

C. 26-17

One aspect of globalization is the development of a worldwide network of technological standards and production, distribution and presentation norms aimed at conquering new markets, minimizing costs and maximizing profits on a global scale. The image industry is not exempt from this economic pressure whose many side effects include enormous increased production costs for movies that can be distributed on a mass global market. Although these production costs also encouraged investment in new digital technologies, in general the price of globalization is standardization. With its tendency to optimize existing formulas for success, the image industry at the same time freezes the process of technological and expressive experiments. Digital media, on the other hand, are providing an appropriate platform for the evolution of independent, experimental and personal cinema in the digital field. A new class of experts, those individuals formerly called artists, have developed technical competence enabling them to challenge a cinematic homogeneity supported by millions of dollars, and to rival and surpass Hollywood's innovative, narrative and expressive achievements. This book offers evidence of a surprising fact: Even the technological and ideological apparatus of huge industries can be transformed by individuals.

The transformation of classical cinema on the basis of apparatus took place in three phases: The Expanded Cinema movement in the 1960s extended the cinematographic code with the cinematic elements itself, with analogic means. The video revolution in the 1970s with its electromagnetic basis allowed intensive manipulation and artificial construction of the image in a post-production stage.¹ The digital apparatus of the 1980s and '90s created an explosion of the algorithmic image with completely new features like observer dependency, interactivity, virtuality, programmed behavior, and so forth. This book focuses on the cinematographic code's expansion into the digital field and concentrates on the apparatus-oriented approach. This emphasis on technical innovation does not imply the exclusion of artistic or ideological content. On the contrary, we insist on the technical aspect because artistic and ideological functions of cinema are, according to the apparatus theory of the 1970s,² inscribed in the cinematographic apparatus. The apparatus (or, to use Foucault's term, "dispositif") is our platform. Each change of the technical apparatus also allows new artistic and ideological options. In 1969, Marcelin Pleynet queried the ideology produced by the apparatus that determines the cinema.³ In the 1970s, Jean-Louis Baudry,⁴ Christian Metz⁵ and others used the work of Louis Althusser⁶ and Jacques Lacan in order to create an apparatus-oriented theory of cinema that combined psychoanalysis, Marxism and cinema. The technical apparatus of the cinema is the ideological instrument. There is no neutral technology: "The machine is always social before it is technical."⁷ Lacan developed an apparatus theory of the subject and demonstrated that the subject mistakes its true self (*je*) and constructs instead an imaginary self (*moi*) that is offered from exterior to subject. This imaginary self is the reflection of an imaginary other. In order to describe this process of the external constitution of the subject through an imaginary signifier,⁸ Althusser uses the term "interpellation," by which a subject is addressed and positioned. This discursive method to address and position subjects is ideology. Therefore, the function of ideology is not so much to reproduce social structures or classes as primarily to reproduce subjects who mistake themselves and are therefore willing to reproduce the values and social order necessary for the survival of capitalism. The apparatus theory of film shows that the cinema is an ensemble of discursive, material, formal

elements that construct not only a reality, but also a subject. We do not demonstrate a "fetishism of technique."⁹ This book is therefore not inspired by "total cinema"¹⁰ in André Bazin's sense of a total representation and mechanical reproduction of reality. The aim is to deconstruct the total apparatus of the cinema, to transform the cinematic apparatus, and create new technologies that allow different psychic mechanisms, that subjugate subjects in the cinema, that allow different relations between spectator and screen, different representations/constructions of reality and subjects, a critical relation to representation. The cinematic imaginary beyond film is the imaginary signifier in the digital field.

The genesis of this exhibition is closely related to the activities of the ZKM | Institute for Visual Media under Jeffrey Shaw's direction. For more than a decade this institute has been at the forefront of artistic, social and technological research into new forms of interactive digital media with an emphasis on the expansion of cinematic codes and techniques. Many of the world's leading digital practitioners have been artists in residence at the institute, and a majority of the installations in the "Future Cinema" exhibition present the groundbreaking works they produced in collaboration with the institute's team of experts. The exhibition also draws on the institute's achievements as an innovator in the field of interactive narrative through a seminal series of CD-ROM and DVD-ROM publications *artintact* and the *ZKM digital arts edition*.

An exhibition of this scope and complexity rests on the skills of the curatorial and engineering teams at ZKM. Led respectively by Sabine Himmelsbach and Martin Haebler, these teams are specialized in organizing, installing and maintaining the public operation of highly complex works of electronic art in both the permanent ZKM | Media Museum collection as well as in an internationally acclaimed temporary exhibition program that has included "NewFoundLand" (1993), "surroGate" (1998), "video cult/ures" (1999), "net_condition" (1999), "The Anagrammatic Body" (2000), "Olefur Eliasson: Surroundings Surrounded" (2001), "CTRL [SPACE]" (2001) and "Iconoclasm" (2002). The success of "Future Cinema" is also very much a result of the inspired cinematic luminosity of Ruth Lorenz' exhibition architecture. The editors have chosen a book design that graphically distinguishes the documented installation environments from the screenshots, which are slightly angled in order to show them as part of a time-based continuum. Furthermore, the artists' pages are illustrated in color, the essays in black and white.

That this catalog can join the series of influential publications produced by ZKM over the years is due to the unflinching patience and dedication of the ZKM editorial team, led by Ulrike Havemann and Dörte Zbikowski. We are also especially grateful to Roger Conover at The MIT Press, and to Tim Druckrey, the director of its Electronic Culture series, for their enthusiastic commitment and contribution to this project since its inception in 2000. Thanks are also due to Heidi Specker and Holger Jost, the graphic designers who responded so creatively to the editors' call for a new way of rendering the transitory, interrelated and heterogeneous nature of the images and writings that constitute this account of the past, present and future of the cinematic imaginary "beyond the frame."

1 A survey of the basic apparatus for the video revolution was given by an exhibition at the Ars Electronica in Linz (curators Woody and Steina Vasulka, artist director Peter Weibel) and the catalog *Eigenwelt der Apparatewelt: Pioneers of Electronic Art*, David Dunn (ed.), Oberösterreichisches Landesmuseum, Francisco Carolinum, Ars Electronica, Linz, 1992.

2 *The Cinematic Apparatus*, Teresa De Laurentis, Stephen Heath (eds), Macmillan, London, 1980.

3 "... you are filming a parole on a wall, but by filming it you embed it into a specific apparatus, constructed for a certain purpose and having a certain ideological structure..." - Marcelin Pleynet, "Economie, idéologique, formel..." in *Cinématique*, 3, 1969, pp. 10-11.

4 Jean-Louis Baudry, "Effets idéologiques produits par l'appareil de base," in *Cinématique*, 7-8, 1970, pp. 1-8. See also Jean-Louis Baudry, "Le dispositif. Approches métaphysiques de l'impression de réalité," in *Communications*, 23, 1975, p. 56.

5 Christian Metz, "Le signifiant imaginaire," in *Communications* 23, *Psychoanalyse et cinéma*, 1975, pp. 9-35; Christian Metz, "Le film de fiction et son spectateur," in *Communications* 23, *Psychoanalyse et cinéma*, 1975, pp. 109-123.

6 Louis Althusser, "Ideology and Ideological State Apparatus," in *Lenin and Philosophy and other Essays*, New Left Books, London, 1971, pp. 127 ff.

7 Jean-Louis Comolli, "Machines of the Visible," in *The Cinematic Apparatus*, op. cit., p. 122. See also Jean-Louis Comolli, "Technique et idéologie," in *Cahiers du cinéma*, nos. 228-231, 233-235, 241, 1971-1972.

8 Lacan's mirror image, the representation of the Other.

9 Christian Metz, "Le signifiant imaginaire," op. cit.

10 André Bazin, "Le mythe du cinéma total," in *Critique*, 1946 (English trans. "The Myth of Total Cinema," in *What is cinema*, vol. 1, Hugh Gray (ed.), University of California Press, Berkeley, 1967, pp. 17-22).