LES ETUDES

DAVID TOMAS

A BLINDING FLASH OF LIGHT

PHOTOGRAPHY BETWEEN DISCIPLINES AND MEDIA

DAZIBAO

Foreword	9		
1. Invisible Movements, Acts of Negation			
Introduction			
1.1 For a Negative Practice of Photography: An Interview with Alberto Cambrosio			
1.2 From Gesture to Activity: Dislocating the Anthropological Scriptorium			
Postscript	67		
2. Photography as Socio-Symbolic Process			
Introduction			
2.1 The Ritual of Photography			
2.2 A Mechanism for Meaning: A Ritual and the Photographic Process			
2.3 Toward an Anthropology of Sight: Ritual Performance and the Photographic Process	153		
Postscript	175		
3. From Photographic Space to the Spaces of Technology	195		
Introduction			
3.1 Photography and Semiotics: Beyond the Limits of an Existing Relationship			
Postscript			
4. Postphotography	220		
4. Postphotography. Introduction			
4.1 From the Photograph to Postphotographic Practice:	231		
Toward a Postoptical Ecology of the Eye	241		
Postscript			
-			
5. Between Media and Fields of Knowledge			
Introduction			
5.1 Mimesis and the Death of Difference in the Graphic Arts			
Postscript	. 277		
6. Media History in Parallax	285		
Introduction	287		
6.1 The Encoded Eye, the Archive, and its Engine House: From a Relational History of			
Technology to the Design of a Three-Dimensional Electronic Book	297		
Postscript	317		
Endnotes	321		
Bibliography	353		
Index	363		

1. INVISIBLE MOVEMENTS, ACTS OF NEGATION

INTRODUCTION

Early practitioners of Conceptual art rejected the conventional supports (with the exception of paper), imaging technologies and artisanal methods of all previous practices of fine art. Conceptual artists such as Robert Barry, Jan Dibbets, Douglas Huebler, Joseph Kosuth and Lawrence Wiener developed art practices that used contemporary reproductive technologies such as the camera, the photocopy machine, the typewriter and the printing press in new ways. They made new kinds of artworks based on the unconventional use of the photograph, the photocopy, the photostat, the newspaper, the billboard and the printed word. Because the visual works that used these media raised questions about content, presentation and location, they challenged conventional pictorial practices and their well-developed modes of display. For a brief moment in 1968-1969, the artwork and the exhibition space were effectively fused with the exhibition catalogue, as a new set of possibilities were exposed by the ground-breaking exhibitions of the New York dealer, Seth Siegelaub. Exhibitions such as Douglas Huebler: November 1968, March 1–31, 1969, and July, August, September, 1969, proposed, in addition to a new type of artwork, radical solutions to traditional relationships between pictorial work and exhibition space, as well as the artwork and its mode of dissemination through the exhibition catalogue.

Artists like Kosuth, Hans Haacke or Bernar Venet, and those associated with the Art & Language group, had also clearly transformed the artwork through the adoption of academic disciplinary methodologies, strategies, visual practices and attitudes. The works produced by these artists were framed, informed by, or referred to disciplines such as philosophy, sociology and physics, or relatively new interdisciplinary models associated with cybernetics and systems theory. These works seemed to pose a clear challenge to the autonomy of the artwork in much the same way that Duchamp's readymades did, but from a singular or implied academic frame of reference. Conceptual art had also valorized the notion of the 'idea' over the conventional materialities of the art object, its aesthetic and 'retinal' qualities. Thus artists who acknowledged the primacy of the idea over an artwork's retinal qualities were Duchamp's legitimate heirs. However, paradoxically, and in contrast to Duchamp, they also seemed to suggest through their combinations of media, visual tools, references and methods

of presentation that this new art was now in some sense dependent on other academic forms of knowledge, and that it might not exist without them. For the most radical of their works pointed, either directly (Venet) or obliquely (Kosuth, Art & Language) to a new context for the professional training of the modern artist—the university—and they did so in a way that redefined the artwork in its terms. This context seemed to point to new epistemological foundations for the art object—to the fact that art could also be considered to be a form of knowledge and the visual arts an academic discipline amongst other equivalent disciplines. However, Conceptual art's new media and frames of reference also seemed to suggest that art might be a secondary and illustrative practice in the sense that its preoccupations might not be of interest to the practitioners of the disciplines that had served as the source of its visual or methodological inspiration.

Conceptual art marked a significant watershed in the history of art because it drew attention, in an unprecedented way, to the limits of knowledge in terms of disciplines and boundaries. However, these limits were identified and transgressed, without ever stepping out of the art world. For the most part, the most radical of the Conceptual artists (Art & Language, Venet) were content to import knowledge and methodologies from other academic disciplines in order to critique and redefine artistic practice and the artwork. It is astonishing that questions concerning disciplinary boundaries and academic frameworks were only exploited by Conceptual artists in ways that favoured the continued production of artworks, and that the new disciplinary matrix in which art was increasingly to function was never brought into play in order to compare and question the visual basis and formal or aesthetic dimensions of art in relation to other forms of knowledge—or even to move between fields of knowledge.

A similar paradox was exposed in Conceptual art's use of photography. For the generation of artists who embraced Conceptual art in the late 1960s and 1970s, the broad question of photography's cultural status was never directly engaged because their focus was always on the photochemical image, its structural, cultural, and ideological statuses, uses and counter-uses. The artists who produced camera-based works in the late 1960s (Vito Acconci, Barry, Bernd and Hilla Becher, Victor Burgin, Dibbets, Dan Graham, Ed Ruscha, Michael Snow, etc.) produced new ways of working with the camera and photograph (Ruscha, Acconci, Dibbets, Snow), new kinds of subject-matter (Barry, the Becher's, Ruscha, Graham), or new relationships with theory and practice (Burgin). But in all cases, radical practices were developed within and in terms of the ongoing transformations in the picture-making conventions of Western art.

These paradoxes were clearly the products of Conceptual art's flirtations with elements of a new set of environmental references. Conceptual art's use of the printed word and associated modes of reproduction and archiving (photograph, photocopy, photostat, file card) had opened up the question of subject-matter in unforeseen ways. This question was also addressed through the importation of new subject-matters, conventions and methodologies. However, if one started to import a significant amount of foreign subject-matter, methods or visual tools, then one created a serious problem for the viewer because he or she was placed in a position in one world (art) that could only make sense in another (physics, the history of science, anthropology, etc.). And yet, from the viewpoint of the other discipline, explorations that might be founded on coextensive methodologies or subjects would appear to be opaque, or they might not make sense if they had not been packaged in a familiar way (the written article or book). Then there was the question of legitimate knowledge—that is, knowledge that could be easily recognized, situated, and survive and compete in the other discipline.

The interview For a Negative Practice of Photography addresses the socio-logic of a practice situated between the fields of art and anthropology. It points to their different information economies and methodologies, and their potential incompatibilities. The issue of research is raised and the particular economy that sustains this type of practice is described: a circulation of ideas and information between academic texts that are conceived in relation to visual works and spatially deployed visual texts that are conceived and executed in relation to the academic ones. This practice is different from one that is based on the importation of ideas from other disciplines in one important detail: it is founded on 'legitimate' research practices and the production of knowledge in both fields. This dualistic methodology generates the practice's critical possibilities. For a Negative Practice of Photography points to the paradoxes of a double process of legitimation and to the existence of a "third space" in between. It discusses how one might gain access to this space through an "act of negation" and describes its 'negative' characteristics. This is important in photography's case because of its transdisciplinary uses, and its ability to serve as a bridge between, amongst other disciplines, art and anthropology, or art and the physical sciences. The interview focuses on the existence of an oscillatory movement between fields and the fact that this movement cannot be seen. There are also questions concerning the limits associated with works that exist 'in-between.'

The ambiguous position of hybrid, pan- or transdisciplinary works raises questions about the nature and constitution of legitimate/illegitimate forms of knowledge and their disciplinary/anti-disciplinary roles in both art and anthropology. It also raises questions about the nature of fieldwork as a means of accumulating information that can then be digested and archived by disciplines. What, for example, is the relationship between the article, book, and the two- or three-dimensional visual work? How is information processed into 'Knowledge' in different disciplines? What happens when someone works between disciplines as opposed to within one or another discipline? Within the context of anthropology, why is the form of presentation associated with installation artworks considered to be an illegitimate medium for encrypting knowledge when compared with books, photographs and films? Why is the visual format of an academic work considered to be too intellectual or too rigid to be treated as an 'aesthetic object' of equal standing with an installation or performance art piece? Why has surrealism had more of an impact on postmodern anthropology and ethnography than Russian Constructivism? How are knowledge, practices, concerns and interests 'mirrored' in opposing disciplines in such a way that enables their practitioners to continue to pursue their activities without stepping outside of the legitimate boundaries of their discipline? This leads us to the question of the risk that is involved in intellectual transgressions and the choices that we make to conceive and produce visual works that are founded on the socio-symbolic logic of specific technologies of representation instead of conventional categories of subject-matter.

Risk raises questions about the nature and functions of knowledge that are constructed and declared by disciplines, in particular academic disciplines, and the knowledge that is reported by a visual practice that might be situated between disciplines. The use of the term 'risk' under these circumstances is appropriate because it is linked to the dangerous consequences of the miscomprehension, misrepresentation and error that are produced by friction and impact between legitimate and illegitimate forms of knowledge, and because it can provide a useful measure for activity that takes place specifically within disciplines, but also in movement between them.

A provocative way to illustrate the ambiguous position of this in-between activity and its culture of risk is through a cogent metaphor for the ways disciplines organize knowledge and police human minds and bodies in their terms.

Bentham's panopticon provides a concise way of visualizing the type of organizational structure that the university system represents. His celebrated prison model places its inhabitants in a circular, partitioned architectural structure that installs an observer at the centre of a system that compartmentalizes each object of observation (an inmate's body) in such a way as to place it against a lit background (the prison cell's window). The prisoner is always isolated in a cell and silhouetted against a background of light. The inmate cannot see the guard, and must

always assume that he or she is under observation. Thus the prisoner's behaviour is always governed/disciplined by the 'idea' that he or she is under observation. Insofar as the prisoner internalizes this idea, there is no need for an actual observer to be in place at the system's centre: the prisoner will behave as if he or she were always under constant observation.

Compartmentalization and self-discipline are also characteristics of the way academic knowledge is organized and governed under the sign of observation, since this kind of knowledge is invariably geared to constructing perspectives that coherently depict an outside world. Although there is no direct architectural correspondence between the panopticon and the university, one has only to visit the latter institution, or to pass through its processes of initiation, acculturation and accreditation, to become aware of the way knowledge has been segregated and compartmentalized into a range of disciplines that lay claim to unique perspectives on the world. These claims are based on boundaries that are policed and defended against 'illegitimate' forms of knowledge, even if these forms are academic in nature. The perspectives are then codified through common sign systems such as written and pictorial languages and are reproduced and disseminated in similar ways, the most common being the book. Central to the academy's correct and efficient operation is the book and its archive:



News Photograph: "Preparing the new catalogue for the British Museum, which will consist of over 200 volumes, of 1,000 columns each, and will take 23 years to complete." Photopress, London, nd, second quarter of the twentieth century. This photograph is a powerful testimony to the manual processes and time intervals implicated in the development of an extensive book-based reference archive. the library. The library also figures in the museum's culture in evocative ways that can reveal the book's central role in structuring its conceptual space.

Reducing the university system to the schematics of a panopticon draws attention to its compartmentalized and disciplinary culture. One can imagine the perfect university in the shape of Bentham's panopticon, with a library situated at its centre and where each cell is represented by a particular discipline.

Since art is now taught in the university, how does this new environment impact on the nature of the artwork, especially if the work is conceived in relation to another discipline such as the history of science or anthropology? This question is especially significant for

Collection: D. Tomas.

someone who has passed through the traditional art school/university systems and who is, as a result, aware of the potential consequences of different pedagogic systems and ideologies. For example, it is clear that each system produces different kinds of artworks according to different epistemological models and possibilities, and that this implies different frames of reference and audiences.

The two chapters in this section, the one a 1984 interview, and the other proposing a critique of the reflexive, experimental, 'writerly' ethnographies of the 1980s, engage with the issues of disciplinary boundaries, legitimate and illegitimate practices and forms of knowledge, and thus set the stage for the following sections. *For a Negative Practice of Photography* sets the



The postconceptual artist as designer for the art world's book culture: Vito Acconci Studio, *Info-System/ Bookstore for Documenta X*, 1997, Documenta X, Kassel, 1997. Acconci's design was for Documenta's Walther König bookstore.

Photograph: D. Tomas

tone for the book because of its detailed discussion of the disciplinary logic through which a different kind of photographic practice can be staged. It presents a clear picture of how an identity is created through the movement between fields of knowledge and how this identity figures through a distinct photographic practice. In this sense, it is a key reference for the trajectory of theory and practice that leads to a postphotographic practice as presented in *From the Photograph to Postphotographic Practice: Toward a Postoptical Ecology of the Eye.* It also sets the stage for the development of the notion of transcultural space that becomes a central concept behind the discussion of drawing and photography in *Mimesis and the Death of Difference in the Graphic Arts. From Gesture to Activity* is an example of the critiques that can be developed when

one begins to transpose methods and strategies from one field of knowledge (art) to another (anthropology), as opposed to reversing the process as is common in most postmodern and postcolonial academically inspired artworks. This transposition produces different perspectives for engaging with pictorial traditions, practices, and theoretical issues in contrast to those that are based on imported concepts (as opposed to methods and practices).

For a Negative Practice and From Gesture to Activity were not engaged in reconfiguring disciplines, nor were they preoccupied with the creation of a metadiscipline like cybernetics. They were committed to a visual and theoretical investigation of the kinds of activities that could be pursued between disciplines and their consequences in a world divided in terms





A visual work that is the product of the art world's new information culture: Heimo Zobernig. Ohne Titel, 1997, Documenta X, Kassel, 1997. Zobernig's work consisted of producing a 'visual platform' for the participants in Documenta X's 100 days-100 guests program. Ohne Titel provides an interface between the presentations and representations of the 100 guests and other activities situated on the ground floor of Documenta-Halle. The work divided the ground floor into functional spaces: a space for debates and performances, a recording space, and a space for the Walther König bookstore. Since the bookstore was an Acconci Studio design, and the chairs (Dokustuhl, 1997) deployed in the Halle were produced by Franz West, another Documenta artist. Zobernig's work becomes a meta-work of organizational and aesthetic design.

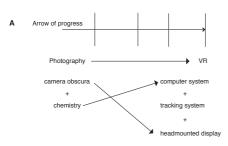
Photograph: D. Tomas

of academic disciplines and normative forms of knowledge. They represent attempts to reflect on the ambiguous position and epistemological ramifications of an individual who

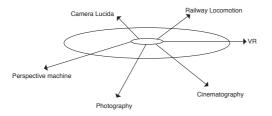
circulates between established and emerging or experimental disciplinary fields. The interview presents the viewpoint of a person at the beginning of a career. At this point, the issues and implications of this kind of movement are new and clear, and are perceived to be radical and unlimited in scope and potential for change. The second reflects the maturity of a position that can never be resolved, even in relatively hospitable circumstances, coupled to self-confidence in its legitimacy and critical perspective as defined in relation to a specific disciplinary context that is governed by limited experimental approaches and procedures.

The first chapter is strategically positioned in relation to the field of art, the second in relation to new historical and literary approaches to anthropology, its fieldwork practices, and its systems of communication and display. It is interesting to note the position of photography in both chapters. In the interview, photography is conceived to be at the core of a "practice." In *From Gesture to Activity*, photography is still a key element, but it is no longer considered to be at the focus of a practice. The shift between the two is a result of photography's position in different fields of activity. It also reflects a general reevaluation of photography's role in a culture





B Networked/Intersystemic Approach to the History of New Media



Old Technologies become New Technologies Depending on One's Spatiotemporal Orientation and Historical Viewpoint

Diagram for a relational history of media.

Most histories are linear and progressive in the sense that they present a series of events or sequence of artifacts, etc., in linear temporal progression or from simple to complex. A relational history is context specific and it presents a local network that links events or artifacts across space and time. In this network there is no before and after. Relationships are defined in multiple directions and dimensions.

Elements of the previous discussion of Conceptual art and risk were originally published in David Tomas, "Une pratique entre les disciplines : risques et enjeux," LA MÉMOIRE—LE VIRUS—LE RISQUE : Actes des tables rondes du 10^e anniversaire de la Galerie B-312, (Montréal: Galerie B-312, 2003), 41–47.

and in a postconceptual art practice: photography has been reduced to an element in a relational history of media where it is considered to be one of a number of transportations and communications media that combine together to form a matrix for a non-linear history of human movement and memory.

This new position is present in the visual works beginning in 1982 and is acknowledged in the interview through the discussion of *Photography: A Word* (1983).

1.1 FOR A NEGATIVE PRACTICE OF PHOTOGRAPHY: AN INTERVIEW WITH ALBERTO CAMBROSIO

ALBERTO CAMBROSIO: Your work is situated at the juncture of two fields of activity, the artistic and the academic. We might see in that an attempt at an artistic deconstruction of academic discourse, an attempt which, from a practical point of view, nevertheless creates certain objective limitations to the exposure of your work. People active in the field of art don't read, or at least don't master, scholarly and technical publications, while academics do not 'consume' art exhibitions the way they consume the books and articles written by their colleagues. You work in a sort of 'no man's land.' Is this a conscious strategy?

DAVID TOMAS: Yes, because with respect to the sense that there are two fields of knowledge the scholarly and the artistic—what's at issue, on the one hand, is to establish a relationship with a body of information which is not, or so it would seem, material out of which an artistic discourse can be constructed; and, on the other hand, to put in place a methodology which, strictly speaking, is not that of the academic field. We might say, therefore, that I operate in a 'displaced' space, because I have to produce a discourse in relation to an 'artistic' frame of reference while at the same time raising questions that do not really belong to this particular field; and that I try to find a way of producing a discourse which, while it can't really be described as 'academic,' nevertheless incorporates strategies that are related to research practices. Thus the texts that I publish in academic journals, for example, are implicitly conceived in a visual context, or in relation to a visual milieu. On the other hand, my 'visual texts' are conceived in relation to these 'scholarly' texts. Between these two poles something is set in play, which consists, for example, of critiquing, at the level of representational form, what could be seen as a visual given, while at the same time critiquing what 'representation' might be in the academic field.

CAMBROSIO: So you refuse any rigid distinction between the artistic and academic fields, and you prefer to see yourself as a sort of symbolic process constantly moving back and forth between one field and the other. Nevertheless, those who see you from the outside are able to follow this movement only with great difficulty. And so they want to position you within



'Experimental' Photographic Structure (seen from the left and the right), 1980, installation at P.S.1., New York. A transparent partition divides the room into two spaces: the space of the photographer's activities and the space of the viewer's activities. In the former, a metallic rod marks the place where the stroboscope was originally located, and an electronic timer where the camera was placed. In the latter space, an electronic timer is also seen, as well as a 6 metre by 4.2 metre 'photograph.' The two timers, each the mirror image of the other, oscillate in cycles of ten-seconds—the exposure time of the 'photograph.'

Photographs: D. Tomas

one or the other of these two categories. How can you escape this polarization imposed from outside?

TOMAS: There are two ways. The first is social, and consists of legitimating yourself in each of the two fields simultaneously through scholarly articles and art exhibitions. But, in so far as the legitimation process is closely tied to a given field, and not to both fields at once, the problem of the intelligibility of the discourse I'm trying to put in place remains. Because, in the end, there is no way of escaping a discourse which attempts to trap an agent and to draw it into its own field. The discourse can also refuse to define the agent-the discourse can ignore it and thus plunge it into nonknowledge. The other, more interesting way, is to persuade the two fields that a third space exists, a space which has a specific relationship to each of them. To reach this point, you have to set up a sort of seduction, which is both visual and intellectual, a sort of transgression that will simultaneously deny both poles. This gesture of negation thus plays the game of power (the game of legitimation), in so far as the power of legitimation is always played out with respect to a non-knowledge which, by definition, is beyond a field's frame of reference. In other words, we can seek this state of non-knowledge by means of an act of negation embodied in a gesture of transgression. You

have to initiate a process of negation in order to start this process anew, in order to create a field that I call 'negative' with respect to the other two fields. The problem, however, is first and above all not to be a victim of the seduction yourself, not to take yourself as an artist or

an academic and thus find yourself ipso facto in one field or the other. On the other hand, the effect produced by the seduction carried out by a non-knowledge¹ can most likely only be described by means of an institutional discourse, which implies a 'third' role, defined by its connection to the positive roles of artist and academic (in my case, of anthropologist). This third role is the role of the photographer. This choice is neither fortuitous nor arbitrary, because it is linked to the idea of a history of the Western gaze, a history which combines the anthropological, artistic, and photographic gazes.

CAMBROSIO: Between these two fields, however, there is dissymmetry. You thus can't expect, by situating yourself in the middle, to have the same effect on each of them.

Tomas: Historically, the field most susceptible to being interested in such a project has been the artistic field, which, at least in appearance, is by tradition 'open.' There is no reason why, however, the artistic field should, *a priori*, be more open to such a strategy. This is true even if we consider its tradition, which, for its part, is conditioned by its own history, by the history of its knowledge. There is no place in this history for a seemingly 'negative' space, conceived of in terms of its relationship to another field. On a strategic level, you can see a natural effect of rejection, which is the result of an institutional and artistic 'dual constraint,' because, on this level, non-knowledge must also be out of the field's frame of reference. This dual constraint is thus produced in the exhibition setting: a negative discourse is strategically present within a positive setting, that of the gallery or museum as an institutional component of the artistic field.

CAMBROSIO: I'd like to return briefly to the problem of how the movement through which you construct your discourse is perceived. Where you postulate the existence of an oscillation, we might simply see a doubling: there is not just one David Tomas, but two—one for academics and one for artists. How can your movement be made visible?

Tomas: At the moment, my strategy consists, quite to the contrary, of moving about without anyone noticing the movement. At the precise moment when the movement becomes evident to those observing it, at the precise moment when your extra-institutional position is perceived, that's when people start to say "But, in fact, he's not really an academic," or, similarly, "But, in fact, he's not really an artist." You have to avoid exposing the movement, while also avoiding the danger of symbolic dissolution, which threatens any immobile agent deprived of an institutional definition. On the other hand, the vision of the artist as 'undivided entity' is a Romantic vision. In actual fact there is no unique entity but rather, precisely, movement between two roles defined by sociocultural fields. Existence between the artistic field and the academic field can never be embodied in a specific individual. You therefore can't see yourself as automatically existing between two positive fields, but only as movement.

CAMBROSIO: Is your ultimate goal subversive? In other words, does it seek the dissolution of these two fields? Or is it, rather, a personal strategy of differentiation?

Tomas: At first, I borrowed elements from the history of physics which I incorporated into my work. This was a way of questioning the premises of the artistic field. It was less a subversive act than an act carried out from a critical perspective. The external elements I incorporated into my paintings questioned an art—painting—that is incapable of conceiving of itself as an historical art. I use the word historical here not with respect to the limited discourse on painting but in the sense of a larger discourse, the discourse of a displaced knowledge within a given representation. Problems concerning the history of physics, once they are transferred to an artistic framework, question the notion of such an art form's subject.

This underlying approach also characterizes my more recent work. Before, when I used the history of physics, I transplanted—when all is said and done quite naively—the elements of one history into another. My current work on the ritual of photography questions the very notion of photography as a sociocultural process and, simultaneously, questions the definition produced by the discipline of anthropology concerning what a ritual is. I replaced the process of transplantation with simultaneous criticisms of the anthropological framework and the artistic framework. In this way, for example, I am both subject and object of an anthropological practice, both indigenous person (a photographer) and anthropologist (I observe the practice of photography). The link with anthropology allows me to construct a series of interrogations into the status of an anthropologist who sees himself as the subject of his own research, while also constructing a series of investigations into the status of an indigenous person who tries to think beyond his own culture, in the sense in which he might see himself as the subject of his own anthropological practice. The doubling is carried out through a reflexive process: as a photographer, I see myself in relation to an anthropological theory of the photographic process (and in so far as this is a theory I developed in 1979—in my role as an artist—there is a doubling of roles involved); as an anthropologist, I 'observe' what I have become as a sociocultural subject of study, and I 'see' that in changing the activity of a photographic practice (which is to say, by theorizing it from the point of view of anthropological knowledge), anthropology has become not only a science of observation but also an applied and experimental science. Because I (the anthropologist) begin to manipulate photography on

the basis of its 'knowledge,' the status of anthropological objectivity is altered. The artist, the other pole of this process, sees photography (and, in its terms, anthropology as well), from an aesthetic perspective, as a form of representation: a spatial graphics. And so this reflexive process appears once again in the oscillation between the role of the artist and the role of the anthropologist. The result of this strategy is not an academic representation, nor is it an artistic representation, it is the verbal and visual representation of a visual mutation on the academic and artistic levels. The fields of art, photography and the Academy dissolve into their own gazes. For me, it is necessary that this movement, which I have been describing at length, not be the result of an act of bricolage. It is a subversive strategy which attempts to establish a homogeneous field, because the different fields evoked have, since the nineteenth century, been intimately connected to the complexity of a history of the Western gaze. This history has yet to be written: under the fixed gaze of the scholar, the Western gaze has taken possession of multiple universes which form the fabric of the sociocultural space in which our daily life is defined.

CAMBROSIO: At an exhibition at Optica gallery in Montreal in 1979, at a time when you were using the history of physics, there was a painting upon which you had attached, immobile, a locomotive. In your more recent work, which we might call 'negative,' miniature trains (which are now in movement) are invariably present. Using this train element, can you better explain how a seemingly 'positive' discourse (in both an artistic and an anthropological sense) has been incorporated into your work?

TOMAS: The painting you are referring to took up the theme of a painting by René Magritte entitled *La Durée Poignardée* (*Time Transfixed*, 1938) in which could be seen, among other things, a train. By linking Magritte's painting to the work of Galileo, I wanted to create a poetic space, to cross a horizontal movement (the train in motion) with a vertical one (the object falling in accordance with Galileo's law). In this transcription, as you have observed, the train was attached to the canvas and was suspended in space, thus defying its own physical movements. In this way, I was asking myself what a train falling in the space of a painting might be, and in general, what it might be in pictorial space. I took up this question in my subsequent work by superimposing a photographic discourse (the stroboscopic photography of an object falling in space) onto the history of painting, which I condensed and questioned in the way I had when transcribing Magritte's painting. From the point of view of my personal development, this painting was the first in which a train appeared as a physical object. For four years afterwards I didn't use trains, and when I did return to them, they were in motion.



'Experimental' Photographic Structure III, 1982, installation at the Belgo Building, Montreal. This work is divided into three axes: the axis of the photographer's activity, the axis of the draughtsman's activity, and the symbolic axis of history. The first axis includes, in order, a mirror, a stroboscope, a camera, and four transparent positive 'photographs.' The second includes a drawing table, at which the artist is seated, a Polaroid camera, and a guote printed on the wall. The third intersects the other two and is made up of video cameras and a miniature train, which moves between two points marked by video monitors. Two video cameras 'record' the train's trajectory. When it crosses a bridge located in the axis of the draughtsman's vision, a viewer is asked to take a photograph: the draughtsman's act of negation consists in making a 'black' drawing of it.

Photographs: D. Tomas

Let's go back, for a moment, to the first painting. The transcription of Magritte was meant to be analytical. It was a metadiscourse on the original painting: by adding the parameters of the two movements (horizontal and vertical) and by making reference to a law of physics discovered by Galileo, I was transposing another domain onto art. Between Magritte's train and my own, the discourse was reversed. I now think that this attempt to enquire into the parameters of a field by transferring elements from another field into it was naive. and prevented me from enquiring into art's sociocultural framework. Although I was interested in this question, my work was still directed towards the problems posed by the epistemological status of the 'framed' image and not towards a larger context. In the meantime, I moved into the academic field, passing from the history of science to anthropology. I thus chose a broader field, one that was capable of relating apparently heterogeneous, yet socioculturally linked, elements such as trains and the photographic process in a reflexive way.

CAMBROSIO: For the exhibition of your work at Galerie Yajima in 1983 (*Photography: A Word*), you were seated on a draughtsman's stool a few metres away from a mirror, which was pierced at its centre in order that the railway line that extended from you, and that supported a train which circulated in both directions, could pass through. Among the various objects that



Photography: A Word, 1983, installation at Galerie Yajima, Montreal. This work takes up most of the elements present in the previous pieces (the axes of the photographer and the draughtsman, and the symbolic axis of history). When the train crosses a bridge mid-way along its trajectory, the image of the train is shown on the video monitors, which thus redistribute it in space. Simultaneously, this prompts the draughtsman's activity, which lasts only as long as the train is crossing the bridge.

Photographs: Centre de documentation Yvan Boulerice

completed this structure were a camera and a stroboscope. I wonder if you could explain the function of the stroboscope?

TOMAS: In general, photography has been at the root of all my work since 1975, whether directly or through pictorial transcription. As for the stroboscope, I had already made reference to stroboscopic photography in my transcription of La Durée Poignardée. It then appeared in all of my work after 1980, which attempts to create a negative discourse. In this work, it functions as a 'mechanism of negation,' making it possible for me to trace a negative field. Concretely, I use it to produce a negation of the conventional photograph, in so far as it is an image created by light that reflects off the objects of the universe. In photographs produced with a stroboscope (which I call "ideologically complex and brute") the light source is turned towards the lens and towards the photographic film. We are thus in the presence of a radiated light. On the other hand, the process of development, for its part, is completely conventional. Thus, from the point of view of the conscious act of negation, conventional photography 'implodes' and, significantly, the photographic process is projected into a space which can never be the space occupied by its conventional history because there was a shift from the meaning of the photograph to its context. Its history is, in fact, the history of a process of producing subject/images and not simply the history of light deposited in successive layers through the action of a stroboscope. With such an act of negation, I aim to produce sedimentation, a deposit—and a hole of light (to speak metaphorically)—which functions only as a sign of itself and not as a sign of a (vertical) narrative in a photographic space. We thus arrive at a narrative without a history, because history, from the point of view of conventional photography, has been displaced elsewhere, beyond a negative discourse with respect to its own conventional history, and towards its production strategy. In other words, the stroboscope represents the sign of a transgressive gesture, an act whereby I turn a light source against the history of the photographic, anthropological, and artistic gazes.

CAMBROSIO: What, to remain with the Yajima exhibition for a moment, was the relationship between the stroboscope and the train?

TOMAS: The stroboscope was placed at the end of the rails, just in front of the camera lens. It functioned as a source of light directed not towards a subject (the rails, the train, or the general context of its production), but towards the photographic lens. It was thus a source of pure light. Like the object that was 'falling' in the painting exhibited at Optica, the train at Yajima moves in space. As a concrete object, it takes a specific historical form (it is a 1930s

Burlington Zephyr) and we can thus assert that it moves within the time of its own history. Nevertheless, it is no longer an historical object, but an object as process, because its role is that of a subject for the act of photography. It is a subject, however, that can never attain the condition of photographic subject, because between the rails and the camera is the stroboscope, which fills the camera's viewfinder and points towards the lens (which is another historical artifact: an 1860s Harrison Globe lens). The stroboscope thus blocks the train's access, and that of the general context (the photographic subject), to the chemical status of photographic subject/image. The resulting photograph is completely white (complete negative entropy). This photograph is then used as the subject of another transgressive gesture by a draughtsman who is seated behind the camera. As for the draughtsman's role, it is not arbitrary either, because it is situated on the 'track' of a history of the Western gaze. (Fox Talbot, an unskilled draughtsman, used a camera lucida for his drawings in the 1830s before he began his research into photography.) The photograph is thus negated in turn: the draughtsman produces an entirely black drawing (complete negative entropy). The displacement of conventional photographic discourse is twofold: a play takes place between the photograph and the drawing. At stake is the classification of the universe into light and darkness, day and night, presence and absence.

With respect to my earlier work, another change is visible: instead of an object limited to a specifically artistic discourse, there is now an object which truly operates within a cultural, social, political and economic discourse. I say "political," because what is at play in the positive histories of the fields in question, and in the gallery space in which these objects are found, is power. These objects are present as representatives of the strategies of the producer, that confront the strategies of the viewer, which are governed by the conventional history of photography, a history that is simultaneously cultural, social and political. The discourses linked together by the horizontal axis of movement between the role of the artist and the role of the anthropologist are in a vertical relationship, so to speak, with the negative discourse suspended beyond the positive discourses. Objects such as the train and the stroboscope thus undergo a doubling, symbolizing both what they are in their own histories (the Burlington Zephyr and the Harrison Globe lens) and this other, 'non-historical' existence, which is to say what they could be, or would be, in this negative space that is brought into play in the gallery setting.

CAMBROSIO: There is a fundamental difference between your 'history of physics' period and your 'negative history' period. In the former, you already employed a metadiscourse: you did not have direct access to physics but rather to a discourse on physics, which you then articulated to artistic discourse. Now you are both anthropologist and an 'indigenous person' and you are thus also, without mediation, an anthropologist. I would say that the difference is twofold, because not only were you not a scientist before (a physicist), while you are now (an anthropologist), but before you could not be a subject of study within physics (you are not an elementary particle) while now you can be an indigenous person. Another difference is that photography is a technological object of study and not a scientific one. What's more, it operates within a world said to be ordinary, and not exclusively within a laboratory.

TOMAS: The irony of what I do resides precisely in the reversal of this relationship. The result of my work functions, for the moment, within an environment that is just as esoteric as the laboratory. This environment is the art gallery. The effect of work exhibited in a gallery is just as esoteric as the effect produced by physical energy in a laboratory, because, in the end, in an art gallery we don't see the same articulation of photographic operations that we see in the 'realistic' world's frame of reference. In place of this reality, there is a displacement of the positive discourses, which is carried out by means of a 'hyper-realist' discourse (Jean Baudrillard). I have become a simulacrum in a discourse-simulacrum, a model of a model within a model of a model which multiplies in multi-dimensional spaces, because instead of a reference to reality there are, precisely, references to models: of art, anthropology and photography. References to a set of models which extend within a space dominated by the 'panoptical gaze of the scholar.' Faced with the silence of all these voices, which are simulacra of their own histories, we no longer find either the artist or the anthropologist, dissolved by their own gazes, but only an articulation between light and darkness (a basic model of classification). Nevertheless, between light and darkness there is the transgressive gesture, as well as the trains, the lenses, and other objects, which function like toys: stripped of their own histories, they fill up a timeless history thanks to a gesture that relates them to an eternal present.

CAMBROSIO: At the outset of this interview, I attempted to pin down the socio-logical dynamic of your project and you replied by situating it with respect to two fields, the artistic and the academic, which function as social agents of legitimation. Afterwards, however, your comments increasingly followed the path of an inward reflection on your project. You seem to want to avoid analyzing your position within the field of symbolic production and to return to the more reassuring terrain of the internal logic which underlies your work. Insofar as this observation is true, we might see your anthropological discourse as a ruse, as an attempt to shield yourself as producer from the objectifying discourse of the sociologist.

TOMAS: Not at all. The displacement you detect in my comments was prompted by the need to render intelligible the strategy I adopted with respect to the two fields, both within each and in my movement between them. All artistic, anthropological and photographic forms of knowledge, as we know, represent instances of social activity. While my discourse may seem to privilege an internal logic with respect to an external 'socio-logic,' this shouldn't be seen as a ruse that attempts to remove me from the horizon of the sociological gaze, because one cannot subtract oneself from 'its' field of interest, but only make oneself intelligible in terms of this interest. What I have tried to explain, both in my work and in my response to your questions, is my attempt to pinpoint the question of the education of the Western gaze as it has become clear to me. At the centre of my work is an attempt to subvert the problem that is at the heart of the education of the Western gaze: the inscription of a subject/image. My strategy consists of enquiring directly into the logic of such an inscription. In a world of visual models, my approach defies a system of education; a simple gesture of negation allows me to explore certain aspects of the sociocultural and political anatomy of this question. The success, or lack thereof, of my approach can only be measured by the interest or lack of interest it provokes in others. As for myself, I have never stopped being interested in the socio-anthropological implications of this approach, even when I try to distance myself from them. You mustn't forget that these implications are instances of the socio-logical objectifying gaze. And, after all, your question is also the product of this objectifying interest.

Alberto Cambrosio is a sociologist of science who now teaches at McGill University. In 1984 he taught at the Université du Québec à Montréal.

Translated by Timothy Barnard

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POSTSCRIPT

Today art is well integrated in the university. It has established relationships with a number of old and new disciplines such as Art History, Cultural Studies, Visual Studies, Communications Studies and Interdisciplinary Studies. The disciplines are porous, ideas circulate with increasing ease, and art is taught by university-trained professionals. But in the early 1970s, Visual Arts was a relatively new academic discipline with few universities offering graduate studies in the subject. For a period between the late 1960s and late 1970s there was a migration of students from vocational art schools to the university. People who moved between the two suddenly found themselves caught between different kinds of teaching institutions and faculty who were themselves trained in the older art schools. But teaching practices changed because they were recontextualized in an architectural matrix that housed many disciplines under the same roof or in close proximity, and the formation of the artist was undertaken in a context of neighbouring, yet accessible domains of knowledge. In addition to a standard art curriculum, the student was introduced to new academic components consisting of different subjects (philosophy, psychology, anthropology, sociology, history and the sciences), as well as different methodologies and modes of visualization.

Often it is the distinction between the old and new—between different pedagogic models, and architecturally defined working spaces—that creates the greatest unease and sense of dislocation, even disorientation in a new student. When I moved back to Montreal in 1972, I had just spent four years in a very conservative London art school under the apprenticeship of a curriculum that was focused on the development of manual dexterity in the basic traditional pictorial practices: drawing, printmaking, sculpture and painting. The atmosphere was clearly anti-academic in terms of how knowledge was organized and presented in a university. In contrast, intellectual development was piecemeal and individualistic. It is important to remember today that 1960s art school ideologies were predominantly anti-institutional in form and were permeated with the ethos of a bohemian/avant-gardist iconoclastic lifestyle. This is especially true for the years immediately following May 1968. Although I had begun to break away from traditional practices through machine-tooled sculpture by the time I moved to Montreal, they were still part of my working universe, as was the general vocational ideol-

SOMETHING WHICH CAN NEVER BE ANY SPECIFIC THING

Robert Barry, Vancouver

Robert Barry, *SOMETHING WHICH CAN NEVER BE ANY SPECIFIC THING.* Barry's contribution to the 995,000 catalogue and exhibition, 1970.



David Tomas, A New Cultural History, 1979. Kodak filter (red), Photocopy, Letraset and Plexiglas box.

ogy of the art school with its more intimate relationships between artist/teachers and students. Although Conceptual art had not filtered through to the particular school I was in, its location in a large cosmopolitan city had already created a fertile intellectual environment for its reception. A shift in context and continents created a situation of cultural dislocation and set the stage for a new set of intellectual and practical engagements. However, these engagements have always been partial and suspect, given a prior process of vocational acculturation. This ambiguity and unease created the state of instability and dislocation that governed the trajectory of future works. Nevertheless, it was in a climate of conceptual questioning and epistemological uncertainty that I decided to pursue a masters degree in the history of science. I chose this discipline because it was implicated in the evolution of ideas concerning the nature of the physical world, in particular the relationship between the visible and invisible. This choice was also motivated by an interest in scientific apparatuses, and the scientific uses of photography, with its different pictorial practices, codes and unusual subject-matters. Together they raised questions about the conventions governing the construction and presentation of knowledge-questions that were intimately related to the problem of readability and intelligibility.

Contact with Robert Barry's invisible and telepathic works, Joseph Kosuth's One and Three Chairs (1965) and Bernar Venet's 'copies' of Physics books and articles, etc., as well as graduate

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David Tomas, A draft slide list of works from 1972–1979. The draft contains a list of works relating to the history of physics.

courses in the history and sociology of science, pointed to different kinds of relationships that might exist between art and other fields of knowledge. Stimulated and intrigued, I began to investigate these possible relationships within the parameters of an eclectic field of interests (revolutionary histories, photography, experimental film, Nouveau Roman, and instruments of science and technology). It was not long before my understanding of the historical evolution of disciplinary practices created improbable tensions and contradictions with my experience of Conceptual art's synchronic pictorial practices. These tensions and contradictions forced me to concentrate my attention on the possibilities of different narrative forms in relation to science

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and history. Ironically, but not surprisingly, given my field of interests and my concentration on Conceptual art's disciplinary limitations, this question then served as the basis for the production of a series of 'pictorial' works. The most interesting of these were permeated with a heightened historical awareness that was manifested through the quasi-disciplinary construction of physical and psychic realities. However, I soon found myself working in a manner that was not solely rooted in an artistic discipline, or in a discipline like the history of science (or anthropology later on in the 1980s). The reasons for this displacement are interesting, as are its consequences, for they are bound up with the question of subject-mat-

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	A Photographic Record of the History of Motion Display Drawing 1979.
51	Madame Marie Curie 1992/1997. Drawing 153 × 193 + Usic , 1972, 1977
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	(Lack) J.N. Niepfe - A Portrait of Niepfe in 1826, Made After He Had Successfully Fixed by Means A Camera Obscura and Light Sensitive Chemicalsthe First Image From Nature. Drawing, 1972, 197
54	The Original Tube Used By J.J. Thomson to Measure the Ratio of Charge to Masss of Cathode Ray 1897. Display (Bisplay 1 and 3 information panels) 1997: 14 77-7 4
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ter in art and the conventions governing the formatting, archiving and dissemination of knowledge in academic disciplines.

Many of the visual works that I produced between 1975 and 1980 were conceived in relation to questions concerning the status of academic knowledge and the forms of its presentation. They were therefore less 'pure' and contextually distilled than the works of Venet that I was familiar with. In works such as *Madame Marie Curie* (1972/1977) and *Nuclear Religion* (1975/1980), I developed parallel and fictional contexts and embedded original items in

A BLINDING FLASH OF LIGHT



David Tomas, Joseph Nicéphore Niépce— A portrait of Niépce in 1826, made after he had successfully fixed by means of a camera obscura and light sensitive chemicals the first image from nature. 1972/1977. Pencil drawing and letraset.

Photograph: Richard-Max Tremblay.



David Tomas, *Madame Marie Curie*. 1972/1977. Pencil drawing, hand written and typed notes.

Photograph: Richard-Max Tremblay.





David Tomas, W.C. Röntgen —A portrait of W.C. Röntgen, the discoverer of X-Rays, made on the day of the initial discovery, the day he took the first X-Ray photograph, and the day his work was published. 1972/1977. Pencil drawing, letraset and note.

Photograph: Richard-Max Tremblay.



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WORKS ON THE HISTORY OF PHYSICS'

DAVID TOMAS - NOVEMBER 02 - 28, 1979 OPENING - FRIDAY, NOVEMBER 02 at 8:00 P.M.

- Statement by the Artist

There are established means of exploring and presenting forms of knowledge. These include the painted surface and displays associated with museums. In structure these methods provide a means of organizing and presenting or carrying' a body of knowledge. The formal attributes of these objects reflect the culturally conditioned activities which form the basis of their manufacture. As methods they also stand as memories and histories of these activities. As objects for analysis they provide the means of exploring aspects of the organization of the systems of knowledge they embody. The particular objects categorized as scientific instruments and their associated experimental results provide the means of exploring the cognitive aspects of man, not only the sensory stage of cognition, but also the relation between the empirical and theoretical levels ve. scientific cognition.

If one assumes that the human mind 'regardless of the identity of those who happen to be giving it expression, should display an increasingly intelligible structure' (Levi-Strauss), it then becomes immaterial when considering two distinct thought processes which of the two takes shape through the other. What becomes important is that one should shed light on the other. In fact, that light should be shed on the structure of the human mind.

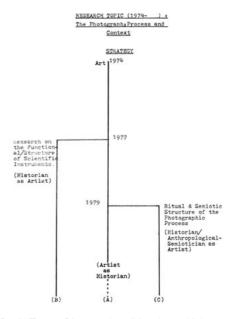
I have an interest in these thoughts.

Within this context the function of the arbit is to discover new structure of autoral organization, and it is to their interventions that the arbit automating addresses

DAVID TOMAS lives and works in Montreal. His long standing interest in science has led him through felloships, research papers and lectures on the subject. He exhibits in Montreal and is the recipient of a Canada Council Junior Grant.

David Tomas, Press release with alterations and additional manuscript corrections, 1979.

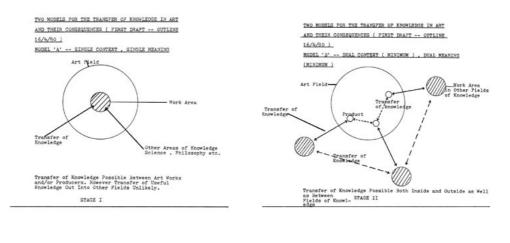
A good deal of the most rigorous and stimulating work produced in the last 14 years has <u>horrowed</u> notions from other fields of knowledge and <u>applied</u> them to examining the structural parameters of art . With the switch from , for instance , artist as historian to historian as artist the reverse procedure is true . As a historian one now has to relearn what those activities are that <u>could</u> be defined as 'artistic' within what can be termed a ' post-conceptual condition '. Any productions from this point of view reflect this epistemological reorientation .



David Tomas, Catalogue statement, 1980.

David Tomas, Diagram describing the multiple identities of the artist who works between disciplines, 1979.

different forms of pictorial display. After 1980 these questions were refracted through the problem of how one could develop a critical visual practice that took as its starting point the cultural infrastructure of a picture-making technology like photography, as opposed to beginning with the question of the image and its range of subject-matters. I distinguished between the two focuses, the one on process and the other on product, by referring to the former as 'a culture of representation' and the latter as 'the representation(s) of a culture.' Since 1980, the question of cultural infrastructure and subject-matter has been explored through a series of photographic installations, and most recently through photographic works that are conceived in one way or another to exist outside of disciplines and practices while operating in relation to them (see chapter 5.1, *Mimesis and the Death of Difference in the Graphic Arts*). These works have explored the nature and status of knowledge in ambiguous or 'transcultural' situations. As a consequence, I have often found myself situated outside of the art and academic worlds, confronted with the question of legitimate and illegitimate



ARTIST AS HISTORIAN

HISTORIAN AS ARTIST

David Tomas, Two models for the transfer of knowledge in art and their consequences, 1980.

forms of knowledge and identity. The contradictions between institutional practices, forms of knowledge, and an identity that was increasingly caught between contradictory disciplinary forms, eventually prompted me to clarify and redefine my situation, interests and methods in a 1984 interview that is reproduced as this section's first chapter.

Between 1980 and 1988, performance and installation-based visual works were produced and exhibited, and articles were written and published, while pursuing graduate studies in anthropology. The installations and articles probed photography's symbolic and cultural identity, especially in connection with the ritual structure of photography's process of production and its related system of classification. Throughout this period, academic and artistic production were allied, but in ways in which references and relationships remained for the most part autonomous. Instead of establishing a relationship of dependence through which one aspect of an author's work could be said to 'illustrate' the other, different methods of investigation were



David Tomas, Experimental Photographic Structure, 1980, P.S.1, New York.

Photographs: D. Tomas.

used to explore the question of photography's cultural infrastructure. The objective of the investigation was to apply theories of ritual processes to technological processes in order to invert the photograph/process hierarchy of photographic reproduction that seemed to dominate, in a very transparent way, the use of photography in anthropology and in art. It was by this means that the question of photography's social and cultural functions could be addressed in a more fundamental way than was possible through a simple consideration of the photograph itself. This investigation was pursued in a series of visual works that took form through a denial of the photochemical inscription of a potential subject on a photosensitive support. The visual works that were produced were considered to be theoretical and practical equivalents to the published papers.

An exploration of the implications of a ritual model of photography continued throughout

the 1980s. The exploration was accompanied by a diffusion of my narrow focus on photography. A more relational history of media emerged in which photography was considered to be part of an intersystem of cultures of representation that included cinematography, Polaroid cameras, early photographic lenses, miniature railway systems, mirrors, closed circuit television, camera lucidas, etc. In 1988 I graduated with a Ph.D. in anthropology. My dissertation explored the relationship between authority, observation and photography in British anthropology between 1839 and 1920. In 1987 I left Montreal to pursue postgraduate studies at the History of Consciousness Program, University of California, Santa Cruz, where my academic work was warmly received. However, by the time I left the program a year and a half later, I was disappointed in what I saw as a perverse relationship that was being forged between the visual arts and postmodern anthropology. This disappointment led to the publication of a critical text entitled *From Gesture to Activity: Dislocating the Anthropological*



David Tomas, *Experimental Photographic Structure II*, 1981, The Belgo Building, Montreal. Photographs: D. Tomas.

Scriptorium (chapter 1.2), in which I explored some of the contradictions that existed between art and postmodern anthropology at the time. The key questions that motivated me to write the article were concerned with the choice of outdated artistic models (such as surrealism) and the adherence to old media formats (the book) when the visual logic of the criticism directed towards anthropological practices, although predominantly textual in nature, pointed elsewhere, to more radical textual practices. One was therefore confronted with the revealing but disturbing paradox of old radical ideas being used to modulate information through conservative media in the service of new disciplinary and intellectual agendas. This bizarre inconsistency pointed to an astonishing lack of reflexivity concerning the conventions governing the construction and presentation of knowledge and the material basis of the means chosen for formatting, disseminating and archiving information. Ultimately this raised the question of the academy's role in normalizing potentially dangerous visual propositions like those that could be produced on the basis of Russian Constructivism or Conceptual art.

These other art forms, especially the former, could be used to challenge the material basis and conceptual architecture of disciplines like anthropology, film studies and cultural studies by opening them up to radical forms of visual experimentation.

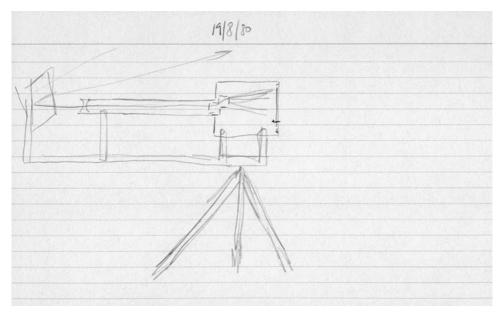
It is in such situations, when one encounters resistance within newly coalescing disciplinary alliances—as in the case of those that animated the History of Consciousness Program (with individuals who championed critical studies in the history of science and biology, ethnographic history, feminism, film studies, museum studies, the new history, psychoanalysis, etc.)—that one becomes subtly aware of the concept of risk and its role in policing disciplinary boundaries in the interests of containing and normalizing knowledge. What might appear abnormal and audacious because of its transversal strategy (the use of new history techniques in the analysis of ethnographic fieldwork practices and traditional forms of museum display) can suddenly be traced to a shift, but not necessarily a revolution, in the academy's culture. While displays might transform under the guidance of new forms of criticism, the museum retains its identity and autonomy in the name of a transcendent culture and teleology of history.

4. POSTPHOTOGRAPHY

INTRODUCTION

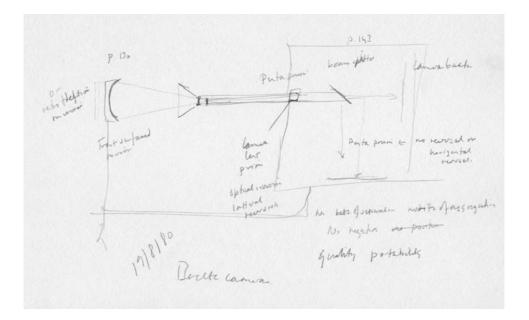
Upon what basis does one develop effective counter-practices in the visual arts and beyond, in relation to a broader culture? What does 'effective' mean is these cases? Is it simply a question of consequences or repercussions? Or does it have to do with range? How far does one's vision of change reach and what is its scope? Can its effects be measured only through a conjugation of consequences and range? But what does this mean in the case of photography? Should we be content to develop counter-practices within a specific disciplinary framework and in terms of the way existing histories have been plotted and laid out? In photography's case in the visual arts, this has to do with different histories of the subject, and the way photography is positioned in relation to other media—painting, sculpture, installation art, performance, new media, etc.

One can criticize the history of the visual arts by drawing attention to the way we look at a picture (by proposing different and unusual viewpoints). We can criticize this history by challenging traditional media on its own terms (by creating three-dimensional photographs or large-scale photographs of intimate subjects). Alternatively, we can offer other unknown or unappreciated subjects (images of various subcultures and their marginalized activities). We can also propose different ways of reading subjects (feminist, gay, postcolonial). Or one can try to reposition photography within an existing relationship or hierarchy of media (large-scale photographs that compete with painting in terms of subject and size or photographs that are sculptural or three-dimensional in form). These strategies produce different results depending on our choice of viewpoint (subject, reading, or photography's relationship to different media) and the direction in which we intend to proceed. However, if our initial options are limited to an existing history of subjects, and we proceed and measure the results of our activities in its terms, then we are limited to a particular dimension or arena of activity, even if the artifact we produce is a three-dimensional structure.



David Tomas, Sketches for new camera designs, 1980.

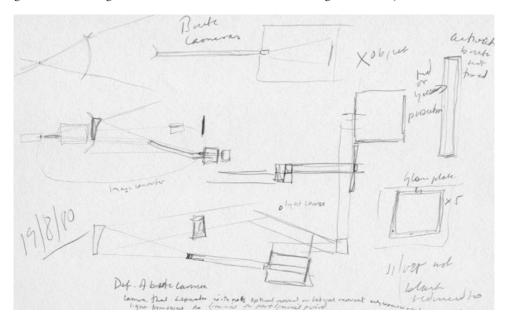
If we limit our activities to the exploration of 'new' kinds of subject-matter whose originality is measured by existing repertoires, then our contributions are restricted to widening these repertoires. These repertoires are not infinite. Their contents depend on the discipline that they serve: physics, astronomy, sociology, anthropology, etc. Importing new kinds of subject-matter does not automatically guarantee that the marriage between the new and old will produce a radically different subject; it might simply extend an existing repertoire. The question of what is new subject-matter in the visual arts is not as simple as it seems, since most pictures, even the most unconventional ones, operate within highly restrictive pictorial and thematic codes/norms. The impact of radical visual propositions depends, more often than not, on a fine sense of distance (not too close and not too far) from established and well-defined visual cues. In order for a radical proposition to have a significant impact in the visual arts, it has to be recognized as radical. This means that the artist as producer and the spectator as consumer must be able to place it in relation to, if not within, a common or congruent imaginary map of the discipline and its traditions.



However, if we are interested in developing instrumentally transmitted or delivered counterpractices, we might be interested in looking at ways that the camera can be modified to operate under a different set of conditions. *Photography and Semiotics* suggests that this is certainly possible. One would only have to establish a different set of logical parameters and operating conditions for the research and development process. For instance, is it possible to imagine a camera form that would not relate to any existing designs, and what information or intuition would serve as the basic premise for the research to begin on this new kind of camera? Would the design process target the camera's traditional organization (black box, lens placed opposite a photosensitive material or its electronic equivalent), and how would they be modified (on the basis of optics, physics, camera form, or culture)?

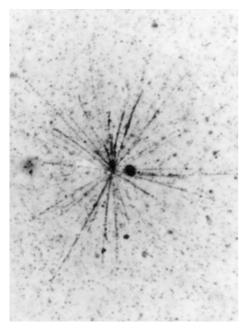
In the meantime, existing cameras cover most conditions in which new subjects are produced in the visual arts, and there are no urgent reasons to opt for the lengthy and costly construction of new kinds of imaging technologies since most have been designed specifically in relation to common pictorial conventions that producers and consumers share in order to facilitate efficient communication. Any movement away from these conventions must be measured in terms of existing subject-matter and the visual parameters that set the conditions for image reception. The relatively smooth transition from analogue to digital imaging technologies has taken place within well-established pictorial conventions. Even the wildest simulations are measured in terms of existing paradigms of naturalism and realism. As a consequence, questions relating to the reconstruction of analogue or digital cameras or to the development of new forms of lenses, storage devices, or recording devices that might produce radical translations or mutations in subjects and the way we read them, do not figure in the repertoire of counter-practices.

An answer to the question of what effect a counter-practice will have on a field of operations and how far it will extend, depends on one's viewpoint and position in a culture, and on one's relationship to a given subject repertoire. In each case, counter-practices will normally be defined in terms of existing subject repertoires and existing imaging technologies. Change operates through the introduction of new subject-matter or new imaging technologies, or a conjunction of both. However, truly radical change would challenge the coherence and cohesion of a discipline; and, as I have suggested in the case of the visual arts, most radical gestures are strategic and tactical in nature, and local in range. Here, subject-matter is often



tied to existing categories like the portrait, nude, landscape, cityscape, or still life. New subject-matter is often defined as a transformation, mutation or the reinvention of an existing pictorial category or convention. Conceptual art, for example, extended the repertoires of the portrait (Bruce Nauman's Holograms (Making Faces), the nude (Vito Acconci's Seed Bed), the landscape (Douglas Huebler's Location Pieces), the industrial landscape (Bernd and Hilla Becher), and the cityscape (Joseph Kosuth's billboard works, Edward Ruscha's Every Building on Sunset Strip), as well as proposing new subjects (Robert Barry's invisible works, Hans Haacke's Communication System-UPI and Proposal: Poll of MOMA Visitors). Imaging technologies are often treated in similar terms, as the Polaroid SX-70 and the Disc photographic system designs suggest. Subjects and methods of working can be transformed through the introduction of new kinds of imaging technologies like the video camera in the 1970s, the computer in the 1980s, or the digital camera in the 1990s. However, it is surprising to note how the images produced by these new technologies are situated in relation to, or remain within, existing subject repertoires. Often they extend existing subject categories—as in the case of the treatment of the body in video art, or abstract representation in the case of computer-based animation and simulation. The implicit set of operating conditions that equates subject with specific pictorial traditions is conspicuously visible in the case of computing technologies and software programs because of the way the interfaces have been conceived and designed to operate like a paint palette or a drawing system.

Atomic and nuclear physics provide an interesting contrast to the question of imaging technology and subject-matter in the visual arts. In these disciplines, the unconventional subject-matter of elementary particle track photographs was produced by an innovative apparatus, as in the case of cloud and bubble chambers, or by new relationships between the natural world and photochemical emulsions. This novel category of picture was not only the product of existing knowledge, it emerged in relation to new interpretative frameworks and modes of reading whose intelligibility depended, in the first instance, on one's detailed understanding of given theoretical and experimental contexts. Transposing an elementary particle track photograph into an art context effectively strips it of its culture and its disciplinary framework to reduce it to a visual enigma or quaint aesthetic effect. The addition of information on the type of apparatus used, its theoretical and practical objectives, and significance in terms of experimental results can clarify its origins, nature and meaning. But this information puts pressure on the photograph's new context through the injection of foreign data that is rooted in a different context of production and set of pictorial rules and conventions.



Photomicrograph, Disintegration of Silver nucleus? Thirty-two tracks are observed to issue from the disintegrating nucleus. From Herbert Edwin Huntley, *Tracks of Ionizing Particles in Photographic Emulsions: A Survey of the Application of the Photographic Emulsion to the Study of Nuclear Particles.* Ph.D. Thesis, Department of Physics, University of the Witwatersrand, Johannesburg, January 1949.

Collection: D. Tomas.

Thus we return to the question of effective counter-practices in the visual arts and in a broader culture. What is their level and range of operation? Do we remain within the dimension of existing categories of subjectmatter? Do we opt for the use of existing picture-making technologies in the sense of using them to produce conventional images? Do we tie the question of subject-matter to the use of specific imaging technologies (the domestic genre in the case of live WebCam Internet broadcasting)? Or do we look beyond these domains and relationships to others to provide us with a different basis for developing counter-practices? If we decide to go beyond the range of an existing discipline like the visual arts, we can pass through one or more of the nexus of disciplines that operate in a university in order to gain access to a larger cultural arena, where we will not be limited to existing image repertoires in the arts in order to guide our movement toward unconventional cultural spaces. But if we do so, we automatically reduce our audience until it might only consist of the solitary producer of the novel visual work

A ritual of photography suggests that all photographic images are founded on a common system of classification and that this system might be associated with a fundamental myth of origins as presented in the first ten verses of the book of Genesis. In contrast to the earlier chapters, *From the Photograph to Postphotographic Practice: Toward a Postoptical Ecology of the Eye* attempts to develop a viewpoint and vocabulary that is suited to the production of visual works that are based on this different set of premises concerning subject-matter and pictorial logic. The chapter begins by setting out the parameters of the new approach by transposing the position developed in *The Ritual* of Photography, A Mechanism for Meaning: A Ritual and the Photographic Process and Toward an Anthropology of Sight: Ritual Performance and the Photographic Process. It locates its subject in terms of a new approach (a postphotographic practice) and operating space: an alternative culture delineated with reference to photography's modes of production and its ritual structure and mythic logic. It proposes that this postphotographic practice is an effective and politically far-reaching counter-practice because it is developed in opposition to the authorial and deterministic foundations of all photographic images which are traced to photography's mythic and product-oriented logics.

The key elements of the old photographic model are inventoried:

- images are fixed in terms of tonal gradations between light and dark, over- and underexposure;
- there is a relationship between this classification system and the one that operates in the Judaeo-Christian myth of origins;
- the relationship points to common symbolic contents, cultural and transhistorical authorial functions;
- there are connections between this older model and the activities of rational or scientific man;
- the optical and perceptual hierarchies of difference between light and darkness and the role of light in the creation of photographs have produced a particular history of photography that sustains a distinct authorial presence.

Having set out the basic elements of the old model of photography, the chapter goes on to link the role of light to the creation of autonomous photographic images and argues that it is in terms of light and photography's capacity to separate appearances from substantive contexts, that photographs can enter the service of history. In this sense all photographs, both conventional and radical, are indissolubly tied to an original mythic content and authorial function. Thus, photography can be understood to be an antiquarian, as opposed to a creative, cultural activity. It is on the basis of these observations that a significant proposition can be formulated: Photography is a remarkable and triumphant product of an industrial culture inasmuch as it is the rational, technologically channelled equivalent for a mythic creation process, and because it provides a means for the operational transmutation of a mythic figure into a material/symbolic process.

How is it possible to develop an effective counter-practice, given this analysis of photography? The key resides in a different model of the relationship between organisms, artifacts and ideas. Beginning with a cybernetic model of the interconnections between organisms, machine systems and natural environments, there is a possibility to dissolve the distinctions between mind/body and culture/nature, and replace these dualisms with an ecologically integrated model of the circulation of ideas across biological and cultural boundaries and throughout a socio-environmental context. Any system would henceforth be defined in terms of operational goals, explanatory objectives, and interfaces between inner and outer environments. By inverting the relationship between product (photography's teleological objective) and process, one can find oneself in a position where context and processes become product. This shift displaces the notion of subject from one that is defined by the photographic frame to one that is defined by a set of explanatory objectives deployed in a matrix of contextually defining historical and cultural possibilities. Thus the chapter proposes a different kind of postphotographic practice that is able to account for its own historical and contemporary contexts of production. Once one accepts an ecological model of this type, the camera becomes a node in an expanding system of ideas concerning this picture-making process. These ideas and their pathways in space and time are a new dynamic form of subject-matter. Access to this subject-matter is through an act of negation that, in the case of the practice discussed throughout this book, consists of denying the subject/image's access to a photochemical surface. Although the act of negation is emblematic of the approach, there is no predetermined portal to this world. The chapter goes on to link this act to Friedrich Nietzsche's analysis of 'the use and abuse of history' and the delicate dynamics that he describes between the historical and unhistorical, or the role of thinking historically and forgetting or feeling unhistorically, in promoting the creative health of an individual or culture. It is on this basis that one can revive the idea of an 'oscillation' (as described in For a Negative Practice of Photography) between the historical (post*photography*) and the unhistorical (*post*photography).

The emergence of a new subject-matter takes place through the materialization of an act of negation that is triggered within a movement between an historical and an unhistorical consciousness. It is through this gesture (or a similar one) that one is transported into a world of ideational networks and operational cultures that are deployed throughout spatial, temporal, social, environmental and material contexts. Here, representation is conceived as a movement of ideas concerning the nature of imaging technologies and their cultural infrastructures throughout a cultural ecology of technology that ultimately links different artifacts together. Given different contexts and elements, postphotography is thus able to redefine its culture and practice continuously. Finally, an ecological counter-practice of this kind eliminates the mythic and spatio-temporal *raison d'être* of traditional photographic images: The act of negation has generated a network of contexts that can be experienced from many different viewpoints, depending on one's position within the network. Finally, postphotography creates situations that exist both inside and outside of history inasmuch as they are context sensitive, site specific, metacontexual and metahistorical in the way that they operate in and across time and space.

4.1 FROM THE PHOTOGRAPH TO POSTPHOTOGRAPHIC PRACTICE: TOWARD A POSTOPTICAL ECOLOGY OF THE EYE

Since 1839, Western culture has conditioned its constituents to see in terms of photographic images. That conditioning, however, has not been homogeneous. One has only to examine the discourses that permeate photography to become aware of the fissures continually disrupting its practice. Thus, one of the principal dichotomies that continues to influence the historical, practical and critical debates on the nature of photography involves its 'objective' versus its 'subjective' foundations. Is photography to be considered a scientific or an artistic tool? Are photographs factual or are they particularly complex fictions? As the history of these debates reveals, the answers to these questions are relative to the practical uses and the discursive formations instrumental to photographic activity. There is, however, another position which can be adopted in relation to photography's historico-epistemological identity that has not yet been surveyed. This position can be identified through an exploration of an alternative culture as it pertains to photography's modes of production. A culture of photography does not necessarily have to be defined in terms of the images that have come to embody much of its current historical and social value. Photography's historico-epistemological identity can also be defined in terms of the cultural dimensions of its process of production-after all, photographs do not simply appear, but are produced by a complex transformational process which might also be impregnated with symbolic value.

In the following chapter, an alternative 'postphotographic practice' will be described, and its strategic/practical consequences will be considered. This photographic 'counter-practice' will be introduced through an examination of a correspondence between a visual classification system and the cultural priorities expressed by the Judaeo-Christian myth of origins as presented in the first ten verses of Genesis. The correspondence will then provide a point of departure for exposing the authorial and deterministic foundations of all photographic images. The remainder of the chapter will be devoted to developing a critique of the principal historical priority sustaining a 'culture of photographic images'—the priority being an historico-epistemological fixation on the photograph as the most valued product of photographic activity. The critique will be based on a strategic inversion in the hierarchic binary system: product/process. In contrast to a haunting cultural fixation on images and the transcendental determinism of current photographic practice, an outline for a systemic and process-oriented account of a postphotographic culture will be proposed. This alternative will be introduced by the description of a postphotographic practice organized in terms of an immanent postoptical and plural ecology of the eye. The development of this alternative to current photographic activity will be predicated on Friedrich Nietzsche's theory of the use-value of history and Gregory Bateson's critique of a transcendent non-ecological epistemology of Mind.

God, Photography and Historical Determinism

Photographic subject/images are 'fixed' in terms of tonal gradations set between light and dark, or over- and underexposure.¹ They are therefore subject to a binary classification system composed of the elements 'light and dark,' with their inferential correlates 'presence and absence.' As with the Judaeo-Christian myth of creation, this photographic order is governed by an initial distinction between 'darkness' and 'light'—the two other terms, 'absence' and 'presence' only becoming marked in disjunctive association with their contrary terms ('light' in the case of 'absence' and 'darkness' in that of 'presence'). Both the photographic and the creation processes emphasize the primacy of ocular perception at the expense of the other four senses; both are mediated by a perceiving entity (man in the former instance and God in the latter); the process of naming is of particular importance in each case; and finally, both are unconcerned with the question of the origin or nature of matter.²

Since the second quarter of the nineteenth century, photographic media has used this dualistic principle of ordering, and has been the principal cultural technique for celebrating an ocular process of cognitive differentiation. Furthermore, the progressive social and cultural diffusion of photographic media during the interim (since photography's initial public unveiling in August, 1839), and the current omnipresence (and omniscience) of photographic products, has been achieved under the authority of a mobile and transcendent representation of the eye cast under the supervision of 'rational' or 'scientific' man.

Photographic technology is used optically to separate appearances from substantive contexts and permanently stabilize the resulting 'subject/images' by mechanical and chemical operations. The photographs that emerge from this process are mediated by a perceiving entity—the photographer—and embody another fundamental cultural distinction: they replicate the dichotomy between the word and its 'referent' in their differentiation between the subject/image and the subject photographed. The similarities that can be traced between photography and the Judaeo-Christian myth of creation suggest common symbolic contents and cultural functions. Although there is no direct historical connection to be drawn between the two processes of creation, the similarities that exist imply a common cultural theme pertaining to the existence and normative functions of a perpetual trans-historical collective mythic/social presence—at the very least, a mediative authorial slot sustaining an optical apparatus: an eye.

The basic physiological structure of the biological eye, a photosensitive surface encased by a darkened chamber with an aperture, is replicated by the camera. Both systems articulate the same electromagnetic material. In each case, the construction of synthetic vision involves an extremely complicated process—either from a physiological or cultural point of view—and this complexity is compounded by the common cultural relations that have been forged between these two types of optical instruments.³ These systems are not only sophisticated photochemical receptors for selective electromagnetic waves; the light they respond to is also suffused with cultural value and is intimately intertwined in their material/symbolic fabric.

The information contained in a photograph is defined by optical and perceptual hierarchies of difference. Photographs are governed by the action of light on darkness, and information emerges by way of luminiferous actions, such as those defined by photographic lenses which are designed to control light rather than its absence: darkness. Light is also the precondition of vision and as a consequence it is culturally valourized over darkness. Light thus becomes the unmarked (contextual) cultural field in which darkness becomes 'marked.'⁴

Light is accorded positive value because it is a constructive cultural agent, and the common substantive medium that unites the biological eye of a given psycho-historical individual with the mechanical eye (a collective cultural artifact). Light is also the active element in the hierarchical binary system delimiting the relational poles of visual representation. For example, it is the medium of 'action' in terms of which the history of photography was and continues to be created, because cultural forms emerge from a light/dark continuum to be continuously and differentially fixed in terms of photographic surfaces. Given the intimate role of light in the process of biological vision and the cultural production of photographs, it is not surprising to discover that the dominant history of photography is the one defined in terms of 'photographs' and their 'authors'—both contiguous mediums of cultural enlightenment.

Photography: At the Service of History

The special position of photography in our culture is predicated on a unique form of contiguous/causal link that unites the photograph with its referent. This link is formed of light. Here it is worth recalling the words of Joseph Nicéphore Niépce: "The discovery I have made and which I call Heliography, consists in reproducing spontaneously, by the action of light, with gradations of tints from black to white, the images received in the camera obscura."5 The phrase "spontaneously, by the action of light" is indicative of a widespread cultural belief in the comparatively unmediated nature of a subject/image's photographic process of optical and chemical inscription.⁶ Light—both natural and artificial—is thus perceived as the custodian of 'truth.' As the medium for the transmission and inscription of fact, light acts as its own guarantor-seeing has become a cultural form of believing. Light also provides the contiguous connection which allows for the cultural ascription of an iconic correspondence between the photograph and its referent. This luminous mediation precipitates the cultural bias of a photograph's factually 'real' nature, and the history of photography emerges as the product of the chemical fixing of light images. In contrast to mirror images, photographs are also historical because they are 'fixed' slices out of Time. Such images can therefore escape the chaos of an undifferentiated temporal reality and enter the differentiated (chronological) realm of historical time.⁷ This explains one facet of the widespread cultural value that photographs have acquired in time: the displacement of an appearance from a substantive context and its 'permanent' fixation severs it from its 'eco-system,' which, if it were a mirror image, would define its spatial and temporal qualities. Photographs therefore have the capacity to enter the service of history at the expense of the prephotographic substantive context which initially served to coordinate the social and cultural conditions of their production. But the cultural connotations of light also resurrect the spectral presence of a mythic author. In fact, photography is mediated by a double authorial presence: a collective mythic figure and the individual photographer.

Photography represents a secularization and democratization of the creation myth—what Lady Elizabeth Eastlake referred to as "the craving, or rather necessity for cheap, prompt, and correct facts" was satisfied by photographic processes that valourized product over mode of production (as the 1888 Eastman Kodak slogan implied, "You press the button, we do the rest").⁸ Divine labour and its hand maiden, divine inspiration, became antiquated after the rise of mechanical reproduction, and artistic labour was relegated to a choice of subject (a question of framing) in a technological and industrial narrative that connects Eastman's Kodak with the Polaroid

process. But this historical narrative has preserved the signs (photographs) of a transcendent creative act (the differentiation between darkness and light) and thus continues to authorize the mythic act of differentiation that inaugurated the privileging of light over darkness.

The culturally sanctioned, photographically fixed relationship between light and dark provides a powerful authoritative site for the condensation of an originary mythic value. With the development of each photograph the symbolic position and authority of a transcendent Mind is resurrected: clothed in difference, each individual photograph is an authorial function with a particular iconic inflection. Poised between darkness and light, myth and science, the figure of the 'author' takes the form of a transcendent being, and the product of his photographic activity fixes a mythic creation process—"And God 'said'..., And God 'saw'..., And God 'called'..." (my emphasis)—in terms of a fundamental classification system. Given this mythical phantom presence, all the historical uses of photography are excessively 'antiquarian'—in Nietzsche's sense of a celebration of preservation (stasis) as opposed to creativity (change)—because subject/images are defined (fixed) in terms of a fundamental perceptual/mythic opposition dominated by light.

The photographic process therefore represents a rational, technologically oriented model for a mythic creation process—its hegemonic role in the symbolic and material consciousness of the Occident is the result of the embodiment of a classification system that mediates fundamental questions such as those concerning the transcendent origins of light/dark, day/night, and the presence/absence of earthly things. Given these connections, photography represents the triumph of an industrial culture because it presents the remarkable solution of mechanizing and manufacturing 'creation' in terms of an extraordinary technological feat: the functional transmutation of a mythic figure into a material/symbolic production process.

Any attempt to subvert the remarkable cultural authority of photography's postulated 'mythic power' and produce another 'practice' dislodged from this origin will be reflexively confronted by a grammar of seeing governed by principles echoing a transcendent authorial presence. If we now function under the historical illusion that we have replaced this mythic presence, we must not forget that we collectively take, make and read photographs, and therefore, in the words of Nietzsche, "we are not getting rid of God because we still believe in [his/our] grammar..."⁹

Toward a Postphotographic Practice

At the root of the cultural epistemology governing our relationship to the natural environment are fundamental hierarchical dualities between Mind/Body and Culture/Nature. For example, Bateson has pointed out that the appropriation of a subject/object dichotomy through which we assume a transcendent position with regard to our natural world, and which also is enshrined in the Cartesian epistemological difference between Mind and Body, has resulted in a notion of Mind that has become synonymous with an individual consciousness. This cultural dichotomy, which also echoes the distinction God/Man, is projected into space and takes form in the substitutive contrasts Man/Nature and Culture/Nature.¹⁰ Technology can then be used to control an autonomously conceived hostile eco-system (Nature). In this role, technology inevitably becomes the representation of an historical, progressive and competitive spirit reproducing the alienation and potentially fatal consequences of this cultural dichotomy.¹¹ This pathological, ecological condition can only be neutralized by redefining the boundaries of Mind so that it now corresponds to the movement and circulation of information or ideas across the classical boundaries of a biological body (a perceiving consciousness) and throughout a social and environmental context. The concept of Mind that emerges as a result of this redefinition of the contextual boundaries (Nature and Culture) is ecologically immanent rather than transcendent, and the Cartesian distinction between Mind/Body evaporates as traditional material and cultural boundaries are transformed through a broad ecological network of "pathways of information."12

Photography, as previously noted, is also defined according to a number of binary distinctions (such as photograph/subject photographed, light/dark and product/process) which tend to (re)produce the dichotomy between Mind (a mythic authorial position signified by the photograph) and Body (a substantive prephotographic context). But the hierarchic nature of these distinctions implies the possibility of change—by way of a strategic inversion in one of the principal binary structures governing a photographic culture. The initial impetus for this strategic inversion comes from the desire to subvert the fundamental hierarchical relationship between the product of photographic activity and the process of its production. The result is a radically different and differing postphotographic practice predicated on an ecological approach to the production of images in a culture.

Postphotographic Practice and a Postoptical Ecology of the Eye

Postphotography is based on the premise that critical and strategic transformations in the cultural dimensions of photographic modes of production lead to the development of alternative representational practices. Unlike a practice that valourizes a 'culture of images,' postphotography critically explores and transforms the historical/contemporary contexts that define the current production of images in a culture. But the practical operation of this premise necessitates a gestalt shift in the traditional figure/ground relationship of process/product in the historical and cultural 'forgetfulness' that serves to subvert the traditional values attributed to products of conventional photographic activity. The possibility of a postphotographic practice is therefore predicated on the denial of the subject/image's conventional cultural value.

Nietzsche argues that any attempt to effect change has to be linked to "the power of forgetting," or "the capacity of feeling 'unhistorically." This 'unhistorical preconscious' is a condition without conscience and knowledge, precipitated by the ability to forget. It lies at the roots of a happiness that Nietzsche identifies with "the will to live," and hence, it functions in the service of life.¹³ Given that the unhistorical is a pretext for change, Nietzsche maintains that "we must know the right time to forget as well as the right time to remember, and instinctively see when it is necessary to feel historically and when unhistorically." Thus the historical and the unhistorical are "equally necessary to the health of an individual, a community, and a system of culture."¹⁴ As a product of this Nietzschean strategy, postphotography operates at the limits of 'forgetfulness,' and continuously oscillates between the historical post*photography* and the unhistorical *post*photography.

A strategic inversion in the process/product hierarchy at the root of current photographic activity clears the way for the development of an ecological approach to the production of images in a culture that involves a considerable widening of the boundaries that have traditionally served to define photography. Instead of seeking legitimation in terms of a narrow, institutionally sanctioned 'history of photography,' or defining itself as a history of subject/images and chemical processes, lens designs or camera forms, postphotographic practice seeks to trace the networks of its operational cultures conceived within broad spatial, temporal, social and environmental contexts. Thus, through the photographic process one can now enter the various worlds of its contexts of production. The result of this strategic inversion is the emergence of different and plural cultures of representation.

The cultural ecology of postphotographic practice is traversed by three formerly distinct cultural contexts—an environmental context (Nature), a social context (Culture), and an individual biological context (an individual psycho-historical biological entity). The ecosystem governing these previously distinct contexts defines the metacontextual characteristics of the photographic process—the cultures of its technology—conceived beyond the limitations of material form. These metacontextual characteristics are not only ecological in terms of the plurality of contexts that define them (a spatial axis), but they are also ecological along their temporal axis (a plurality of spatial contexts across time).

As previously noted, this 'ecosystemic' approach to photography emerges in the wake of 'forgetting' the grand narrative of a given subject/image culture (a culture of images) and thus creates the possibility of engaging the cultural realms of contextual and metacontextual image production. This is achieved by subverting the traditional hierarchy of product over process, through which a photographic culture of images has achieved sovereignty in the Occident. In Nietzschean terms, postphotographic practice is simultaneously historical and unhistorical, as the cultural context of photographs (the narrative history of subject/images) is absorbed by the ecosystem of contextually current processes of production. Because postphotographic practice operates through ever-present contexts of production, the results of strategic oscillations between the historical and unhistorical, and because of the perpetual recontextualization of its productive processes, postphotography continuously reproduces and redefines its culture-hence the pluralism of its cultural practice. This pluralistic counterpractice effects a number of important changes in the relative values accorded the traditional constituents of photography. For example, conventional photographs have no hegemonic role or position in a postphotographic culture because they no longer serve any of their traditional functions. In a recontextualized ecosystemic postphotographic practice, there is no need to escape a present so as to engage a future in order to serve a past. Photographs are no longer the necessary transcendental and decontextualized signifiers of photography. An eclipse of the transcendent functions of conventional photographs also precipitates the collapse of the photographer's sovereign power. In this ecosystemic context—with its shattering of point of view by ever-present oscillations between the historical and the unhistorical—the traditional photographic author (and eye) are reduced to epiphenomenal mirroring effects-continuously differing, contextually defined iconic inflections.

The primary sense organ of photography is a mobile camera/eye which echoes the structure and instrumental functions of the human biological eye. Its lens, however, is made of glass,

its retina is a photosensitive surface and its optic nerve is a perceiving authorial consciousness. In contrast to this all-seeing cultural artifact, the postphotographic eye has no need of a lens and its darkened chamber (the mediums for the differentiation, focusing and fixing of point of view). Postphotography is no longer modelled on an optical consciousness operating independently of its material and symbolic contexts. Its mirror-like surfaces, which correspond to raw retinas, continuously provide pretexts to contextualize and metacontextualize systemic visual processes of production.

Conclusion: Postphotographic Practice and the End of History

The ecological absorption of the photograph and the obsolescence of the photographer precipitate the cultural dissolution of the photographic eye. A postphotographic culture has no need for a witness—a transcendent and discriminating eye—to testify to the significance of events by organizing and fixing them according to a chronological code of before and after. With postphotography there is no longer a point of view, but a visual context; no longer an eye, but a continuous contextually interactive, visually educative process in which biological eyes reflexively commune with the fragments and possibilities of their cultures. With this negation of perspective and chronological codification, postphotographic practice calls into question the sovereignty of history. The inauguration of this postoptical practice will signal the beginning of the end of history as postphotography liberates the 'fixed' super-historical aspects of a culture of images and communicates the 'eternal' as the continuing.¹⁵ Images will now float fragmented, incoherent, but free in a perceptual present, the continuous product of contextual oscillations between the unhistorical and the historical.

If photographic history was the product of a sovereign teleological perspective through which a visual event (or an aggregate of events) became optically and chemically fixed (from a chronological point of view), then postphotography is an illusory and postocular nowhere where everything is 'becoming' and already 'is.' It is the eternal (super-historical) present of Nietzsche's "life and action"—the pulse of the unhistorical in the context of the use-value of the historical.¹⁶ Postphotographic practice thus precipitates the dusk inaugurating the 'posthistorical'—an era which has no need of a point of view and its optical products, visual facts or witnesses, and thus no need of Light.

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POSTSCRIPT

As I previously noted in the Foreword to Section 2, Western cultures operate on the basis of a fundamental distinction between processes of production and products. The separation between imaging technology and image product is reinforced through distinct sets of physical and sensory attributes. A product's relative mobility in comparison with its site or context of exposure, or its process of manufacture, development, or the site(s) of its presentation serves as a further measure of this separation. These discontinuities have clearly determined the way the history of imaging technologies has been constituted. For distinct attributes and spatial and temporal discontinuities between sites of exposure, processes of production or manufacture and their products provide efficient readymade categories of classification which produce highly specialized knowledge (independent histories of photographic equipment, photochemistry, and photographic images). But they do so at the expense of more accurate ways of apprehending and appreciating the cultural and historical singularities of images, their modes of production and reproduction, and the interrelationships between their specialized cultures and those of other technologies of communication and transportation.

The visual and acoustic works produced between 1980 and 1998 were founded on the strategy of pointing a 35mm camera at the sun and taking an overexposed photograph. This gesture opened the way to an alternative photographic practice based on a reassessment of the hierarchical relationship between product and process. It was on the basis of the Experimental Photographic Structures, in particular the second and third ones, that this reassessment was readjusted to take account of a new interconnected vision of media history that was conceived as an intersystemic or networked field that could also be mapped in terms of ideational possibilities.

Within the trajectory traced by this book's chapters, postphotography does not pivot on the distinction between analogue and digital. It does not represent a newer, more powerful, more synthetic technology of representation. It represents, on the contrary, a completely different approach to the relationship between process and product in the case of picturemaking technologies and, as such, it also represents a displacement in the parameters of a picture-making process. The result is a different 'dimension' of picture, a dimension that is postoptical and ecological in form.

From the Photograph to Postphotographic Practice: Toward a Postoptical Ecology of the Eye was written from the point of view of the various Experimental Photographic Structures. Whereas the chapters concerning a ritual of photography and photographic space were written in tandem with them, this one was written 'in relation' to the installations and the earlier articles, where it served as a general theoretical statement that was implicitly tied to a clearly defined, visually based, counter-practice. Less formal and technically academic in tone, it addressed a reader who was closely allied to the art world of the 1980s, with its intimate engagements with poststructuralism and postmodernism. Ironically, the original version of this text was rejected by a leading art journal, possibly because of its theoretical tone; it was eventually published in a poststructuralist interdisciplinary literary journal. The original paper first proposed the terms 'postphotography' and 'posthistorical' to describe the kind of work that had emerged as a consequence of the original 1980 gesture of photographic negation.

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The mesmerizing power that the photograph has exercised over our collective imagination has created a situation in which it is hard to imagine other forms for images and image-making activities that might emerge through a reassessment of photography's position in the world of picture-making technologies. Not limited to photography's historical or contemporary rehabilitation, this reconsideration can also change the way that we conceive, construct, use or adapt new technologies, inasmuch as they are structured in a similar way (optical imaging and recording technology) or are conceived and operate within a photographic paradigm of realism (naturalistic and lifelike simulations in the case of digital pictures).

This book presents an unusual model of photography, and traces its elaboration and transformation over a twenty-five year period. In doing so, it also raises questions about the nature and forms of knowledge that might exist between disciplines. For the model of photography proposed is informed by a number of distinct disciplines such as anthropology, art, and the history and sociology of science.

David Tomas is an artist and writer. He has exhibited internationally and has held visiting research and teaching fellowships at CalArts, Goldsmiths College, London, and the National Gallery of Canada. Tomas is the author of four books: Transcultural Space and Transcultural Beings, an Internet book entitled The Encoded Eye, the Archive, and its Engine House, DUCTION (co-authored with Michèle Thériault), and Beyond the Image Machine: A History of Visual Technologies.



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