drugs, and the Carnival in Münsterlingen 1954*

With his study “Maskendeutungen im Rorschachschen Versuch” (“Mask Interpretations in the Rorschach Test”, 1944), Roland Kuhn not only qualified himself as Switzerland’s leading authority on Rorschach’s psychodiagnostics, but he also proposed an anthropological theory of masking as a practice that unsettles the boundaries between the self and its environment. When the book’s French translator, Jacqueline Verdeaux, visited Kuhn at the psychiatric hospital in Münsterlingen in March 1954, she and her companion – a young psychology student named Michel Foucault – arrived just in time to witness a long-established tradition: masked patients from the clinic participating in the ritualized madness of the local Carnival festivities. For Verdeaux and Foucault, the patients leaving the hospital and joining the Mardi-gras parade raised questions about the historical and social production of madness through the clinical setting. Today, the visual evidence of the costumes designed and worn by the patients also offers rare glimpses into their own experience of institutional life – at a moment when the clinic was rapidly transforming into an undisclosed testing ground for experimental pharmacological substances developed by Basel chemical companies.

Drawing on sources from the Münsterlingen hospital and the Kuhn estate, as well as the Verdeaux and Foucault archives, this paper examines how masking as a cultural practice became a privileged epistemic object for Kuhn, while simultaneously serving as a strategy of subversive self-narration for his patients. In doing so, this paper situates the Münsterlingen clinic and its inhabitants within a broader ecology of mind linking the psychodiagnostic technique of the Rorschach test with electroencephalography, the neurochemical revolution in psychiatry, Cold War nuclear anxiety and cybernetic theories of behavior.

Elena Vogman (Bauhaus Universität Weimar), “The Technical Instrument Is Rooted in the Colonial Situation”: Toward a Decolonial Genealogy of Media Ecologies

This paper explores elements of a decolonial counter-genealogy of media ecology. As Ginger Nolan has shown, Marshall McLuhan’s influential Cold War theory of media environments and technological trauma draws on J. C. Carothers’s racialized ethnopsychiatric account of African “detribalization.” McLuhan’s universalization of colonial ethnopsychiatry preserved an allochronic structure: the West moved from tribal orality through print literacy toward electronic retribalization, while colonized peoples served as living evidence of its preliterate past.

Against this lineage, I read Frantz Fanon’s “This Is the Voice of Algeria,” on radio during the Algerian War of Independence, as a media theory in its own right. For Fanon, who mounted a forceful critique of Carothers’s ethnopsychiatry, the “technical instrument is rooted in the colonial situation.” Radio’s perceptual and psychic effects do not inhere in the medium but are organized by the antagonisms of decolonial struggle. They are also premised upon structures of ownership, language, and social infrastructure. Revolutionary broadcasting transforms an instrument of occupation into a collective medium, producing what Fanon calls “a radical transformation of the means of perception, of the very world of perception.” I place this account alongside Fanon’s practice within institutional psychotherapy and the movement’s broader politicization of media and milieus, tracing a genealogy from François Tosquelles’s geo-psychiatric approach to Félix Guattari’s *The Three Ecologies*. Here, media are reworked against their deployment as operators of power—as techniques for classifying and managing subjects and governing environments. Instead, they become socially repurposed means for healing institutional space and its intersubjective relations within a collective project of disalienation.

Marie Rebecchi (Aix Marseille Université), *Experimenting with Perception: Psychiatric Cinema and the Sandoz Medical-Media Environment*

This paper examines psychiatric films commissioned by the pharmaceutical company Sandoz in the 1960s as experimental media practices situated at the intersection of cinema, psychopharmacology, and psychiatric research. Rather than treating pharmaceutical cinema simply as a vehicle for medical communication, I approach the Sandoz film archive as a medical-media

environment in which cinema participated in broader Cold War attempts to investigate and reshape the relations between mind, body, and milieu.

I focus on two films that adopt strikingly different strategies: Jean-Daniel Pollet's *Le Horla* (1966), an adaptation of Maupassant conceived as an exploration of persecutory delusion, and Éric Duvivier's *Perception and Imagination* (1964), which investigates the unstable boundaries between perception, imagination, and hallucination. In *Le Horla*, colour, spatial organization, repetition, and audiovisual disjunction progressively distribute delusion across the protagonist's perceptual environment. Duvivier, by contrast, mobilizes optical and cinematic experimentation to investigate how perception becomes unstable and opens onto imaginary or hallucinatory experience. By situating these films within Sandoz's broader investment in psychopharmacology, psychiatric research, and medical cinema, I argue that pharmaceutical film culture constituted an experimental terrain in which clinical knowledge and aesthetic practices converged. Cinema operated here not merely as a means of representing psychopathology, but as a perceptual apparatus for modelling shifting relations between bodies, images, minds, and environments.

13:00-14:30 (eikones) – **Panel IV:**
Landscapes and Ecologies of the Nuclear Threat

Chair: **Sarah Catriona Evison (Universität Basel)**

Olexii Kuchanskyi (Universität Basel), *Sensing Strontium-90: the Politics of Sensation and Nuclear Contamination in Soviet Ukrainian Scientific Film*

In the lecture “Form, Substance, and Difference,” delivered in 1970, Gregory Bateson articulates the question decisive of ecological thinking from the Cold War to the present day: the question of the interrelation between informational and metabolic processes in the environment. In the mid 1960s–1970s, this problem was also at stake for the Kyiv Studio of Popular Science Film, a site of modernist experimentation in bridging environmental science, filmmaking, and politics. One of the first films crystallising this vector – *Searching for Strontium-90* (1968, dir. by Hryhorii Kokhan) – was produced in collaboration with the Institute of Biology of Southern Seas, based in Sevastopol, Ukrainian SSR. The filmmakers follow radioecologists

as they collect biological evidence of contamination resulting from the ocean disposal of radioactive waste and nuclear weapons testing conducted by Western powers. The film culminates in the visualization of its principal scientific evidence: a close-up of the radioautograph of strontium-90, produced through the contact between contaminated algae and photographic emulsion.

Through the reconstruction of the Kyiv Studio's method, the paper examines how the nuclear threat was rendered sensible through the conjunction of the studio's cinematic practice and the Soviet ecological science, informed by the Cold War-era "settler-socialist militarism" (Svitlana Matviyenko). It analyses the film's production of the scientific fact for popular imagination by investigating how the radioautograph – the "material witness" (Susan Schuppli) – is socialised within the political, epistemic, and sensorial milieu mediated by *Searching for Strontium-90*.

Kamila Smagulova (Universiteit Leiden), *The Nevada-Semipalatinsk Movement: Anti-Nuclear Activism, Transnational Solidarity, and Soviet Nuclear Colonialism*

After forty years of Soviet nuclear tests at Semipalatinsk Test site civil society in Kazakhstan mobilized into the Nevada-Semipalatinsk anti-nuclear movement which led to the decrease and latter ban on the nuclear testing in 1989. Nevada-Semipalatinsk originally started as an international movement that advocated for global anti-nuclearism and transnational solidarity. I intend to look at this movement as an intersection of environmental mobilisation intertwined with complex civic landscapes in the late 1980s.

Nevada-Semipalatinsk was initiated in February 1989, when Soviet Kazakh writer and politician Olzhas Suleimenov called citizens of Kazakhstan to resist the Soviet nuclear tests on Kazakh land. The name originated from the transnational solidarity of Kazakh anti-nuclear activists with their indigenous counterparts of Western Shoshone in Nevada. Apart from being one of the largest environmental movements across the Soviet Union, Nevada Semipalatinsk managed to reach its goal, thus Semipalatinsk test site was shut down in 1991. At that time the movement got institutional support from the Soviet authorities and came to be in tune with Mikhail Gorbachev's interests in denuclearization. Olzhas Suleimenov himself would highlight

that it was specifically glasnost and perestroika policies that opened up more opportunities for protests.

However, the major driver was still public resistance, where millions of people across the country showed their solidarity with Nevada-Semipalatinsk. I suggest focusing on the people's history of the movement, which helps to look beyond bigger power networks in Moscow or Almaty. The protests and marches organized by Nevada Semipalatinsk were massive, after the brutal suppression of youth protests against Gorbachev assigning Gennady Kolbin in December 1986 in Almaty. It makes Nevada-Semipalatinsk distinctive from other anti-nuclear or environmental protests in the 1980s that merged into anti-Soviet or pro-independence movements in Baltics or Armenia. The study of this movement opens up a discussion of environmental movements that were a significant part of this period and often overlooked. Addressing the available archives and focusing on the oral history of activists, I reconstruct how the history of the movement reflects colonial policies of the Soviet Union and analyze it in the framework of nuclear colonialism.

Svitlana Matviyenko (Simon Fraser University), *Asymmetric Horizons: Environing Nuclear Terror*

Terror is ecological: it penetrates the networks of life-affirming connections to weaponize the organism's deep embeddedness in its environment. When Bateson expanded the mind outward into its milieu, he described a subjectivity distributed across feedback loops of organism, technology, and surrounding. Nuclear terror is the dark double of this ecology of mind: it targets precisely the environmentally extended subject, converting the medium of existence — air, soil, energy grid, information sphere — into an instrument of psychic warfare, with targeted nuclear infrastructures functioning as environing technologies. Where Cold War deterrence stabilized terror through communication (take, for example, cybernetic feedback of credible signals between rational sovereigns), contemporary Russia's nuclear conduct in Ukraine imposes terror as an environment on populations. The talk proposes the terror environment as a framework for this subversion of Cold War rationality, in which the suspended possibility of catastrophe — held open across several horizons at once — becomes itself an instrument of war.

14:30–14:45 (eikones) – **Closing Remarks**