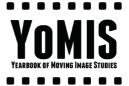
Virtual Images: Trilogy of Synthetic Realities I

Lars C. Grabbe, Patrick Rupert-Kruse, Norbert M. Schmitz (eds.)

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Trilogy of Synthetic Realities I







muthesius kunsthochschule



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Contents

Acknowledgements/
About the Yearbook of Moving Image Studies (YoMIS)
Introduction Lars C. Grabbe, Patrick Rupert-Kruse & Norbert M. Schmitz10
Mediality as a Modernist Aesthetic Strategy: On the History of Discourse in Media Art18 Norbert M. Schmitz
Image and Digital Media: The Concept of Mediated Reality67 Christiane Wagner
What is a Virtual Image?91 Jens Schröter
VR Images as Arrays of Activity: The Virtual Image Representation in the Range of Detection and Collision 106 Lars C. Grabbe
Into the Universe of Virtual Images: Flusser, Deleuze, and Glitch Potentiality
How is One's Own Movement Possible in a Virtual World? A Phenomenological Investigation

6 CONTENTS

Immersion and Floating Sensation: Thinking with an Artistic	
Approach to the Virtual	166
Akihisa Iwaki	
Illustrations of Non-Euclidean Geometry in Virtual Reality Martin Skrodzki	192
The Image becomes a Body: Avatarial Embodiment in the Context of a Body Ownership Illusion	218
Authors	236

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Lars C. Grabbe, Patrick Rupert-Kruse & Norbert M. Schmitz

March 2021

About the Yearbook of Moving Image Studies (YoMIS)

The significant work that led to the concept and idea of the Yearbook dates back to 2011 and is closely connected with the initial establishment of the Research Group Moving Image Science Kiel | Münster (RGMIS) in Kiel, Germany. Established as a doctoral seminar at the Christian-Albrechts-University in Kiel, RGMIS is now working in all areas of modern media theory, focusing on the essential role of visual media, technology and the structures of visual and pictorial media communication in the context of multimodality, intermediality or transmediality. The interdisciplinary research of RGMIS includes media and film studies, image science, philosophy of media and mind, phenomenological and semiotic approaches, art history, design theory, computer graphics, aesthetics, presence research, game studies, theories of perception and psychology and other research areas related to the moving, technological and dynamic images.

The academic engagement of RGMIS led to a series of conferences termed *Moving Images* (in 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018 and 2019), which intended to discuss and reflect the concepts and structures of images used in traditional image sciences (in terms of static pictures or images) and in a modern perspective; according to new and immersive media technologies.

The necessary consideration for the establishment of YoMIS is the interdisciplinary connection of German, European and international media research to improve the academic exchange of ideas. Therefore, YoMIS is innovatively conducted as an electronic and print publication (ePub and Book on Demand) to enhance the range of impact and to simplify the production process. The Yearbook is based on a prolific scientific cooperation of the University of Applied Sciences Kiel, the

Muthesius Academy of Fine Arts and Design in Kiel, and the MSD—Münster School of Design in Münster; and is edited and published by Prof. Dr. Lars C. Grabbe, Prof. Dr. Patrick Rupert-Kruse and Prof. Dr. Norbert M. Schmitz.

YoMIS is conducted as a periodic forum for international scholarly exchange and interdisciplinary discussion, not determined as a publication for a specific academic school or tradition. The editors are formulating the specific topic of each issue, but the members of the editorial board make the final decision for the publication of articles, in a double-blind peer review process. The content-related broadness of the different topics, and the variety of methodological approaches, forces a productive opposition of academic perspectives, which can certainly differ from the subjective perspectives of the editors.

Lars C. Grabbe, Patrick Rupert-Kruse & Norbert M. Schmitz March 2021

Introduction

Lars C. Grabbe, Patrick Rupert-Kruse & Norbert M. Schmitz

The editors of the Yearbok of Moving Image Studies (YoMIS) are convinced that a modern image theory has to be far more than a historical perspectivation of image developments in art and design with a focus on style, image context, aspects of artistry in the range of images as artworks and images as outcome of artists or designers. Additionally, the image theoretical research of the past years gives evidence to the fact that the modern concept of art is only mandatory in a very limited geographical and historical area (cf. Belting 1990). In fact, a modern image theory has to ask several more and important questions because images as visual media are constantly evolving with regard to aspects like technological developments, embedding in multior intermedial media conditions, performance and action, addressing of the different sense modalities of the recipient, bodily involvement and corporeality of images, learning and cognition through images, a media-inherent shift from analog image patterns to digital image procedures by specific hardware-software-dynamics, and a transformation of images itself from visual surface phenomena to embodied quasiobjects, avatarial bodies or multisensory excitation patterns.

If we have a closer look on the media evolution of images within a media ecological (cf. Postman 2000) point of view, it is very striking, that images are on the one hand a specific evidence for the mental capacities of *homo sapiens* and that on the other hand they set a very precise example of the specific media impact on the behavior and consciousness of individuals that are living in complex image societies. Therefore, images could be clearly identified as specific psycho technologies (cf. de Kerckhove 1997, 45), they are tools for mental-driven communication processes, and they also shape postmodern societies in a drastic image-driven way (cf. Hartmann 2003, 57).

Additionally, the potential of images and historical developments of image visualization lies in the specific modes of representation that are enabled and structured by the technological media fundament: To be more precise, ancient cave paintings give not only evidence for a specific image practice and capacity but also indicates an analog and colorful way of abstract representation of the specific lifeworld; these images were already signs that could be understood in the mode of iconic similarity, indexical reference and symbolic convention. Over the centuries, the historical progress in technical perfection led to increasing specification of the image objects and a higher density of realism based on physical and optical effects of the media apparatus. This physicality or indexicality of image media became more and more evident in the industrial-driven history of photography, cinematography or within a variety of optical and mechanical devices for creating moving and temporal image illusions (e.g., zoopraxiscope, phenakistoscope, thaumatrope, zoetrope, praxinoscope etc.). This progress of images was always interlinked with a cultural and social dimension because modern or postmodern societies are constantly expanding image communication processes, which are directly influencing a whole variety of human actions and mental dispositions, like learning of facts through mass media (printing press in general, newspapers, magazines, TV etc.) or digital devices (smartphones, tablets, smart watches, computers etc.), shaping social and individual behavior through social media, searching and gathering of information, information selection and cognition, storage of data, media technology adaption and gadget use, instantaneous mobile communication, network infrastructure and network navigation, hyper-locality of personal communication and expanding the real into the realm of extended reality.

The editors want to address the question if our postmodern social condition is already characterized as the effect or symptom of Baudrillard's hyperreality (cf. Baudrillard 1981)? With a specific reference to images and technological image media the editors would argue for a specific extended reality turn, which is emphasizing that the boundaries between the physical reality and the rising digital realities are fading: Immersive image technologies like virtual reality, augmented reality and mixed reality—summed up under the concept of

extended or synthetic realities—allow and demand a completely novel form of interaction and corporeal relation with the extended images and its digital image objects; with regard to the epistemological difference of reality and illusion. In the history of images, the technological aspects of movement, temporality and spatial change could be described as interlinked media structures that enable a novel and innovative physicality or indexicality based on the apparatus that leads to a more realistic aesthetics. This new category of vivid moving images was not the end of the aesthetic image tradition, but a renewed technological momentum of images in the context of apparatuses. Nevertheless, every technological revolution can only be understood in the context of a restructuring of the dispositives of perception in a media society, compared to the inefficient approaches of monocausal theory models. This technological-driven impact on images was also an effect on the expectations and new communication practices of the image users in the development of modern cinema, TV shows and news channels; and after all, an influence on the origins of display images (like computer screens and displays, video arcades, console games or computer games etc.). The aspects of technology and design of the display image became historically important with regard to the vividness of the display images and its objects, the usability of devices and the interactivity of the whole computer devices and the impact on the manipulability of the specific image objects.

The media conditions of *vividness* and *interactivity* play an important role for the postmodern aesthetic practices of the image users. Therefore, the editors of the issue would like to argue, that the *physical* or *indexical turn* of the moving image is enhanced nowadays through the *extended reality turn* of the computer-based display images. This computer-based display image or screen image, this is a first assumption, incorporates the structural media logic of the moving image:

- 1) It gets realized as an image on the basis of a specific technological procedure (in this case a software-hardware relation; compared to the case of motion pictures with a film-reel-projection relation.
- 2) The technological procedure is a mode of movement (in this case a data detection interval, algorithm and software activation and a final image visualization; compared to the case of motion pictures with the real movement of the film reel).

3) The technological procedure extends in a temporal interval as an image duration (in this case the specific duration of the visualized digital image; compared to the case of motion pictures with the duration of a shot or a scene).

Nevertheless, this computer-based display image or screen image, this is a second assumption, extends the structural moments of the moving image, more particularly, when it is activated in the context of extended realities. This means, that the phenomenal structure of an extension becomes evident in the context of virtual reality images, augmented reality images and mixed or merged reality images:

- 1) In essence, a moving image structure in virtual reality realizes as a full 360-degree visual simulation in the mode of a total immersive and proprioceptive space that surrounds the body of the recipient visually.
- 2) The moving image structure in augmented reality realizes as a device and display driven visual simulation in the mode of a partially proprioceptive image overlay that connects digital image objects with a physical space or background.
- 3) The moving image structure in mixed or merged reality realizes as a device and display driven visual simulation in the mode of a partially proprioceptive and physical image interlinking that connects controllable digital image objects with a physical background, in combination with a physical artefact interaction.

It seems evident, that working and living with extended reality technologies is a challenging aspect of our everyday life and that this will also imply some enriching dynamics in our information society with unexpected impulses for the aesthetics, art and design of image media use. Furthermore, it seems evident that the different media practices will on the one hand structure a set of conventional forms, such as the development of the *Classical Style* in film history and aesthetics, or at the other hand create an open field of experimental opportunities in the specific formation, as it is characteristic for the arts. Therefore, the editors think of the first issue »Virtual Images: Trilogy of Synthetic Realities I« as a prelude of the trilogy (augmented and mixed reality images will follow as subjects in the next issues in 2021 and 2022) to focus on virtual synthetic images that are already challenging and en-

riching the human lifeworld in ways, only science-fiction movies, comics and novels thought of before. Thus, contributions for this kickoff will concentrate on virtual images and visuo-virtual-multimodal artefacts, specific virtual media technologies, graphic representations and different material interfaces of virtual reality. The different authors are concentrating on virtual images as perceptual artefacts and simulation of possible spaces and virtual story worlds, like impossible architecture or mathematics in physic-less continua; the different aspects of aesthetics and communication in virtual reality, new forms of interaction in 360-degree VR environments; the processual dynamic of virtual images; embodied and embedded interaction and cognition, effects of the so-called body ownership illusion, the phenomenology or semiotics of the avatarial body and the sensory and perceptual effects on the physical body in virtual landscapes.

In the beginning, Norbert M. Schmitz offers with his reflections on Mediality as a Modernist Aesthetic Strategy: On the History of Discourse in Media Art a specific avant-gard-driven perspective of a critics of media art studies. His approach offers a media theory that interconnects the history of media with the art history of media. He criticizes that media art is often connected with a pseudo-scientific perspective and often suffers nowadays from the inability to fulfill its experimental liberty and freedom. He also discusses the developments and boundaries of media theory on the basis of the impulses of modernity, which imply a conflict field in the wide range of illusionism and virtuality, in the mode of a long history of mimesis.

In *Image and Digital Media: The Concept of Mediated Reality* Christiane Wagner is highlighting images in contrasting the virtual and the real to refer technical aspects of images and their effects to social imagination. In this perspective, her central topic is the digitization process of media and the focus from the digital medium to the specific content that is implying the notion of hyperreality (cf. Baudrillard 1981). She is contrasting the real and the virtual by means of perception to argue for a digital media transformation and revolution of images in the sense of simulation, implosion, hyperreality, and disappearance of the real.

It seems that Jens Schröter is asking a simple question in *What is a Virtual Image?* But the answer is a complex and complicated theoretical description of virtual images as a modern phenomenon. His arguments

are addressing the area of optics that give evidence for the problem to cast virtual images on a screen. Then, he refers to computer science and the aspect of virtuality as a specific difference between address and memory space and finally, with the third aspect, he gives evidence that Gilles Deleuze image-driven notion of the virtual could be best described as a symptom of the optical and the computer science concepts.

Lars Christian Grabbe reflects in VR Images as Arrays of Activity: The Virtual Image Representation in the Range of Detection and Collision the specific VR image as a phenosemiotic sign system and a complex technology. One central argument of the author is to characterize the epistemic condition of VR images as an array of activity in the context of collision and detection. Collision and detection appear as central interdependent structures of a specific VR aesthetics as active structures within the image and computational geometry. The relation of collision and detection is interconnected with speed as a temporal condition, movement and seize of an object as a spatial condition and the algorithmic fundament; that is the central condition of the possibility of the degrees of freedom of user interaction.

In his study Into the Universe of Virtual Images: Flusser, Deleuze, and Glitch Potentiality Laurence Counihan is discussing glitch photography in respect of Vilém Flusser's theory of the technical image and Gilles Deleuze's concept of the virtual. He understands glitch photography with its elements of noise, glitch and error not as malfunctions, which disturb the transfer of meaning. Instead, he analyzes glitches as actualizations of hidden virtualities that lay within the hidden depths of the machine. The author develops glitch aesthetics as an expression of virtual events and emphasizes digital photo-images as generative processes and machinic becoming.

The exploration of Serhii Hryshkan in *How is One's Own Movement Possible in a Virtual World? A Phenomenological Investigation* is focusing on movements in a virtual world with respect to a phenomenological being-in-the-virtual-world. He highlights the conditions of movement in VR influenced by the imaginary virtual body and the virtual ground. Following the work of Sartre, Merleau-Ponty, Heidegger and Husserl he examines the living body, the living-body-ready-at-hand, the real virtual body, the environment, the imaginary virtual body and the

virtual environment to proclaim finally, that the virtual ground and the imaginary virtual body are the transcendental conditions for movement in a virtual world.

Akihisa Iwaki discusses the role of the body in the context of image perception in *Immersion and Floating Sensation: Thinking with an Artistic Approach to the Virtual.* The author argues for the specific role of the body as an image processor and its participation as the precondition of virtual reality image generation with regard to the artwork *Divina Commedia: Praxis for Death.* In reference to the philosophy of Bergson he also expresses a framework for thinking about the interaction between the relations of perception, body, and memory in contrast to recent media theories that are mainly focusing on interaction, based on the relation between perception, body, and action.

With his study *Illustrations of Non-Euclidean Geometry in Virtual Reality* Martin Skrodzki discusses the problem of understanding und visualizing abstract mathematical structures like hyperbolic objects. He argues that the computer screen has specific limits in the visualization of non-Euclidean geometry, but that virtual reality makes it possible to present immersive experiences of non-Euclidean geometries. Within virtual reality the user has new chances to encounter geometric properties and effects that are not present in the surrounding Euclidean world. The author gives a state-of-the-art overview on recent developments in the field and develops a glossary as a point of reference for the reader.

Finally, Lars Christian Grabbe reveals the aspects of embodiment of virtual images in *The Image becomes a Body: Avatarial Embodiment in the Context of a Body Ownership Illusion*. He argues that Virtual Reality can realize a transformational mode of image pictoriality with regard to the avatar. In this case, the classical concept of a two- or three-dimensional image gets transformed by the immersive functionality of VR into a quasi-material image—the avatarial body. This quasi-materiality addresses the transformation as a body ownership illusion in combination with a realized first-person perspective and refers to perception of the avatarial body and the dynamics of embodied signals and cognitive states.

The different and interdisciplinary approaches that are connected in the volume *Virtual Images: Trilogy of Synthetic Realities I* try to focus

explicitly on the relation of virtual visuality, technology and culture to locate and present specific findings and further problem areas that should be clarified in the future research of digital VR technologies and specific prototypes. VR media technology and its structural interdependency with digital media materiality has a specific role to play in the context of the dynamic development of new interactive and immersive image concepts in the VR space: The issue on *Virtual Images* could be one structural component of the VR image discourse to connect the concepts of dynamic images with the approaches in modern media theory, technology studies, media design and art theory, aesthetics, and computer graphics as well as the complex range of image science in general.

Lars C. Grabbe, Patrick Rupert-Kruse & Norbert M. Schmitz

March 2021

References

Baudrillard, Jean. 1981. Simulacres et simulation. Paris: Galilée.

Belting, Hans. 1990. Bild und Kult. Eine Geschichte des Bildes vor dem Zeitalter der Kunst. München: C.H. Beck.

De Kerckhove, Derrick. 1997. The Skin of Culture. Investigating the New Electronic Reality. London: Kogan Page.

Hartmann, Frank. 2003. "Techniktheorien der Medien." In *Theorien der Medien:* Von der Kulturkritik bis zum Konstruktivismus, edited by Stefan Weber, 49–79. Konstanz: UTB.

Postman, Neil. 2000. "The Humanism of Media Ecology. Keynote Address Delivered at the Inaugural Media Ecology Association Convention Fordham University, New York, June 16–17." In *Proceedings of the Media Ecology Association*, Volume 1, 10–16.

Mediality as a Modernist Aesthetic Strategy: On the History of Discourse in Media Art

Norbert M. Schmitz

Abstract

This essay inquires into the history of preconditions for media theory discourse and the media-based understanding of media art. Far from any ontology of "digital apparition," it infers these from the aesthetic paradigms of the classical avant-garde. In doing so, it attempts a critical epistemology of modern art and media art studies, which, due to its uncertainty over its own historical limitations, cannot perform its necessary function as an outside observer of the art system. The author criticizes the fact that media art has slowly and surreptitiously grown beholden to pseudo-scientific norms and hence restricted in its experimental freedom. At the same time, he reflects on the limitations of a general mediascientific theory formation in modernism's aesthetic paradigms, particularly in the interstice between illusionism and virtuality as a kind of technicalized mimesis theory.

Keywords

aesthetic strategy, immersion, interactivity, media discourse, media art, media materialism, simulation theory, virtuality, techno art

Preliminary Notes

In 2000, people won't kiss anymore ...

German pop song of the early seventies

I criticize its [modern art's] sluggishness and the fact that it did not live up to what the Dadaists proclaimed in 1920: 'Art is dead. Long live Tatlin's machine art.' Their response to the Industrial Revolution must now be followed by a response to the post-industrial Information Revolution.

Peter Weibel in January 1999

When one sets out to republish a text on media art after nearly twenty vears' time, moreover in English translation, one has to ask what portion of the analyses and (given the novelty of the subject at the time) what were often prophecies still retain their validity and relevance today.1 Overall, this look back leaves the author in a state of extreme ambivalence, because as much as he can continue to stand behind the fundamental theses of his theoretical analysis of media art in terms of its dynamics, virtuality, and interactivity, and as much as he finds confirmation of his basic thesis that the above-mentioned phenomena are forms of the continuation and differentiation of the functional logic of the arts and other communication forms of modern civilization, he is nonetheless forced to realize how far removed we are from all the aesthetic and social utopias born from the spirit of digitality that at the time, justified or not, at least possessed the reality of being the realia of the discourse. In any case, the former prophet of the free network mentioned at the end of these deliberations, Jaron Lanier, is now one of its strongest critics.2 Today, the deconstruction of the classical

¹ Translated from the German by Andrea Scrima. Quotations from German texts were translated for this essay. This text is a reprint of Schmitz (2001). Apart from the brief preliminary note, the only other editorial changes made were in the essay's temporal references in regards to the original. The editorial staff would like to thank Suhrkamp Verlag for permission to reprint the text. The editors have incorporated it into the present volume in the absence of a peer review process.

² Recommended in this context: Baumgärtel (2017). The subtle observations Baumgärtel made in comparison to his own publication from 1999 (Baumgärtel 1999), to which I referred at the time, are informative.

discourses, for example through radical constructivism and poststructuralism, which (it went without saying) promised salvation in the media studies just then becoming established, has lost some of its rhetorical suggestiveness and expressive power; at the same time, its epistemological paradigms have entered social practice in a way that was clearly never intended.

Aren't they the involuntary heralds of an "end of the grand narratives," an absolute freedom from hierarchy and an opening up of all plateaus from the official news broadcast to blogs and chats? Their evocative power was certainly never intended, but it reveals at the very least that Donald Trump no longer believes in the "grand narrative" of the established science on climate change. In any case, the traditional narratives of classical representational democracy vanish before the freely fluctuating messages in the vast expanse of the social networks of Twitter, Facebook, TikTok, etc. In all of these bubbles, the self-referentiality of a perfect autonomy and freedom of opinion reigns entirely absent any hierarchy.

It must be conceded that the universal potency of these crackerbarrel discourses, once so frowned upon—this abolition of communicative obligation—is perhaps more than anything an effect of the media: a perilous consequence, at least from the perspective of classical humanism. And this, when compared to the situation of nearly two decades ago, offers us an entirely different backdrop for all our mediatheoretical considerations. The following contrasts such negative aspects with a longer-term, somewhat happier perspective on civilizational differentiation, one that experiences the functional differences between various forms of media use across the fields of art, mass communication, and entertainment as a cultural enrichment. What is striking, at least for the author of this essay, is how the enormous ongoing technological advances in the field of digitality, everywhere from virtual experience to everyday technology, have in the meantime come to constitute a younger generation's natural, entirely unspectacular set of expectations. The text, written at the beginning of the twenty-first century, was composed at a time when the last generation in the sciences not familiar with digitality as a virtual everyday world from childhood was in a position to perceive these comprehensive changes as a fundamental caesura. At the same time, the considerations still seem relevant. The outcome of these developments continues to remain open.

1. Media Theory as Art Theory

Media theory and media art have been booming for at least twenty years.³ Today—in the year 2021—the two seem to have established themselves in the institutions as well as in society's imagination and have advanced to become the leading fixtures of science and art. The inevitable relevance of technological innovation and the daily upheavals caused by the new media lead the establishment of an original media science to appear as a logical adaptation of the scientific system to social change and media art as an urgent challenge to aesthetic practice. Where, on the one hand, "digital apparition" turns the aesthetic into a key category of theoretical analysis and, on the other, the technological foundations of computer art require a scientific and technical mastery on the part of its creators, media studies appear to become aesthetics and media art to become science, after which we have finally achieved the old Renaissance ideal of the "unity of art and science."

As always, this paradigm shift was not self-evident, and massive attention strategies had to be mobilized to draw the attention of a structurally biased scientific and art establishment to the "digital revolution." Regardless of whether it was expressed in a culturally pessimistic or affirmative manner, the claim to an independent media art and media studies asserted itself as a complete break with all that had gone before and necessitated entirely new scientific methods and artistic practices. The inadequate efforts of the older humanities and social science disciplines, which tried to get a grip on the media upheavals by subsuming them under their traditional and ultimately inadequate categories, forced young media theory to confirm its view

³ From the point of view of the original essay, written in 2000.

⁴ Regarding the methodic and methodological requirements of the following deliberations: cf. Schmitz (1993, 29 ff.).

that the only adequate answer to the reality of these new media worlds was to focus on its own and on the completely new.

It is probably more than a historical coincidence that the *post-histoire* became an ally in this endeavor to achieve independence when it recognized the concrete substrate of its deconstruction in "digital apparition" and found the experimental field for an aesthetic philosophy in media art, with which it sought to break the "compulsory shell of occidental rationality."⁵

As with every other new scientific and art form, more than forty years after the media debate began to dominate theoretical and artistic discourses, it also seemed time for the nascent media theory and for media art to take a somewhat sober perspective of their high expectations and to critically question media studies and media art in terms of their own concrete historical preconditions in order to create space for an approach that is less confrontational than integrative and to combine the undeniably necessary attention to the new with a look at the continuities.

The following is less about media art or theory as such, but rather about the "aesthetics of media studies," in other words, it is primarily a piece of discourse history, in that art, and particularly modern art, was and is never talked about separately from *the way* in which it is talked about. And for digital art, this is truer than ever. Conversely, current media theory, perhaps more than any other scientific discourse, is contingent on certain, often unreflected preliminary aesthetic considerations that I will discuss in the following paragraphs. Be that as it may, it is apparent that the vast majority of pertinent approaches, despite their heterogeneity, have one very basic thing in common: they all refer to artistic paradigms of the avant-garde.

Art, however, is not an ontological entity, but a historical category. And as long as a concept of art exists—which means ever since

⁵ In a strict philosophical sense, of course, postmodernism cannot be summed up in this way. Here, in the sense of a methodologically reflective sociology of art, it's more about an open discursive field, a postmodern "zeitgeist" that affects the self-confidence of the actors in the art system, and not about the ideal reconstruction of a theoretical system. Postmodernism sees itself here as a non-homogeneous field of diverse positions within very distinct social fields, all of which, however, have a certain dominance of the aesthetic in common (cf. Renner 1988).

Vasari's Lives—it defines itself through the debates conducted around art. Since its inception, this discussion (in the Mannheimian sense) has always adopted the form of ideology for the purposes of legitimizing certain types of art and artists (see Mannheim 1921/1922). This is the consensus of the critical history of science (cf. Gehlen 1965); hence an analysis of the discourse must reveal the precise social circumstances imbedded within a respective aesthetic paradigm. But more on that later. First of all, my central thesis, without comment, is as follows: A large part of the paradigm shift in recent media studies, in particular the frequently proclaimed "expulsion of the human spirit from the humanities" and its merging with the linguistic turn to form postmodern textual criticism, represents, contrary to its own self-stylization, nothing more than a repetition of certain debates over classical modernism.6 A media materialism purely oriented towards technological change, as has dominated the discourse over the new media for several years, is essentially an aesthetic program, or, to emphasize it in terms of the sociology of knowledge, an artistic strategy whose social function calls for scrutiny.

This may initially come as a surprise, in that we tend to understand media theory⁷ as part of the "postmodern constellation," which as a rule defines itself as distinct from a failed modernity.⁸ The aim of this essay is to sketch this complex figure of self-affirmation in art through its supposedly critical self-abolition. Overall, it sees itself as a contribution to a critical methodology of media studies, a discipline still in formation, and as an attempt to more precisely define the continuities and breaks between the traditions of modern art since the Renaissance and the *ars digitalis*.

⁶ Winkler (2000) offers a critical interpretation of one-sided, monocausal approaches in media studies.

⁷ In order to keep the difference linguistically transparent between the media studies criticized here and the meaningful establishment of a specialized research field on the phenomena of mediatization—particularly the analysis of the so-called "new media"—a distinction in terminology should be made in the following between an aestheticizing media theory and actual media studies (cf. Sandbothe 2001).

⁸ Initially, of course, this perspective is an art historical one and is shaped by architecture. The perspective elaborated upon in the following is, however, less surprising if one understands the self-perception of the *post-histoire* that predominates in the French source texts as the "execution" of classical modernism. Manfred Frank (1984) pointed out the aesthetic and epistemological problems in Derrida's interpretation of Mallarmé and subjected them to a critical epistemological analysis.