# Rational Fictions

## Hollis Frampton's *Magellan* and the Atlas of Film

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S A T O R

A R E P O

T E N E T

O P E R A

R O T A S

The 'old Latin saying' that concludes the lecture given by Anton Webern on 2nd March 1932, from *The Path to the New Music.*

*If you could fill each square on a calendar with*
*a picture instead of a number, and if each picture*
*could show clearly some event or landscape or*
*recollection or dream that made each day*
*memorable, then after a long time and from a*
*great distance the hundreds of pictures might*
*rearrange themselves to form surprising patterns.*

Gerald Murnane, author's note to *Tamarisk Row* (1974)

**Abstract**

This thesis analyses three films by Hollis Frampton (1936-1984): *Magellan* (1964–1984), *Palindrome*, (1969), and *Zorns Lemma* (1970). I argue that Frampton sought to organise knowledge on film by recuperating the atlas—a highly selective tableau of images arranged spatially—as a model to promote film as a form of cultural memory in contrast to history. It begins with an examination of these themes in Frampton's writing, following his conceptualisation of what he called 'the infinite film' and 'the infinite cinema' in his 1971 essay "For a Metahistory of Film: Commonplace Notes and Hypotheses" and the subsequent essay "Digressions on the Photographic Agony," from 1972. After an analysis of how his unfinished, 36-hour-long film-cycle titled *Magellan* developed from this model, I argue that *Zorns Lemma* (1970) can be re-framed as an experiment in "filmnemonics". This latter film left Frampton unsatisfied, however, due to the way in which it emphasised photography's subordination to traditional systems of inscription, both alphabetical and numerical, in the highly determined matrix of the film frame. Finally, I argue that Frampton recognised that his earlier film, *Palindrome* (1969), was the experiment most appropriate for realising the model of the atlas of film. Frampton's decision to include *Palindrome* within the *Magellan* cycle is proof not only of the importance of that film and its significance for understanding the complexity of the long, calendrical film cycle as a whole, but also of his shift to a topological model of film. Central to the thesis is the idea of conflation as a means to link memory with formal attempts at thinking in images, as demonstrated by Frampton's work, addressing how he strove to accommodate film in its complexity while also providing a path through its infinity.

**Declaration**

This is to certify that:

- the thesis comprises only my original work toward the PhD
- due acknowledgement has been made in the text to all other material used,
- the thesis is fewer than 100,000 words in length, exclusive of tables, maps, bibliographies and appendices.

Giles Simon Fielke

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**List of Abbreviations**

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*CC*: Scott MacDonald, ed. *A Critical Cinema: interviews with independent filmmakers*, 5 volumes. Oakland, CA: University of California Press, 1988-2006.

*CV*: Hollis Frampton. "File: Frampton.CV (1 February 1981)." 28 pages, Pittsburgh, PA: Museum of Art, 1981.

*Dialogues*: Carl Andre and Hollis Frampton. *12 Dialogues 1962-1963.* Photographs by Hollis Frampton. Edited and annotated by Benjamin H.D. Buchloh. Halifax, NS: The Press of the Nova Scotia College of Art and Design and the New York University Press, 1980.

*Letters*: Hollis Frampton. *"A Young Man's Book": Letters From Framp 1958-1968.* 8 volumes. Edited by Reno Odlin. Kandinsky Library, Centre Pompidou, Paris. Samizdat, 1996.

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# Introduction

*there is no dictionary of images…we would have to imagine an infinite dictionary*
Pier Paolo Pasolini, "Cinema of Poetry" (1965)

*this body of material, whatever it is, then imposes upon us the responsibility of inventing it.*
Hollis Frampton, "The Invention Without a Future" (1979)

*Magellan* is an unfinished cycle of films by the North American artist-filmmaker Hollis Frampton (1936-1984) with a planned total running time of 36-hours. *Magellan*'s aim was to formalise and celebrate film as a tradition, and it was to be screened in carefully arranged sections on every day of the calendar year.[1] In what follows, I argue that this project can be understood as an atlas of film. The atlas is a model which makes coherent the presentation of the work's separable elements into both a temporal and spatial relationship with each other, forming a tentative unity which Frampton named *Magellan.* About five years into his career as a filmmaker, Frampton wrote an essay which announced the project, "For a Metahistory of Film: Commonplace Notes and Hypotheses," first published in *Artforum* in 1971.[2] His subsequent review of two exhibitions of photography, "Digressions on the Photographic Agony," also published in *Artforum* in the year following the "Metahistory" essay, are significant for their presentation of Frampton's thinking through the idea of the 'infinite film,' which he had identified as fundamental for the direction of his work.[3] The relationship between the atlas and the concept of infinity are key for my argument that *Magellan* is to be understood as a work addressed to cultural memory, and not archival or historical in its intent.

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[1] Given that there are a number of variations on the title by which Frampton refers to the *Magellan* project as an idea, it will be referred to as *Magellan* throughout this thesis for reasons of consistency.

[2] Hollis Frampton, "For a Metahistory of Film: Commonplace Notes and Hypotheses," *Artforum* 10, no. 1 (September 1971): 32-5. The essay was reprinted in *Circles of Confusion: Film, Photography, Video, Texts 1968-1980*, foreword by Annette Michelson (Rochester, NY: Visual Studies Workshop Press, 1983), 107-16; and in *On the Camera Arts and Consecutive Matters: The Writings of Hollis Frampton*, ed. Bruce Jenkins, (Cambridge, MA: MIT Press, 2009), 131-39. From now on this book of Frampton's collected writing will be referred to in its abbreviated form as *CA*. The quote attributed to Schopenhauer on page 35 of the original has been changed to credit Walter Pater in the reprints. See pages 115 and 138, respectively.

[3] Hollis Frampton, "Digressions on the Photographic Agony," *Artforum*, 11, 3 (November 1972): 43-51. The essay is in fact a review of two exhibitions on early photography to which Frampton had been sent on assignment to review. The first was *Masterpiece: Treasures from the Collection of the Royal Photographic Society* (London: Arts Council of Great Britain, 1971) and the other at the Victoria & Albert Museum called *'From today painting is dead': The Beginnings of Photography* (London: Arts Council of Great Britain, 1972). Reprinted in Frampton, *Circles of Confusion*, 177-91; *CA*, 9-21. Henceforth all references to these essays will be to the versions published in *CA*, unless otherwise noted.

Frampton's idea of infinity was complex—in the "Metahistory" essay he refers to both 'the infinite cinema' and 'the infinite film'—and the metaphor he provides is revealing for its ironic obligation to structuralism:

> If we are indeed doomed to the comically convergent task of dismantling the universe and fabricating from its stuff an artifact called *The Universe*, it is reasonable to suppose that such an artifact will resemble the vaults of an endless film archive built to house, in eternal cold storage, the infinite film.[4]

*Magellan* is Frampton's response to this task, and rather than accommodating the archive it sets out to determine how to navigate '*The Universe*' of an infinite film that has a substance and structure which could encompass all images. To do this, I argue, Frampton undertakes *Magellan* as an atlas of film. The review essay, which I will hereafter refer to as "Digressions," begins with an elaborate tale of the discovery of the lost continent of Atlantis as a massive, spherical hulk full of photographs and found floating in the Atlantic Ocean. It is by beginning with this image that I position the atlas as a model for explaining Frampton's intentions for *Magellan* by drawing on a select set of ideas and stories from historical memory.

The atlas of film approaches a limit, however, framing Frampton's endeavour in a way comparable to the tale of Suárez Miranda, who reported on the perfection and decline of a guild of cartographers who had created a 'map of the Empire whose size was that of the Empire' in the 17th century. This allegory, linking science to conquest, was imagined in 1946 by Jorge Luis Borges (1899-1986)

[4] "Metahistory," *CA*, 137. His initial formulation is: 'A still photograph is simply an isolated frame taken out of the infinite cinema', ibid., 134. Rebecca Anne Sheehan dedicated her PhD to this idea in American Avant-Garde Film more generally, focussing on Frampton's 1972 essay "A Pentagram for Conjuring the Narrative". Rebecca Ann Sheehan, "Towards an "Infinite Cinema": American Avant-garde Film and Its Modernist Inheritance" (PhD Diss., University of Pennsylvania, 2008). Hollis Frampton, "A Pentagram for Conjuring the Narrative," in *Form and Structure in Recent Film*, ed. Dennis Wheeler (Vancouver: Vancouver Art Gallery, 1972), n.p. This essay was reprinted in Frampton, *Circles of Confusion*, 59-68, and *CA*, 140-148.

and Adolfo Bioy Casares (1914-1999) and suggests the domination of territory by nation-states.[5] Applied to film, however, it becomes something different. The literary experimentalism of Borges in particular is a constant presence in Frampton's writing. Just as the Atlas myth is concerned with the separation of the celestial sphere from the terrestrial world, Frampton realised that any attempt to envisage '*The Universe*' meant the mapping of film could only be achieved by productively linking the experimentalism of science with the narrativity of culture. Rather than separating out the arts, film drew them together, and—as I demonstrate in this thesis—to disentangle his idea of a cinematic tradition, Frampton initially relied on the possibilities of chance as determined by a branch of mathematics called set theory.

With *Magellan*, Frampton set out to organise a subset of images as a way of creating an ordered path through the infinite film, even while it appeared to him as a 'continent bounded in time', which is how he terms the appearance of the history of film in "Digressions".[6] The immediate consequences of this idea for mapping constellations of film, and for navigating a sea of images, meant that the work and the score for the performance of *Magellan*—i.e. its manual, index, or primer—had become conflated. This reveals how Frampton's understanding of a 'tensed spatialising process' poses a question of the rhythmics of memory for the present.[7] For the purposes of my research, I have understood this process as akin to

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[5] Jorge Luis Borges, "Of Exactitude in Science," in *A Universal History of Infamy*, trans. Norman Thomas di Giovanni (New York: Dutton, 1972), 139. The story is in turn indebted to a similar motif in Lewis Carroll's story *Sylvie and Bruno Concluded*, published in London by Macmillan and Co. in 1893.

[6] "Digressions," *CA*, 12. He then writes: 'Whatever sort of place early photography is, there have been repeated attempts to map it,' ibid.

[7] This is a concept of the subject I borrow from Roy Bhaskar. Roy Bhaskar, *Dialectic: The Pulse of Freedom* (London: Verso, 1993), 48: 'Once we specifically thematize causal efficacy, emergence, tensed spatializing process, totality and sui generis social forms, all sorts of topologies become possible: hidden depths, tangled loops, inverted hierarchies, mediatized, virtual and hyperrealities; holes-within-wholes (and vice versa), binds and blocks, intra- as well as inter-action; juxtaposed, elongated, congealed, overlapping, intersecting, condensed spatio-temporalities; intertwined, dislocated and punctured processes.'

'contrasting memory with history', as Inez Hedges has framed her recent study *World Cinema and Cultural Memory*.[8] When 'historians went whole hog for the fact,' Frampton writes in the "Metahistory" essay, they went 'headfirst into what James Joyce later called the "nightmare" of history'.[9] For Frampton, film reveals its antipathy to a definition of history as that which is defined by facts. Rather, Frampton sought to return to the possibility of a tradition he had glimpsed within the mechanics of film and cinema, as 'an open set of rational fictions within that world'.[10] In this sense Frampton's project is invested in an attempt to engage the spectator's conscious awareness of their own time. Furthermore, Frampton's work participates in a discourse on the efficacy of photographic images that has been contested throughout the history of film, and is concerned with the documentary status of montage, which as Erika Balsom has more recently pointed out, questions 'truth as guaranteed by direct inscription'.[11] Balsom's inclusion of Frampton's 'idiosyncratic requirement' of the calendar for the screening of *Magellan* allows her to place him in the company of a number of male filmmakers who make demands on their viewers by refusing the practicality of the conventional cinema apparatus.[12] Instead, Frampton's focus on the efficacy of the cut, as the origin of montage, is found to be present for him even in the single frame, linking his filmmaking to photography in a way that already problematises the emphasis on what theorists of photography, such as Molly Nesbit, have argued is the camera's unique ability to

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[8] Inez Hedges, *World Cinema and Cultural Memory* (New York: Palgrave Macmillan, 2015), 1.
[9] "Metahistory," *CA,* 132.
[10] Ibid., 131.
[11] Erika Balsom, 'The Reality-Based Community,' *e-flux Journal,* no. 83 (June 2017), https://www.e-flux.com/journal/83/142332/the-reality-based-community/.
[12] Erika Balsom, *After Uniqueness: A History of Film and Video Art in Circulation* (New York: Columbia University Press, 2017), 167-168. Balsom lists Frampton alongside David Larcher, Robert Smithson, Gregory Markopoulos, Melik Ohanian, Morgan Fisher and William Raban, as exemplars of filmmakers who in their own work have attempted to suppress film's easy reproducability.

'document'.[13] This is best captured by his suggestion, in the "Metahistory" essay, that 'a still photograph is simply an isolated frame taken out of the infinite cinema'.[14]

In contrast to Kenneth Eisenstein's thesis on what he calls Frampton's 'fantasy of the archive' for the history of film, I argue that *Magellan* can be understood through the curious logic of the atlas, which offers itself as both a guide and an organisational strategy for navigating the infinite film.[15] In 1979 Frampton spoke of a photographic theorem which attempted to account for 'the material, and thus the psychological universe' through the 'fragmentary and codified illusions of its own presence'.[16] Given the examination of images was something usually undertaken by art history, it was this discourse—named explicitly at the beginning of the "Metahistory" essay—that Frampton had set out to visit as a filmmaker. According with the recovery of the atlas for art history, as it has been proposed more recently by Georges Didi-Huberman, the atlas is precisely what models 'a *materialistic* practice in the sense that it leaves things their anonymous sovereignty, their abundance, their irreducible particularity'.[17] In this way the atlas contains the elements of the work that are collected and maintain themselves alongside each other. Importantly, the atlas is also 'a *psychological* activity,' as Didi-Huberman

[13] Molly Nesbit, *Atget's Seven Albums* (New Haven, CT: Yale University Press, 1992), 14-18.
[14] "Metahistory," *CA*, 134.
[15] Kenneth Eisenstein, ""Disembering": The Activity of the Archive in Hollis Frampton," (PhD diss., University of Chicago, 2016).
[16] Hollis Frampton, "A Talk on Photography and History: Time, Space, Causality," *CA*, 55. In the paper, which Frampton gave at a symposium titled "Towards the New Histories of Photography" at the School of the Art Institute of Chicago in 1979, he also asks: 'If the visual arts have assumed, by now, many of the customary tasks and prerogatives once alloted to the sciences, is it reasonable to suggest that they may have assumed, as well, their practical axiomatics and methods, their concrete kit of tools?' Ibid.
[17] Georges Didi-Huberman, *Atlas: How to Carry the World on One's Back?* (Madrid: Reina Sofia, 2011), 58.

continues, 'in which the reasoned inventory makes room for association, anamnesis, the magic of a game that is linked to childhood and imagination.'[18]

In the selection of particularities for inclusion, the present undertaking reveals its concern for cultural memory as what can only be revealed after a period of time has passed. A 'span amounting to about eighty years,' Frampton writes in "Digressions," noting the significance of the period 1835-1917 for the history of photography.[19] This notion accords with Jan Assmann's arguments for cultural memory as following communicative and collective memory by passing out of the living memory of a generation approximately every eighty years.[20] These artefacts, therefore, constitute an act of world-making that is deferred, and while both the *material* and the *psychological* are constantly present in Frampton's thinking about the *Magellan*, it is only in his understanding of filmmaking as an art-form in its infancy, and without a tradition befitting it, that we can establish how and why he came to think of the history of film as a 'continent bounded in time'.

To elaborate on this aspect of his work, I have divided Frampton's notion of the atlas into two related metaphors which he repeatedly relies upon throughout the presentation of his work: the structuring figure of the matrix, and the indeterminate figure of the cloud. To do this I have paired them with shorter, experimental films completed by Frampton: the matrix with *Zorns Lemma* (1970), and the cloud with *Palindrome* (1969). Furthermore, and contrary to the accepted chronology usually associated with the production of Frampton's work, this thesis provides an alternative approach which helps to focus Frampton's conception and labour over his work, as well as the social milieu in which he participated as an arts worker and educator. By presenting *Magellan* as what came first, followed by *Zorns Lemma,* and then *Palindrome*—the latter being included in *Magellan* retrospectively, the atlas as a

[18] Ibid., 58-9.
[19] "Digressions," *CA*, 10.
[20] Jan Assmann, 'Communicative and Cultural Memory,' in *Cultural Memory Studies: An International and Interdisciplinary Handbook,* eds. Astrid Erll and Asgar Nünning in collaboration with Sara B. Young (New York: Walter de Gruyter, 2008), 111.

model for Frampton's filmmaking becomes more apparent and is diametrically opposed to the chronology of the work provided by Bruce Jenkins, in the first major study into Frampton's films.[21] Importantly, *Magellan* was a project Frampton had conceived of before he had even picked up a Bolex film-camera.

His most well-known film, *Zorns Lemma* is examined in this thesis for its explicit relationship to artificial memory techniques, through the primer and the alphabet depicted on film using the mathematical logic of the set based on the matrix of the film's material and contents. Alternatively, my analysis of *Palindrome,* a film made from the waste-ends of film rolls, complicates the progressive sense of knowledge as simply accumulative, by focussing on the recursive structure of the loop; firstly through the literary form which reads the same both forwards and backwards, and then in the modular unity of twelve-tone composition as borrowed from music. In a similar way, memory contrasts with history by re-ordering the chronological appearance of the work in order to reveal what has been left out. Frampton wanted to accommodate film in its complexity, yet also provide a path through its infinity. Following this sense the structure of this thesis reverses the chronological order of the films in a way not dissimilar to the publication of Anton Webern's lectures from 1933 and 1932 respectively, as *The Path to the New Music* by Willi Reich for Universal Edition in 1960.[22] As we shall see it is this dialectical back-and-forth, 'without the hope of synthesis',[23] as Didi-Huberman suggests, which links the abstract idea of the atlas to the concrete example of Atlantis as the initial

[21] Bruce Jenkins, "The Films of Hollis Frampton: A Critical Study," (PhD diss, Northwestern University Evanston, 1983).
[22] The English version was published in 1963 as Anton Webern, *The Path to the New Music*, ed. Willi Reich (London: Universal Edition, 1963). In the Preface to the edition Reich states: 'Here the chronological order of the two cycles of eight lectures has been reversed, for objective reasons that will immediately be obvious.' My hope is that this will also explain my reversal of Frampton's film chronology.
[23] George Didi-Huberman, *Confronting Images: Questioning the Ends of a Certain History of Art,* trans. Stephen Goodman (University Park, PA: Pennsylvania State University Press, 2005), 40.

figure for understanding the work as addressed to cultural memory, rather than to history.

If *Magellan* can be understood as an atlas of film, it can be linked to cultural memory by establishing its relationship to several bodies of literature. This includes art history and its use of the atlas as a model for the critique of the discipline from within, the development of montage as a concept applicable to the introduction of cinema, and also the survival and sublimation of techniques for artificial memory, which I argue leads to an understanding of film as necessarily conflating images as opposed to their distinction and semiotic systematisation.

Despite the fact that researchers of his work agree that Frampton 'left behind him several hundred finished films,'[24] this thesis takes only three of these works as its focus, and I argue furthermore that there is no obvious way to distinguish them meaningfully other than by their relation to *Magellan*. By beginning with what is traditionally posed as his final film, the *Magellan* cycle becomes a work—although it was only partially completed by the time of his death in 1984—that provides the consistent guideline through which to relate all of Frampton's filmmaking from 1964 onwards. Supplementary notes and additional materials were also planned to be provided to accompany screenings of *Magellan*, which although spread across every day of the entire calendar year, were also made to overlap at either end and scheduled on an electronically assembled calendar, to take place over 368 consecutive days. This cyclical and looping work has not yet been commented upon at length in the literature on Frampton's work and, in spite of the difficulties inherent in any attempt at unpacking unfinished projects, I argue that the *Magellan* cycle can be understood as an attempt by Frampton to actualise his notion of metahistory of film by using the medium itself.

[24] cf. *CC*, vol. 1, p. 21. In 1982 Frampton lists 58 films and six series' of photographs as completed works in his curriculum vitae. See 'File: Frampton.CV,' c. 1982, 28pp, Museum of Art, Pittsburgh, PA. Herafter referred to as *CV*.

Frampton took up the sustained investigation and analysis of the ontological possibilities of film as his life's work, seeking to both establish and critically engage with film through a series of experiments within the context of the 1960s New York avant-garde, the artist milieu in which he had initially come to participate as both *documenteur* and practitioner. I argue that the centrality of the formal problems of order and organisation that both *Zorns Lemma* and *Palindrome* take as their theme is indicative of Frampton's work *in toto*. The former film examines the relationship which exists between film, the Latin alphabet, and numerical systems as the modern idea of the text. *Zorns Lemma* is couched in the idea of ordering and was named for the lemma associated with the axiom of choice within the mathematics of set theory. The latter, *Palindrome*, examines the temporal rhythm of film's immersive regime as it relates to audio-visual composition, departing from the textually recursive figure of the palindrome, in order to demonstrate a way of scoring the film as a work that is both discrete and continuous, and both technical and actual. By relating both films to the artistic milieu in which they appeared, in the context of Fluxus, Minimalism, and Concrete Poetry in New York, as well as the highly contested moment of structural film, I argue that the extension of the avant-garde practice of serialism reveals the basis for Frampton's understanding of film and the infinite cinema. The terms used to make the arguments in this thesis include Frampton's own: Atlantis, the atlas, metahistory, and tourism, as well as concepts established in the discourse on the history of art in the 20th century: montage, condensation, compaction, conflation, and cultural memory.

In chapter one, I connect the above concepts to Frampton's writing about the idea of metahistory and the allegory of Atlantis in his writing for *Artforum.* In chapter two, I look at the conception of *Magellan* as an atlas of film which emerges from Frampton's encounter with the poet Ezra Pound (1885-1972) in St. Elizabeth's Hospital in Washington in the late 1950s and to the possibility of the epic in the context of the USA as an international power after World War II.

In the third chapter, I examine *Zorns Lemma*'s matrix structure by beginning with an image of the anagramatic relationship of film found in the work of experimental filmmaker Maya Deren (1917-1961) from 1946. I show how, upon *Zorns Lemma*'s completion in 1970, Frampton found himself frustrated by the apparent limitations of the positively didactic, structural emphasis for filmmaking which he had created, despite his apparent breakthrough in its form of presentation. In this moment it appears as if he exhausted this arrangement by realising what Deren had two decades earlier, that cinematic time could only be defined by its modularity, and structured by the loop. This analysis will also show how his return to the idea of the cloud as it relates both the constellation of stars for *Magellan*, and the indeterminacy of the formless image, came to bear on his thinking about film more generally.

In chapter four, I argue that this insistence on the figure of the cloud is one reason why *Palindrome* would be included in its entirety in the *Magellan* cycle, and *Zorns Lemma* would not. As I demonstrate, the production of *Palindrome* from the waste-ends of film rolls found at the Technicolor lab where Frampton worked throughout the 1960s as a technician, is significant for understanding the impulse to organise the indeterminacy, especially in the context of the debates around the Art Workers' Coalition in 1969, when the work first appeared. Finally, I return to the idea of the atlas and to *Magellan* to reassess the claim that the project was Frampton's attempt to create a total artwork through film. The partiality of *Magellan* as a metahistory of film, and as a work of film as such, allows me to assess the claims that Frampton makes for the invention of a tradition for film, which was only then eighty years old, and therefore only just passing out of the first generation of its practice. The atlas of film, I conclude, opposes the total artwork in the same way that cultural memory can be understood in opposition to history.

# 1. Metahistory and the Discovery of Atlantis

*Whoever once notices early photography, soon finds it bulking large as a continent…*
*what in* this *world that continent recalls is hard to say.*
Hollis Frampton, "Digressions on the Photographic Agony" (1972)

## 1.1 Atlantis and the Atlas

In this chapter the ideas presented by Frampton as fundamental for his approach to cinema are examined in their relationship to the traditions of thought from which they are drawn. Importantly, none of Frampton's terms are new, and he adapts his idea of metahistory, montage, and the story of Atlantis from other sources. However, in order to frame Frampton's thought I develop a notion of conflation as it relates to cultural memory to explain his syncretic approach to these ideas on film. This leads us to the atlas, and how it relates to *Magellan* as the subject of chapter two.

Frampton's review essay "Digressions on the Photographic Agony," published in the November 1972 edition of *Artforum,* begins by describing in detail an imaginary event, in which he indulges his thinking about the history of photography. After towing the hulk 'Atlantis' up the River Thames, the huge mass is prised open and its contents are recounted detail:

> Of a hundred decks within the structure, the bottom dozen or so are awash in bilge; the remainder are piled high with photographs of every sort and condition. Some are immaculately preserved, others eroded and dog-eared and faded nearly past recognition. They are boxed, or tipped into albums, or rolled into cylinders that crack at a touch, or strewn in loose stacks on shelves or underfoot. Some few bear signatures, or captions, or dates. Most are on paper, but a few images adhere to metal or glass; very occasionally, a picture adorns an otherwise undistinguished mug or platter. Interspersed throughout the mass are verbal oddments: manuscript pages, pamphlets, articles torn bodily from magazines, a few books. And that's all.[1]

[1] "Digressions," *CA,* 9.

With this image of a salvaged archive arriving as if from parallel universe, a non-site of metaphoric significance, Frampton presents his idea of an infinity of images suggested by the mouldering collection of photographs, which he portrays as 'everywhere copious, exact, assured.'[2] In the year following the publication of "Digressions," Frampton would offer a related fiction in his text for the exhibition catalogue of *Options and Alternatives: Some Directions in Recent Art,* curated by Klaus Kertess (1940-2016) and Annette Michelson (1922-2018) for the Yale University Art Gallery. In the essay he describes 'three caches of proto-American artifacts,' which he attempts to decode with assistance of a Hopi Indian colleague. The extensive "archives" that have been plundered reveal a pictographic and 'secret' language that has been recorded on 'solar emblems, in the form of reels' found in locations at Oaxaca and Tehuantepec, appearing to suggest a proto-historical technology closely resembling the modern cinematic apparatus.[3]

In essence Frampton's fictive, photographic 'Atlantis' exemplified the limit condition for the mounting of an exhibition on the history of photography, such as those he'd recently witnessed in Great Britain, and of which the "Digressions" essay constituted a review. These were the travelling exhibition *Masterpiece: Treasures from the Collection of the Royal Photographic Society*, on view around the country in 1971 and 1972 and, *'From today painting is dead': The Beginnings of Photography*, which was held at The Victoria & Albert Museum between March 16 and May 14, 1972. The quotation in the title of the latter show, attributed to the 19th century history painter Paul

[2] "Digressions," *CA,* 11. Robert Smithson's unpublished 'A Provisional Theory of Nonsites,' is dated to 1968 by the Holt-Smith Foundation and appears in *Robert Smithson: The Collected Writings*, ed. Jack Flam (Berkeley, CA: University of Caifornia Press, 1996), 364.

[3] Hollis Frampton, "A Stipulation of Terms From Maternal Hopi," *CA,* 303. Originally published in *Options and Alternatives: Some Directions in Recent Art,* exh. cat. (New Haven, CT: Yale University Art Gallery, 1973). The exhibition took place between 4 April and 16 May 1973. Frampton's work was featured alongside work by artists Richard Tuttle, Lydia Benglis, and Brice Marden, and others. Artist-filmmakers George Landow, Paul Sharits, and Michael Snow were also included in the show, and Michelson's essay for the catalogue was titled "Intellectual Cinema: A Reconsideration," in *Options and Alternatives,* 9ff.

Delaroche (1797-1856), implied the primacy of the medium for representation in its mimetic social function. In his review, however, Frampton felt at liberty to argue that 'the invention of photography made it forcibly obvious that representation was a task to which painting had never been very well suited'.[4] The consequences of this shift in representation are precisely what is at stake in Frampton's allegorising of the images, from painting to photography, and provide the anthropological thrust for Frampton's argument about the meaning of the non-objective, and rather 'projected' status of this new type of art-work.[5]

Despite this, Frampton continues by suggesting that the mounting and installation of photographic images, which he says lies somewhere between art and objective science, is a project of the utmost difficulty. The selection of meaningful works from this unwieldy and decaying corpus of discrete images, because of which 'we know (whether we want to or not), what Ulysses Grant looked like,' fundamentally changes our relationship with the past.[6] Eventually—in Frampton's tale—an accompanying textual Codex to the collection is found, which is unfortunately the exact opposite of the images. In Frampton's description, the book provides an 'unrelievedly sparse, vague, and defensive' catalogue as a conventional mode for presenting the inventory or index of the barnacled orb's contents.[7] Within this idea Frampton provides a fiction to describe the interminable remnants of a documentary history, a kind of wreckage that is also reminiscent of a universal memory theatre, relocated—as the Atlantis in his story eventually finds its way—to

[4] "Digressions," *CA*, 18. The primacy of mimesis in arts relation to truth is an obvious theme of its history, which continues unabated through painting into photography and cinema. For a recapitulation of Delaroche's statement, applied to documentary representation in the cinema, see Dai Vaughan, "From Today, Cinema is Dead," in *For Documentary: Twelve Essays* (Berkeley and Los Angeles: University of Caliornia Press, 1999), 181-92. The essay was originally published as "The Broken Trust of the Image," *Vertigo*, 1, issue 4 (Winter 1994-5): 16-20.
[5] "Digressions," *CA*, 20.
[6] Ibid., 15. Ulysses S. Grant (1822-1885) was the 18th President of the United States from 1869-1877.
[7] Ibid.

Rochester, New York, and the site of Eastman House and centre of the Kodak photographic empire.

Frampton's use of the Atlantis story, as it is borrowed here from Hellenic mythology, could also be understood to simply mean an 'island', just as Thomas More (1478-1535) had described it in his satirical tale, *Utopia* (first published in 1516), symbolising its inhabitants' walled, location in the "New World".[8] The image can therefore be related to the atlas as a metaphor of an imaginary model for situating and depicting unknown territory on a map, which relates to Frampton's work on film, and in this way it is also possible that the "Digressions" is also referring to *Magellan* through the metaphor of discovery and the idea of a 'cinematic terrain', which Frampton will also mention in a later manuscript titled 'Statement of Plans for *Magellan*'.[9]

Frampton's anthropological approach to film as a particular cultural practice recalls his encounter with the work of the German anthropologist Leo Frobenius (1873-1938), which Frampton pursued at the behest of the modernist poet Ezra Pound (1885-1972) in the late 1950s. Pound had tasked him with translating Frobenius' monumental seven volume work, *Erlebte Erdteile* (1925-29) while Pound was interned at St Elizabeth's psychiatric hospital in Washington D.C, where Frampton had moved following a correspondence which he had begun with the poet in March 1956.[10] The proximity of Frobenius to other contemporary figures

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[8] Thomas More, *Utopia*, ed. and trans. by Robert. M. Adams (New York: W.W. Norton & Company, 1975). More's text was first published in 1516. From the Greek, the name Atlantis can be understood to mean the 'island of Atlas'.

[9] Hollis Frampton, "Statement of Plans for *Magellan*," *CA*, 229. Bruce Jenkin's editors notes for this text state that it is undated but c.1978 and that there are at least three versions of the proposal requesting support for various portions of the work.

[10] Leo Frobenius, *Erlebte Erdteile: Ergebnisse eines deutschen Forsherlebens*, 7 vols. (Frankfurt am Main: Frankfurter Societatsdruckerei, 1925-9). Frampton's letters to Pound are located in the Pound Archive at the Beinecke Library at Yale University, YCAL MSS 43, Box 17, Folders 761-762. Ezra Pound Papers. American Literature Collection, Beinecke Rare Book and Manuscript Library, Yale University, New Haven, CT. Pound was first introduced to the work of Frobenius by the artist Henri Gaudier-Brzeska (1891-1915), but did not engage in his work properly until 1925 or

significant for Frampton's presentation of metahistory, such as Oswald Spengler (1880-1936), whom Frampton discusses in his correspondence with Pound, or to another contemporary of Frobenius' like Aby Warburg (1866-1929), relates to the argument of this thesis linking Frampton's idea of metahistory to cultural memory.[11] The larger shift in the approach to ideas of cultural transmission that today mainly appear as a question of method, only appear as possible through the elaboration and intrication of history as a concept adapted at this time to suit the ends of a number of different researchers and theorists.[12] In the case of Frobenius it was his idea of *Kulturmorphologie* (Cultural Morphology), which filmmaker and theorist R. Bruce Elder has argued follows an 'organicist conception of cultural development', and as such is an early influence on Frampton's idea for *Magellan.*[13] Nevertheless, Frampton goes to great lengths to highlight the revenant temporality of the atlas metaphor in his text as it applies to film—as a kind of parallel anthropology that is outside the scope of a specific cultural identity. 'Viewed as a body of innocent document,' he concludes in the "Digressions," 'only our reflex acquiescence to the plausibility of the photographic image contradicts what that same image so poignantly enforces: a sense of times and places altogether lost, and thus irretrievably alien—an Atlantis.'[14]

The idea of the atlas is given here through its mythical characterisation, and it is as a metaphorical elaboration on photography that it suits the ideal of a

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1926. Guy Davenport, "Pound and Frobenius," in *Motive and Method in the Cantos of Ezra Pound,* ed. Lewis Leary (New York: Columbia University Press, 1954), 35.

[11] For example Erwin Panofsky's adoption of Spengler's idea of 'pseudomorphosis' for Art History, in turn borrowed from minerology, will be related to Frampton's adoption of the matrix to describe a similar relationship of metahistorical transmission in *Magellan*, but explicitly related by Frampton to the material technology of film. See Alexander Nagel and Christopher Wood, *Anachronic Renaissance* (New York: Zone Books, 2010), 48.

[12] For a comparative analysis of Frobenius' and Warburg's work, for example, see Peter Probst, "Über Kreuz: Leo Frobenius als Gegenspieler von Aby Warburg," in *Kulturkreise: Frobenius und seine Zeit*, Herausgeber Jena-Louis Georget, Hélène Ivanoff und Richard Kuba (Berlin: Reimer, 2016), 25-43.

[13] R. Bruce Elder, "A Note on the Long Film: The Grisly Roots of Hollis Frampton's *Magellan* in Frobenius' Idea of Cultural Morphology," *Parol,* 20 (2010/2011): n.p.

[14] "Digressions," *CA,* 11.

technically realised *topos*. Furthermore, it also suggests Frampton's purpose in allegorising his thesis on photography as a dialectical incommensurability between the particular and the universal, where the gulf between the real and the imaginary is no longer mediated by symbols, but has been short-circuited by the apparent indexicality of photography. T.J. Clark has referred to the strategy of 'non-naming' and '*un*-meaning' in his analysis of the historical avant-garde, and this idea retains its applicability to Frampton's interest in the namelessness of photographic images in the 1960s and 70s.[15] Alternatively, Devin Fore has more recently recovered this same impulse in the other direction, as a semantic excess 'overcoding' the work, but rather than an approach borrowed from literature, the *anomia*, or apparent lawlessness of Frampton's anarchic images could just as easily be seen as one result of collecting photography without titles or descriptions, paradoxically figuring both the real and the imaginary in the archival accrual.[16]

In "Digressions," Frampton's review of the photography exhibitions fades into the background as his vertiginous imaginings for the epistemological problems presented by photography in contrast to history takes full flight. Subsequent to the publication of the "Digressions" essay it was reported that upon reading it, a thoroughly bamboozled couple of *Artforum* enthusiasts were so amazed by the recent 'discovery' of Atlantis that they set out immediately to Rochester to demand access to the collection, which they had been led to believe was now safely stored in the archives of Eastman House.[17] The point Frampton had—rather successfully—made is revealed by its deceptively simple ruse: that photographic exhibitions such as those

[15] T.J. Clark, "God Is Not Cast Down," in *Farewell to an Idea: Episodes from a History of Modernism* (New Haven: Yale University Press, 1999), 252.
[16] Fore is referring to the work of Russian constructivist writer Sergei Tret'iakov (1892-1937) and to photomontage. Devin Fore, *Realism After Modernism: The Rehumanisation of Art and Literature* (Cambridge, MA: MIT Press, 2012), 256-258.
[17] Christopher Phillips cites a text by Robert A. Sobiezek which recounts this response to Frampton's essay in "Word Pictures: Frampton and Photography," *October,* 32 (Spring 1985): 76. See Robert A. Sobiezek, "The International Museum of Photography at George Eastman House: The Research Center: A Brief Introduction," *University of Rochester Library Bulletin*, 29, no. 2 (Summer 1976): 109-127.

he was reviewing are bound to attempt some kind of psycho-geographic mapping in their survey of the medium, one that for Frampton suggested the disorienting set of *all* photography. The problem, it seemed, was the infinity of any possible film frame.

With "Digressions" then, Frampton comes closest to establishing an explicit link between the idea of the atlas and his idea for *Magellan*. And despite the fact that *Magellan* remains fiercely impervious to any direct interpretation, it is nevertheless important that we return to Frampton's initial intentions for considering how he conceived the work. This is to understand not only how *Magellan* relates to the concept of metahistory, to which I now turn—but also to the genesis of that idea which had emerged in Frampton's thought almost a decade earlier.

As a final note on the Atlantis metaphor, however, a significant point of departure for Frampton's later writing and thought can be located in Frobenius' proposal of an 'African Atlantis' which he claimed to have discovered at the beginning of the 20th century.[18] Frobenius' argument that traces of alternative civilisations could be glimpsed through the artefacts of a culture and which did not accord with the factual historical narratives accepted at the time, while controversial in its application, also questioned history at the level of method. It is in this sense that Frobenius' biological anthropology prefigures the idea of tracing normative inversions established in the work of Jan and Aleida Assmann, and as a method legitimised by cultural memory.[19] The idea of Atlantis, as it survives in Plato's *Timaeus*, figures as another possible point of divergence from the established

[18] Suzanne Marchand describes Frobenius' 'neo-romantic search for an unspoiled black Atlantis,' as motivated by his critique of European hubris in Suzanne Marchand, "Leo Frobenius and the Revolt Against the West," *Journal of Contemporary History,* 32, no. 2 (April 1997): 169. See Leo Frobenius, *Das Unbekannte Afrika: Aufhellung der Schicksale eines Erdteiles* (Munich: Beck, 1923).

[19] This distinction is based on their reading of Aby Warburg and Maurice Halbwachs as shifting 'the discourse concerning collective knowledge out of a biological framework and into a cultural one' in the early part of the 20th century. See Jan Assmann, "Collective Memory and Cultural Identity," trans. John Czaplicka, *New German Critique*, no. 65 (Spring/Summer 1995): 125.

narrative provided by More's *Utopia.*[20] Other attempts at explaining the metahistorical aspect of Frampton's approach by suggesting its cinematic recapitulation of the work of his contemporaries—Robert Smithson, or George Kubler, for example—has been posed more recently by Michael Zryd and extended by Lisa Zaher.[21] However this complex mix serves to show how Frampton's encyclopedic approach to scholarship and thought belies the influence of any single figure, or source. For example Kubler's influential book, *The Shape of Time: Remarks on the History of Things*, was first published in 1962,[22] and while it provides further context for the extrapolation of Frampton's participation in the thinking of the period, the guiding metaphor of the atlas will provides more generously for his early encounters with a latent strand of European modernism in America post-WWII.

[20] On the vicissitudes the idea of Atlantis transmitted across history Anthony Vidler's defence of the legacy of the idea is decisive. Anthony Vidler, "The Atlantis Effect: The Lost Origins of Architecture," *One Book, The Whole Universe: Plato's* Timeus Today, eds. Richard D. Mohr and Barbara M. Sattler (Las Vegas: Parminedes Publishing, 2010), 329-42.

[21] Zaher cites Zryd's lecture at the Society of Cinema and Media Studies conference in Chicago, 2013, on Frampton's relationship to Kubler's ideas, which she extrapolates further in her own thesis. Lisa Zaher, "By Mind and Hand: Hollis Frampton's Photographic Modernism" (PhD diss., University of Chicago, 2013), 196 n11. See the section of Zaher's PhD thesis 'Frampton's Metahistory,' 197-202. Similarly, Federico Windhausen sees in Frampton's work the somewhat buried influence of Hugh Kenner. See the chapter 'Hollis Frampton: Words Into Film,' in Federico Windhausen, "Syncretic Practices and the Idea of Didactic Cinema: The Significance of the Non-Cinematic Arts for the Work of Ken Jacobs, Hollis Frampton, and Paul Sharits" (PhD diss., New York University, 2007), 119-168. The chapter appeared earlier as 'Words into Film: Toward a geneological understanding of Hollis Frampton's Theory and Practice,' *October,* 109 (Summer 2004): 76-95.

[22] George Kubler, *The Shape of Time: Remarks on the History of Things* (New Haven, CT: Yale University Press, 1962).

## 1.2 Metahistory and Tourism

> *…your proposal of any given film as a "fragment", which I suspect you ran intuitively head-on into in the heat of discourse…well, it was suggestive to the point of vertigo, seen from the tangent of a meta-history of film such as I tickle myself with…*
> Hollis Frampton letter to P. Adams Sitney, marked 'The Wilderness, April 4, 1971', Hollis Frampton Collection, Anthology Film Archives, Box 1, Folder 1A, 'Sitney Letters'.

In September 1971 Frampton published his theory of film by proposing that above the grid of the chessboard, which prescribed the actual zone of play, there also existed the possibility of a 'Tour of Tours', by which he elaborated the navigational metaphor of metahistory.[23] "For a Metahistory of Film: Commonplace Notes and Hypotheses," first appeared in *Artforum* as the lead essay in a special edition on film edited by Annette Michelson. Extending the formal strategies for advanced art posed by Viktor Shklovsky (1893-1984) earlier in the century, the metaphor of the Knight's Tour across every position on the chessboard extended from the illumination of the concept of defamiliarisation towards the quixotic irony of the movement of ideas aiming for absolute transcendence.[24] The metaphor of the Knight's move was the dream image for Frampton's idea of modernism, suggesting that the repletion of an entire field of operation was navigable by the careful selection of a pathway determined by the artist. Nevertheless Frampton proceeded to

[23] Frampton, "Metahistory," *CA*, 138. The term metahistory has been used in varying contexts since the mid-twentieth century. Frampton appears to be claiming the term as his own, despite its vernacular appearance in the decade before. Virginie Marie Guichard presents a brief history of the term in her thesis on Frampton, however her reference to Christopher Dawson's criticism of Alan Bullock in the journal *History Today* appears to be a 1957 republication of the original 1951 article, somewhat confusing her argument. See Virginie Marie Guichard, "ABC of Film: Hollis Frampton and the Cultural Tradition of Film," (PhD diss., King's College, University of London, 2004), 101-5; Alan Bullock, "The Historian's Purpose: History and Metahistory," *History Today*, 1, no. 2 (February 1951): 5-11; Christopher Dawson, 'The Problem of Metahistory,' *History Today*, 1, no. 6 (June 1951): 9-12. With Hayden White's publication of a literary concept of metahistory first appearing in 1973, the term appears awkardly associated with Frampton alone in the context of the cinema and film in the early 1970s. Hayden White, *Metahistory: The Historical Imagination in Nineteenth-Century Europe* (Baltimore, MD: John Hopkins University Press, 1973).

[24] Viktor Shklovsky, "Art as Device," in *Theory of Prose,* trans. Benjamin Sher, introduction by Gerald L. Bruns (Champaign: Dalkley Archive Press, 1991), 1-14. The essay was first published in 1925.

critique this idea of formalism in the Metahistory essay by entering into direct dialogue with the cybernetics of Norbert Wiener (1894-1964) and Gregory Bateson (1904-1980), also arguing that the introduction of radar was a better way to 'mark the end of the Age of Machines', as opposed to the arrival of video as marking the obsolescence of film as medium.[25] Extending beyond the arts-oriented discourse and into systems theory, Frampton's proposal of a metahistory of film eventually revealed itself to be a theorisation of the *Magellan* project.[26] The apotheosis of cinema, as the 'Last Machine' in the 'Age of Machines', therefore helps to locate its technical redundancy following the emergence of radar, with the appearance of artists-film—Maya Deren's *Meshes of the Afternoon* (1943), and Willard Maas' *Geography of the Body* (1943), to be precise.[27] This collision—which may be called Frampton's idea of 'tourism' for its new periodisation for art history—is the focus of what I have examined further below.

The central premise of the "Metahistory" essay is that the "infinite film," including even the individual frames of photography, provides the evidentiary paradigm exposing a technical and temporal rupture in conventional notions of history as diachronic and consecutive. Film simply could not contain itself within the literary narrativity of history. Perhaps the simplest explanation of this idea is the hesitation before a concept like metahistory, concerning the totalising direction of the work of British historian Arnold J. Toynbee (1889-1975). In 1951, the Canadian historian Frank Underhill concluded that 'any historian who becomes a system-maker is to be regarded with the deepest suspicion', and perhaps even more forcefully that attempts at metahistory are to be understood as 'illegitimate for the historian'.[28] It is precisely the question of infinity which separates Frampton from

[25] "Metahistory," *CA*, 136.
[26] 'as the germ of a plan for execution.' Ibid, 138.
[27] Ibid. 136. *Meshes of the Afternoon* is now credited to both Deren and Alexander Hammid, although Frampton names only Deren in the "Metahistory" essay.
[28] Frank Underhill, "Arnold Toynbee, Metahistorian," *The Canadian Historical Review*, XXXII, no. 3 (Sept. 1951): 218.

the possibility that he was working as a film historian, and rather in relation to what is now called cultural memory. His work as an artist was speculative and inventive in its attempts to navigate the "nightmare" of history as buried by an infinity of possible elements signified by the ubiquity of film. It is in a similar sense that Annette Michelson, who edited the *Artforum* edition in which Frampton's "Metahistory" essay appeared, could be seen as deliberately promoting metahistory as an alternative model, and towards the idea of film as cultural memory precisely against the hubris of totality. Presenting a paper at the Guggenheim Museum in 1969, Michelson is described as precisely 'nonhistorical' in her approach to the formal problems raised by contemporary art by the then Associate Curator, Edward F. Fry.[29] Speaking at the same series, titled 'On the Future of Art', Toynbee was described, in stark opposition to Michelson, as someone who could give 'operative descriptions of historical processes',[30] presumably because the publication of his 12-volume *A Study of History* had attempted to explain the rise and fall of civilisations from across the globe as a general theory of empire.[31]

Despite the film-strip's seeming adherence to the idea of time as linearly progressive, it was the spirals or rolls of film on the reel—a feature of recording media—which suggested an alternative pathway towards an *archē*-, or fundamental tour of history after film, which needed to be found or even 'invented':

> The historian dares neither select nor ignore, for if he does, the treasure will surely escape him. The metahistorian of the cinema, on the other hand, is occupied with

[29] Edward F. Fry, "Introduction," in *On the Future of Art: Essays by Arnold J. Toynbee, Louis I. Kahn, Annette Michelson, B.F. Skinner, James Seawright, J.W. Burnham, and Herbert Marcuse* (New York: Viking Press, 1970), viii.
[30] Ibid.
[31] Arnold J. Toynbee, *A Study of History*, 12 vols. (London: Oxford University Press, 1934-1961).

> inventing a tradition, that is, a coherent, wieldy set of discrete monuments, meant to inseminate resonant consistency into the growing body of his art.[32]

Following his idea as against the historical impasse, Frampton's cycle of films for *Magellan* proposed a quixotic tour of tours based in metaphors that would be comprehensive enough to encompass the history of film. In this way I propose that Frampton's arguments for metahistory, therefore, are apposite to the contemporary development of cultural memory as a counter-theory to history, precisely because of its logic of selection. Indeed, it is the question of selection, strewn throughout Frampton's work, that provides hints of the difficulty faced for the atlas—in the sense provided by Warburg and then Didi-Huberman—as the model guiding the work's relation to its subject, and it appears here as a counterpart to his concept of metahistory and the spatialising image of the errant Knight moving across a chessboard.

Towards the end of the "Metahistory" essay, Frampton also proposes the film strip as akin to the musical score. For Frampton, film is of a type whereby the score becomes the performance, claiming it 'bears the sort of resemblance to music that the genetic helix bears to a living organism'.[33] Following this point he claims, by quoting Borges, that film maps the topological arrangement of sensory experience as 'almost infinitely richer' than its unmediated iteration.[34] Within this paradigm film becomes a technical externalisation for a mirroring of the senses, comparable to the 'matrix of rows and columns beyond reckoning' in the movement, or tour, of the Knight.[35] Thus film exhibits something ungraspable—or as Raymond Bellour (b. 1939) has written, 'unattainable'—which Frampton suggests is an outcome of its

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[32] "Metahistory," *CA,* 136.
[33] "Metahistory," *CA,* 138.
[34] "Metahistory," *CA,* 136. Frampton quotes from Jorge Luis Borges' 1939 short story, "Pierre Menard, Author of Don Quixote": 'The text of Cervantes and that of Menard are verbally identical, but the second is almost infinitely richer.' See Jorge Luis Borges, *Ficciones*, ed. Anthony Kerrigan (New York: Grove Press, 1962), 52.
[35] "Metahistory," *CA*, 139.

relation to life as such, in its contingencies and formal indetermination.[36] This conflation of the figure of the artist-filmmaker with his work became a major theme of *Magellan*, and therefore makes its demands upon memory the fundamental question of the entire endeavour.[37] That is, if its discrete time signature means 'that film meets what may be, after all, the prime condition of music,' Frampton writes, it is also because 'it produces no object'.[38] By extension it is implied that what film produces is a subject. In the archive containing Frampton's unclassified notes for *Magellan*, there is included an outline for teaching "A Metahistory of Cinema" as a course which will 'construct the armature of a rational fiction which we shall agree to call "A History of Cinema"' (figs. 1.1a & b). Years after his initial publication of "Metahistory", his attempt to teach it suggests it remained the basis for his subsequent work on film.

[36] Raymond Bellour, 'The Unnattainable Text (1975),' trans. Ben Brewster, in *The Analysis of Film*, ed. Constance Penley (Bloomington: Indiana University Press, 2000), 21-27. Rebecca Sheehan has noted the relevance of Bellour's text for Frampton, in her thesis, "Towards an "Infinite Cinema": American Avant-garde Film and Its Modernist inheritance" (PhD diss., University of Pennsylvania, 2008), 39-43.
[37] Here I am following the notion of trans-individuation, developed for the phenomenology of technics in the work of Gilbert Simondon (1924-1989) as well as the philosophy of time examined by Edmund Husserl (1859-1938) and returned to by Bernhard Stiegler in his series *Technics and Time*. Stiegler has described modern technics as the organisation of the inorganic, and suggests that the cinema may be signature of the epoch. Bernard Stiegler, *Technics and Time, 1: The Fault of Epimetheus* (1994), trans. Richard Beardsworth (Stanford: Stanford University Press, 1998), 243. In her arguments about Frampton's literary influences Sheehan focusses on the question of technical memory and uses the term conflation to describe the figural process that take place in Frampton's preference for the image as a counterpart to language. For an example, see Sheehan, "Infinite Cinema," 41-2.
[38] "Metahistory," *CA*, 138.



Figs. 1.1a & b Hollis Frampton, "A Metahistory of Cinema – 3 Hours," Magellan Unclassified Notes #2, Box Y – *Magellan* research materials & notes, Hollis Frampton Archive, Anthology Film Archives, New York.

Noël Carroll's fidelity to the intention of Frampton's idea of metahistory provides the first attempt to unpack his emphasis on film as operating alongside the historical contingencies of the medium's development. Carroll realised that metahistory was a concept which for Frampton was intimately tied to the appearance of film in particular.[39] In this way Carroll reduces metahistory to what he saw as Frampton's collapsing of the essentialising impulse of the neo-avant-garde on the one hand, with his broader historical interests in the development of a global modernity on the other.[40] In the "Metahistory" essay, however, Frampton's formalist reading of film as film is given a temporal twist by its sublimation of the history of art, which Frampton determined as failed in its attempts to provide 'a time of utmost certainty'[41]. The dialectical impulse offered by Carroll, makes this reading of

[39] Noël Carroll, 'A Brief Comment on Frampton's Notion of Metahistory,' *Millennium Film Journal*, 16/17/18 (Fall-Winter 1986-87): 200-5.
[40] Ibid., 205.
[41] "Metahistory," *CA*, p. 132.

Frampton's concept too easy, however, for art history still struggled to understand the implications of its own assumptions about the historical method. The project dedicated to Mnemosyne, the goddess of memory, by Warburg earlier in the century, the *Mnemosyne Atlas*, is given here as a possibility for helping us to relate Frampton's idea of metahistory to *Magellan*. Elaborated more recently by Didi-Huberman, this collection and arrangement of photographic images of artifacts and objects of visual culture foregrounds the question of the history *of* art in the subjective genitive sense in order to contrast it to art history in the objective genitive sense, as it is also 'forcefully demonstrated', Didi-Huberman points out, in the 1987 essay by Hans Belting titled *The End of the History of Art?*[42] For Frampton the end of the history of art was contained in his belief that the appearance of the cinema provided the apotheosis of modernity. The emphasis on the atlas in Didi-Huberman's work figures, therefore, the analysis of what follows from the point at which the subjective and the objective sense of history is conflated by the work of art on film, resulting in its indetermination (which can also be understood by Frampton's allusion to Werner Heisenberg's principle of uncertainty in his subject plan).

While most of the literature engaging Frampton's work still seeks to detach *Magellan,* and indeed most of his films, from being anchored too closely to P. Adams Sitney's influential essay "Structural Film" in 1969, this means much of the research into Frampton's work remains trapped in a form of reactionary recognition for the significance of his concept of metahistory as found in his ability to transcend the discourse as a motivating factor for the work itself rather than towards the idea of the tour.[43] From Bruce Jenkins' PhD thesis in 1983, which covered all of Frampton's film work, to research which focusses solely on *Zorns Lemma*, the argument that Frampton's metahistory in fact evades the structural film argument

[42] Didi-Huberman, *Confronting Images,* 39-40; 279 n31. Hans Belting, *The End of the History of Art?* trans. Chistopher S. Wood (Chicago: Chicago University Press, 1987).
[43] P. Adams Sitney, "Structural Film," *Film Culture*, No. 47 (Summer, 1969): 1-10.

proposed by Sitney is consistently entered into across the range of scholarship by using the example of Frampton's *Magellan* in the context of the expanded arts at the time.[44] More recently, Lisa Zaher has sought to address this issue by attempting to frame Frampton as an artist who should be understood through the guise of the modernist photographer, in a thesis which focusses on Frampton's photographic practice in a necessarily expanded way, attempting to approach film almost exclusively from the perspective of photography (rather than the other way around).[45] However, these approaches to Frampton's work also stop short of acknowledging the idea of metahistory and its attempt in *Magellan* as a critique of history as such.

In a 1977 interview with fellow filmmaker James Broughton (1913-1999), Frampton locates a Juan Gris' painting, *The Cloud,* from 1921, at the origin of cubism (fig. 1.2). While this elaboration of the artistic movement is unconventional by any definition, it is significant for the fact that it demonstrates Frampton's interest in interrupting the standard idea of a developmental history in preference for a model that promotes his belief in the figure of the cloud, quite literally in this case. It may also explain Frampton's (and his interlocutors') anxieties over his association with the term 'structural film', and the resistance of the practice to its own formalisation. 'Film,' he tells Broughton, 'is an art like music and dance that is extended, is experienced in time.'[46] Above the matrix of rows and columns on the chess board, the significance of the cloud as the figure for film that 'tours the tour' therefore transgresses the technical specificities of the medium, and in this way the approach proposed by Frampton in the "Metahistory" essay, and attempted with *Magellan*, is not only to be understood as a history of film as an artistic medium. Rather it is the

[44] Perhaps beginning with Jenkins' "A Case Against "Structural Film"," *Journal of the University Film Association*, 33, no. 2 AVANT-GARDE FILM/VIDEO (Spring 1981): 9-14.
[45] Zaher, *By Mind and Hand.*
[46] Hollis Frampton cited in interview with James Broughton, "Hollis Frampton in San Francisco, San Francisco Art Institute, 4/21/76," *Cinemanews* 77.6 (1977): 10.

metahistory of film that relates it to the histories of art, re-organising the possibility of history as such through the idea of the infinite film, one which requires a set of recognisable monuments for its navigation. With *Magellan* Frampton believed he could create a work that would identify and supply the waypoints for a 'tour' of the infinite film.



Fig. 1.2 Juan Gris, *The Cloud* (1921), oil on canvas, 65 x 100cm. Private Collection.

## 1.3 Montage: Condensation and Compaction

> *…the distance measured between the stars and between the stars and the horizon. Montage involves nothing more than such measurements: it is the art of creating proportions.*
> Alexander Kluge, "On Film and the Public Sphere" (1979)

In his 'Statement of Plans for *Magellan,*' Frampton makes explicit his intentions to promote film as a 'model for human consciousness'.[47] Thinking in film therefore becomes a specific approach to thinking in images, which are understood as simultaneously discrete and moving, determinate and contingent, as both evasive and locatable productions. If Frampton understood his filmmaking as directed to and encompassing human consciousness as such, the organisation of images on film suggested the temporality of montage was where its intentions would be located. As such montage is what links *Magellan* to the idea of the atlas in the largest sense.

Frampton's approach addressed his belief in an emerging image consciousness, which took issue with the hegemony of rule-based writing, as both a theorist and artist practicing in film and photography, and conceptualising the aesthetics of reprographic media more generally (and eventually including video, computing, and xerography). This point is significant for the fact that it places him at odds with other film theorists engaging a semiotic and psychoanalytic approach to films' articulation at the time, where film was figured as a medium that acts on the mind of the viewer's unconscious, and therefore necessitated the linguistic notion that one must be able to 'read' images in order to understand and master their influence. This idea is perhaps represented by an analysis of the resemblance between Freud's dream-rebus and photomontage, as related to film, suggested by Victor Burgin (1941—) in his essay for *Screen* in 1980, considering the fact that pictorial montage could access desire in a way which precedes verbal discourse,

[47] "Statement of Plans for *Magellan*," *CA*, 228.

leading to the interest in visual culture evidenced in advertising, for example.[48] Of course for Sigmund Freud (1856-1939) the rebus gave rise to the idea of a repression through language which could return via the image-conscious, in particular in the unconscious remembrance signified by the dream, and furthermore in what he called "screen memories".[49]

An early theorist of montage, Russian filmmaker Sergei Eisenstein (1898-1948) was particularly interested in Freud's theory of condensation in the theory of dreams and the unconscious. Eisenstein also realised that image-consciousness could correspond to montage as a pre-linguistic technique.[50] As an important location for understanding the psychoanalytic legacy for film theory, it also related early research into film form with anthropology. The result was a matrix structure for montage posed by Eisenstein as both horizontal and vertical, and this subsequently allowed Frampton, a close reader of Eisenstein, to focus on the possibilities of film as a conscious entity. Given Frampton's idea of metahistory is founded on the Cartesian idea of the matrix structure, which through the metaphor of the knight's tour across the chessboard relates the 2-dimensional axis, his thinking clearly related to the question of montage as a technique for attention. If montage is now recognised by contemporary historians such as Devin Fore as 'not just an artistic strategy of assembly, but an instrument of thought itself,' this idea was already present in Eisenstein's theory of intellectual montage, even if it is in contrast to the

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[48] See Victor Burgin, "Photography, Fantasy, Function," *Screen*, 21, no. 1 (Spring 1980), 43-80. The significance of this essay is noted in Fore, *Realism After Modernism*, p. 383, n29.

[49] Freud defined a 'screen memory' in an 1899 paper as 'one which owes its value as a memory not to its own content but to the relation existing between that content and some other, that has been suppressed.' In this way the relational aspect of the 'screen' in psychoanalysis was easily adapted by film theory, in particular for understanding montage. Sigmund Freud, *The Standard Edition of the Complete Psychological Works of Sigmund Freud, Volume III (1893-1899): Early Psycho-Analytic Publications, Standard Edition, 3,* (London: The Hogarth Press, 1962), 320.

[50] In 1934 Eisenstein published the article 'Film Language,' concluding: 'It is time with all sharpness to pose the problem of the culture of film language.' Sergei Eisenstein, *Film Form: essays in Film Theory,* edited and translated by Jay Leyda (New York: Harvest/HBJ, 1949), 121.

historical avant-garde's development of photomontage, as evidenced by the work of John Heartfield (1891-1968), for example.[51] This approach to film suggested montage as a new mode for expression, as well as immanent to the film form, whereby its 'materialist modality differs fundamentally from that of the purely verbal sign'.[52]

But if film is a medium, it is also a part of a larger cinematic *dispositif,* or constellation of components, and it is in this way that the matrix presented itself to film as a tool for understanding montage as such, rather than as script or as text, which does so for language.[53] This spatial organisation of film, across its frames as it were, was something which the critical art history of Warburg also understood as arriving to overpower the linguistic capacity of the signifier, even as it flattens the indexical relationship and emblematises the contents of a frame as a symbol. If, as Fore notes, Sergei Tret'iakov could show how the avant-garde strategy of "over-coding" was addressed to mnemonic excess, his colleague Eisenstein could also see in Freud's example of the *Mischwort* (composite word) how it 'captured the monteur's technique of semantic condensation'.[54] However as I argue below, in the chapter on *Zorns Lemma*, the orientations of the ideogram in filmic montage resulted in a difficult and complex outcome for the image when posed according to the strictures of language.

The importance of the matrix for what Warburg called 'formations', relate montage rather to the spatial conditions of the atlas, as opposed to the orthodox form of the comparative, or synoptic, table for the organisation of images on film described by Roman Jakobson as 'filmic similies', which prioritise the jump cut in

[51] Fore, *Realism After Modernism,* 266.
[52] Ibid.
[53] More recently the term 'encoding' has arisen to bridge the gap existing between the idea of textual signification and composition more generally. Wolgang Ernst writes that the 'interplay of materiality and encoding recalled the occidental connection between music and mathematics.' Wolfgang Ernst, "Distory: One Hundred Years of Electron Tubes, Media-Archaeologically Interpreted, vis-à-vis One Hundred Years of Radion," trans. Dawn Michelle d'Atri, in *Digital Memory and the Archive*, ed. and with an introduction by Jussi Parikka (Minneapolis, MN: University of Minnesota Press, 2013), 170-1.
[54] Eisenstein, *Montazh*, cited in Fore, *Realism After Modernism,* 265.

montage, in his writing on metaphor.[55] This is an idea that was reinforced and then extended by Frampton through his attempt to understand the conditions of the matrix for film through the idea of 'synoptic conjugation', which he states at the end of the "Metahistory" essay, while using his technical knowledge and experience as a film technician in a processing lab.[56] Frampton's employment as a dye-transfer print-maker at the Manhattan lab of Technicolor, Inc throughout the 1960s necessitated his mastery of the printing matrices used for producing colour images from film.[57] As opposed to the idea of semantic condensation, this practice required three colour separation onto the same matrix for receiving the print, linking the montage of the *mischwort* to colour film photography as such.

Considering Eisenstein's initial translation of Freud's term *Verdichtung* (condensation) as *уплотнение* (compaction), applicable to the packing of soil, or even the act of sealing or being impressed upon, it may be preferable to re-frame the link between montage and the dream-image as more closely related to the emblematic conflations of heraldry, which follows the logic of heredity, rather than following any rational ordering principle.[58] Here the polysemy of the term "to seal" could be combined with the genealogy of the term matrix, in its etymological relationship to maternity, suggesting an emblem which verifies and seals the letter through its heritage. Furthermore, compaction seems to ring true with Frampton's interest in exploring what he calls his interest in the "chemistry of dirt", which links metahistory to *Magellan* by lending it the image of complexity as a concern for

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[55] Didi-Huberman, *The Surviving Image – Phantoms of Time and Time of Phantoms: Aby Warburg's History of Art* (2002), trans. Harvey Mendelsohn (University Park, PA: The Pennsylvania State University Press, 2017), 312. See Roman Jakobson, 'The Metaphoric and Metonymic Poles,' in *Fundamentals of Language,* with Moris Halle (Berlin: Mouton de Gruyter, 1956), 92.

[56] "Metahistory," *CA,* p. 138.

[57] Frampton worked at Technicolor, Inc. in New York from 1961-1969. See Bruce Jenkins and Susan Krane eds. *Hollis Frampton: Recollections/Recreations,* exh. cat. (Cambridge, Mass.: MIT Press, 1984), 111.

[58] Eisenstein, *Montazh*, cited in Fore, *Realism After Modernism,* p. 383 n32. Later in the same chapter Fore notes that Heartfield's photomontages 'have long been compared to the ornate word-image complexes of the baroque emblem,' whereby the chain of resemblences exceeded conceptual logic. Ibid., 292.

cultural memory as opposed to the logic of historical narrativity. This relates to the subject of the chapter on *Palindrome*, where Frampton's film experiment with cloudy emulsions produced by the waste-end of the film-strip emerged directly from his work at the Technicolor lab and also to the idea of labour organisation and the heightened political atmosphere of the late-1960s. Conflation is a concept I will use to describe this process as emblematic, more so than psychoanalytic, in what follows and it is posed here as an alternative for the elucidation of the notion of condensation for the unconscious, as it is propelled into the conscious compaction of images, stamped into montage through film.

Importantly there are further correspondences in this approach to the status of poetry in the West during this time. The practice of Imagism in the circle of Pound, for example, provides another reference for the development of Frampton's thinking about poetry and art in the late 1950s, when he spent time working with the poet at St. Elizabeth's Hospital in Washington. In particular it was Pound who also related the compaction of the "word-image" to the *vers libre* economy of writing by H.D. (Hilda Doolittle, 1886-1961).[59] Citing Soviet examples, Susan McCabe has noted that 'the Imagist model of poetry is readily adaptable to film practices,' however this link, which emphasises the cut inherent to montage by equating word-images with serial order, has not yet been established for the neo-avant-garde films of the 1960s and 70s.[60] For Frampton however, the psycho-perceptual potential of a film language was no longer a question of possibility, but a question of a conscious engagement with the type of montage required to 'invent' the tradition of film. The new mode for communication offered by the camera arts and the possibility of

[59] Not only was Hilda Doolittle an important figure for Imagism and 20th century modernism, but would later turn to film criticism, and even acting, her writing for the Swiss publication, *Close Up,* and further cementing the emergence of poetic filmmaking. See Leonard Diepeveen, "H.D. and the Film Arts," *Journal of Aesthetic Education*, 18, no. 4 (Winter 1984): 57-65. See the chapter "H.D.'s Borderline Bodies," in Susan McCabe, *Cinematic Modernism: Modernist Poetry and Film*, (Cambridge: Cambridge University Press, 2005), 133-183.
[60] McCabe, *Cinematic Modernism*, 140.

industrial reproducibility in the period, relied upon the matrix, extending the metaphoric and metonymic poles described by Jakobson's literary formalism. As such it was as a question of the organisation of images in their spatial relations that permitted Frampton to pursue his work on film as a poetic consciousness in images, providing a further justification for the pursuit of his work in terms of the atlas.

Hans Belting has written that film, as the material base for the photo-chemical emulsion, is 'the quintessentially modern medium', which he furthermore suggests 'operates like a new mirror in which images of the world appear.'[61] The arrival of photography on a transparent yet physical base compromises the historical thrust of writing in relation to the classical arts by introducing a change in historical technique exemplified by a material shift in its relationship to light. If the industrial automatism of film images begin by 'opening up the boundaries' of the medium, this operative function to the enterprise features significantly in the present analysis for the role it plays in the transparent elucidation of a model of modern subjectivity understood to be fundamentally concerned with the possibility of not only a positive knowledge of film, but the possibility of memory and all its complexities in an era of globalisation and migration.[62] Furthermore, it can be shown that what Belting calls the 'two bodies' of representation survive in the presentation of the work on film, whereby 'the emblem and the likeness are part, each in its own way, of the visual praxis of a legitimate succession by which the living bearer assumes his place in an ancestral line.'[63] It is through analyses such as Belting's, and his reappraisal of the notion of heraldry and portraiture in the context of montage, that the notion of conflation is required for understanding how the transmissions of knowledge as a subjective inheritance can be glimpsed in film as an industrial-material product created out of necessity by historical forces. The

[61] Hans Belting, *An Anthropology of Images: Picture, Medium, Body*, trans. Thomas Dunlap (Princeton: Princeton University Press, 2011), 145.
[62] Ibid. 168.
[63] Ibid. p. 67.

subsequent shifting and expansion of these boundaries for the representation of a 'legitimate succession' is what Frampton was determined to explore, and planned to bring to culmination in the films that were to be collected under the title *Magellan.*

## 1.4 Conflation and Cultural Memory

Framing specific examples of Frampton's work through the methodological approach opened by cultural memory will allow for the conscious effects of thinking in images, and through film, to develop out of the archival and towards the model of the atlas envisioned by Frampton for *Magellan.* Shira Segal was the first to link Frampton's work to the idea of cultural memory, by arguing in her article on his 1971 film *(nostalgia),* in which a series of photos are filmed burning on a hotplate, that 'film is the apposite medium for the transmission of cultural memory and cultural renovation due to the inherent nature of its form, the fact that it is *moving*'.[64] Movement, as it follows from montage, carries with it a multiplicity of meanings, not the least that it engages the idea of animation as fundamental for our distinction of the organic from the inorganic made problematic by film. A feature of my focus on a specific subset of Frampton's films—as opposed to his photography and other works like *(nostalgia)*—is their insistence on the importance of the idea of movement.[65] Segal refers to Mieke Bal's writing on the topic of memory as understood culturally, noting that for Bal cultural memory mixes the private and

[64] Shira Segal, "From the Private to the Public: Photography, Film and the Transmission of Cultural Memory in Hollis Frampton's *(nostalgia),*" *Text, Practice, Performance*, no. 6 (2005): 50-1. She also notes Stan Brakhage's argument that 'the entire act of motion picture making... can be considered as an exteriorisation of the process of memory'. See Stan Brakhage, 'In Defence of Amateur,' in *Essential Brakhage: Selected Writings on Film*, ed. David E. James (Kingston, NY: Documentext/McPherson, 2001), 149.

[65] An exhibition of Frampton's "other" work was curated by Susan Krane and Bruce Jenkins under the title 'Recollection/Recreations' between September 29 and November 25, 1984 at Albright-Knox Gallery in Buffalo, New York.

the public and therefore makes distinctions between the individual and the social increasingly difficult.[66] Following the pioneering work on the structures of modern memory by Henri Bergson (1859-1941), Bal refers to images 'whether or not they convey movement technically,' as figurative in the sense that they are '*moving* by definition.'[67] The distinction between memory as artificial, or technical, and cultural memory as also linked to emotion and affect is grasped in this subtle formulation.

Cultural memory, as it has been developed and defined by Jan and Aleida Assmann, exists in two modes: 'first in the mode of potentiality of the archive whose accumulated texts, images, and rules of conduct act as a total horizon, and second in the mode of actuality, whereby each contemporary context puts the objectivised meaning into its own perspective, giving it its own relevance'.[68] This two-fold definition proves important for considering Frampton's own notion of the 'infinite cinema' and 'infinite film' as extending from the archival impulse towards the second mode, and necessarily follows the introduction of amateur photography as supplementary to the historical document, a question Frampton first introduced in the "Metahistory" essay and elaborated upon further in the "Digressions". My argument proposes that metahistory can be positively compared to the subsequent development of cultural memory as an artistic strategy employed by Frampton, for addressing marginal aspects of culture in response to the canonical form of historical narrativity, which Frampton sees as burdened by the archival impulse and its resulting reliance on the synthesis of 'facts'.

An important model for cultural memory is Frances Yates' work on the 'art of memory', which continued from the approach facilitated by Warburg and the *Kulturwissenschaftliche Bibliothek Warburg*, concerning the survival of images from

[66] Segal, "From the Private to the Public," 50.
[67] Mieke Bal, *Thinking In Film: The Politics of Video Art Installation According to Eiija-Liisa Ahtila* (London: Bloomsbury Publishing, 2013), 5. Emphasis author's own.
[68] Assmann, "Collective Memory and Cultural Identity," p. 130.

antiquity.[69] Warburg's *Mnemosyne Atlas*, which framed the theoretical approach to "thinking in images", was possible only after the invention of photography had established itself as a technical support for memory. This kind of memory, which is externalised as artificial and reproducible, reduced monuments captured by the photograph to a conventionalised and manageable scale. In this way the organisational activity which comes after selection (and its resonances with the function of metaphor in language) presents itself to the practice of memory in cinematic time as inherently spatialised. Furthermore, the kinship between Yates' notion of conflation and cultural memory, as it has been framed by the Assmanns', can be demonstrated through the organic potential of discrete images and their ability to travel and transform themselves, as surviving *across* time.

In *The Art of Memory,* Yates writes of conflation as one way early modern figures were productively able to use (and abuse) recently re-discovered and antiquated knowledges and fragmented histories in both epistemological, and technical and artificial senses. For example she describes medieval scholar Albertus Magnus (c.1200-1280) as incorrectly linking the authorless treatise, *Ad Herennium* (c. 80 B.C.E) to Aristotle (384-322 B.C.E.), on the question of memory.[70] Seen from the contemporary discourse of media studies, Yates' work on early modern memory highlights her point that the traditionally literary trope of conflation—as the idiomatic concatenation of once distinct ideas expressed in language, erasing or transforming their previously existing differences—can be found to better represent the way images function in relation to memory, as well as in the transmission of culture. A good example is the combination of emblems and metaphor, selected and

[69] Yates was invited to work at the Warburg Institute in London by the director Fritz Saxl in 1943. Prior to the Warburg institute Yates had completed an M.A through the University of London as a reader at the British Museum, her thesis was titled 'Contribution to the Study of the French Social Drama in the Sixteenth Century,' marked 1926. Yates' biography is contained in Marjorie G. Jones, *Frances Yates and the Hermetic Tradition* (Lake Worth, FL: Ibis Press, 2008).

[70] The ancient Latin book on rhetoric is of unknown authorship, and was previously linked to Cicero. Frances Yates, *The Art of Memory* (London: Pimlico, 1992), 74. Yates' study was first published in 1966.

conjugated for the memory theatre of Giulio Camillo (1480-1544). Yates shows how the conflation of different historical knowledges leads to his attempt at presenting his magical theatre of memory to early modern scholars, like the Dutch jurist Viglius (1507-1577), who reported the idea of the theatre in a letter to Erasmus (1466-1536). From the perspective of cultural memory as a 'total horizon' it is important that Erasmus is also remembered as perhaps the last figure to have been known for having read all of the works then published in the Western canon. Camillo's memory theatre also drew upon Hermetic writings regarding the power of images, but it is the seven-tiered theatre that retains them here in a sense that can be described as thoroughly emblematic (fig. 1.3).



Fig. 1.3 The Memory Theatre of Giulio Camillo based on L'Idea del Teatro, 1550
In the folder of Frances Yates, *The Art of Memory*, 1966.

As it relates to the verb 'to inflate', to blow into, conflation is concerned with the depiction of movement, and more importantly with the image of the wind. To conflate means to blow together (from the Latin, *flare*, to blow, to ignite, to burst into flame). As opposed to the literary meaning of the term, conflation has a meaning that is also addressed to images through the *impresa*, or emblems of early modernity. The combinations of heraldry, often following a marriage, joins two

previously distinct emblems together, conflating them. In *The Art of Memory,* Yates writes that 'Camillo spoke of it [the theatre] as representing all that the mind can conceive and all that is hidden in the soul—all of which could be perceived at one glance by the inspection of the images.'[71] The immediacy of the process suggests a divine influence that offers a way of prefiguring the model of the atlas pursued by Frampton for *Magellan* as based on technical attempts to organise memory using images.

In the preface to her 1995 study *The Gallery of Memory*, Lina Bolzoni makes a direct link between the figure of Camillo and the image of the wind.[72] In 1543, the governor of Milan at that time, Alfonso d'Avalos (1502-1546), was travelling with the poet Girolamo Muzio (1496-1576), who deferred to Camillo on the question of what would be the appropriate image for depicting the meteorological phenomenon. Muzio then links memory to the idea of proper images by suggesting they should call on the broad repertoire of knowledge Camillo was said to possess. Despite Camillo's inability to give an answer for this anecdote, one example that could be posed to Muzio's questionable image of a breeze depicted by wings, is that clouds offer an image of the wind through their co-determined relationship. But clouds are of a different register and so we make do with the artificially inscribed lines of influence usually relied upon to visualise the wind's direction, or technical objects which indicate the weather instrumentally. It is possible, however, that Camillo's appearance in this anecdote better serves to provide us with the word-image for conflation as it relates to indeterminacy, and as such is relevant for understanding

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[71] Yates, *Art of Memory*, 161.

[72] See Lina Bolzoni, *The Gallery of Memory*: *Literary and Iconographic Models in the Age of the Printing Press,* trans. Jeremy Parzen (Toronto: University of Toronto Press, 2001), xiii-xiv. On the theme of the wind or the breeze in early modern thought see Georges Didi-Huberman, "The Imaginary Breeze: Remarks on the air of the Quattrocento," *Journal of Visual Culture*, 2, no. 3 (2003): 275-89. For an example of how conflation occurs with the figure of Opportunity and the figure of Fortune, which is represented by the wind filling a sail in antiquity and used for early modern iconography, see Frederick Kiefer, "The Conflation of Fortuna and Occasio in Renaissance thought and iconography," *The Journal of Medieval and Renaissance Studies*, 9, no. 1 (1979): 1-27.

his significance for the development of modern memory as not simply mnemonic, but drawn from cultural memory. The etymology of the word, conflation, a term whose use can be dated to the early 16th century, and to Camillo's own lifetime, is maintained here by reference to the wind, as one that had inspired early modern thought concerning what organised, or motivated the movement of inanimate, or inorganic things, just as Frampton would grapple with these questions concerning film.

## *Conclusion:* Metahistory as Cultural Memory

If Frampton's idea of metahistory and Atlantis leads us to the model of the atlas, in what follows I show how this sense of the role played by images as complex emblematic conflations of knowledge in early modernity has been influential on film as an audio-visual medium, and therefore how this is particularly relevant for Frampton's metahistorical project based on the calendar.[73] Indeed by attempting to define and navigate a similar totality, Frampton's *Magellan*—given its planned deployment of a film program over the cycle of an entire calendar year—can also be understood as related to the Memory Theatre of Giulio Camillo, as much as to the *Mnemosyne Atlas* of Aby Warburg (which in turn relates to the atlas as a model for cultural memory through montage), as well as to the related forms of the almanac and encyclopedia.

In a recent essay, which revisits Warburg's work on the survival of certain images, Giorgio Agamben excavates it as a practice that also suggests a collapsing of any distinction between history and metahistory: 'The historian,' he writes, 'does not randomly or arbitrarily choose the documents out of the inert and endless mass of the archive but follows the subtle and obscure thread of signatures that demand to be read here and now'.[74] And perhaps this is also what motivated Frampton's metahistory, the desire to re-habilitate history beyond the impossibly exhaustive statement of 'facts'. Agamben's argument for the chain of signatures as the 'thread' guiding the historian also matches closely the sentiment which Frampton proposed in the figure of the metahistorian as a response to the '"nightmare" of history, and

[73] In this sense the parallel study of American Avant-Garde film as 'syncretic' in the work of Federico Windhausen, is apposite to the idea of conflation presented here. Windhausen, *Syncretic Practices*, 2007.
[74] Giorgio Agamben, *The Signature of All Things: On Method*, trans. Luca D'Isanto with Kevin Attell, (New York: Zone Books, 2009), 73.

which I argue also approaches what has been termed the 'metaphoric logic' of Warburg's atlas.[75]

As cultural memory, however, metahistory can be understood as a call for renewed work on the construction of a tradition for the historical method and approach to film as a device for storing images. This is, in brief, precisely what cultural memory aimed to do for writing in the expanded sense provided by Jacques Derrida in his presentation of *Archive Fever.*[76] The undeniable links that exist between writing and film, as an expanded practice of inscription that is transferred, and more importantly transferable, allows for a constructivist approach to the metaphorical character of film established here in the idea of the necessary conflations of the 'moving' subject of cultural memory which motivated filmmakers like Frampton from the 1960s onwards. Therefore, the atlas' sublimation of forms like the early modern notion of the theatre of the world, or the memory theatre, furthermore highlights the relationships and affinities allowed by the conflation of these models of knowledge, and which also permit the sublimation of art history by the cinema. Given Frampton was aiming for the infinite cinema, the idea of totality and the notion of access to "all knowledge" provided for in the model of the memory theatre, *Magellan* can be linked not only to the navigation of the archive of film, but to modern models for the collection and preservation of knowledge as such.

[75] Christopher D. Johnson, *Memory, Metaphor, and Aby Warburg's Atlas of Images* (Ithaca, NY: Cornell University Press, 2012), 170.
[76] Jacques Derrida, *Archive Fever: A Freudian Impression* (Chicago: University of Chicago Press, 1996).

# 2. Atlas: *Magellan*

*I cannot generate the infinite cinema that I posited then.*
*But I can generate a grammatically complete synopsis of it.*
Hollis Frampton, "Talking About *Magellan*: An Interview" (1980)

It is important that *Magellan* is understood as Frampton's attempt to create a masterpiece on film. As Frampton's most ambitious and long-lasting project, *Magellan* has not only been compared to a Wagnerian *gesamtkunstwerk* by Brian Henderson, following Frampton's death in 1984, but also noted for its adoption of computing technologies for aiding in its creation as 'a new kind of work' that 'required a new kind of house for its exhibition'.[1] Frampton's interest in the aesthetic questions raised by computing were only beginning to bear on the project towards the end of his life, following his co-founding of the Digital Arts Lab with his colleague Woody Vasulka (b. 1937) at the Centre for Media Studies at SUNY, Buffalo in 1977.[2] However, work-in-progress screenings of *Magellan* presented by Frampton were never anything other than cinematic, and there is consensus amongst those who have examined the project since Frampton's death that it remains a work of film first and foremost. Michael Zryd's work in particular remains indispensable for keeping the scholarly interest in *Magellan* alive in recent years, and will be considered closely in what follows below. However, by presenting *Magellan* as work that was originally conceived as an installation for a gallery space, the significance of its migration to the cinema theatre becomes clearer still. As such, the atlas appears as a useful model for understanding why the original conception of the work has not been a significant part of the discussion of Frampton's project as

[1] Brian Henderson, "Propositions for the exploration of Frampton's *Magellan*," *October,* 32 (Spring 1985): 150. While the totalising impulse Frampton attempted is cyclical in a way that retains a thoroughly historical thrust as its motivating impulse, other arguments about the work include what Peter Lunenfeld has called its 'aesthetic of unfinish'. Peter Lunenfeld, "Hollis Frampton: The Perfect Machine," in *Snap to Grid: A User's Guide to Arts, Media, and Cultures* (Cambridge, MA: MIT Press, 2000), 116-134. Although he does not mention Frampton, Andrew Uroskie has more recently argued for the counter-esthetic of Lettrist cinema as an 'intermedia assemblage' of disjunction for the 20th century, operating against the unity of the total art work. In this way it is posed as a formative influence on Brakhage, who was deeply impressed by Isidore Isou's *Traité de bave et d'éternité* (Treatise on Slobber and Eternity, 1951). See Andrew V. Uroski, "Beyond the Black Box: The Lettrist Cinema of Disjunction," *October*, 135 (Winter 2011): 21-48.

[2] See Andy Uhrich, "Pressed into the Service of Cinema: Issue in preserving the Software of Hollis Frampton and the Digital Arts Lab," *The Moving Image*, 12, no. 1 (Spring 2012): 18-43.

yet. Therefore, my method here is to re-establish the link between *Magellan* and the idea of the atlas in its relation to art history, and to contrast the ways in which the atlas relates to the idea of the *gesamtkunstwerk*, and the spectral presence of a utopian modernism. In this chapter *Magellan* is presented as not only the first film project that Frampton envisioned, but also a project which will come to increasingly consume his work, as he tried to complete the monumental work as a film in the last decade of his life. I begin by presenting the fragments of the work and describe its shape and approach, focussing on the gestation of the work, beginning in 1964 as Frampton attempted to establish himself as an artist-filmmaker, and not only a photographer. Following this I situate the work within an art historical context by emphasising its character as an atlas in order to demonstrate Frampton's criticism of 'art history' in the "Metahistory" essay. The initial distinction to be made, from the outset, is between the *Magellan* project and all of the other films Frampton made during his lifetime, and in particular the two other films to be analysed in this thesis, *Zorns Lemma* and *Palindrome.* This distinction, it will become clear, is between *Magellan* as Frampton's attempt at a metahistory of film, and the experimentalism of his other works, which he undertook to prove *Magellan* was possible.

## 2.1 The Plans For *Magellan*

If it is necessary to see *Magellan* as a vast 'visual Metaphor', which Bill Simon confirmed in his interview with Frampton in 1980, it is because Frampton was still struggling to articulate what the project would ultimately be.[3] As opposed to a rigorously defined concept, it was always as an artwork, as a fragmentary potentiality, that Frampton had understood *Magellan*. Just what this metaphor intended to communicate is unable to be reliably established, and *Magellan* remains incomplete. However, parts of the film cycle were completed before his death, and a number of documents exist which describe in varying degrees of detail Frampton's plans for *Magellan*. These notes present the work as based on a territorial metaphor of navigation. The intention of Frampton's film as an atlas appear here in concrete terms. What follows will therefore seek to situate and analyse aspects of the work which emerge from its calendrical structure in more detail.

To begin with, Frampton's text 'CLNDR'—a 729 line printout of a digital file dated December 1 1978—is a document which lays out the program for individual films assigned to certain days of the year appropriate to their screening (fig. 2.1).[4] As opposed to a table, the CLNDR—'subject to change without notice'—lists the diurnal

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[3] Bill Simon cited in "Talking About *Magellan*: An Interview," *CA,* 248. The interview between Frampton and Bill Simon took place in New York City on January 19, 1980, during the course of a series of screenings of films from the *Magellan* cycle at the Whitney Museum of American Art. The interview was originally published as 'Talking About *Magellan:* An Interview,' *Millenium Film Journal*, nos. 7/8/9 (Fall/Winter, 1980-1): 5-26. For a consideration of the function of metaphor as a possibility for film images see Noël Carroll, "Visual metaphor," in *Aspects of metaphor*, ed. Jakkoo Hintikka (Dordrecht: Kluwer Academic Publishers, 1994), 189-218.

[4] Hollis Frampton, "CALENDAR FOR MAGELLAN," 15pp. A4 printout from digital file. Titled <CLNDR>: AN ANNOTATED CALENDAR FOR MAGELLAN, VERSION 1.2.0. Hollis Frampton Archive, Anthology Film Archives, New York. The file heading also notes that it is 'SUBJECT TO CHANGE WITHOUT NOTICE'. A large amount of materials can be found in the Hollis Frampton Archive of Anthology Film Archives. I am also indebted to Michael Zryd for making his collection of photos of many of these documents available to me. A selection of material related to *Magellan*, including the "Statement of Plans for *Magellan*" document are republished in *CA,* 226-54.

rhythm of *Magellan's* programming in a way that orders the work as a collection of component parts, yet it does not reveal their contents. In the CLNDR, the relationship between the films is not established in any way other than their position on the calendar and therefore gives a structure to the work as a whole.

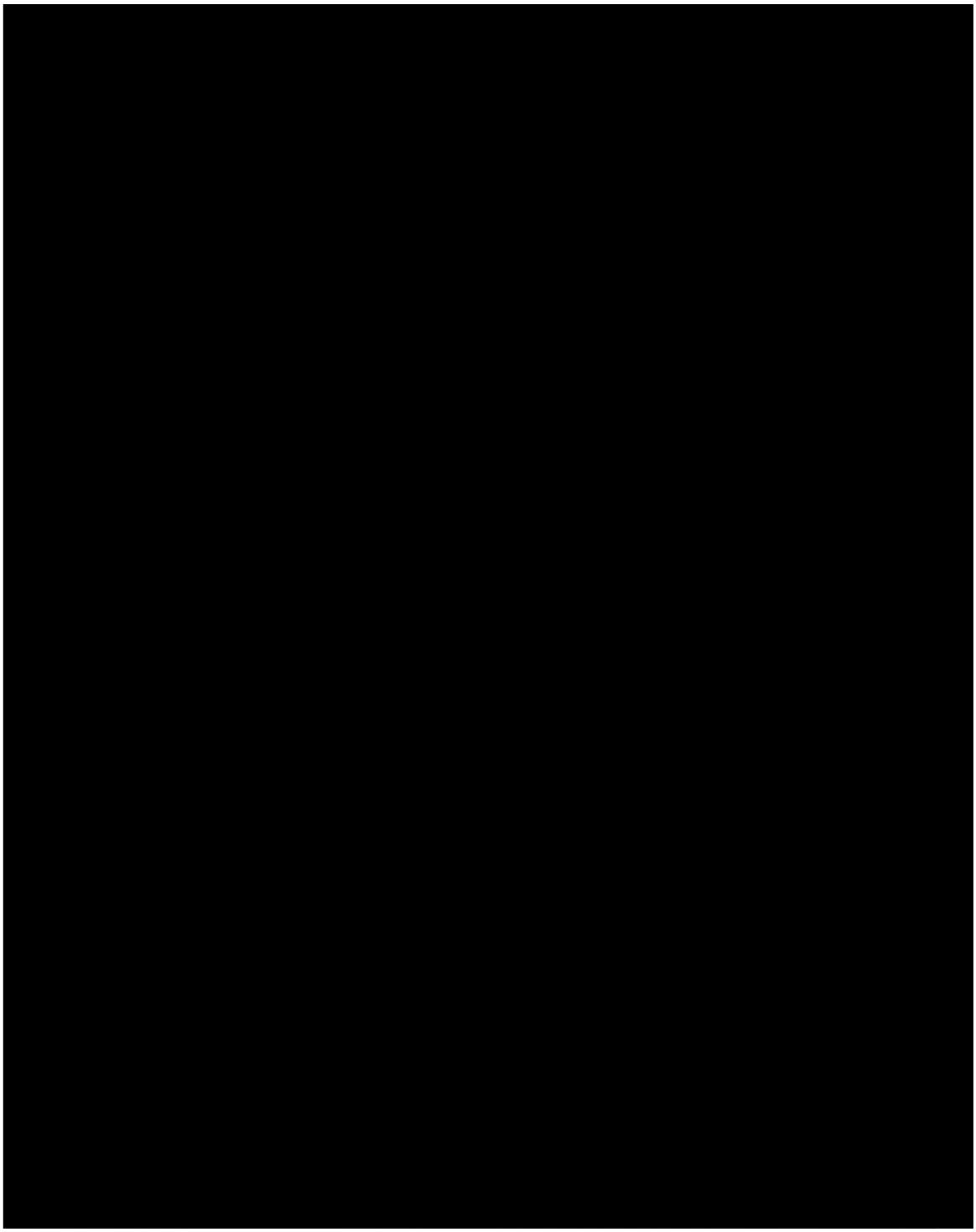


Fig. 2.1 Hollis Frampton, <CLNDR>: AN ANNOTATED CALENDAR FOR MAGELLAN, VERSION 1.2.0 = 1 DEC 78 (SUBJECT TO CHANGE WITHOUT NOTICE), 1978, page 01. Hollis Frampton Archive, Anthology Film Archive, NY.

A number of proposals for grants and statements on the project prepared by Frampton also help to further outline his vision for *Magellan*, which remains, apart from the completed films, as a series of sketches and drafts in his notes. Folders full of Frampton's research exist in archival form, mostly in Box Y of Frampton's archive at the Anthology Film Archives, New York (AFA).[5] Perhaps more importantly, Frampton's presentation of the work in progress, his interviews and his writing about it for publication, reveal in the most direct manner what the *Magellan* cycle is.

While an important and detailed analysis of the work completed for *Magellan* appears as the final section of Bruce Jenkins' 1984 dissertation, *The Films of Hollis Frampton: A Critical Study*, it follows—and in fact sets in train—the usual presentation of the work as appearing last in a chronological listing of Frampton's works. Coming after the completion of his seven-part *Hapax Legomena* series (1971-2)—which included shorter works like *(nostalgia)*—and in a period Jenkins somewhat arbitrarily calls Frampton's "post-critical" work, *Magellan* is designated a 'late-style' work despite the fact that the artist was still in his thirties when Jenkins proposes its commencement in the early 1970s.[6] While this allows for the most convenient reading of *Magellan,* given its notorious complexity, it refuses to situate the genesis of the project at an earlier stage in Frampton's thinking. I argue that *Magellan* was something which Frampton was working towards from the very beginning of his filmmaking. Therefore, Jenkins' largely descriptive exercise remains a necessary yet cursory examination of the films Frampton had completed for *Magellan* at the time of his death. However, both the timeline for the presentation of the works, as well as their conception, is just as important for understanding *Magellan* as the idea of the

[5] In keeping with Frampton's preference for alphabetical order it appears his archive of film and notes has been arranged to consist of 26 boxes marked A-Z, prepared by Marion Faller on May 17, 2004 and addressed to Robert Haller at Anthology Film Archives. A further three boxes of paper research material, marked I-III, was sent to AFA by Faller on February 24, 2006. The majority of non-filmic material related to *Magellan* are in boxes Y and Z.
[6] Jenkins, "The Films of Hollis Frampton," 288-318.

calendrical cycle which formalises it. Put simply, Jenkins' analysis is ultimately misleading in that it implies that the *Magellan* cycle is what appeared at the end of Frampton's career. I argue that it should be the other way around: that *Magellan* is what came first.

That a project like *Magellan* appears as an idea very early on in Frampton's career is suggestive of its significance for Frampton's approach as a whole, other than just in its screening. Jenkins' own articulation of the project reveals this ambiguity when he eventually acknowledges that for Frampton, the *Magellan* cycle ostensibly 'summarises, and extends themes and concerns that can be traced back to his earliest works in film'.[7] Despite his identification of some aspects of the work in which Frampton had planned to 'go far beyond simple considerations of shape or structure or logical formulae,' Jenkins declines the opportunity to speak of the significance of *Magellan*, which Frampton had conceived of even as he was making his first experiments on 16mm film in the early 1960s.[8]

Given the broad scope of Frampton's project, a select number of thematic examples demonstrating the overall structure of the film and its contents will suffice to give a suitable impression of the work in its entirety, before focusing upon an analysis of the intensive period that informed it. The importance Frampton comes to ascribe to his concept of metahistory, as a framing device that cuts across history as diachronic, means the metaphor of *Magellan* can become the basis upon which the examination of two of Frampton's "earlier" experiments on film—*Zorns Lemma*, and *Palindrome*—which demonstrate component parts of his approach and lead us back to the question of the atlas as a paradigmatic idea for work on film.

[7] Jenkins, "The Films of Hollis Frampton," 315.
[8] Ibid.

2.1.1 The Gates to *Magellan*

In 1976 Frampton screened two sections of *Magellan* at the 40th Edinburgh Film Festival's International Forum on Avant-Garde Film under the title *Magellan: At the Gates of Death.* Part one, *The Red Gate,* was 54 minutes in length, and part two, *The Green Gate*, ran for 52 minutes. By the time of the CLNDR file two years later, Frampton had successfully integrated these films with the other parts he had completed: nearly an hour of film now called *Straits of Magellan: Drafts and Fragments*, containing a series of one-minute sections referred to as 'pans', as well as a larger section called *Solariumagelani*, completed in 1974-5. Split into four films (most films could be broken up into smaller sections), Frampton had programmed *Solariumagelani*—which ran for nearly three hours in total—to be screened in their individual parts on the dates of the two solstices and two equinoxes as cardinal points in the solar year.[9] Of the more than five hours of film he had completed at this stage, all were in colour, all were silent. (Although sound would eventually become feature of the cycle, for example in *Cadenza I*, the second film listed on the calendar and a part of the *Birth of Magellan* phase of the work.)

*Magellan: At the Gates of Death* depicts a highly complex montage sequence of images shot in a morgue and processed using reference to both standard film materials like the red and the green leader commonly used for the ends of film rolls (as well as being two of the three principle colours in the three-colour separation process for colour film—the other being blue). The film also features a hexagonal motif which consistently appears in both Frampton's filmmaking and his planning notes for *Magellan. Soleriumagelani*, the set of four longer films dedicated to seasonal

[9] In the filmography published in special issue on Frampton by *October*, the introductory notes state that '*Magellan* includes virtually all the films listed in this filmography, from *Apparatus Sum* through *The Birth of Magellan: Fourteen Cadenzas*, as well as a number of films which were not completed.' *Apparatus Sum (Studies for Magellan: #1)* at 2mins 30secs, silent, colour, 16mm is dated 1972 and is the first of 30 films listed up to 1980, totalling nearly 10hrs. See "Hollis Frampton: A Complete Filmography," *October,* 32 (Spring 1985): 167-69.

points occurring once each during the year, is relatively straightforward in comparison to this phase of the film. It was first shown on March 19, 1975, at the Eerie County Public Library in Buffalo, New York.[10] The contents of these four films consist mainly of precisely shot and edited, hand-held 16mm footage documenting specific locations such as the US Homestead Steel Works Factory in Pittsburgh, Pennsylvania (*Winter Solstice*), an abattoir in South St. Paul, Minnesota (*Autumnal Equinox*), a sequence of long-shots of an unidentified agricultural landscape dotted with dairy cows lazily grazing (*Summer Solstice*), and images of a female nude (Marcia Steinbrecher) enacting superimposed and highly choreographed gestures against the black ground of a darkened studio (*Vernal Equinox*).[11] Apart from recalling the visitations of worksites shown by Dziga Vertov in films like *Enthusiasm* (1930), the cardinality of the films suggests an elemental relationship which mediates between the machinic and organic.[12]

The elemental and geocentric dialectic that is present throughout the endeavour—which highlight's Frampton's concern for both the terrestrial and celestial spheres—is best evidenced by a single example: the subtle superimposition

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[10] An audio recording of Frampton speaking at the event is preserved in the Harvard Film Archive. HFA item # 10031. Hollis Frampton, *Solariumagelani* at Erie County Public Library: Buffalo, NY. 1975 Mar. 19. 1 audio cassette. HFA item # 10031. Harvard Film Archive, Harvard Library, Harvard University, Cambridge, MA.

[11] On Frampton's vision of the US Steel Mill for *Winter Solstice*, an industrial mill where he worked for a time as a young man, see Sara Sullivan, "'Polished Steel and Palpitating Flesh': Historicising Hollis Frampton's *Winter Solstice* (1974)," *Quarterly Review of Film and Video*, no. 31 (2014): 656-668; '*Winter Solstice* as a Parody of US overproduction and Weston's aestheticism,' in Sara Ann Gooch, "Mediating the mill: steel production in film" (PhD diss., University of Iowa, 2012), 135-43. Vernal Equinox was eventually re-shot but never screened. The footage of Steinbrecher became the film *INGENIVM NOBIS IPSA PVELLA FECIT*, and was split into 12 parts and screened on the first day of every month. Lucy Fischer, describes this film as a homage to Muybridge's zoopraxinoscope, for its step-sequenced animation of the body in motion. Lucy Fischer, "*Magellan*: Navigating the Hemispheres," *University Film Study Supplement*, 7, no. 5 (June 1977): 7.

[12] Frampton discusses the films' relationship to Vertov in his discussion with Bill Simon, *CA,* 248-9. The tension between the natural and the artificial in Vertov's filmmaking is the subject of an interesting essay on the contradictions of montage by Malcolm Turvey, "Vertov: Between the Organism and the Machine," *October,* 121 (Summer 2007): 5-18.

of the sun, which is barely perceptible at the centre of *Summer Solstice*. Just visible against the pastoral images of cows in a field, the heliocentric source of light and the elemental basis of the terrestrial plain, mediated by the animals—the same animals depicted in the abattoir in Saint Paul (*Autumnal Equinox*)—suggests the film seeks to metaphorise the membrane of modernity in a way that is not immediately or entirely obvious.

Gelatin derived from animals was developed to be used as the suspension agent which attaches the photosensitive emulsion of the filmstrip, such as from cattle (and most usually for film the gelatin derived from calf ears), onto its transparent base (celluloid, acetate, or polyvinyl).[13] Captured by exposure to light, the images on film conflate any distinction between the natural and the technological—light and film emulsion—necessary for the recording of images using the photographic process (fig. 2.2). This somewhat odd combination is not so much a visual metaphor, then, as a highly conceptualised conflation of two distinct images. It is this image which provides the clearest example of how Frampton's metahistory of film would be made manifest, by showing the cattle—both alive and dead—as the otherwise hidden link between light and film, which cuts across the distinctions established by conventional history, where film is too easily coded as artificial and opposed to organic life as such.

[13] Frampton makes mention of this fact explicitly in a manuscript from 1965, published for the first time as "Some Propositions on Photography," *CA*, 6. He repeats this statement almost verbatim in 1979, in his Whitney lecture, 'The Invention without a Future,' *CA*, 177.



Fig. 2.2 Hollis Frampton, *Summer Solstice* frame enlargement, *Solariumagelani*, 1974.

As cardinal markers for the nebulous architecture of the film, situated within the central section he titled 'Straits of Magellan', the *Solariumagelani* are counterposed to an alternative order of films referred to as two constellations in another part of the same series: the 'clouds' of Magellan, namely the large and the small clouds that describe the nebulas used to navigate through the Tierra del Fuego. Diagrams in the folder now held at Anthology Film Archives in New York, marked 'Magellan: Scheme', show how Frampton had arranged these sections spatially in their relationships to each other and along a timeline reading from left to right (figs. 2.3a and 2.3b). In the CLNDR the clouds can be found spread across two sections, the 'large cloud' in fourteen parts, and the 'small cloud' divided into ten. In addition, there are a number of other planned and partially completed elements to the work: the 720 'pans' that run for one minute each, for example, with two usually programmed per day, and which appear to take over as the backbone of the Straits of Magellan; the 24 'paths' (expanded to

'Path/Bridge/Garden' and 'Garden/Bridge/Path' in CLNDR) straddling the straits and the 'clouds' in the CLNDR, and which appear to have a palindromic structure (in this way they are also related to the 'gates' which have a similarly inverse and retrograde relationship to the overall structure of the work). This formal characteristic will be revisited in a later chapter and related to the film *Palindrome*, but it is not only for reasons of brevity that an exhaustive analysis of the nearly ten hours of extant *Magellan* material is not given here. Rather, what is relevant to my arguments about *Magellan* as a whole will focus on the constructive distinction which can be made between the 'straits' and the 'clouds'.



Fig. 2.3a Hollis Frampton, page from folder 'Magellan: Scheme', Box Y, date unknown (c.1970s), Hollis Frampton Archive, Anthology Film Archive, NY.



Fig. 2.3b Hollis Frampton, page from folder 'Magellan: Scheme', Box Y, date unknown (c.1970s) Hollis Frampton Archive, Anthology Film Archive, NY.

Given the attempts which have been made at re-constructing the plan of the film, at least in its outline, it has become clear that the search for a complete program which satisfies our desire to understand the unfinished project will always fail to account for the contingencies which Frampton was so keen to accommodate. While it remains incomplete, *Magellan,* it seems, would have always remained both first and last in Frampton's filmmaking. As such, a complete inventory or repertoire of the work will not satisfy our desire to explain it in its entirety nor the complex temporality and anachrony of the artwork as it relates to 'the topology of memory itself'.[14] In his 1985 essay on the work Brian Henderson only briefly mentions that the '*Clouds of Magellan* was, of course, Frampton's first name for the entire cycle,

[14] Nagel and Wood, *Anachronic Renaissance*, 45. On the question of authorship, which remains so important to Frampton but will only be touched on briefly in this thesis, see the discussion of Borges' Pierre Menard as "The Plebian Pleasure of Anachronism," ibid, 45-50.

conceived and planned in the early '60s before he had ever made a single film'.[15] While a number of scholars, following both Henderson and Jenkins early attempts, have made important inroads into uncovering and explicating further influences and references informing the work over its twenty year gestation, none have so far attempted to frame *Magellan's* relationship to Frampton's work on film as a whole.[16] Following its established significance as a work on film which was based on the historical forms of the almanac and the calendar, the encyclopedic nature of the enterprise analysed by writers like Henderson, and more recently, Michael Zryd and Rebecca Sheehan, has never been paired with a spatial model for organising the works contents. Therefore, my emphasis on the atlas will allow me to frame the work as differentiated from the other experimental film works which Frampton continued to create throughout his career, and which were often able to be related to, or even incorporated into the *Magellan* cycle by Frampton at certain points. Especially, it seems, because of its propensity to accommodate change, the atlas collapses the temporal specificity of the work while at the same time makes history contingent upon marginal and poorly coded remnants of film as a cultural tradition.

The calendar is therefore only the last (and possibly not the final) form that arranged Frampton's realisation of a metahistory of film. Importantly, it also appeared a majority of *Magellan* would contain no text.[17] Sound, when used, is either diegetic, phatic, or synthesised and as such creates a subset of what is included in

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[15] Henderson, "Propositions," 147.

[16] Writing and interviews on *Magellan*, other than Jenkins and Henderson' speculations, mainly attempt to enquire into and describe the approach taken by Frampton. See Lunenfeld, *Snap to Grid*, 116-34; Zryd, "History and Ambivalence," 119-42; Guichard, "ABC of Film," 154-72; Sheehan, "Towards an *Infinite Cinema*," 43-8. Zaher, "By Mind and Hand," 218-22 and 243-47; for interviews with Frampton about *Magellan* see Fischer, "*Magellan,*" 5-10; Lucy Fischer, "Frampton and the Magellan Metaphor," *American Film*, 4, no. 7 (May 1979): 58-63; "Talking About *Magellan* in *CA*, 232-52; Deke Dusinberre and Ian Christie, "Episodes from a Lost History of Movie Serialism: Interview with Hollis Frampton (1976)," *Film Studies*, issue 4 (Summer 2004): 104-118; Henry Hills and David Gerstein, 'St. Hollis (part 2),' *Cinemanews* 3/4 (1978), pp. 14-5; 17.

[17] With the main exception being *Gloria!* (1979, 16mm, colour, sound, 9mins 36secs), which uses a computer to generate a list of phrases, and the appearance of the letter A at the beginning of the phase *The Birth of Magellan.*

the film cycle. Initially, however, it appears *Magellan* had been conceived as an exhibition to be staged in a gallery or museum rather than a cinema (or computer). In a letter to his friend, the poet Reno Odlin (1932-2005), dated the 19th of March 1964, and concerning possible solutions to the idea of a massive installation work based around photographic images which he had been formulating at the time, Frampton mentions what he calls 'both MAGELLANS'.[18] It appears that at this point he is referring to the same thing he had mentioned in a letter from two weeks earlier, and in subsequent conversations had by the two over the phone. The 'STRAITS OF MAGELLAN' and the 'CLOUDS OF MAGELLAN', listed in a brief note from the 4th of March, are then elaborated upon further in subsequent correspondences.[19] From the outset, it was clear that there was two different arrangements which he was devising for each, as the original idea for the work.[20] At first glance, the straits naturally suggests plot points navigable on a map, while the clouds proposed something more indeterminate.

Describing his idea in more detail and imagined as a large and presumably expensive piece for exhibition, Frampton's chancing upon a map of constellations, along with an article describing the Clouds of Magellan—the pair of celestial nebulas visible in the southern hemisphere—suggested an elegant solution for

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[18] Hollis Frampton, letter dated March 19, 1964, 'Letters from Framp,' ed. Reno Odlin, *October*, 32 (Spring 1985): 45. The letters were republished in expanded form as *"A Young Man's Book": Letters From Framp 1958-1968*, 8 vols., ed. Reno Odlin (Samizdat, 1996); and again as *Hollis Frampton: Letters*, ed. Reno Odlin (Paris: Galerie Arnaud Lefebvre, 2002). Odlin insightfully comments that Frampton, once he had come up with a name, was never one to abandon it. His persistence with *Hapax Legomena* is another case in point, Odlin writes of a letter marked 17 May 1958: '*Hapax Legomena* was a proposed collection of HF's short poems... HF did not often throw titles away, and *Hapax Legomena* is no exception.' Odlin cited in "Letters from Framp," 53. All subsequent references will be to the 1996 edition, as *Letters,* followed by the year(s), which describes the volume of the letters. Eg. *Letters*, 1958, 8.

[19] *Letters*, 1964, 1. The capitalisations which follow are Frampton's own.

[20] In an interview from 1972 Frampton is asked about his new project 'Clouds of Magellan,' suggesting that at least from that time onwards, the title *Magellan* was an abbreviation of the initially plural title explicitly referring to the constellation named for the expedition. See Simon Field and Peter Sainsbury, '*Zorns Lemma* and *Hapax Legomena:* Interview with Hollis Frampton,' *Afterimage,* no. 4 (Autumn 1972): 73-4.

guiding his project, which he detailed in a letter dated 11th March 1964. 'A constellation is an "image",' he explains to Odlin, as if the formulation alone would make clear the entire structure of the photographic installation he had envisioned.[21] Looking back, Frampton refers to his discovery twice. The first time he describes it as the 'crux' of the CLOUDS.[22] In his next letter to Odlin, dated April 1 1964, he describes a film which would use the probability theory of Zorn's Lemma, the mathematical axiom of choice for the ordering of sets, as the 'reasoning for the manipulation of footages in the movie'.[23] Clearly Frampton was prone to pondering his ideas a long while in advance. Even four years later, on the 12th of May 1968, he was still relaying to Odlin that he had 'a clouds of magellan in the offing. THAT shd/ take me up to age 35, and run about 2 hrs 30 min'.[24]

### 2.1.2 The Clouds and the Straits

At this point Frampton had been approaching art through the guise of a photographer, as a portraitist and documenter of New York's downtown art scene Frampton had also begun to produce work in series adjacently related to the photographic conceptualism then emerging in the US. Initially it appears that Frampton first envisaged two MAGELLANS following an idea in the work of Marcel Duchamp (1887-1968), in particular the *Large Glass* and the *Small Glass.* Frampton specifically refers to Duchamp's *Green Box* (1934) in his letter to Odlin on March 19, and he describes how the work was intended by Duchamp as a kind of commentary and manual accompaniment to the *Large Glass*, which is the shorter

[21] *Letters*, 1964, 8. Odlin was a Pound scholar and friend of Frampton's from college, his writings can be found in the Pound studies journal, *Paideuma,* at the University of Maine.
[22] *Letters*, 1964, 5.
[23] *Letters*, 1964, 10 Frampton also briefly mentions Zorn's Lemma in its possible application to what he calls 'dictions', in the letter from March 19.
[24] *Letters*, 1965/8, 16.

version of the work's full title *The Bride Stripped Bare by her Bachelors, Even* (1913-23).[25] If this early association failed to suggest his aspiration for what he was planning, or the complexities he had in mind for his work at the time, he would also begin to refer to the work as his 'Finnegan's Wake', given another significant influence was the writing of James Joyce.[26] Clearly, the photographic project was conceived as comparable to what Zryd understands to be 'utopian modernist artworks,' despite his qualification that, as *Magellan* evolved over a period of 20 years, we may 'observe substantial changes in [Frampton's] view of modernism'.[27] Increasingly in Frampton's mind the monumentality of the *Magellan* came to be akin to Tatlin's *Monument to the Third International* (1919-20), an idea which, once imagined, was already realised even if it was never actualised or constructed, as he would state in a presentation on *Magellan* given at Harvard University in 1977.[28]

Frampton's attempts to 'rescue *Magellan* from the reductive logic and arid systematicity' of his initial approach after 1978, as Zryd writes, away from the high modernism of his other models, Ezra Pound and Edward Weston, are given as a reflection on the project after the arrival of "postmodernism".[29] Evidenced in a 1980 essay for his friend and collaborator, the photographer and media artist Patrick

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[25] *Letters*, 1964, 6. Duchamp had stated in a radio interview from 1959, 'In the *Large Glass* there is nothing to converse about, unless you make an effort to read the notes in the *Green Box*.' Duchamp, cited in Linda Dalrymple Henderson, *Duchamp in Context: Science and Technology in the* Large Glass *and Related Works* (Princeton: Princeton University Press, 1998), xxii-xxiii.

[26] Field and Sainsbury, "*Zorns Lemma* and *Hapax Legomena*," 74. Eventually, aspects of the film would incorporate and sustain these references, such as the use of archival footage depicting a woman whose dress is 'stripped' by two men in an early cinematic folly which is used in *Cadenza I* of *The Birth of Magellan* phase.

[27] Zryd, "History and Ambivalence," 119. In his interview with Bill Simon after screening sections of *Magellan* at the Whitney Museum in 1980, Frampton states: "I think that what is utopian about it is that it posits for the spectator a kind of willingness to see the thing through and a resourcefulness in reading and a certain taste for the chase that has been suggested certainly as a goal for film, but I don't think has ever been pushed quite this far. In that sense, it's utopian.' Frampton and Simon, "Talking About *Magellan*: An Interview," 235.

[28] Frampton explicitly links *Magellan* to Tatlin's monument in a paper given in 1977, *Magellan and Perspective – Hollis Frampton at the Carpenter Center for the Visual Arts, Harvard University, December 1977*. A transcript of this lecture is included as an appendix to this thesis.

[29] Zryd, "History and Ambivalence," 120.

Clancy, Zryd's explanation is that Frampton grappled with modernism and its ends by attempting to apply 'a series of ordering strategies' to *Magellan* which were openly 'mathematical, calendrical, and encyclopedic'.[30] This should by now be obvious enough and points to his principle concern for the possibilities for the organisation of knowledge on film, however it is not clear how much this idea does in fact differ from earlier modernist strategies such as those pursued by Duchamp.[31]

Returning to the first letter mentioning *Magellan*, describing it as existing in two distinct parts, the first titled STRAITS OF MAGELLAN, the other titled CLOUDS OF MAGELLAN, it appears Frampton first conceived of it as an exhibition of large photographic prints with the architectural conceit of a carefully designed gallery installation. The former, 'STRAITS', was to consist of a series of images projected onto a set of variously transparent and opaque slabs or friezes (40 inches high and 120 inches long)—and which he also refers to in the letter by the term 'PROMONADE'. Alongside this is a programmed installation titled the 'CLOUDS', which seem to correspond to what he had earlier been calling the 'ARENA'. This work in itself Frampton describes as 'consist[ing] of a double cloud of didactic hoaxes, their elements set about and cast in space, but all 24 or 25 of the hoaxes or constellations in the SAME cubic space,' his breathless excitement for the project described to Odlin in technical terms apparently meaningful only to Frampton himself.[32] Importantly however, the 'CLOUDS' as 'elements set about in space' seemed to have no specific material basis as yet. Perhaps confusing things further, *Didactic Hoaxes* was the name Frampton had been using for a photographic

[30] Ibid. 121.
[31] On the idea of a 'new tradition,' positioned against modernism as such, with respect to the work of Patrick Clancy see Frampton's essay "Inconclusions for Patrick Clancy," first published in the brochure for the exhibition *Marginal Works: Atopia—No Man's Land*, March 27—April 11, 1980, Utica College of Syracuse University, Utica, New York, curated by Scott MacDonald. Republished in *CA*, 292-5.
[32] *Letters,* 1964, 4.

series that dated back to the late 1950s, following his time spent with Ezra Pound in Washington, and before he first moved to New York.

Read retrospectively, the overarching idea for both installations is undeniably cinematic, but it was also highly architectural in that the audience would not be able to behold the work in its entirety at any point. This factor seemed to motivate the need for apertures which he proceeded to design for the viewing of certain parts of the installation. Frampton had first explained to Odlin that he was 'working TOWARDS cinema' in a letter dated as far back as July 1 1959.[33] This statement, furthermore, appeared in the same letter that he writes of a project titled 'DIDACTIC HOAXES'. In another, from February 8 1960, he mentions 'sketches for 2 *very* short films'.[34] This shows how it was in the wake of the period spent in Washington with Pound, and the subsequent move to New York, that these projects were first imagined by Frampton, and thus from the literary endeavours of the epic poet, through photography, and on to filmmaking in rapid succession, as Frampton settled upon the medium most appropriate to his idea, 16mm film.

On the 8th of March, 1956 Frampton began a correspondence with Pound which would continue for the next few years. Pound was at work on a section of the *Cantos* epic titled 'Rock Drill', and by September 1957 Frampton was visiting the poet at his bedside, attending the sessions Pound gave to his followers at St Elizabeth's hospital in Washington until March the next year. Discussing the *Cantos* in an interview in London in 1976, Frampton claimed:

> I suspect, in fact, that one of the reasons it was repudiated [by Pound himself between 1961 and his death in 1972] was that Pound perceived in

[33] *Letters,* 1959, 18. The note continues: 'I wd/ like to do a flick. There is more *sense* of cinema in the 8 stills or even the layouts) than I've seen in real footage for more than 30 seconds at a time.' Ibid.
[34] To be called CYBELE and KORE. *Letters,* 1960, p. 10. On the 29th of November, 1960 Frampton first makes mention of two films 'CLOUDS LIKE WHITE SHEEP and a RUNNING MAN', which will be the first films he lists on his filmography, albeit as completed in 1962 and 1963 respectively. *CV*, 11.

> one way or another that the very thing the poem needed, since it was and is an essay about history, was some controlling view of what history is. Pound seems, literally, to subscribe to the view that history is just one goddam [sic] thing after another...[35]

This challenge, albeit two-decades later, to such a significant figure in Frampton's formative thinking, can be linked to the production of that theory of history after film which Frampton then made a concerted effort to develop following his encounter with the poet, and given his attempt to translate the German anthropologist Leo Frobenius' seven volume *Erlebte Erdteile* ('Experienced Continents'), at Pound's request. Presenting the young acolyte with the practical experience of how to compose history on a grand scale, the theory presented in the Metahistory essay, and in particular the "Digressions," can also be linked with Frobenius' questionable notion of an 'African Atlantis' as the logical outcome of a normative inversion conducted from the perspective of 'Western Civilisation'.[36] The major problem, which Frampton surely realised, was how to understand history in its relation to conflicting notions of time.[37]

Four years after his first inklings of filmmaking, and after recovering from an operation to remove a defective kidney, he ends his description of the two

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[35] Frampton cited in Dusinberre and Christie, "Episodes from a Lost History," 113. Frampton repeats his sympathetic critique of Pound's lack of historical vision for the *Cantos* as 'an incredible catastrophe within modernist poetics' in 1979. See "Interview at the Video Data Bank," a transcription of a videotaped interview by Adele Friedman for the Video Data Bank, School of the Art Institute of Chicago, 1978, in *CA*, 183.

[36] On Frobenius' 'discovery' in 1913 of the significance of the Yoruba, see Suzanne Marchand, "Leo Frobenius and the Revolt Against the West," *Journal of Contemporary History,* 32, no. 2 (April 1997): 160.

[37] In a later paper given for the symposium *Towards the New Histories of Photography,* at the School of the Art Institute of Chicago on March 16, 1979, titled "A Talk on Photography and History: Time, Space, and Causality," Frampton reinforces what his belief in 'history's present readiness to unite, by a process of mutual ingestion, with the photographic image incorporating it into its method as well as its object.' *CA*, 53-4. The paper was initialy published in *exposure (Journal of the Society for Photographic Education)*, 21, no. 4 (1983): 32-34.

*Magellans* to Odlin, on the 11th of March, with the words, 'I was 28 today.'[38] That Frampton's birthday marked the beginning of his plans for *Magellan* also seems to foreshadow the biographical conflation of the historical protagonist with the artist's own life. This may also help to explain the circle at the centre of the diagram for the 'Straits of Magellan' (fig. 2.3b), which can be found amongst the solstices and equinoxes (marked 'return').[39] On the CLNDR he would also list a film in the cycle presumably included for the celebration of the day he was born. Furthermore, in the March 1964 letter on his birthday, Frampton registers his growing interest in the work of Stan Brakhage, whose *Metaphors on Vision* had been published as a special edition of *Film Culture* in the Fall of 1963.[40]

In the next letter to Odlin (on March 19) he elaborates further:

> STRAITS is a fairly literal and straightforward idea, containing elements of autobiography, the history of photography, an implicit epistemology of the "image" etc. within a thoroughly controlled environment, I mean the whole piece constitutes an ecological model for the intellect upon which the temporal circumstance does not intrude.

Despite sounding anything other than straightforward, Frampton's intention with the 'STRAITS' can perhaps be understood to be relatively personal yet drawn from his own idiosyncratic and autodidactic understanding of photography as it relates to

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[38] *Letters*, 1964, 5.

[39] A sixth circle appears marked 'Yvonne', which corresponds to a date—February 29, the leap year—dedicated to a screening of *Film About a Woman Who…* a 1974 film by Yvonne Rainer (16mm, black and white, sound, 105mins). This film concerns the sexual dissatisfaction of a woman presented in the guise of a soap opera.

[40] Stan Brakhage, *Metaphors on Vision*, ed. and with an introduction by P. Adams Sitney, *Film Culture*, no. 30 (Autumn 1963). *Metaphors on Vision* was republished in 2017 in an expanded and annotated version by Anthology Film Archives and Light Industry in New York. In his "Introduction to the French Edition," Sitney notes that 'in the very last week of 1963, the first copies came from the *Film Culture* press just in time for the Third International Experimental Film Competition at Knokke-le-Zoute, Belgium.' Stan Brakhage, *Metaphors on Vision* (New York: Anthology Film Archives and Light Industry, 2017), 179.

the conceptualisation of the image. He then goes on to describe the 'CLOUDS' in a far more abstract way:

> Chanced upon an article on the Clouds of Magellan, together with a star map of the southern hemisphere naming the constellations... The old puzzle came to me, of how the ancients drew their lines between the bright dots and came up with pictures of a crane, scorpion, bear, or just triangulum...Any single consciousness' image of the world, [is] a constellation of points of varying weight, at varying distances from the centre of gravity of that consciousness.[41]

The discovery of the Magellan metaphor inspired Frampton to see in the constellation a coherence around what he then calls the 'ideogram in pictorial terms'.[42] Almost immediately, and following the Duchampian model of the *Green Box*, Frampton then states his realisation that '*Clouds* in particular will need a substantial atlas or installation manual.'[43] It is here, in the initial complex of his ideas for *Magellan*, that Frampton lands upon one that comes close to the thinking through images that would align his work with art history. As I argue below, the atlas model had been recovered as a method for art history by Aby Warburg three decades earlier, and was already being adopted by the neo-avant-garde of the 1960s in Germany, in the work of Gerhard Richter (b. 1932), for example. Without any apparent awareness of the productive image as a constellation of ideas, which had also motivated the work of continental thinkers of modernity like Walter Benjamin (1892-1940), Frampton seemingly stumbles in his isolation upon a way to begin to arrange his idea for a programme of images as based on an astrological method that reached back to a time before the invention of history.

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[41] *Letters*, 1964, 8-9.
[42] Ibid.
[43] *Letters*, 1964, 7.

It is also at this point that Frampton began to syncretise a number of his sources. While Lisa Zaher has also proposed his work as indebted to Duchamp's, *To Be Looked at (From the Other Side of the Glass, with One Eye, Close to, for Almost an Hour)* (1918), other possible influences must also be examined.[44] The 'Small Glass', alongside the 'Large Glass' of the *Bride Stripped Bare,* was clearly imagined by Frampton to be recapitulated in the relationship of the two Magellanic clouds he had come across in the *National Geographic* magazine. But to the degree that the work started as a monumental and architecturally prescribed installation, it very quickly approximated the model for looking established by the memory theatre as it survived from antiquity. This is a significant point of comparison to make, given mnemonics on film is a consistent theme in Frampton's work and one which constitutes a central theme of this thesis. The art of memory, which survived in rhetorical treatises from antiquity—in Quintillian, for example, whom Frampton was well aware of from his school-days—is re-established as an important form for what Frances Yates called the figure of the Renaissance Magus in her study published at the same time Frampton was conceiving of *Magellan. The Art of Memory* thenceforth appears to inaugurate the idea of cultural memory in the latter part of the 20th century.[45]

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[44] Zaher, "By Mind and Hand," 111.

[45] Yates describes the 'Magus with divine powers' as achieved through imagination: 'Magic assumes laws and forces running through the universe which the operator can use, once he knows the way to capture them.' Frances Yates, *The Art of Memory* (London: Routledge and Kegan Paul, 1966), 221. While critiques of Yates' approach allows historians like Mary Carruthers to distinguish her own on the relationship between memory and forgetting in the middle ages, the development of the notion of cultural memory by Jan and Aleida Assmann recognises Yates' importance for their work. Aleida Assmann writes in her text, first published in Germany in 1999, 'Interest in memory studies was kindled in literary studies with the rediscovery of ancient mnemotechnics... It was Yates who paved the way for literary scholars like Renate Lachmann and Anselm Haverkamp, who some twenty-five years later were able to take up the paradox of the "forgotten art of memory" and link mnemotechnics with advanced theories such as intertextuality, psycholanalysis, and deconstruction.' Aleida Assmann, *Cultural Memory and Western Civilisation: Functions, Media, Archives* (Cambridge: Cambridge University Press, 2011), 18. See Mary Carruthers, *The Book of Memory: A Study of Memory in Medieval Culture* (Cambridge: Cambridge University Press, 1990). Yates' Italian counterpart, Paolo Rossi, was also

As I have pointed to in the introduction to this thesis, an emphasis on rhetoric raises the question of how to understand what role photography could play within this antique structure for thought, without tending towards anachronism. Nevertheless, in Frampton's feverish thinking at the time, he settled upon formulating the work through the metaphor of the constellation, and furthermore linked it explicitly with the model of the atlas. Eventually a solution was established, whereby he could explain to Odlin how:

> [the] image is not a whole and literal DRAWING, it is a group of elements that we construe meaningfully, as we construe the letters b-i-r-d, a constellation of unrelated sounds, as the general name of feathered flying warmblooded egglayers. Or a-b-c-d-&c as the alphabet, our name for an arbitrary grouping of a small number of symbols standing for a rather larger number of the sounds a human throat can make.

Given that he had already envisioned the architectural settings of 'ARENA' (for the Clouds) and 'PROMONADE' (for the Straits) as the technical supports for the presentation of his yet to be revealed work, the idea of the memory theatre—with its places for words, things and images spatially arranged and aiming to supplement and improve the memory of the privileged observer—reveals itself as the hidden motor upon which Frampton inaugurates his project, directed as it would eventually be towards the spaceless zone of the cinema theatre. In a further example, Frampton even notes that for the 'CLOUDS' there should be certain 'vantage points' marked on the floor of the gallery that further reinforce the subjective and

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instrumental in reviving the study of the arts of memory in the 20th century. Paolo Rossi, *Logic and the art of memory: the quest for a universal language* (first published as *Clavis Universalis* in 1960), translated with an introduction by Stephen Clucas (London: Athlone Press, 2000).

theatrical nature of the enterprise.[46] Clearly it is the possibility of a relationship between words and images, mediated by the 'things' Frampton would create for the work, which instantiate the idea of *Magellan* from its outset.

The constellation, then, becomes a way of concentrating the multitude of images that make up the infinite film. I have chosen to call this process a conflation, as these influences allow for the utopian resonances of the endeavour to interact on a level which proposes a network of celestial interactions between the cardinal points marked out for the work. This relation to the atlas in time, spread across the calendar year, was the form of Frampton's idea of metahistory, which emerges through his subsequent experiments in film. Perhaps due to the costly and ambitious scope of the original scheme (not to mention how it could be stored after its exhibition), the *Magellan* project would eventually be migrated onto film.[47] On January 20 1968 Frampton wrote to Odlin to say that he was confident that the hour-long *Zorns Lemma* would be finished in time for the Knokke-le-Zoute film festival in Belgium that year. In fact, it would take him two more years to complete, *Magellan* would take him the rest of his life.[48] It is this sense that I argue the atlas, a model which provides for the open aesthetics of modernity, frames Frampton's autobiographical particularity for a historical project based entirely on the medium of film.

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[46] Letters, 1964, 12.

[47] From the perspective of a photographic project directed towards the cinema, the work is seen as 'complex, messy, and unmoored,' see Zaher, "By Mind and Hand," 110-12.

[48] *Letters*, 1965/8, 9. In fact the festival he was referring to was initially known as Exprmntl, which took place in an empty casino in the small town in Belgium. Exprmntl 4, took place in 1967, featuring Frampton in a supporting role, as he appeared in Michel Snow's *Wavelength* (1967). Clearly Frampton planned for his own films to be there in the following year, which ended up being a year of political upheaval that also spilled over into the festival. See Xavier Garcia Bardon, 'Exprmntl: An Expanded Festival. Programming and Polemics at Exprmntl 4, Knokke-le-Zoute, 1967,' *Cinema Comparat/ive Cinema,* No.2 Forms in Revolution, 2013, http://www.ocec.eu/cinemacomparativecinema/index.php/en/15-n-2-forms-in-revolution/133-exprmntl-an-expnded-festival-programming-and-polemics-at-exprmntl-4-knokke-le-zoute-1967.

## 2.1.3 The Atlas and the Archive

*A map of the world that does not include utopia is not worth even glancing at, for it leaves out the one country at which humanity is always landing.*
Oscar Wilde, *The Soul of Man Under Socialism*

In contrast to the emphasis placed on the meaning of photography in the documentary archive, the atlas has only relatively recently come to feature prominently in the discourses on the history of modern art and photography.[49] Yet Frampton's interest in the atlas seemed to precede his thinking seriously about the archive, which would also figure significantly in his thinking, and for *Magellan*, at a later date.[50] Particular to photographic or other reproducible images, categorised as reprographics, it is now common to relate the proliferation of print-based media to the emergence of a global consciousness, or at the very least to changes in the way certain knowledge has been made available in the time of industrial reproducibility. While the archive retains its administrative function as a question of order, the organisation of knowledge through images can move in ways that also resists their administration. Photography, therefore, is also coded as 'living' in an unsettled and

[49] Although Warburg's *Mnemosyne Atlas* dates to the late 1920s, it was only published as a volume in Warburg's collected works in 2003 after being imagined by Warburg initially as early as 1905. Ernst Gombrich, *Aby Warburg: An Intellectual Biography*, with a memoir on the history of the library by F. Saxl (London: Warburg Institute and University of London, 1970), 285. See Aby Warburg, *Der Bilderatlas Mnemosyne* Herausgegeben von Martin Warnke unter Mitarbeit von Claudia Brink. Zweite, ergänzte Auflage (Berlin: Akademie Verlag, 2003). See also *Aby Warburg Mnemosyne Bilderatlas: reconstruktion – commentary – revision 09/01-11/13/2016,* eds. Axel Heil, Margrit Brehm, and Roberto Ohrt (Karlsruhe: ZKM, 2016). Alternatively, the project *Psychological Atlas* (1949) by the Scottish artist Eduardo Paolozzi, based on the work of popular science by David Katz, is presented by John-Paul Stonard in the Spring 2011 edition of *October.* See John-Paul Stonard, 'Eduardo Paolozzi's *Psychological Atlas*,' *October,* 136 (Spring 2011): 51-62. Gerhard Richter's ongoing work *Atlas* (1962— ), is of course the most well-known example of the form related to photographic modernism, and will be discussed further below.

[50] In a letter to Enno Develing which served as the catalogue essay for Carl Andre's exhibition at the Haags Gemeentemuseum in 1969, Frampton wrties: 'I write to you now rather in the role of archivist, not a very competent or thorough archivist, granted, but the only one available.' Frampton proceeds to write of his knowledge and 'systematic photography' of Andre's work. Frampton, "Letter to Enno Develing," *CA*, 279.

'unattainable' sense (as Raymond Bellour has proposed), and remains thoroughly utopian for its sense of lost time.[51]

Writing on the emergence of the photographic archive, artist and theorist Alan Sekula (1951-2013) understood a 'territory of images' to be determined by the particularly proprietary terms for the designation of an archival collection. As such, Sekula's essay, 'Photography Between Labour and Capital,' also posited links between the photographic archive and the vernacularisation of knowledges in relation to the proliferation of humanist projects concurrent with the emergence of mercantile capitalism. As an example, Sekula presents the *Encyclopedié: ou dictionnaire raisonne des sciences, des arts et des métiers* (Encyclopedia, or a Systematic Dictionary of the Sciences, Arts, Crafts), produced by Denis Diderot (1713-1784) and Jean le Rond D'Alembert (1717-1783) between 1751-1772, as one point of origin for the dissemination of reprographic, or discrete, images in the context of a highly stratified bourgeois culture in 18th century Europe, aiming to cut across the divisions imposed by literacy amongst the classes. 'The photographic project itself,' Sekula writes, 'has from the very beginning been identified not only with the dream of a universal language, but also with the establishment of global archives and repositories according to models offered by libraries, encyclopaedias, zoological and botanical gardens, museums, police files, and banks.'[52]

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[51] Writing in 1975 Bellour notes: 'The only code constituted by Christian Metz has been a syntagmatics of the image band, and if most analyses have concentrated, with a kind of quite explicable fascination and impatience, on the textual workings of the image as it were, expressing a voluntarily agreed restriction that clearly never ceases to transgress its limit, since that limit is illusory.' Raymond Bellour, 'The Unattainable Text,' *Screen*, 16, no. 3 (Glasgow 1975), 25. By 1985 Bellour could write: 'In truth, there are no longer, or should no longer be, analyses of films. There are just gestures.' Raymond Bellour, 'Analysis in Flames,' in *Diacritics*, 15, no. 1 (Spring 1985): 52-6. Both essays are reproduced side by side in Ehmann and Farocki's publication alongside the exhibition, *Kino wie noch nie/Cinema like never before* (ed. by Antje Ehmann / Harun Farocki and published by Sabine Breitwieser (Wien: Generali Foundation / Köln: Walther König, 2006), 113-20; 121-4. Rebecca Sheehan noted the relevance of Bellour's text for Frampton, in her PhD thesis. Sheehan, "Towards an "Infinite Cinema"," 39-43.

[52] Allan Sekula, "Photography between Labour and Capital," in *Mining Photographs and Other Pictures: a Selection from the Archives of Shedden Studio, Glace Bay, Cape Breton.*

Written in 1983, Sekula's essay was deeply influenced by the growing anglophone reception of the writings of Walter Benjamin's at the time. Furthermore, this kind of thinking about the role of archives in relation to the 'dream of a universal language' present in the formalisation of highly reproducible, discrete images, also follows a thread which Frampton had presciently figured as 'infinite film' in the "Metahistory" essay from 1971.[53] By the 1990s, the meaning of the archive shifted register, particularly given the growing anticipation for the publication in English of Benjamin's *Passagenwerk,* as well as the art historical proximity of the collected writings of Aby Warburg, which would both appear in 1999. In his curatorial project dedicated to the Atlas, Georges Didi-Huberman gestured to this link in a particular way: the archives of a particular culture could only produce an atlas of a thoroughly global one.[54] His articulation of the atlas as both a concept and a metaphor, revisited a mode of divinatory history, no longer wedded to a linear idea of narrative form which provides a history arranged from beginning to an end, but one that is now search-based and rhizomatic, seeking hidden sympathies between conceptually distinct works, and aiming at reconnecting the discontents of enlightenment rationalism. I argue that it is a similar approach which Frampton had imagined for *Magellan* as a young man, as both and artwork and an anthropological framework addressed to art history through film.

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*1948-1968,* photographs by Leslie Shedden, edited by Benjamin Buchloh and Robert Wilkie (Halifax: Press of the Nova Scotia College of Art and Design, 1983), 197. On Diderot's role in the publication of general knowledge during this time see Thomas Crow's introduction to *Diderot on Art I & II*, trans. John Goodman with an introduction by Thomas Crow (New Haven: Yale University Press, 1995).

[53] Frampton's "Metahistory" essay for *Artforum* seems to have introduced the idea of the interminability of the archive to the American art community. See also Douglas Crimp's essay, describing Benjamin's aura becoming a 'ghost' in "The Photographic Activity of Postmodernism," *October,* 15 (Winter 1980): 91-101.

[54] Georges Didi-Huberman, *Atlas. How to Carry the World on One's Back?* exh. cat. (Madrid: Museo Nacional Centro de Arte Reina Sofia and Tf. Editores, 2010), 14. The exhibition was held at ZKM, Karlsruhe from May 7 to November 28, 2010; MNCARS, Madrid from November 26, 2010 to March 28, 2011; Sammlung Falckenberg, Hamburg, September 24 to November 27, 2011.

One particular example from Didi-Huberman's exhibition captures—in a way that is related to Frampton's work—the renewed tension between words and images promoted by photographic media from out of the archive, and foregrounded by the *Atlas* exhibition. *Erth* (1971), a 16mm film by the British artist John Latham (1921-2006), features a section in which the *Encyclopedia Britannica* is presented in its entire edition sequentially, page by page. This section was included by Didi-Huberman in his *Atlas* exhibition. In the same year as Frampton's "Metahistory" essay appeared Latham photographed each page on single consecutive film frames. In its playback the Encyclopedia is shown in a rapid-fire six minutes at 24 frames per second (equating nearly 9000 pages with the individual frames of the film). The resulting crazy blur of the strictly formal repository of general knowledge is then followed by a longer series of images of the earth seen from space, which had been recently produced by NASA's decade-long Apollo space program (fig. 2.4).[55]

[55] Didi-Huberman, *Atlas*, 235. The film was first shown during 'INN70' at London's Heyward Gallery, 1971. At the end section of Latham's work *Erth*, a 25 minute 'whole-event' work consisting of time-based photos of Earth, was a sequential series of film images of every page of the Encyclopedia Brittanica. Latham's conceptual practice focussed on what he termed Time-Base theory, and included event-focussed activities like book-burning as a form of negative sculpture actions, which he called Skoob Tower Ceremonies, c. 1966. See *John Latham: Art after Physics*, exh. cat. (Stuttgart and London: Edition Hansjörg Mayer, 1991).



Fig. 2.4 A frame from the 'Encyclopaedia Britannica' section of John Latham's *Erth* (16mm, colour, sound, 25mins., 1971).

Latham's work proposes a new relation between the form of the book and the world as mediated by film, and this territory of images is suggestive more of the atlas as opposed to the archive, as Didi-Huberman proposed. If Frampton's *Magellan* metaphorises the emergence of a global consciousness through navigation, and relates it to the photographic archive, his stated interest in early practitioners of photography and film such as the Lumières, to Duchamp, and also the work of Étienne Jules-Marey (1830-1904), Eadweard Muybridge (1830-1904), Thomas Edison (1847-1931), the emerging artist photography of Group f/64 figures such as the aforementioned Weston, as well as the East Coast modernism of the 291 Gallery and Paul Strand (1890-1976), suggests an archival impulse that is framed by a particular type of monumental vision.[56] However, *Magellan*'s reference to a moment much

[56] Throughout his career Frampton continued to write about the history of photography, focussing on these figures in particular.

earlier than the 18th century *Encyclopédists* (despite the fact Frampton would also refer to it in his discussion of the work), furthermore positions the question of the atlas as appearing prior to the archive, which inevitably follows from the expedition and collection of disparate knowledges.[57]

Early modern exploration across the Atlantic Ocean, and the first documented circumnavigation of the world undertaken by Magellan (1480-1521), the Portuguese commander, makes the initial conceit of the project a question of revolutionary modernity. The expedition, which was completed in 1522 by his Spanish deputy, the naval commander Juan Sebastián Elcano (1475-1526), following Magellan's death at Mactan on the island of Cebu in what is now the Philippines on the 27th of April 1521, is inscribed on a terrestrial globe made by Johannes Schöner (1477 – 1547) around 1526, and is now believed to be 'the earliest known cartographic representation of the route taken' by the expedition, according to experts (fig. 2.5).[58] It has also been supposed that this globe was the model for the depiction included in the much discussed painting from 1533 by Hans Holbein the Younger (1497-1543), known as *The Ambassadors* (figs. 2.6a & 2.6b). Curiously Holbein's painting, which was produced through his patronage by the Habsburg monarchy, elides the circumnavigation from the globe, perhaps due to sensitivities concerning the political ramifications of the voyage at the time.[59]

[57] To be fair, Sekula also situates the importance of Agricola's *De re metallica* (1556) as the early modern basis for the representation and documentation of mining labour by photography in his essay. See Sekula, "Photography Between Labour and Capital," 203-49.
[58] Lisa Jardine and Jerry Brotton, *Global Interests: Renaissance Art between East and West* (London: Reaktion, 2000), 55.
[59] Antonio Pigafetta, *Magellan's Voyage: A Narrative Account of the First Circumnavigation*, trans. R.A. Skelton (New Haven: Yale University Press, 1969), 30-1.



Fig. 2.5 19th century facsimile of the 16th century 'Ambassadors Globe'. 1 globe: 12 woodcut paper gores mounted on solid wooden sphere, 54 cm. in diameter delineate the route of Magellan's expedition. BEIN 2003 1481, Beinecke Library, New Haven, CT.

Perhaps better known for its anamorphic depiction of a skull at the base of the symbolic portrait of the two ambassadors, Holbein's painting locates the emergence of a global imaginary by conflating two incommensurable points of view within a single image. The painting—and its anamorphic device—is referred to by Jacques Lacan in his Seminar XI, first presented at the beginning of 1964 and known as 'The Four Fundamental Concepts of Psychoanalysis'.[60] Addressing the concept of the gaze, Lacan describes *The Ambassadors* as representing a splitting of signification by demonstrating the impossibility of reducing images to a purely language-based consciousness.[61] Opticality, at the foundations of modern perspective, was therefore likened to a mode of experience that always exceeded, or came prior to language, which then refined it synoptically. It follows then, that the logocentric

[60] Jacques Lacan, *The Four Fundamental Concepts of Psychoanalysis,* ed. Jacques-Alain Miller, trans. Alan Sheridan (London: Hogarth Press, 1977).
[61] Ibid. 87-9.

rationality which the Magellan expedition had brought with them as they set out to claim the world for Christian Europe, could only help to bring the cultural complexities of the "new" world into view. The atlas, therefore, comes prior to the archive because of this incommensurability, not despite it.



Fig. 2.6a Hans Holbein the Younger, *The Ambassadors*, 1533,
oil on oak, 207x209.5cm, National Gallery, London.



Fig. 2.6b The terrestrial globe in Hans Holbein the Younger's, note the spelling of AFFRICA which matches Schöner's globe. *The Ambassadors*, detail (inverted).

One of the few survivors of the first circumnavigation was a supernumerary on the voyage named Antonio Pigafetta (1491-1534). Pigafetta's journal is now given as the primary document recording the trip, and it reveals how the Magellanic world can be seen to add further significance to *The Ambassadors*, as one of many symbolic elements encoded in Holbein's composition.[62] Pigafetta was from Venezia in the Republic of Venice, and he both recorded and reported his experience of the journey upon his return to the Medici Pope Clement VII (1478-1534), as well as the nobility and patrons of the arts of the time, such as Isabella d'Este (1474-1539) at the Mantuan court in 1522.[63] Most importantly for Frampton, Pigafetta's account included a description of the 'clouds of Magellan', and the constellations discovered and used by the expedition to navigate the Straits were subsequently adapted for the film by Frampton, using the aleatoric compositional strategy of rolling the dice to

[62] For a more recent analysis of the arguments about the scientific instruments included in Holbein's painting see Elly Dekker and Kristen Lippincott, "The Scientific Instruments in Holbein's Ambassadors: A re-examination," *Journal of the Warburg and Courtauld Institutes*, 62 (1999): 93-125.
[63] See R.A. Skelton's introduction to Pigafetta, *Magellan's Voyage*, 14.

determine their arrangement using number and chance for the *Clouds of Magellan* section of the film.[64]

This nexus of chance and meaning in Frampton's cinematic incursion demonstrates how *Magellan* is also indebted to works of musical composition. And while this will be examined further in the chapter on *Palindrome,* it is also worth briefly mentioning here. Frampton couldn't have failed to notice the orchestral program for mapping the intersection of both chance and indeterminacy established by composer John Cage (1912-1992), for example in his work *Atlas Eclipticalis* (1961-2) (fig. 2.7), following its notorious performance by the New York Philharmonic Orchestra on the evening of November 9, 1964.[65] A more explicit linking of clouds (as both constellations and floating masses of water vapor in the earth's atmosphere) with the atlas was eventually made by Cage's student, Toshi Ichiyanagi (1933—), and his keyboard suite *Cloud Atlas I-X* (1985-99). Furthermore, Cage's use of *I Ching*

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[64] In the diary of the first circumnavigation by the supernumerary, Pigafetta's description of Magellenic clouds (*Nubecula major* and *Nubecula minor*) occurs just once in the narrative, appearing to guide the expedition when the fleet are within 50 degrees of the Antarctic Pole, below the 'roaring forties', as 'two clouds with little distance between them.' These clouds are in fact nebulas outside of the milky way. Antonio Pigafetta, *The First Voyage Around the World 1519-22: An Account of Magellan's Expedition*, ed. Theodore J. Cachey Jr (Toronto: University of Toronto Press, 2007), 25; 151 n127. On the question of number and chance the contemporary philosopher Alain Badiou says, in his book on the 20th century, titled *The Century*: 'The distinction between number as a form of being, on the one hand, and number as stopgap for the failure of the real, on the other, is so important for me that I have devoted an entire book to it. [*Number and Numbers*, 1990] As a counter-example, Stéphane Mallarmé was a thinker of number in the guise of the dice-throw. But for Mallarmé number is anything but the material of opinion. It is 'the unique number that cannot be another,' the moment in which chance is fixed—by the intermediation of the dice-throw—as necessity. There is an indissoluble link between chance, which is not abolished by a dice-throw, and a numerical necessity. *Number is the cipher of the concept.* That is why, as Mallarmé concludes, 'Every thought emits a dice-throw.' Alain Badiou, *The Century*, trans. Alberto Toscano (London: Polity, 2005), 27. This link between the dice-throw and the cloud as a navigational emblem will become clearer in the fourth chapter, on *Palindrome.*

[65] Cage's score for the work, which premiered in Montreal on the 3rd of August 1961, used an atlas of the stars published in 1958, *Atlas Eclipticalis 1950.0,* by the Czech astronomer Antonín Becvár (1901-1965), superimposing musical staves over the charts of the stars. On the controversy surrounding the later performance of the work in New York, see the chapter "When Orchestras Attack! John Cage Meets the New York Philharmonic," in Benjamin Piekut, *Experimentalism Otherwise: The New York Avant-Garde and Its Limits* (Berkeley: University of California Press, 2011), 20-64.

hexagrams could also be seen to be a source for Frampton's interest in the hexagon as a kind of talisman which reappears throughout *Magellan*—not to mention Pound's interest in Chinese literature and language through the academic orientalism of the American Ernest Fenellosa (1853-1908). As a geometric figure, the hexagon can also be connected to the flattened cube, a six-sided diagram which appears at the end of the fifth row in a 1974 table by Sol LeWitt (1928-2007), *Variations of incomplete open cubes* (fig. 2.8) and paradoxically describes a closed, 2-dimensional hexagonal shape within the set of isometric figures.

Representing the threshold at which Euclidean geometry and perspectival collapse occurs, the hexagon became for Frampton a figure for the transgression of geometric perspective and therefore Western history. Furthermore, Frampton collapses the idea of a "God's eye" perspective onto the existence of a 'hexagonal lattice' framework upon which his pathway structures for *Magellan* were based, explaining this in an interview with Deke Dusinberre and Ian Christie.[66] The hexagon motif also accords with the structure of the retinal pigment epithelium in the fundus of the human eye (the interior surface of the eyeball), which consists of a single layer of hexagonal cells that nourish the retinal visual cells.[67] Here, in a more direct way than he had done in his 1973 paper 'Mental Notes', Frampton makes a link between the idea of historical perspective and an ocular privileging of

[66] Frampton explains: 'If there is announced or believed to be a grand design, which seems to be the case for this film [for *Magellan*], this is in anticipation of a kind of hindsight, you understand. That eye is something that changes its colours and its configuration. I winced internally when you said that, because there is a two dimensional map or diagram of the whole thing which, when seen from a distance with all its construction on a hexagonal lattice and with various kinds of coding marks (colours, numbers and so forth), when seen from that distance reduces it to a kind of pantheist mush. That notation, or map, is a very large rendering of the human eye.' Dusinberre and Christie, "Episodes from a Lost History," 117.

[67] Barbara Cassin, Sheila A.B. Solomon, Melvin L. Rubin, M.D., (ed.), *Dictionary of Eye Terminology*, second edition (Gainseville, FL: Triad, 1990), 229.

the gaze as it relates to the cinema, which he suggests via a formal schema he had developed out of the modernist grid as a map, what I have called his atlas of film.[68]



Fig. 2.7 John Cage, *Atlas Eclipticalis* (sketch), 1960-1.

Meanwhile the historical proximity of the circumnavigation by Magellan to the revival of the memory arts in the early modern period suggests furthermore that the work can also be understood through Yates' recovery of the art of memory, as that which operates alongside historical narrative. Pigafetta's story of *Magellan's* fate would reach the court of Francis I (1494-1547) in France, following the expedition's initial sponsorship by Charles V (1500-1558), who was the Holy Roman Emperor during a period in which the realm expanded to the point where its domain was so large that the "sun never set" upon it. The Friulian philosopher, Giulio Camillo, had shared his design for a memory theatre with Francis I, who agreed to patronise Camillo as its inventor in 1530. Camillo, who was also present at the coronation of Charles V, would most likely have heard of Magellan's expedition, and in his idea of the theatre for accessing universal knowledge, offers a parallel to an emerging

[68] Hollis Frampton, "Mental Notes," *CA,* 255-7. 'Our imaginary cube partakes, rather humbly, of a metaphor for which I have no name.' This is a text Frampton which delivered at the "Buffalo Conference on Autobiography in the Independent American Cinema," at SUNY Buffalo in March 1973.

global consciousness based on both an empirical understanding of the world as it was newly defined, as well as concerns for the organisation of knowledge, which included the use of magical emblems for adapting antique memory systems.

Just what influence Magellan's circumnavigation played on Camillo's notion of the memory theatre remains uncertain, however, and the complexities of this early moment for conflating global with universal thought suggested new possibilities for the idea of totality: a territory of images which could map the entire world. This potentiality matched with Camillo's belief in a universal memory based on his magical apparatus, and although it prefigured the cinema by hundreds of years it nevertheless situates Frampton's idea of a metahistory of film, as a 'synoptic conjugation' of 'all knowledge', squarely at this moment in early modernity.[69]



Fig 2.8 Sol LeWitt, *Variations of Incomplete Open Cubes* (1974).

[69] "Metahistory," *CA*, 138.

The globe was not yet an atlas, however, and the emergence of the book form for the reference of cartographic mapping as an indexed utility, like a technical reference manual or catalogue, would only take place over the following centuries.[70] Importantly, the historical form for the collection of tables, plates, and images, was soon to offer itself back for depiction to the same artistic circle of innovators from which it had first sprung. The first use of the term atlas in a geographical sense was to come with the posthumous publication, in 1595, of a set of maps by the cartographer Gerardus Mercator (1512-1594). Mercator's *Atlas Sive Cosmographicae Meditationes de Fabrica Mundi et Fabricati Figura (Atlas, or Cosmographical Meditations Upon the Fabric of the World and Figure of the Fabrick'd)*, based on his earlier world map, which was produced whilst he lived in Duisburg (now in Germany) in 1569 (fig. 2.9).[71] The term *figura* in Mercator's title links Didi-Huberman's contemporary revival of the form to the idea of the atlas as a metaphorical procedure, while also providing further resonances with the historical basis for a figurative understanding of photography and film as linked to the visual mapping of the world, and importantly as an artistic project dedicated to memory.

[70] See A.E. Nordenskiöld, *Facsimile-Atlas to the Early History of Cartography, with Reproductions of the Most Important Maps printed in the XV and XVI Centuries*, trans. J.A. Ekelöf and C.R. Markham, Stockholm 1889, repr. (New York: Dover, 1973). A technical manual is how Sekula treats Georgius Agricola's 16th century illuminated catalogue on mining and the refining metals, *De re metallica*.

[71] Gerardus Mercator (1512-1594), the atlas manuscript, produced in Duisburg in 1595 is now in the collection of the Library of Congress of the United States of America, G1007.A7 1595, 3 pts. in 1 v. port., 107 col. maps (part fold.), 45 cm.



Fig. 2.9 Gerardus Mercator, *Nova et Aucta Orbis Terrae Descriptio ad Usum Navigantium Emendate Accommodata*, World Map, 1569.

## 2.2 *Magellan* and Art History

*the whole history of art is no more than a massive footnote to the history of film.*
Hollis Frampton, "Notes on Composing in Film" (1975)

In a 1979 article for *Film Criticism*, David Bordwell highlighted the art cinema which he understood to recapitulate the form of the novel, by recalling the analysis of epic and dramatic literature written during WWI by György Lukács: 'if the classical protagonist struggles,' Bordwell writes, 'the drifting protagonist traces an itinerary, an encylopedic survey of the film's world.'[72] If, as Lukács says, 'the novel seeks, by giving form, to uncover and construct the concealed totality of life,' then the art cinema, Bordwell argues, does something similar—he then lists filmmakers like Federico Fellini (1920-1993), Ingmar Bergman (1918-2007), Andrzej Wajda (1926-2016).[73] In this concern for the innovations by filmmakers born between the two World Wars (as was Frampton), Bordwell points to the fact that the 'author', and not yet the artist, 'becomes a formal component, the overriding intelligence organising the film for our comprehension'.[74] Further to the idea of order, and alternative to the notion of 'systems' in art, the organisation of images on film seems to reveal the conditions for the emergence of the artist-filmmaker as a question of the history of art.

Echoing the concluding remarks of the "Metahistory" essay which describes it as a 'synoptic conjugation', the typewritten document Frampton prepared for securing funding for his project in the 1970s, the 'Statement of Plans for *Magellan*', presents the work as 'the synoptic explication of a single metaphor,' where Frampton writes that 'the protagonist of my work,' i.e. the figure of Magellan, 'must

[72] David Bordwell, 'The Art Cinema as a Mode of Film Practice,' *Film Criticism,* 4, no. 1 (Fall 1979), 58.
[73] Bordwell also cites Francois Truffaut (1932-1984), Roman Polanski (b. 1933), Alain Resnais (1922-2014), and Jean-Luc Godard (b.1930). Georg Lukács, *Theory of the Novel: A historico-philosophical essay on the forms of great epic literature* (1920) trans. Anna Bostock (Cambridge, MA: MIT Press, 1971), 60.
[74] Bordwell, "The Art Cinema," 59.

be a first-person consciousness that bears resemblances to myself'.[75] Frampton's film-work of necesssity conflates the figure of the artist, as author, with the 'drifting protogonist' perceived by those critics as the character of the novel.[76] In this case of Romantic self-portraiture, however, it is the conflation of Frampton's own subject position as the author of the work, with the literally drifting historical figure, Fernão de Megalhães, or Magellan, whose fateful 16th century naval expedition, despite its leader's death in the midst of the endeavour, was the first to record a complete circumnavigation of the terrestrial globe by finding a route through the Tierra del Fuego and across the South Pacific Ocean. This 'tour' of the globe is the central metaphor used for the creation of the film's subject as synonymous with the work's maker, of Frampton himself, as the "Tourist". But if he is a tourist, what is the terrain which he is touring? Given the approach to images was prepared by art history, it was this discourse—named explicitly at the beginning of the "Metahistory" essay—that Frampton had set out to visit. In this case the identification of Frampton with Magellan gives way to the author as an explicitly 'formal component' of the work, and as such the conflation here occurs as a metaphor of the cinema itself, the subject who changes their subjectivity now does so as the product of the film, just as an actor does on a set or on the stage in the theatre. Of course, given the distinction between art and life was a particular concern for the avant-garde, Frampton's motivations would hardly seem out of place amongst his artistic contemporaries.

By the late 1970s *Magellan* had come to incorporate elements as diverse as the digital arts and from early works of cinema sourced from the paper print collections

[75] "Statement of Plans for *Magellan*," *CA*, 226. The statement continues: '(if only as the amalgam H. C. Earwicker/Anna Livia Plurabelle resembles James Joyce)... and, even, to Flash Gordon and Fantômas of the filmic vulgate.'

[76] The common term 'auteur' is an obvious contender for the creators of art cinema. However, the term has rarely if ever been applied to Frampton. One point of entry for the theory of the auteur in its English reception, closest to Frampton's milieu, is Andrew Sarris, 'Notes on the Auteur Theory in 1962,' *Film Culture*, 27 (Winter 1962/3): 1-8.

of the Library of Congress.[77] That it could be said Frampton's films 'elaborated a lexicon of tropes,' as P. Adams Sitney had argued in relation to Frampton's work as a whole, hints at the ambition of his project.[78] Language on film was not semantic in any logical or meaningful sense, however, and can only be articulated as such in poetic and metaphorical terms, and when Frampton died in 1984 *Magellan* was left as a work-in-progress, unfinishable. His proposal to 'systematically map the terrain of film art', as laid out in the Statement of Plans, therefore tied the work to the biography of the artist in the very way Frampton was at pains to justify from the very beginning of the ambitious project.[79] Furthermore, by this stage it appeared any supplementary material for the work was no longer needed, and was not to be included—only the film (and its schedule) remains.

The unfinished work, often viewed as a 'practice or approach', suggests the incorporation of an aesthetics of openness into the reception of the artwork by contemporary institutions and galleries. This presents as many difficulties in reconstructing the intentions of the artist as the construction of the work itself, when using established historical methods.[80] It is for this reason that *Magellan*, as both an artwork on film as well as a methodological intervention that aimed to critique the moment when art historians chose science because 'science favoured the fact', suggested to Frampton that chance and probability was precisely the way into

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[77] The paper print collection of early motion picture film at the Library of Congress in the United States of America, 1891-1912 was initially registered as photographic series in order to be entered into the collection, and consists of films printed to archival paper. On origins of the collection see Kemp R. Niver, 'From Film to Paper to Film,' *The Quarterly Journal Of The Library Of Congress.* 21, no. 4 (October, 1964): 248-64.

[78] P. Adams Sitney, 'Hollis Frampton,' *The Films of Hollis Frampton November 16, 17, 18 Walker Art Center Auditorium 8pm* (Minneapolis: Walker Art Center, 1972), 4.

[79] "Statement of Plans for *Magellan*," *CA,* 226.

[80] Kelly Baum, Andrea Bayer, and Sheena Wagstaff, 'Introduction: An Unfinished History of Art,' in *Unfinished: Thoughts Left Visible* (New York: The Metropolitan Museum of Art, 2016), 13. *Gloria!*, a completed part of Frampton's *Magellan* cycle, was included in this exhibition, *Unfinished: Thoughts Left Visible*, at the Metropolitan Museum of Art in New York from March 18 through September 4, 2016. For a discussion of the aesthetic of openness in the work of art as 'pure potentiality,' see Giorgio Agamben, *The Man Without Content,* trans. Giorgia Albert (Stanford: Stanford University Press, 1999), 66.

the issue.[81] By focussing on memory, and upon the relationship between Yates' work and the legacy of Warburg in the history of art, this aspect of the work will be considered further in the chapter on *Zorns Lemma*, helping to situate Frampton's work in the long 20th century.

Despite his insistence on the 'synoptic' character of *Magellan* as a 'Tour of Tours', my argument that cultural memory is philosophically closest to Frampton's metahistory, against the positive, structural logic of the film form can also be understood by linking Frampton's work to the historical avant-garde's interest in the idea of formlessness. Georges Bataille (1897-1962), who had adapted the models of the encyclopedia and dictionary for dissident surrealism and the *Acéphale* group in 1947, also figures as another default of origin for *Magellan*, alongside Auguste and Louis Lumière, Marcel Duchamp, James Joyce, and Ezra Pound.[82] In perhaps the strangest analogy for any project on film before or since, at one point Frampton compares his intentions for *Magellan* to the formlessness of dirt, in a marked antithesis to the idea of the summary work. 'There is dirt,' he told Scott MacDonald in the same year as Bordwell's essay on the art cinema appeared, 'but nobody wants to have anything to do with the chemistry of dirt because dirt is in fact genuinely complex,' concluding: 'if you're going to get involved with *Magellan,* then, of course, you're up to your eyeballs in the chemistry of dirt'.[83]

Where Frampton addressed dirt, Bataille had embraced shit as one limit point for his 'scatological obsessions' which aimed at the subversion of Western logocentrism.[84] To navigate this problem, Frampton developed a montage strategy

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[81] "Metahistory," *CA*, 132.
[82] See the reprinted edition of *Documents'* complete 'critical dictionary' Georges Bataille et. al, *Encyclopaedia Acephalica*, eds. Georges Bataille, Robert Lebel & Isabelle Waldberg, introduction by Alastair Brotchie, trans. by Iain White, Dominic Faccini, Annette Michelson, John Harman, Alexis Lykiard et al. (London: Atlas Press, 1995).
[83] Hollis Frampton cited in Scott MacDonald, 'Interview with Hollis Frampton,' *Film Culture,* Nos. 67/68/69 (1979), 75.
[84] Rosalind E. Krauss, 'J: *Jeu Lugubre*,' in Yves-Alain Bois and Rosalind Krauss, *Formless: A User's Guide* (New York: Zone Books, 1997), 109. This link is significant for understanding Frampton's use of the dirt metaphor here. Frampton is cited in a way

based upon the structure provided by the hexagonal lattice and the matrix (fig. 2.10). Figured by the explorer Magellan, and out of the Cartesian flatness of the modernist grid, Frampton's work also sought to incorporate chance strategies for the direction of this tour.[85] Rolling the dice, a motif he linked to the poetics of chance in the work of Stephane Mallarmé (1842-98), was one way forward. Strategies such as these allowed the complexity of the formless 'dirt' of film's metahistory—its infinity of gestures—to be addressed, and navigated using an aesthetic of indeterminacy. This strategy, linking the work to the idea of cultural memory through its focus on the peripheries, the discarded (as in *Palindrome*), and the out-of-the-way, will be addressed further below. For the time being it suffices to say that, opposed to the centrality of the historical narrative, this broad approach attempted a strange mixture of the implications of the discovery of the globe with the existing notion of universalism.

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that creates and analogy with Breton and Dali in the introduction to *Formless* by Yve-Alain Bois, titled 'The Use Value of "Formless"'. Frampton's role as the photographer of early scatological works by Carl Andre in cement, and for which Andre subsequently refused permission for inclusion in the *Formless* exhibition, involves him in the surely playful situation whereby Andre's 1950s works did not 'represent' his work in general. See Bois and Kraus, *Formless*, 258 n24. Interestingly, this analogy casts Frampton in the role of artist – Dali – and Andre as Breton and Bois is echoing the disruptive surrealism of *Documents*-era Bataille and his concept of the *informe*. Importantly, the book arranges its concepts alphabetically, suggesting the randomising principle of order offered by language in its arbitrariness.

[85] The classic account of the arrival of the grid structure in modernism is Rosalind Krauss' essay, 'Grids', where she presents the generative root of a tension in the manifold for perception between the measured and the experienced as pointing to an ahistorical potential of modernism's version of the quest for the essence of things. Rosalind Krauss, 'Grids', *October,* 9 (Summer 1979): 51-64.

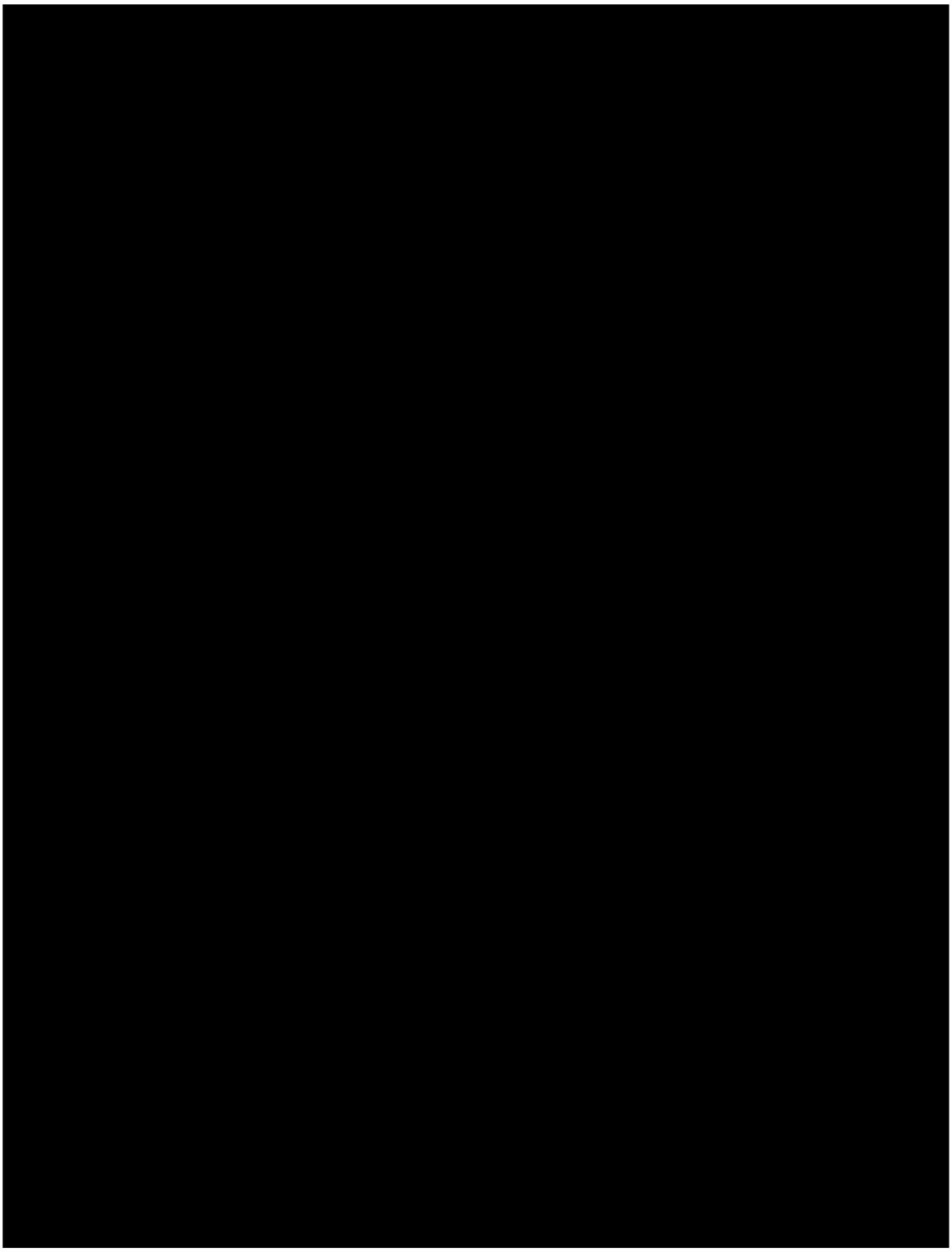


Fig. 2.10 Hollis Frampton, production notes for *Magellan*, 27 March 1976, Box Y, Hollis Frampton Archive, Anthology Film Archives, New York.

Since the appearance of Frampton's first ciné-films, officially beginning with *Information* (1966), a short film featuring multiple exposures of a light-bulb in black and white, Frampton's work has most often been measured against 'Structural' film in its relationship to the history of experimental cinema in its New American

Cinema Group phase. As an artist-filmmaker, beginning with his own definition of film as simply being about film in the work *A Lecture* (1968), it can now be shown how Frampton's work demands to be examined more broadly in its relationship to modernism as addressed also to early modernity.[86] The aims of placing it in the context of archival projects modelled on the recovery and interpellation of the atlas as a dynamic form for organising knowledge spatially also suggests a metaphorical model for cultural memory that has only recently re-emerged. It is this latent aspect of a critical art history in the 20th century that simultaneously reflects upon the methods for the presentation and display of the work of art after WWII.

Distinguishable from other literary forms for the organisation of concepts in language, reference works like the dictionary and the thesaurus, or even the almanac, suggest Frampton's *Magellan* approximates an encyclopaedic form for knowledge based topographically upon spatially arranged images rather than on a linear and textual narrative. The atlas becomes the constellated ground for the *episteme,* represented by and surviving in the artwork as an emblematic map of images in the formless network, a *dispositif* which survives the 20th century's administrative archival impulse. However, as the atlas is applied to Frampton's continual use of indexed and alphabetically arranged literary forms for his films, which ultimately allowed for synoptic abbreviations of the *Magellan* project, it is important that we keep in mind the constant correspondence posed between words and images.

At one point, a note suggesting an idea for the creation of at least a part of the *Magellan* cycle, is formulated by Frampton in the following way (fig. 2.11):

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[86] 'But only one thing has *always* been in the projector.

Film.

That is what we have seen.

Then that is what all films are about.'
Hollis Frampton, "A Lecture," *CA*, 128.

"Dictionary" i.e. a set of images defined in terms of other images w/in a closed set [film = a portion of CLOUDS(?)] a film that "works like" a dict/y.

Given the oscillations between the archive and the atlas that can be witnessed in Frampton's idea of *Magellan,* I am aiming here at the elucidation of the meaning of the work as a whole, given that the atlas is also a kind of wordless dictionary of images. After titling each section, the question was how to organise them. Given the lexicon had already been prepared for by art history, the possibility that film provided the means to organise these images was tested in earnest by initially focussing on elemental things like fire, water, and plant and animal life (and death).

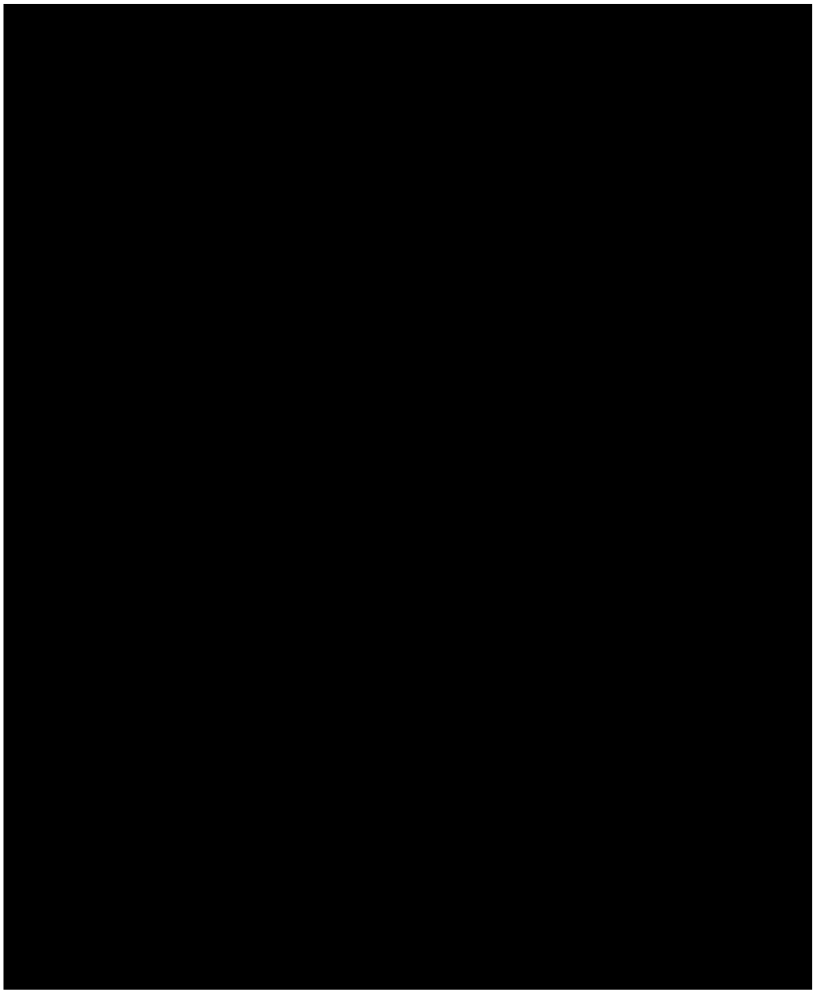


Fig. 2.11 Hollis Frampton, production notes for *Magellan*, Box Y, date unknown (c. 1976)
Hollis Frampton Archive, Anthology Film Archives, NY.

### 2.2.1 *October* and the Two Avant-Gardes

Before his attempt at making and exhibiting at least parts of *Magellan*, Frampton's significance as an artist-filmmaker was established through the discursive networks that existed between New York and the European artistic avant-gardes and especially in the initially distinct 'structural film' milieu announced by P. Adams Sitney in his essay, "Structural Film," which first appeared in 1969.[87] It was this divide which Annette Michelson sought to address by inviting Frampton to write for *Artforum* in 1971. Since Sitney's later arguments concerned the relation of the New American Cinema to the nature philosophy of American transcendentalist Ralph Waldo Emerson (1803-1882), the distinction has only became more pronounced.[88] Nevertheless, Sitney's "Structural Film" essay, published as the lead article of the *Film Culture* journal, set the tone for Frampton's initial reception as a filmmaker who was an inheritor of the earlier pioneers in the North American film avant-garde. The figures Sitney names, such as Kenneth Anger (b. 1927), Gregory Markopoulos (1928-1992), and perhaps more importantly for Frampton, Stan Brakhage (1933-2003), all appear to frame a cinema which was limited by the question of their formal engagement with film as an ensemble. Sitney's therefore focussed his arguments on the experimental approaches of a newer group of artist-filmmakers (including Frampton) who had developed a cinema that, as he says, was principally concerned with the 'overall shape' of their films. As I will revisit this moment in the fourth chapter of this thesis in more detail, it is sufficient to note here that Sitney's argument identified their use of certain production procedures to achieve a

[87] Sitney, "Structural Film."
[88] Sitney's argument appears forced when he writes: 'Frampton seems to have filtered his Emersonianism through reluctant and oblique conduits: Ezra Pound, John Cage, and even Brakhage.' P. Adams Sitney, *Eyes Upside Down: Visionary Filmmakers and the Heritage of Emerson* (Oxford: Oxford University Press, 2008), 101.

sense of formal simplicity. These included looping, flicker, rephotography, and fixed framing of the works' subjects.[89]

Brakhage's earlier treatise, *Metaphors on Vision,* was championed by Jonas Mekas (1922-2019), the filmmaker and publisher of *Film Culture,* and its impact on Frampton's filmmaking was to be immense.[90] Michelson's position as a founding editor of the *October* journal in New York in 1976, however, following her commitment to Frampton's writing as an editor of *Artforum*, and as one that posited the relationship between contemporary art and the cinema in a fundamentally new way, helped to better situate Frampton's project as both theoretical in its links to the avant-garde as well as experimentalism in his work on film. By 1976 then, Frampton's writing for *October*, as well as the journal's support for his artistic legacy after his death, subsequently placed his work in direct contact with advanced art criticism in both America and across the Atlantic, and in ways which seemed previously unmanageable for artist-filmmakers.

Published in Spring 1976, *October's* first issue included contributions by, amongst others, Michel Foucault and Noël Burch. Frampton's "Notes on Composing in Film" appeared as the closing essay of this issue.[91] Its editors, Jeremy Gilbert-Rolfe, Rosalind Krauss, along with Michelson, had named literature,

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[89] Sitney, "Structural Film," 1. Sitney includes re-photography as a characteristic of structural film in a later version of the essay, of whichh there are three main versions. Apart from the orginal *Film Culture* publication, it was revised in the Winter of 1969 and republished in the *Film Culture Reader: An Anthology*, ed. P. Adams Sitney (New York: Praeger Publishers, 1970), 326-348. It was again revised in 2002 for the third edition of the anthology of his writing, first published in 1974 as *Visionary Film: The American avant-garde 1943-2000* (Edinburgh: Edinburgh University Press, 2002), 347-370.

[90] Brakhage, *Metaphors on Vision*, op. cit. The entire issue was dedicated to Brakhage's text, and was designed by Maciunas, who would be the chief critique of Sitney's application of the term structural to a select group of filmmakers. See George Maciunas, "Some Comments on *Structural Film,* by P. Adams Sitney, (*Film Culture No. 47, 1969)*," dated Dec. 5 1969. The table was published in *Film Culture: An Anthology*, ed. P. Adams Sitney (New York: Praeger Publishers, 1970), 349.

[91] Hollis Frampton, "Notes on Composing in Film," *October,* 1 (Spring, 1976): 104-10. This essay was originally a text delivered at the "Conference on Research and Composition," State University of New York at Buffalo, in October 1975. It is reprinted in Frampton, *Circles of Confusion*, 117-25, and *CA*, 149-56.

painting, architecture, and film as placing equal demands upon their critical, and intertextual engagement with modern art through the lens of contemporary French theory.[92] However, the editors borrowed the name for the journal from the revolutionary film made by the Russian filmmaker Sergei Eisenstein, *October* (1927), for its embodying of the potential which the cinema held for drawing the arts together, and for the form which they describe as 'paradigmatic for our century'.[93] In their opening statement they also named Brakhage as a successor to the suprematist painter, Kasimir Malevich (1878-1935), suggesting that both men embodied the modernist tradition of uncompromising artistic idealism in a way which demanded the sober critique promised by the editors.[94] The confidence with which Frampton exhibits his theory of filmmaking in its pages suggests that, by 1976, his persistence with the concept of metahistory alongside his commitment to making *Magellan* was already enough to see his work as akin to the 'radical artistic practice' that the editors of *October* had determined to be the journal's main line of inquiry.[95]

However, a contrasting narrative for this moment was British filmmaker and theorist Peter Wollen's text "The Two Avant-Gardes," first published in London in the year before the launch of *October.*[96] The essay was the re-published in 1976 for an edition organised for the Edinburgh Film Festival, at which Frampton was in attendance to screen parts of *Magellan.* Wollen's text distinguishes between different approaches to advanced filmmaking by arguing for the existence of two, parallel avant-gardes: one closer to painting and responding to what he called the 'break'

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[92] "About October," *October,* 1 (Spring, 1976): 3. The journal's stated aim was to restore criticism to its materialist and idealist foundations against existing journals such as *Artforum,* for which both Michelson and Krauss had formerly written and edited, and which in 1976 they characterised as descending into 'pictorial journalism'.
[93] Ibid. 4.
[94] Ibid.
[95] Ibid.
[96] Peter Wollen, "The Two Avant-Gardes," *Studio International,* 190, no. 978 (November/December, 1975): 171-175.

between the signifier and signified in modern semiotics, the other as closer to a dialectical montage practice engaged with investigating the narrative character of early cinema.[97] Wollen suggested that this latter tendency within the avant-garde was more apparent in Europe because its association with art cinema—represented in Wollen's essay by Jean-Luc Godard—was kept at arms-length by the artist-filmmaker communities which belonged to the former avant-garde who were apparently more interested in producing work independently and experimenting with film's radical potential.[98] The first "avant-garde" was comprised of the independent Co-ops movement and collaboration was instead posed through the exploitation of formal concerns that cohered around the contemporary discourse on medium specificity. As such this avant-garde was supposed to be more closely related to the New York milieu, as a part of which Frampton had increasingly played a crucial role during the years prior to the publication of Wollen's essay.

In this way the convergence of Frampton and Godard (mediated on screen by Pound reading the *Cantos*, no less) at Cannes two decades later, when his name appears towards the end of part 4(b) of Godard's monumental *Histoire(s) du cinéma* (1988-1998) project, and Frampton's "Metahistory" essay was handed out for distribution to the press (fig. 2.12), retrospectively problematises Wollen's

[97] The festival ran from August 22 – September 4 1976. Edited by Phil Hardy, Claire Johnston and Paul Willemen, the *Edinburgh '76 Magazine, Issue 1: Psycho-analysis, Cinema, and the Avant-garde,* was published especially for the Edinburgh Film Festival and featuring writing by Christian Metz, Julia Kristeva, and others, reprinting Wollen's essay on pages 77-86. During the festival two 'special events' were scheduled. The program 'Psychoanalysis and Cinema' ran against the 'International Forum on Avant-Garde Film,' perhaps this split re-inforced Wollen's point about the avant-garde binary.

[98] In a recent inteview, Michelson expresses the distinction between the two film avant-gardes in the following way: 'I considered writing an essay called "The Work of Two Stanleys," in which I would regard Kubrick and Brakhage side by side. You could not have two more disparate modes of production than those of the two Stanleys, both of them insistent on independence, though of sharply distinct economies.' Annette Michelson, "Expanded Cinema: Annette Michelson talks with Rachel Churner about *On the Eve of the Future*," *Artforum*, 55, no. 7 (March 2017): 81.

arguments.[99] If nothing else, this event in 1998 suggests a suturing of the supposed bifurcation of filmmaking practices proposed by Wollen had now occurred, following the 1976 Edinburgh International Film Festival, which had featured the early screenings of films from *Magellan*.[100]



Fig. 2.12 Still from Jean-Luc Godard, 'The Signs Among Us' (1998), part 4(b), *Histoire(s) du cinema* (1988-1998), video, 288mins, colour, sound.

That a split was the main case to be discussed at the festival was also due to the fact that the profile Frampton had managed to develop through both his filmmaking and writing, championed as it was by Michelson, meant that by 1976

[99] See Hollis Frampton, "Pour une métahistoire du film. Notes et hypothèses à partir d'un lieu commun," trans. Cécile Wajsbrot, *Trafic*, 21 (March, 1997): 130-138, and Jonathan Rosenbaum, "Bande-annonce pour les "Histoire(s) du cinema" de Godard," *Trafic*, 21 (March, 1997): 5-18. On Godard's pamphlet see Nicole Brenez, "Recycling, Visual Study, Expanded Theory—Ken Jacobs, Theorist, or the Long Song of the Sons," trans. Adrian Martin, *Optic Antics: The Cinema of Ken Jacobs*, eds. Michele Pierson, David E. James, and Paul Arthur (Oxford: Oxford University Press, 2011), p. 160; p. 173 n12.

[100] See Michael Witt, *Jean-Luc Godard, Cinema Historian*, (Bloomington, IN: Indiana University Press, 2013), 108. Witt also links Godard's project, albeit superficially, to Warburg's *Mnemosyne Atlas* (on page 3). A French translation of *Circles of Confusion* was published in 1999: Hollis Frampton, *L'écliptique du savoir*, éd. A. Michelson, J.-M. Bouhours (Paris: Centre Georges Pompidou, 1999).

Frampton's influence had already spread far wider than the various Filmmakers Co-op's, which had also established a network of links predominantly between the US and Europe. By this stage Frampton's work had been screening at a number of high-profile film festivals internationally for a number of years. In fact, in the same year as Wollen's article appeared in *Studio International,* Frampton's work was reaching a mainstream audience through the Parisian daily newspaper, *Le Monde.*[101] So it was clear that when, in August 1976, Frampton presented *Magellan: At The Gates Of Death* in Edinburgh, his connection to the moment of structural film in New York already seemed to be a distant memory. Yet the art historical significance of the period is yet to be established.

Reviewing that year's Edinburgh Film Festival for *Screen,* Donald MacPherson suggested Frampton's presentation of this silent section of *Magellan*, which featured heavily manipulated images of a dissected human body shot in the anatomy lab of the University of Pittsburgh, was a clear exception to the broadly conceived 'two avant-gardes' thesis—and he already posited the possibility of a convergence between the two modes from the outset.[102] *The Gates of Death* not only focused on the human body and autopsy, however, but collated these images through coloured filters and an editing technique which foregrounded the filmic nature of the work, indebted as it was to Brakhage's *The Act of Seeing with Ones Own Eyes* (1971), which had also been shot at a morgue in Pittsburgh.[103] As evidence MacPherson noted 'the interminable production in the film of differences within repeated systems' as his evidence of this convergence between the formal and the psychological.[104] In particular, he understood that *Magellan*—in a way that was then

[101] Louis Marcorelles, 'Avant-garde,' *Le Monde*, January 2, 1975, 7.
[102] Donald MacPherson, "Edinburgh Film Festival 1976," *Screen*, 17, no. 4 (Winter 1976): 105-111.
[103] Frampton's cuts of *Magellan: At The Gates of Death* shown in Edinburgh featured two parts: 'The Red Gate', and 'The Green Gate', which were both 52 minutes in length. Later each film was divided into twelve sections of 5 minutes each. See Dusinberre and Christie, "Episodes from a Lost History," 104.
[104] MacPherson, "Edinburgh Film Festival," 109.

echoed years later by Godard's *Histoire(s)* project—was a film which 'simultaneously constructs and deconstructs the memory of the film,' in its references to Brakhage and therefore of itself as it spilled out onto the screen.[105] Clearly, *Magellan* suggested the collapse of the false binary suggested by the Edinburgh Film Festival's bifurcation of the advanced film programs between 'Psychoanalysis and Cinema' and the 'International Forum on Avant-Garde Film'. By appearing to situate *Magellan* between the contested poles of "cinema" and 'film" respectively, Frampton was aiming rather at "art" and as such at art history.

### 2.2.2 Aby Warburg's *Atlas*

The renewal of the atlas as a reference model in the era of photography took place in the early part of the 20th century, as the abstracted ordering of the archives into the 19th century threatened to become anarchic and incoherent. Specifically, for art history the atlas re-appeared within the context of the Kulturwissenschaft Bibilothek Warburg (KBW), a privately instituted centre for the study of the science of culture (*kulturwissenschaft*). Originally based in Hamburg, the institute was the vision of Abraham 'Aby' Warburg, who was the eldest son of the director of M.M Warburg & Co., a family-owned bank, who had decided to dedicate his life to the study of culture through art history. Following Warburg's death, the Institute was moved to London in 1933 to escape the clutches of National Socialism, where it remains today as a part of the School of Advanced Study at the University of London.

Elaborating a research approach dedicated to the study of images from the broadest range of cultures and periods, the KBW pioneered the use of photographic images as a comparative technology for art historical research. Warburg's *Mnemosyne*

[105] Ibid.

*Atlas* was the final outcome of this approach, which Warburg began in earnest in 1924 and which remained an ongoing project at the time of his death in 1929. Its principle idea consists of arranging photographic constellations of images onto black panels, and evidenced a heretofore hidden pathology for the transmission of culture which Warburg named 'dynamograms' (fig. 2.13).[106] Since its inauguration it has been a wide-ranging source of influence on subsequent generations of artists and theorists of modernity, inspired by Warburg's undefined method. The collection and presentation of amateur photographic images for the work *Atlas* (1962—) by the German post-war painter Gerhard Richter, for example, suggests the atlas is not so much an archive, but a way of responding to the proliferation of archival conditions as the foundation of industrial society. As such, the atlas is a model that proposes a way of searching through history conceived in the widest terms, focussing on images and their transmissions of meaning through the gestures of those depicted. It is in this way that the atlas proposes a perspectival framework, a 'looking through' its subject as one such device, or *dispositif.*[107]

[106] Johnson, *Memory, Metaphor,* 8. Giorgio Agamben defines Warburg's concept of the 'dynamogram' as related to Richard Semon's '*engram'* from his book *Die Mneme* (1921), describing the idea as symbols that are 'transmitted to artists in a state of great tension, but that are not polarized in their active or passive, positive or negative energetic charge; their polarization, which occurs through an encounter with a new epoch and its vital needs, can then bring about a complete transformation of meaning.' Giorgio Agamben, 'Aby Warburg and the Nameless Science,' *Potentialities: Collected Essays in Philosophy*, trans. Daniel Heller-Roazen (Stanford: Stanford University Press, 1999), 94.

[107] Cf. the translators note on the term *Dispositif perspectif* in Hubert Damisch, *The Origin of Perspective,* trans. John Goodman (Cambridge, MA: MIT Press, 1994), xi.

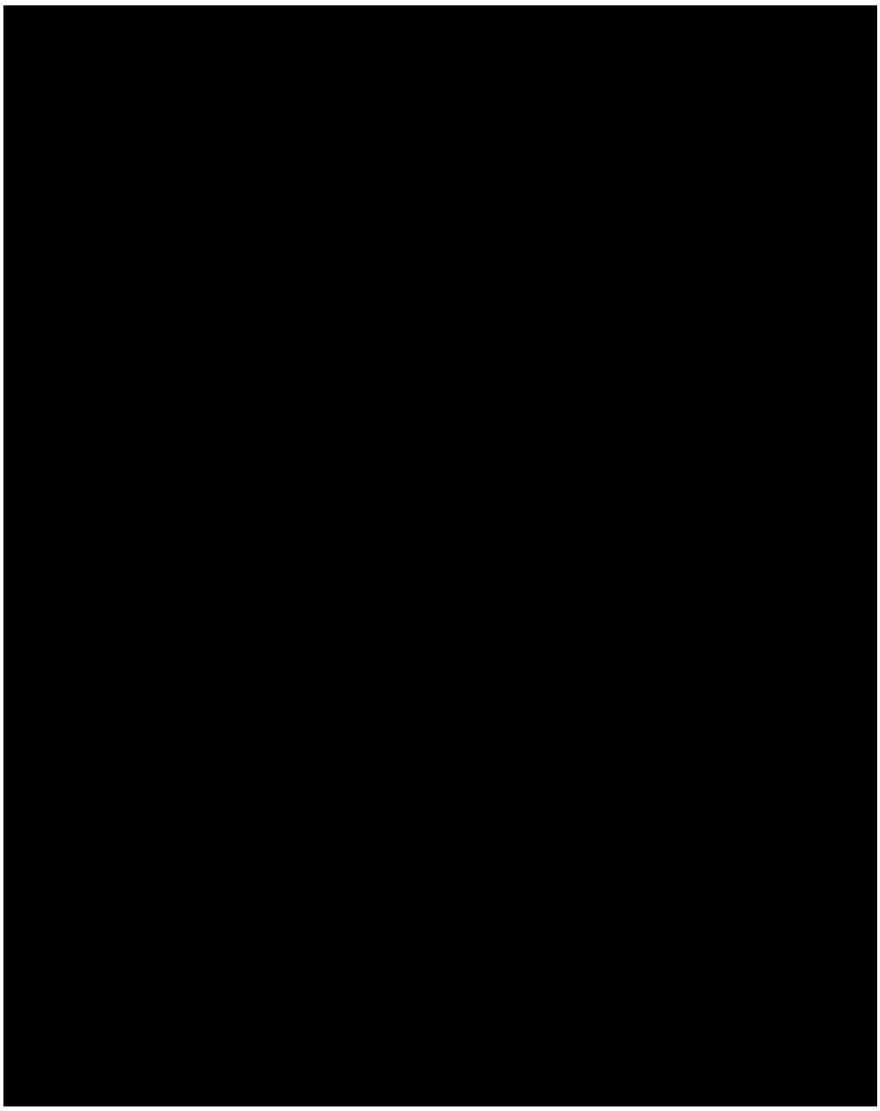


Fig. 2.13. Photograph of panel 79 from Aby Warburg, *Mnemosyne Atlas*, 1926-1929.

In contrast to other models of early photographic research, for example the project undertaken by Albert Kahn (1860-1940), titled *Les Archives de la planète* (The Archives of the Planet, 1908-1931), which consists of a series of colour photographs and motion picture films, as well as black and white photographs and stereography, the atlas as a form for describing global modernity has been mainly adapted as a model for critical research in Germany.[108] The analysis of history and capital undertaken by the filmmaker and writer Alexander Kluge (1932—) along with the

[108] On Albert Kahn's photographic project as an archive see Trond Lundemo, ""The Archives of the Planet" and Montage: The Movement of the Crowd and "the Rhythm of Life"," in *Between Stillness and Motion: Film, Photography, Algorithms*, ed. Eivind Røssaak (Amsterdam: University of Amsterdam Press, 2011), 207-224.

social theorist Oskar Negt (1934—) in the 1970s and 80s—in particular in their text *History and Obstinacy* from 1981, employs the term in a way that is specific to its resonance within this cultural milieu.[109] More recently, the Austrian artist-filmmakers Gustav Deutsch (1952—) and Hanna Schimek (1948—), have undertaken a project that closely adheres to Warburg's model of the Atlas for their own archaeology of filmmaking history.[110] Warburg's work in particular continues to influence artists and curators as a model for global art history in the 21st century, from the work of Romanian artists Dan (b. 1961) and Lia Perjovschi (b. 1961), to the aforementioned projects by Didi-Huberman.

The metaphorical power of the atlas as a model of the global as well as the general form for spatialising or diagrammatising events both formally and historically continue to engage successive generations of artists in the sense linked to its original versatility. Warburg's idiosyncratic atlas marks a moment in which the use of discrete images emerges to over-throw the hegemony of writing for modernity and is openly related to the divinatory practice which sees the celestial

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[109] See Alexander Kluge and Oskar Negt, 'An Atlas of Concepts (with Interspersed Stories),' *History and Obstinacy*, ed. with an introduction by Devin Fore, trans. Richard Langston et al. (New York: Zone Book, 2014), 389-440.

[110] See Gustav Deutsch and Hanna Schimek, "Notes; On Light | Image: A Forum for Art and Science," in *Light Image Imagination,* eds. Martha Blassnigg, Gustav Deutsch, and Hanna Schimek (Amsterdam: Amsterdam University Press, 2013), 289-298. Growing interest in Warburg's work post-WWII has meant that the atlas has become a form of reference for work by contemporary artists and filmmakers alike. In another example, Walid Raad (1967—), and the fictional collective *The Atlas Group* (1989—), addressed it to the history of Lebanon and the Lebanese wars of 1975-1991. On Raad's *The Atlas Group* see the website for the project http://www.theatlasgroup.org/; Kassandra, Walid Raad, and Britta Schmitz. *The Atlas Group (1989-2004): A Project by Walid Raad.* Berlin: Walther König, 2006. Alternatively the *Pastario, or Atlas of Italian Pastas* (1985) presented by Peter Kubelka, the Austrian filmmaker responsible for the early 'flicker' film within the context of the post-war avant-garde, *Arnulf Rainer* (1960), adapted the atlas for a more playful work of comparative analysis whereby types of pasta are organised under the principle of an 'architecture for the mouth', in collaboration with his Italian students at the time. See Fernanda Gosetti and Eugenio Medagliani, *Pastario. Or Atlas of Italian Pastas: A first attempt to catalogue Italian pastas, conducted under the patronage of the Staatliche Hochschule für Bildende Künste, Frankfurt am Main STAEDESCHULE by Eugenio Medagliani and Fernanda Gosetti, on the basis of regional Italian traditions and of the different types of pasta made by national manufacturers. (drawing by Libero Gozzini and Wilma Incerti) with an essay by Prof. Peter Kubelka on the nature and meaning of Pasta* (Crusinallo: Alessi, 1985).

sphere as an influence upon the terrestrial. When it was first employed by Mercator, the signifier 'atlas' was meant to refer not only to the world as a map but also to the creation, history and collection of knowledge in a way that would contrast it to the existing form of the *Theatrum*.[111] The Atlas is thereby linked with the Theatre, and can be understood as a corollary to the theatre of memory as it was envisioned by Giulio Camillo only a few decades prior to the publication of Mercator's atlas.[112] While it is certainly the case that the atlas as a figure of myth represents the principle splitting of universality and totality (Atlas is a Titan tasked with holding up the celestial sphere, separating it from the western edge of the world), it is also often the case that Atlas is consistently mis-identified as supporting the terrestrial globe on his shoulders. The two spheres, the celestial and the terrestrial, are conflated by the introduction of the camera, and it is possible to show how the metaphor of Atlas becomes for modernity—as an echo of the myth of the Titan—an embodied figure of the recursive and trans-historical repetition of images presented from the cultural memory of radically digressive, but convergent, traditions.

The particular idea of the 'lawlessness' of archives also remains an influence on the atlas, a difficulty in naming what this cartographic separation and convergence means for the identification of signs, of semiology in art history, and for our ability to read and understand images from the past and consequently the present. In this way the atlas has revealed itself to be a form operating against the classificatory prescriptions of archival knowledge as ordered according to highly

[111] In this way Abraham Ortelius (1527-80), who published *Theatrum orbis terrarum* (*Theatre of the Whole World*) in May 1570, can serve as a link between the idea of the atlas and the idea of the world as a theatre. Cf. Gerardus Mercator, *Atlas sive Cosmographicae Meditationes de Fabrica Mundi et Fabricati Figura* (1595), commentary by Robert W. Karrow, Jr. (Oakland: Octavo, 2000), 2-3.

[112] Cf. Johnson, who describes Warburg's use of the term atlas as functioning cartographically but also 'as a conceit to yoke together cosmographical and art-historical material'. Johnson, *Memory, Metaphor*, 10.

abstract alpha-numeral systems.[113] Warburg's own massive library at the KBW Institute was arranged according to his own peculiar concept of reference and governed by specific modes of inquiry. It was not meant to collect everything, in fact it was highly selective and therefore not 'universal' in the sense of totality. Warburg's notion of a 'good neighbourhood of books' presupposed the algorithmic idea of the 'nearest neighbour', a tour of all possible locations in the most economical way.[114] This mode of selection and focus, I argue, can be compared with Frampton's sense of a 'synoptic conjugation' of history as a 'tour' in *Magellan.* In the same way, we cannot just 'read' *Magellan*, as Didi-Huberman reminds us about the atlas, just as both projects—Warburg's and Frampton's—cannot attain to a 'definitive form'.[115]

### 2.2.3 The Anomic Atlas

In his PhD thesis on the work of Gerhard Richter, Benjamin H.D. Buchloh includes a chapter addressing the artist's turn to amateur photography, in the broader context of a period now known as Capitalist Realism, centred in Dusseldörf between the years 1962 and 1966. In this way the development of the Richter's *Atlas* project is related to his principal practice as a painter. Buchloh begins his

[113] In an essay linking Diderot and Eisenstein, via the figure of Bertolt Brecht, Roland Barthes writes: 'In the theatre, in the cinema, in traditional literature, things are always seen *from somewhere.* Here we have the geometrical foundation of representation: a fetishist subject is required to cut out the tableau. The point of meaning is always the Law: law of society, law of struggle, law of meaning. Thus all militant art cannot but be representational, legal…in the long run it is the Law of the Party which cuts out the epic scene, the filmic shot; it is this Law which looks, frames, focusses, ennunciates.' Roland Barthes, 'Diderot, Brecht, Eisenstein,' trans. Stephen Heath, *Screen,* 15, no. 2 (1974): 38.
[114] See 'The Library of Aby Warburg,' *The Warburg Institute*, https://warburg.sas.ac.uk/library/library-aby-warburg, accessed Jan. 5 2019. On the principle of the nearest neighbour and its relationship to the Travelling Salesman Problem and optimisation, see E.L. Lawler, *The Travelling Salesman Problem: A Guided Tour of Combinatorial Optimization* (New York: John Wiley & Sons, 1985).
[115] Didi-Huberman, *Atlas,* 14.

discussion of the atlas, which he calls 'The Anomic Archive', by following his conviction that, by the 1990s—his thesis was completed in 1994—it had become all but clear that 'photography can be discussed as a private phenomenology and as a partial semiotics, but not as a comprehensive history.'[116]

Following this provocation, and permitting Rosalind Krauss' identification of the emergence of a 'photographic condition' informing the art of the period, he postulated the 'anomic' character of Richter's photographic tableaux, one at odds with history as such (fig. 2.14). But Buchloh does not yet address it to other forms of photographic collection, to Warburg's *Atlas* for example, which he will only take up in the decades following his proclamation of the novelty of Richter's approach. Subsequently Buchloh set out to refine his position on this work, and the 'photographic condition' of the 20th century as the impulse to document and record things that intricate convention. This idea now appears to have influenced the critical art history, in which he has been an active participant since the 1970s, as a contributor to and an editor of the *October* journal.

[116] Benjamin H.D. Buchloh, "Gerhard Richter: Painting after the subject of history" (PhD diss., City University of New York, 1994), 41.



Fig. 2.14. Gerhard Richter, *Atlas*, installation view, December 1972, Hedendaagse Kunst, Utrecht.

Frampton, as an original contributor to the *October* journal's critical and theoretical investigation of photography, can be seen as among the more compelling examples of an engagement with the historical ruptures produced by the introduction of photography.[117] Therefore the proximity of the photographic archive to the atlas, and vice-versa, makes them at times almost indistinguishable as modern forms for recording and cataloguing information, especially when addressed to photography and other serially reproducible media. Buchloh eventually framed this problem through a reference to Warburg in particular: 'The question to be asked,' he writes in 1998, 'is how both positions on Warburg's photographic project'—i.e. as archive or atlas—'on the one hand, and the debate on and formal

[117] For example Rebecca Solnit praises his writing on Eadweard Muybridge in her book *Rivers of Shadows: Eadweard Muybridge and the Technological Wild West* (New York: Penguin, 2004), 84. Frampton's essay "Eadweard Muybridge: Fragments of a Tesseract," was originally published in *Artforum*, 11, no. 7 (March 1973): 43-52. It is republished in *CA*, 22-32.

structuring of archival photographic collections, on the other, operate.'[118] By adopting the concept of anomy from the early sociology of Émile Durkheim (1858-1917), which featured in particular in his writing on suicide from 1897, Buchloh attempted an answer to this very question.[119]

In a later essay on the *Atlas*, published *October* in 1999 under the title 'Gerhard Richter's *Atlas*: The Anomic Archive', he returns to Warburg and now mentions Durkheim by name—alongside Freud and Richard Semon's theories of memory (Semon himself having committed suicide in 1918 following Germany's defeat in WWI)—relating their work to the mnemonic aspect of the atlas (while also following arguments made by Sigfried Kracauer, Roland Barthes, and Walter Benjamin). For Buchloh, Warburg's archive-oriented selection of over 1000 images, can only be seen as authentic when its photographic basis in an empirical, practical approach to thinking in images is revealed as related to trauma:

> The photographic image in general was now defined as dynamic, contextual and contingent, and the serial structuring of visual information emphasised open form and potential infinity, not only of photographic subjects eligible in a new social collective but equally an infinity of contingent, photographically recordable details and facets that would constitute each individual subject within perpetually altered activities, social relations and object relationships.[120]

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[118] Benjamin H.D. Buchloh, "Warburg's Paragon? Photomontage in Postwar Europe," in *Deep Storage: Collecting, Storing, and Archiving in Art,* eds. Ingrid Schaffner and Matthias Winzen (Munich: Prestel Verlag, 1998), 54.

[119] Durkheim contrasts anomy with egoistic and altruistic modes of suicide and defines it as resulting from a lack of regulation, causing suffering. Emile Durkheim, *Suicide: A Study in Sociology* (1897), trans. John A. Spaulding and George Simpson, edited with an introduction by George Simpson (London: Routledge, 2002), 219.

[120] Benjamin H.D. Buchloh, "Gerhard Richter's Atlas: The Anomic Archive," *October*, 88 (Spring 1999): 131. This essay was originally published in the German as "Gerhard Richter, *Atlas*: Das Archiv der Anomie," in *Gerhard Richter*, Vol. 2 (Bonn: Kunst-und Austellungshalle der Bundesrepublik Deutschland), 1993; it was

Buchloh's concern was that this technical practice can only be ultimately directed towards death. He therefore refused to see Warburg's project—which carefully arranged images according to groups or themes, and included images of works from antiquity as well as from Warburg's own time—as addressed to the *survival* of the gestures observable in these images, against the demands for novelty professed by the historical avant-garde. It is in precisely this way, following his idea of 'tradition', that I argue Frampton's *Magellan* is similarly concerned with the survival of a historical repertoire of gestures on film, and as such can be approached not only as a novel form for film, but also as a work addressed to its capacity for holding and maintaining cultural memory.

At about the same time as Buchloh makes these claims, Didi-Huberman argues alternatively that Warburg's atlas is best approached through the concepts of filmic montage, as opposed to photomontage, not because of any sense of temporal continuity of the diachronic material, but because it was concerned with '*visually unfolding the discontinuities of time* throughout all of history'.[121] Warburg's links to the development of the cinema and movement, as intricating and complexifying the 'relationship between man and the image he constructs of his universe,'[122] has since been thoroughly examined in the literature as 'a conceptual interrelating of transparency, movement, and impression'.[123] At the same time, the development of a

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republished in *The Archive*, ed. Charles Merewether (London: Whitechapel and Cambridge, MA: The MIT Press, 2006), 85-102. Following this statement Buchloh then compares Marc Bloc (1886-1944) and the *Annales* historians to the 'Soviet model of the photographic,' Osip Brik in particular, 'The organisational and distributional form will now become the archive, or as Rodchenko called it, the photo-file, a loosely organised, more or less coherent accumulation of snapshots relating and documenting one particular subject.' Ibid. 133.

[121] Georges Didi-Huberman, *The Surviving Image – Phantoms of Time and Time of Phantoms: Aby Warburg's History of Art* (2002), trans. Harvey Mendelsohn (University Park, PA: The Pennsylvania State University Press, 2017), 311.

[122] Didi-Huberman, *The Surviving Image*, 313.

[123] In his book on cinema and the *Mnemosyne* atlas, and introduced by Didi-Huberman, Phillipe-Alain Michaud writes: 'if we relinquish defining the cinematographic apparatus on the basis of material determinations—film as the

media-art practice contrasting light and darkness in the phantasmagoric presentation art history, towards the black ground upon which the reproductions used for the *Mnemosyne Atlas* were placed, has paved the way for a psycho-historical approach to space as a perspectival innovation that challenges history as such.[124] These fundamental question of movement re-emerged for art history just as art was turned into reproducible pictures by the discrete mechanical processes for the series of images taken up by the cinematic apparatus. Or, as in Didi-Huberman's words: 'All art will henceforth be understood as an art of memory.'[125]

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conjunction of a supple celluloid medium, perforation, and rapid emulsions—and instead consider it, in a more unusual and larger framework, as a conceptual interrelating of transparency, movement, and impression, we will discover, within the field of cinema, the same categories Warburg used in the history of art.' Philippe-Alain, Michaud, *Aby Warburg and the Image in Motion*, trans. Sophie Hawkes (New York: Zone Books, 2004), 39-40.

[124] On the notion of 'Black Screens' see Noam M. Elcott, *Artificial Darkness: An Obscure History of Modern Art and Media* (Chicago: University of Chicago Press, 2016), 77ff.

[125] Didi-Huberman, *The Surviving Image*, 312.

Warburg's development and expansion of art history's iconological method relied on the technical intervention of photography (and thus of film) in order to present the scope of the study he was proposing. For Didi-Huberman, and others like Philippe-Alain Michaud, montage is the key concept for thinking about the images in Warburg's atlas. In this way the atlas is a metaphor of the spatial relations between the figures set out upon a matrix, within which they are understood as both moving and dynamic.[126]

When contemporary art historians like Mieke Bal write of the movement of the image in film, as 'a technical concretisation, or even an embodiment, of the movement inherent in the image as such,' she is adapting Warburg's pioneering use of photography as an art historical research method brought back to the cinema.[127] The presentation of the "*pathosformeln*", formulas which can be discovered in the presentation of emotional affectivity which move across and through time, show how they adhere to the mimesis of gesture. Despite there being no positively identifiable formula being posed by Warburg within his montage practice, which rather emphasised the dynamism of images observable in the traces left by their transmission across cultures and across time, his work nevertheless has offered a way for subsequent art historians to approach the image as such through discrete images.[128] By attempting to deal more carefully with the heterogeneity of discrete

[126] Warburg's black screens are discussed at length by Christopher D. Johnson and can be understood as related to Noam M. Elcott's focus on the cinematic function of the 'black screen' in the history of media and art, although they are not discussed there. Johnson, *Memory, Metaphor,* 9-10.
[127] Bal, *Thinking In Film*, p. 16.
[128] For Aby Warburg's famous formulation of the 'emotive rhetoric' of images, see Aby Warburg, 'Dürer and Italian Antiquity (1905),' in *The Renewal of Pagan Antiquity: Contributions to the Cultural History of the European Renaissance,* introduction by Kurt W. Forster, trans. David Britt (Los Angeles: Getty Publications, 1999), 556. On the relation between Warburg's *pathosformeln* and the psychoanalytic identification of gestural symptoms see Georges Didi-Huberman, '*Dialektik des Monstrums:* Aby

images, Didi-Huberman suggests that the complex relationship existing between film and visual culture bears more than just the arrival of a new medium.[129] Understood by Bal to offer a 'technical concretisation' for affective memory, and furthermore focused upon the 'interval'—the gaps between images as suggested in earlier writing on montage by Dziga Vertov (1896-1954)—these processes underscore Warburg's provocation to art history's reduction of images to meaningful symbols and corresponds to the emergence of cinema as a new model for consciousness made possible by film.[130] In this chapter I have proposed that it is this same impulse that Frampton is attempting to elaborate with *Magellan*, the interval of the relationship between the stars that permit the navigation and the constellation that produces the image.

That the idea of movement in artistic images informs and has subsequently been superseded by what is now termed affect theory, is noted by theorists of contemporary media such as James Elkins and W.J.T. Mitchell as resulting in a renewed emphasis upon 'visual literacy'.[131] This trajectory locates Bal's own approach to images as part of a larger development in the history of art, concerned

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Warburg and the Symptom Paradigm' in *Art History*, 24, no. 5 (November 2001): 621-645.

[129] At one point he claims: 'Above all else, the *Mnemosyne Atlas* is a photographic apparatus [dispositif],' suggesting an epistemological horizon has been opened up by Warburg's use of film whereby he aims *'to make a picture with the photographs'*. Didi-Huberman, *The Surviving Image,* 296.

[130] Didi-Huberman writes of the 'practical value' of the 'models Warburg employed' against the dominant orientation set for Warburg's heritage by Panofksy. Ibid., 175.

[131] James Elkins, *The Object Stares Back*: *On the Nature of Seeing* (New York: Simon and Schuster, 1996), 14. See also, *Visual Literacy,* ed. James Elkins (New York: Routledge, 2008), for a collection of essays on this topic, particularly the chapter by W.J.T. Mitchell, "What is Visual Culture?" 207 – 217. Mitchell's 'new kind of iconology' – which he has termed *Bildwissenschaft* – emerges, according to Hans Belting, 'not so much in methodology as in the claim that it enables the study of iconic media not based on texts.' While this seemingly suggests an affinity with Warburg's work, Belting continues, 'the debate, however, centers on the question of whether or not image studies are a part of art history,' a question rendered irrelevant by our focus on Warburg and Frampton as working within the art historical milieu. Hans Belting, *An Anthropology of Images*, 2. On Mitchell's Iconographic renewal and the 'pictorial turn' in its vigorous re-appraisal of the status of the image see Jacques Ranciére, "Do Pictures Really Want To Live?" *Culture, Theory and Critique*, 50, no. 2 (December 2009): 123 – 132.

more readily with how moving images can be related to memory, and not just to the history of their production. Cultural memory is one approach to writing about these technical concretisations in an expanded sense, in a way which is also sensitive to material that does not aim to transmit meaning as such, yet may become meaningful in time. Elaborated in the work of Jan and Aleida Assmann, cultural memory opposes the literary determinism inherent to history as a technique dedicated to temporal narrativisation. In their words, cultural memory 'corresponds to what Derrida calls "archive" and [Richard] Bernstein "tradition",' but it is important to recognise that this expansion—furthermore indebted to Warburg's prescient interest in culture as addressed to its 'ghosts'—is also 'indebted to Freud's insights into the psychohistorical dimension and the dynamics of cultural transmission.'[132] This means that, for the Assmann's, 'cultural memory, in contrast to communicative memory, encompasses the age-old, out-of-the way, and discarded; and in contrast to collective, bonding memory, it includes the noninstrumentalizable, heretical, subversive, and disowned'.[133] In many ways, this definition also accommodates the 'dirt' which Frampton aimed for with *Magellan* on film.

Given the proliferation of discrete, reproducible images, nothing less than the complete revision of the entire concept of writing was required, to be expanded beyond its increasingly apparent, narrow logic in the formal analysis. Derrida's interest in the *gramme* and *différance*, and Barthes' playful incursions into semiology, also relate the emergence of this approach to what constitutes 'writing' as such. Barthes' encounters with photography and film, as well as writing by other French

[132] Jan Assmann, 'What is "Cultural Memory"?' in *Religion and Cultural Memory: Ten Studies*, trans. Rodney Livingston (Stanford: Stanford University Press, 2006), 27.
[133] ibid. The sociology of Basil Bernstein in relation to pedagogy and transmission is figured here through the notion of cultural memory and as such will not be further extended into a direct discussion with Frampton's own interest in the pedagogical role of art. Future work on the proximity of the two may further help to establish Frampton's own theories on the transmission of culture, however. See Basil Bernstein, *Pedagogy, Symbolic Control, and Identity: Theory, Research, Critique* (New York: Rowman and Littlefield, 1996).

theorists in the post-structural mode—such as Raymond Bellour's *The Analysis of Film* (which first published in English in 2000)—suggests a way of questioning film in its conventional social-historical representation, and helps to prepare the ground for a theory of cultural memory in its relation to media. The anthropological study of gesture, of bodies as images, alongside writing, becomes the necessarily methodological horizon towards which an analysis of Frampton's work must now be directed, where gesture is understood to be inherent to our empathic identification between the different works.

As a dynamic and constantly shifting arrangement of photographic documentation of works of art, as well as cultural artefacts and even advertising photographs, Warburg's atlas is now a widely commented upon and thus artistically significant formal project which creates a metaphoric model for art historical research as a *dispositif* of knowledge, rather than a history. As a filmmaker working predominantly with 16mm film, forty years after Warburg's death, Frampton can be understood as a transitional figure, one who marks the shift from the plastic arts to the expanded field of media art, forcing a convergence in both the material of art in its presentation, while remaining reliant upon the narrative conventions of discrete images in series.

If one consequence of the introduction of photography, and subsequently of the cinema, is that 'the arts eat away at one another,' as sociologist Theodor Adorno realised by the late 1960s, the role played by photography in the contemporary environment of a post-medium condition, must also be understood as motivating the our understading of modernist avant-garde practices.[134] The subsequent dissolution

[134] Theodor Adorno, "Art and the arts," (1967) trans. Rodney Livingstone in *Can One Live after Auschwitz? A Philosophical Reader* (Stanford: Stanford University Press, 2003), 387. This trope of the arts' cannibalism is traceable back to Paracelsus' treatise on invisible diseases (1531), and has its main root in Lessing's aformentioned *Laocoön*, prescribing the separation of the arts. In relation to film this idea is also discussed by Justin Remes in his 2015 book *Motion(less) Pictures: Cinema of Stasis* (New York: Columbia University Press, 2015), 62ff. On the notion of the post-medium condition

of categorical specificity in the artwork, however, has meant the aesthetic logic of the work is able to be re-opened by cultural memory. As we will see, film submits to the mathematical sublimity of its complex arrangements and the formal category of the sublime can be linked to the fundamental unattainability of film in its antagonistic relation to linguistics and penchant for indeterminacy. *Magellan* as an atlas of film, was one way of approaching the possibility of accomodating this characteristic, and relies upon the model of the clock as much as it does on the seasonal rhythms of calendrical time.

In what follows, I argue that the solution Frampton finds for elaborating his ideas rely upon the appearance of the modernist grid in painting as the conceptual matrix for the work on the one hand, while maintaining the metaphor of the cloud at the limit of representation on the other. The resulting theory of the composition of film however, relates montage to serial strategies developed by the new music of the Second Viennese School, and Arnold Schoenberg (1874-1951), with whom Adorno had studied at an early stage in his career. By framing the analysis of two of his completed films, *Zorns Lemma* and *Palindrome*, as experiments directed at the elaboration of Frampton's self-described 'primitive' film project, *Magellan,* the link between the survival of artificial memory techniques and cultural memory can help us to further understand Frampton's reproach to history and preference for metahistory, fixed in the spatialising metaphor of the atlas.

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see Rosalind Krauss, *"A Voyage on the North Sea": Art in the Age of the Post-Medium Condition* (London: Thames & Hudson, 2000).

# 3. Matrix: *Zorns Lemma*

*Systems are for old men, angels and Germans.*
Hollis Frampton to Carl Andre, October 14, 1962, *Dialogues*

If, as I argued above, the atlas is the model which frames *Magellan*, his decision to undertake a number of experiments concerning his ideas for film can be seen as a way of approaching this goal. Therefore, it is important to state from the outset that the results of these experiments did not produce the atlas of film Frampton had envisioned for *Magellan*, but allowed him to test his ideas for the formal structures of the work. Because they are clearly defined and executed as finished works, these experiments now present to us as clear objects for investigation. This chapter focusses on one of these experiments, *Zorns Lemma*— perhaps Frampton's most well-known and highly celebrated work—which he first screened in 1970.

This chapter explores certain aspects of *Zorns Lemma,* in particular its relationship to *Magellan*. The question of *Zorns Lemma*'s significance, and how it influenced (and was influenced by) *Magellan*, despite a plethora of writing on it, remains under-researched. Focussing on artificial memory, mnemonics and the rhetorical strategies Frampton employs in the work will provide a fresh perspective in light of what David E. James has called 'the interdetermination of all practices in the total historical field of film production' with regards to the alternative cinemas of North America in the sixties.[1] In what follows, I argue that with this work Frampton effected a shift from photography to ciné-film, evidenced by the transformation of an earlier work, a series of black and white photographs called *Word Pictures* (1962/3), into what would become *Zorns Lemma*, a one-hour work in colour which also incorporated sound. Initially, after five years in New York, Frampton appears to have exhausted his immediate interest in practicing still photography and turned to the question of montage and the relationships between the film frames and time. While the first part of this chapter discusses the film as a matrix concerned with memory, in the second part I delve into the pre-history of the work to consider the significance of *Word Pictures* as it related to concrete poetry.

[1] David E. James, *Allegories of Cinema: American Film in the Sixties* (Princeton: Princeton University Press, 1989), 5.

I demonstrate how Frampton posited both an alphabetic and axiomatic understanding of the film form through the idea of the "cut", an artistic strategy which is made material by filmic montage.

The title of *Zorns Lemma* is both a reference to a mathematical axiom of choice that ordered hierarchically the selection of given elements from a set, and also a play on words: *zorn* in German means *anger*. In this chapter I argue that *Zorns Lemma* is a work that allowed Frampton to develop the idea of the film atlas as a model for realising his idea of a metahistory of film, because it meant he could demonstrate and exceed the possibilities of a language of the cinema. He did this by positing the 24-letter Latin alphabet as a "maximal fully ordered subset" for all letters. However, the idea of the film matrix survives as Frampton's other interest, as a counter to the cut of montage, which pointed him to the question of infinite film. This also relates to his work as a Dye-transfer technician at the Technicolour film lab in New York throughout the 1960s. The fact that the matrix of the film frame, the materiality of the work, was not the only concern he had for film is what is lost in critical appraisals of the film, and which often argue it is a successful demonstration of the structural approach. Rather, I demonstrate the ways in which Frampton worked on developing an architecture for thinking in film, through the material available to the work. He does this by returning to mnemonic strategies, permitting the didactic explication of the world, an architecture of the mind, which gesture towards the ideas of metahistory and cultural memory.

## 3.1 Filmnemonics

Following *Zorns Lemma*'s first public screening at the Museum of Modern Art on the 14th of April 1970, Frampton was immediately asked about *Zorns Lemma*'s relation to memory. He responded by acknowledging that, with the arrival of film, 'the demands upon memory become more intricate,' engaging an aspect of the film that has not been commented upon since.[2] *Zorns Lemma* establishes the possibility that 'memory does play a part in it,' as Frampton says is true of all art during the question and answer session after the *Cineprobe* screening, in relation to the film.[3] *Zorns Lemma* is approached here as a work that is addressed to the particular temporality of cinema as a novel technique for memory. This is an alternative to the usual understanding of the work as defined by the moment of structural film.

What *Zorns Lemma* shows, in its replacing of pictures of words taken in and around New York, with indeterminate images, is Frampton's attempt to examine a shift in the grammar of communication from text to image. This was made possible by the mechanical automatism of the cinematic apparatus, and was named for the statement by the German-American mathematician Max August Zorn (1906-1993), equivalent to the axiom of choice in set theory: *Every partially ordered set contains a maximal fully ordered subset.*[4] Set theory is a branch of mathematics that deals with the classification and ordering of distinct objects. Its utility for understanding montage and the discrete images of the film frame has been evident since early cinema, for example in the work of the filmmaker Jean Epstein (1897-1953).[5] While the post-

[2] Hollis Frampton, 'An Evening with Hollis Frampton,' *"Cineprobe"* at the Museum of Modern Art, April 14, 1970. The two films screened were *Zorns Lemma and Artificial Light*. Sound Recordings, 70.22, The Museum of Modern Art Archives, New York.
[3] Ibid.
[4] "*Zorns Lemma*: Script and Notations," *CA*, 195.
[5] An explicit reference to set theory in relation to film's spatialising of relationships between the part and the whole can be found in Jean Epstein, "To a Second Reality, a Second Reason (1947)," trans. Sarah Keller, *Jean Epstein: Critical Essays and New Translations*, eds. Sarah Keller and Jason N. Paul (Amsterdam: Amsterdam University Press, 2012), 322. I thank Dr. Lauren Bliss for this reference.

screening conversation in the Spring of 1970 quickly moved on, it remains an obvious question for the work. What were the demands on memory which Frampton has conceived of as presented by the arrival of film? And how were the statistics of the film-frame related to mathematics of set theory?[6]

Initially the film—the central, 45-minute section of which pairs words found in the urban environment of Manhattan alphabetically but resolves them to seemingly random images—presents itself as a feature-length, alternative index of an alphabetised ordering of words presented in the half-light of the cinema, a filmic thesaurus of New York city perhaps. *Zorns Lemma*'s initial premise seems to be that the light-oriented technology of cinematic projection came to jeopardise the primacy of writing as inscription, in preference for a theatre which could be populated by both words and images and, furthermore, by recorded sound. The film is structured as follows: First there is the Word, the indoctrination into both language and religion read out by the disembodied voice of the female narrator in the darkness of the imageless introduction. Then follows a long, soundless section populated by images of words in alphabetical order, which appear for one-second each. As the sequence repeats, they are slowly replaced with scenes as if taken from a vast repertoire of cinematic tropes. Eventually words are no longer required, and by the end of *Zorns Lemma* they become mechanised and virtually incomprehensible as they are read out over a sumptuous, pastoral field of snow crossed by a couple and their dog, slowly walking away from the camera. The blank white light of the projector's beam—mirroring the matter of the shot—comes to fill the entire frame, bringing the work to its conclusion after exactly on the hour.

[6] Concerning the development of statistics and probability as operating against the previous era of religious determinism, and the growing realtionship between the figure and the number, historians of science like Ian Hacking place the erosion of determinism' squarely on developments in mathematics in the 19th century. Ian Hacking, *The Taming of Chance* (Cambridge: Cambridge University Press, 1990), 15.

*Zorns Lemma* is often understood as principally responsible for Frampton's reception as an artist-filmmaker at the level of auteur.[7] The film, according to P. Adam Sitney's entry for it in the Filmmaker Co-op catalogue, 'exaggerates the fixed rhythms of *Palindrome* and insists upon the pulse of one second with incredible obdurance.'[8] By this Sitney means Frampton's insistence on 24-frame, or one-second, shots as the basic unit of the film. For the theorist of structural film, *Zorns Lemma* extended and exceeded Frampton's previous works through its explicit reference to the letters and the order of the alphabet, in the documentary mode established by his abandoned photographic series which focussed on text he found in public spaces, and called *Word Pictures.* For this Frampton took photographs of words displayed in the public environment—from advertising signs and other outward facing surfaces—which by directly addressing language and incorporating Manhattan streets-scapes, complexified the abstract emphasis and hermetic autonomy of many of Frampton's other mathematically formulated works, such as *Heterodyne* (1967) and *States* (1967).

That Sitney links *Zorns Lemma* to *Palindrome*, the subject of the next chapter, is significant for the fact that the 24 frame tempos of both works relies upon one-second cuts that propose the apparent arbitrariness of clock-time as immanent to the cinematic apparatus as such. The implicit point made by *Zorns Lemma*'s central section is that the 24 hours of the day also ordered the standard playback rate for the film frame per second, as well as providing the set of elements for indoctrination into written expression: the 24 letters of the Latin alphabet alongside the clock-time of the mechanism. Its production in Manhattan meant that this was

[7] See for example Guichard, "ABC of Film". Guichard's thesis focuses exclusively on Frampton's metahistory as it relates to *Zorns Lemma.* While Guichard's perceptive reading of the film greatly expands Bruce Jenkin's 1984 presentation of the work's content, the main reason for my analysis is to place the work in the larger context of the production of film as an experiment that relates to *Magellan*, a topic that is not a subject of Guichard's thesis.

[8] P. Adams Sitney cited in the listing for *Zorns Lemma*, *Film-maker's Cooperative Catalogue*, No. 7 (New York: New American Cinema Group, 1989), 169.

also found in the tempo of the city's architecture, seen as a living organism in constant motion. With the medieval adoption of the letter 'w', the Latin alphabet expanded from 23 to 24 characters—I/J and U/V remained identical—and it was this conceit which gave Frampton the requisite number for the standard speed of film in the cinema, 24 frames per second within the city as a living memory theatre. Norms and standards provided for a 'system of structuring', as Mark Segal noted in his review of the film, which Frampton would rely upon to elaborate his hypothesis: that film could provide a 'consciousness' in a way related to the role played by the written word, just as the literary mind had followed from the standardisation of writing.

The first section of *Zorns Lemma* is imageless, and for three minutes only the sound of a woman's voice can be heard reading from the *Bay State Primer*, a 17th century abecedarium listing the proper order of the letters of an alphabet (and the most commonly owned book alongside the Psalm Book and the Bible in New England, America). The central and longest section of the film is introduced by the display of the 24-letter alphabet, one letter at a time for one second, and therefore for 24 frames per letter. The monumental characters lit in high contrast against a black ground are the first thing the audience sees. Frampton produced these initial images by filming in close-up letters made by a typewriter loaded with tinfoil. The 24-letter alphabet therefore appears as the first image on-screen in a sequence of enormous glyphs. Frampton enthusiastically embraces his interest in the exploitation of the spatial paradox in the film, by which the careful utilisation of the representational novelties it permits can animate the two-dimensional flatness of text (and the film itself) while at the same time maintaining the illusion of depth produced in low relief by the typewriter's violent impact on the thin metal sheet.[9] Following the typewritten letters, the 45-minute section begins a programmed

[9] The sculptural qualities of the film is commented upon by Frampton in interviews and subsequently by Bruce Jenkins in his analysis of the film. See Bruce Jenkins, "The Films of Hollis Frampton," 201.

sequence of alphabetised words which Frampton shot mainly by hand using a Bolex 16mm film camera.[10] Signs, buildings, and anything presenting text on its surface made themselves available to his roving lens. This meant that Frampton quickly built up a repertoire of words to be organised and filed according to their initial letter. Again, the combination of architecture with sculpture, and following the alphabetic primer, suggests Frampton is revealing New York as a living memory theatre.

Gradually, and with no immediately apparent correspondence to the order of the letters, the alphabetised cycle of words is interrupted by sequences of idiosyncratic, textless images, replacing the expected word-image sequences. In the first instance a handheld and zoomed-in shot of a fire at night takes the place of the letter 'X' (fig 3.1).[11] From the first letter that is replaced, the mute scenes return to play out in their assigned locations for the remainder of the section.[12] Dizzying in its flashing and wavering, the initial presentation of fire for one out of every 25 seconds (there is one-second of black between every alphabet cycle), suggests the

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[10] Peter Gidal, "Hollis Frampton: Interview with Hollis Frampton," *Structural Film Anthology*, ed. with an introduction by Peter Gidal (London: BFI, 1978), 65. Frampton notes the exceptions to this general rule for shooting in Manhatten as:

> *Fox:* Brooklyn
> *Exit:* Summit and Medina counties, Ohio
> *Humble:* Summit and Medina counties, Ohio
> *Yield:* Summit and Medina counties, Ohio

Alongside these are a number of typewritten words superimposed over shots of Lower Manhattan Buildings. "*Zorns Lemma*: Script and Notations," *CA,* 197-98.

[11] Frampton's interest in emphasising the handheld shot is best demonstrated in the seventh film in *Hapax Legomena, Special Effects* (16mm, black and white, sound, 10mins30secs), in which the image of a white rectangle which matches the frame of the image is filmed on black ground using a telephoto lense to exacerbate the 'jittery nervous tension of his hands'. Sitney, *Eyes Upside Down*, 108-9. The sound-track for the film was made using a Buchla synthesiser, the only 'music' Frampton ever attempted to compose for his films. Frampton's discussion of this film can be found in Jonas Mekas, "movie journal," *the village VOICE,* January 18, 1973, 71-2.

[12] Peter Wollen believes that Frampton used 'the statistical frequency of English words beginning with each letter to determine the film's underlying structure.' Whether this is merely convenient for Wollen's argument, or a research-based consideration on Frampton's part is not clear. Peter Wollen, "An Alphabet of Cinema," in *Paris Hollywood: Writings on Film* (New York: Verso, 2002), 221.

myth of a primal scene for this strange lexicon of images, through the highly ordered nature of the alphabetic sub-set. Eventually the last letter, 'C', is replaced by a final image, a shot of a pink ibis spreading its wings, which appears for one second only in the entirety of the film. Visible only for the same duration as the individual word images, like the badge of an Oldsmobile Cutlass, the ibis image appears to have no discernible relation to this transition at all. If it does it is so only on the terms of the film itself (figs. 3.2 and 3.3).[13]



Fig. 3.1 Replacement image for 'x', fire, from Hollis Frampton, *Zorns Lemma* (16mm, colour, sound, 60mins., 1970)

[13] Bruce Jenkins provides an exhaustive description of the film's contents in his thesis on Frampton, which argues that *Zorns Lemma* 'figuratively situates the birth of cinema in the death of language in a manner which recalls Roland Barthes' celebrated notion of the death of the author in modern literature.' Jenkins, "The Films of Hollis Frampton," 206. The section on *Zorns Lemma* begins on page 193. For a speculation on the meaning of the ibis image as not only a reference to Egyptian mythology, but also to the Kabbala and monotheism, see Allen S. Weiss' essay "Frampton's Lemma, Zorn's Dilemma," *October*, 32 (Spring 1985): 127-8.



Fig. 3.2 'Cutlass', word image frame from Hollis Frampton, *Zorns Lemma* (16mm, colour, sound, 60mins., 1970)



Fig. 3.3 Ibis replacement image frame from Hollis Frampton, *Zorns Lemma* (16mm, colour, sound, 60mins., 1970)

The complexity which Frampton has deliberately embedded into each replacement image can be gleaned by his description of the initial transition from 'X' to the fire sequence. Frampton writes that the fire images were 'shot at twelve frames per second, handheld, *long* telephoto [lens], while a friend deliberately pushed me and told me jokes, to make the frames smear *à la* Abstract Expressionism'.[14] Even if Frampton's enthusiasm for hyperbole can be detected here, the shot is still difficult to define. It is not only the image of a fire, but a particularly 'smudged' shot of combustion which appears in the film. Prior to this shift, the one-second tempo also produces some form of concrete poetry in the order of the word-pictures—phrases like as 'Amuse Bill Choice Dodge Eye'—which are then punctuated by the mute directionlessness of the wordless images.[15] Eventually this new 'sub-set' becomes the anchor for the remains of the sequence, which block-out with the strange selection of images in time.

Against these aleatoric lists of words the viewer is confronted with the increasingly commonplace reappearance of the same scene, which replaces a certain letter for the remainder of the section. Some replacement images progress, like a man walking around the block which replaces the letter 'H', or a shot of hands peeling a tangerine on a striped ground for letter 'U/V'. Others fill gradually and expectantly converge in the frame by the conclusion of the section.[16] A man, the artist Robert Huot (1935—), painting a wall white for letter 'K', is not only a stark distillation of manual labour, but he completes his task of filling the entire frame only by the end of the 45-minute section of the film. Elsewhere, the replacement

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[14] Frampton's emphasis. "*Zorns Lemma*: Script and Notations," *CA*, 201.
[15] This is a point made by David E. James, who emphasises *Zorns Lemma* as the exemplary work in Frampton's oeuvre, and calls the alphabetical order of the words a 'weird concrete poetry'. James, *Allegories of Cinema*, 257.
[16] Following Frampton's notes for the film, critic Wanda Bershan names the classes of replacement images as convergent in her review. Wanda Bershan, "Zorns Lemma," *Artforum*, 10, no. 1 (September, 1971): 45. The convergent aspect is also elaborated upon by Bruce Jenkins in his PhD thesis on Frampton. Jenkins, "The Films of Hollis Frampton," 202-3.

image for the letter 'E' depicts Frampton's passing interest in split-brain theory by showing, as he reveals in his notes, the 'schoolmarm of Part I, reciting the same text by halves'.[17] The tangerine being peeled in the 'U/V' replacement image exhibits the illusion of depth versus the flatness of the picture plane through what Frampton calls the 'axial modular symmetry' of the striped background of the shot.[18] This central section progresses to its climax when all word-images have been replaced by this set of short scenes. For 24 seconds the shots, chosen for their sculptural, cinematic, or paracinematic effects propose this ridiculous subset as a kind of novel alphabet of images.[19]

These references all commune to reveal the culmination of different aspects of Frampton's thinking about film at the time. The replacement images, Frampton explains in his notes to the film, 'refer, secretly, to characteristic postures vis-à-vis space, color, etc. *within the history of film:* i.e. stylistic tendencies of other directors, mostly within the narrative canon'.[20] In this way they are related to the idea for *Magellan.* However, it is not clear to what extent Frampton expected people to take these claims at face value in watching the film. Notes for the film did not accompany it in any official capacity, and have only been published subsequent to its showing.[21] The point that *Zorns Lemma* makes therefore, at least initially, is that the very act of using the cinematic 'machine' cannot but help to proliferate its self-referentiality, and as a formal experiment, Frampton has created a successful model for making his point. Yet Frampton's tacit acknowledgment of the veracity of the

[17] "*Zorns Lemma*: Script and Notations," *CA*, 200.
[18] Ibid. 201.
[19] Paracinema is a concept that elaborates the cinematic resonances with everyday reality. Frampton states that '*any* phenomenon is paracinematic if it shares *one* element with cinema'. In the film it is the parallel with construction and montage seen in the modular elements of a Tinker Toy under construction which replaces the letter 'r'. On the idea of paracinema see Jonathan Walley, "The Material of Film and the Idea of Cinema: Contrasting Practices in Sixties and Seventies Avant-Garde Film," *October,* 103 (Winter 2003): 15-30.
[20] "*Zorns Lemma*: Script and Notations," *CA*, 196.
[21] Scott MacDonald first published the notes to *Zorns Lemma* in his book, *Screen Writings: Scripts and Texts by Independent Filmmakers* (Berkeley: The University of California Press, 1995), 55-69.

claim 'art is art,' as hegemonic for his own artistic milieu and taken up by his minimalist peers, poses a certain autopoietic condition to the apparatus, whereby the film is responsible for creating the cinema also as a biography of the filmmaker, relying just as much on the audience's expectation of its structure. Therefore, the film is about film, as much as film is about the world which it documents. It is precisely this idea of film as proliferating images that I have connected to the notion of conflation. Frampton's independent and artist-filmmaker status maintains a certain sense of authorship, as David Bordwell noted for art cinema. The same question dominates *Magellan*, and Frampton's solution is to incorporate this esoteric aspect of filmmaking, rather than attempt to cast it out.

### 3.1.1 The Anagramatic Complex

> *This is not, therefore, to be taken as a manifesto.*
> *It is an organisation of ideas in an anagramatic complex*
> *instead of in the linear logic to which we are accustomed.*
> Maya Deren, *An Anagram of Ideas on Art, Form and Film*

A text by Maya Deren (1917-1961), who Frampton would position as significant for the beginning of cinema as an art in the "Metahistory" essay, inadvertently helps to refine the Lumière's earlier intuition. For Deren cinematic time is anagramatic because 'nothing is first, nothing is last; nothing is future, and nothing is past; nothing is old and nothing is new... except, perhaps, the anagram itself.[22] Years later, Michelson would note that 'it was Frampton—poet, cineaste, and theoretician—who would assume the strenuous and seminal role marked out by Deren,' as the inheritor of this problem of linear temporality's collapse.[23] Here

[22] Ibid.
[23] Annette Michelson, "Poetics and Savage Thought: About *Anagram*," *Maya Deren and the American Avant-garde*, ed. Bill Nichols (Berkeley, CA: University of California Press, 2001), 42.

then, is an appropriate moment for situating *Zorns Lemma* as that which comes 'before' *Magellan*, but in a time for which things can no longer come first or last. Interestingly, even Deren's 'contents of anagram' inaugurates a kind of matrix of display, upon which the combinatorial set of her texts as re-arrangeable elements in the essay can be organised (fig. 3.4).



Fig 3.4 Maya Deren, 'Contents of Anagram,' *An Anagram of Ideas on Art, Form and Film* (1946).

Following her contention that all of Frampton's work was addressed to 'open' systems, Melissa Ragona has proposed that *Zorns Lemma* was created as 'a training ground for *Magellan*', where the basis for the work lay in its functioning as an 'epistemological metaphor,' which suggested a certain knowledge of the film form was at play.[24] However, I argue that *Zorns Lemma* demonstrated a closed system for

[24] Melissa Ragona, 'Hidden Noise: Strategies of Sound Montage in the Films of Hollis Frampton,' *October* 109 (Summer 2004): 108. Ragona's use of the term 'open' here relies on the idea of the 'open work' proposed by Umberto Eco in the early

film semiotics designed by Frampton to make the point that by abandoning the idea of a standardised cinematic language, as it was being pursued by theorists like Christian Metz (1931-1993) and Peter Wollen, Frampton's notion of a tradition of film alternatively provided an "exit" through its anomic images. If *Magellan* is a metaphor for Frampton's concept of metahistory, it is the atlas model which allows for the 'not-knowing' of cultural memory to operate alongside the epistemic work, and it is this potentiality which Ragona and others emphasise when presenting the work as 'open', overdetermining the inexplicable images which appear at the end of the cycle of alphabetised words. Accommodating Frampton's own feelings towards *Zorns Lemma* as a functionally replete, yet ultimately dissatisfying project, this work is not to be understood as an atlas because it is a critique of established knowledge. However, this doesn't mean it is not an experiment directed towards Frampton's idea of the infinite film. In *Zorns Lemma*, Frampton's engaging of aleatoric and arbitrary procedures borrowed from conceptualism in both photography and the expanded arts of the time helped him to test and refine his approach alongside his work on *Magellan.*

Within the film, recurring images of a hand turning the pages of a book contained what Frampton called a 'secret correspondence' between the two works: the book that is the replacement image for the letter 'A' in the *Zorns Lemma* is the Old French version of Antonio Pigafetta's diary of the voyage of Magellan.[25] *Zorns Lemma* was therefore a project which Frampton produced alongside his plans for *Magellan*, experimenting in miniature and in advance of the massive scope of that work. However, the film's relationship to the idea of metahistory which Frampton would elaborate immediately following its production is not as clear. *Zorns Lemma*, a film exactly one hour in length and divided into three parts, was addressed more to the written languages of the alphabet and of mathematics, and to examining the

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1960s. See Umberto Eco, *The Open Work* (1962), trans. Anna Cancogni; with an introduction by David Robey (Cambridge, MA: Harvard University Press, 1989).
[25] "*Zorns Lemma*: Script and Notations," *CA*, 200.

formal possibilities of both within the matrix of the film frame, than to metahistory as a 'synoptic conjugation', or tour of 'all knowledge'.[26] However, this did not mean that Frampton did not include in the work other esoteric material from 'cinema's prehistory', as he calls it in the metahistory essay.[27]

Focussing a photographic series of documentary images of words taken in city streets and ordered alphabetically into consecutive, one-second cycles, Frampton forced the indexical images of the Manhattan streetscape into direct contact with the abstract, semiotic system of written communication. The seemingly open aesthetic of this system for images, however, has a source which came directly from established techniques of artificial memory. This is the *Bay State Primer* which is recited for the first three minutes of the film as a didactic and maternal opening to the film using the voice of a 'school-marm'. After the forty-five minutes of silent, one-second word-images from the city and their replacement by the image-set, sound then re-appears for the film's final section, where six female voices read in the round from a 13th century treatise at the speed of one second per word, beginning: 'Since | Light | which | is | the | first | Form | created | in | first | Matter | could | not | abandon | Matter | in | the | beginning | of | Time | it | drew | out | Matter | along | with | itself | into | a | mass | as | great | as | the | fabric | of | the | world'. Instead of darkness, this time the screen shows images of a couple walking into the distance over a snow-white field. The text is Frampton's own 'pocketed' Latin translation of *De Luce* (c. 1225), 'On Light' by Robert Grosseteste, the Bishop of Lincoln from 1235 – 1253.[28] *Zorns Lemma* therefore is predicated, not only the matrix of filmic montage, but on techniques for learning the alphabet and as well as on theories of light and time.

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[26] "Metahistory," *CA*, 38
[27] Ibid., 136.
[28] 'Pocketed' is Frampton's description of his own translation of Grossteste's Latin and he notes that it represents approximately 20 to 25 percent of the original. "*Zorns Lemma*: Script and Notations," *CA*, 202.

Speaking about the *De Luce* text in London, Frampton explained to his interviewer and counterpart, the artist-filmmaker Peter Gidal (1946—), that he included the particularly antiquated text, known in English as *On Light, or the Ingression of Forms,* for the 'key line' which opens the text.[29] Frampton proposes that *On Light* also provides, albeit anachronically, 'a fairly apt description of film'.[30] He continues, by gesturing to what he calls 'the total historical function of film, not as an art medium but as this great kind of time capsule'.[31] Given that the interview takes place in May 1972, he then links it to the recently published "Metahistory" essay, and how it was Grosseteste who had led Frampton 'to posit the universe as a vast film archive which contains nothing in itself and presumably somewhere in the middle, the undiscoverable centre of the whole matrix of filmthoughts, an unfindable viewing room in which the great presence sits through eternity screening the infinite footage.'[32] This 'whole matrix' also appears to expand upon Frampton's idea of the film archive as best approached by the atlas through the Atlantis metaphor, and not unlike the idea of the chessboard which also features in the "Metahistory" essay, as echoing Grosseteste's idea of light as a 'mass as great as the fabric of the world'.[33] While in England, writing the review that would become "Digressions on the Photographic Agony," Frampton began to figure film topologically, which we can understand to mean a process for recording an infinity extending in all possible directions from an original event, 'the beginning'.

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[29] Hollis Frampton, interview with Peter Gidal in Gidal (ed.) *Structural Film Anthology*, 62.
[30] Ibid.
[31] Ibid.
[32] Ibid.
[33] The 1957 film *8x8: A Chess Sonata in 8 Movements,* by Hans Richter and others, including Jean Cocteau and Marcel Duchamp, is another link between the historical avant-garde and film's spatial metaphor. At 80 minutes, the film remains somewhat of an anomaly in the archives of modern art, and despite the fact that he never makes mention of it, the film may offer another possible source of Frampton's interest in the chess metaphor on film. The film's self-description as a 'fairytale for grown-ups' in the opening credit sequence also resonates alongside Warburg's earlier declaration of his *Mnemosyne Atlas* as a 'ghost story for truly adult people'. Agamben, *Potentialities,* 95.

Allusions to Borges' one-paragraph short story, 'Of Exactitude in Science' (1946), imagining 'a map of the Empire whose size was the Empire', can also be gleaned in the idea, given the collection *A Universal History of Infamy* appeared in an English edition in 1972 and Frampton had been reading Borges into his metahistory.[34]

On screen for the first three minutes of Z*orns Lemma* nothing happens, as the primer monologue is accompanied by a black screen. The 45-minute central section consists of a long, silent series of one second word-image shots and the last section slowly fades to white over the film's final 12 minutes, featuring the abridged Grossteste text. The significance of the final, locked-off camera shot, which frames a couple walking away from the camera across a snow-covered field and finally fades to white, suggests a departure from the entire endeavour of film semiotics, and the final few feet of the film-roll has been 'flashed' by removing it from the camera, exposing it to ambient light. At exactly 60-minutes long, *Zorns Lemma* was presented as a feature-length experimental film when it premiered at the 8th New York Film Festival at the Lincoln Centre on the 12th of September, 1970. At this length, *Zorns Lemma's* nod to the feature-length format appeared at around the same time that the studio culture of 'A' and 'B' styled double-features would face the arrival of independent and artist films with New Hollywood era works like Arthur Penn's *Bonnie and Clyde* (1967), and coinciding with a shift in the studios' film production models.[35]

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[34] Jorge Luis Borges, "Of Exactitude in Science," in *A Universal History of Infamy*, trans. Norman Thomas di Giovanni (New York: Dutton, 1972), 139.

[35] See William E.B. Verrone's discussion of the film as remarkable for its feature-length presentation in the context of structural film in his book *The Avant Garde Feature Film: A Critical History* (Jefferson, NC: McFarland and Company, 2012), 88-91. This is opposed to the hostile reception Tony Conrad received four years earlier when he screened *The Flicker* at the 4th New York Film Festival at Lincoln Center, where the film was described as 'masochistic', and following what Conrad describes as the 'Lincoln letter scandal', a 2-page statement he read protesting against the festival's industrial culture. See Branden W. Joseph, *Beyond the Dream Syndicate: Tony Conrad and the Arts After Cage* (New York: Zone Books, 2008), 279. *Bonnie and Clyde* opened in 1967, and is considered the landmark of the New Hollywood period.

Frampton's 16mm film was very different, however. Favourably reviewed by Wanda Bershan in the September 1971 edition of *Artforum*—the issue dedicated to film and also featuring Frampton's "Metahistory" essay—the work was not conventional cinema in any sense of the term. [36] That Bershan's review of Frampton's film appeared in the *Artforum* issue edited by Annette Michelson, who had placed the "Metahistory" essay as the edition's lead article accompanied by only two images—a shot of a man's reflection in a camera lens from Dziga Vertov's *Man With a Movie Camera* (1929) and a double-perforated strip of black film frames—clearly flavours her reading of the film for *Artforum's* readers. *Zorns Lemma*, as Bershan writes, not only 'functions similarly to a medieval canon' but seeks to demonstrate that all film 'consists fundamentally of the rhythmic articulation of *time*'.[37] Elsewhere in the issue, Robert Smithson writes of cinema's organisations of filmed material 'proliferating outside their original structure or meaning', in a clear reference to the work of artist-filmmakers like Frampton and Michael Snow, at the time.[38]

Given the presentation of the work, I'd like to argue that the goals of the montage matrix which Frampton presents in the film's longest section, composed of single words shot in New York's streetscapes and replaced by the image sequences, lie in the exhaustion of an idea related to Louis Lumière's strange premonition of cinema as an invention without a future, which appears as the epigraph to the "Metahistory" essay.[39] This is because it is this aspect that relates the film's

[36] Bershan, "Zorns Lemma," op. cit.
[37] Ibid., 44. Michelson's editorial also employs a single frame of film from *Zorns Lemma* as the only image for her conceptual introduction to the film issue, three correspondences by Peter Gidal, Jonas Mekas, and herself.
[38] Robert Smithson, 'A Cinematic Atopia,' *Artforum*, 10, no. 1 (September 1971), 53.
[39] The quote, 'The cinematograph is an invention without a future,' is used as a title for a recent book by James Naremore, who notes 'many cinephiles, among them Jean-Luc Godard, have attributed the statement to Lumière, but there's no evidence he actually said it. James Naremore, *An Invention Without a Future: Essays on Cinema* (Berkeley, CA: University of California Press, 2014), 14. The book also begins with a quote by Frampton, about our responsibility to invent a future for cinema, as well as a quote from James Agee.

insistence on artificial memory. In opposition to readings of the work as employing Eisensteinian 'metric montage', *Zorns Lemma* seeks to represent a transition from the linearity of writing—and of history—to images. This is made possible by cinema only at the cost of losing any sense of linearity as its ordering principle.[40] In this sense only an 'anagramatic complex' of images—which demonstrates how the simultaneity of filmic images can interrupt narrativity in the cinema—can be the ultimate goal of this work, dedicated as it is to light.[41] This idea of a 'simultaneous relationship' describes an aesthetic relationship as it applies to film, directed towards both memory and time, and it is here where the conflation of images can take place upon the metahistorical matrix provided by medium, albeit at the cost of a linear sense of time as a continuum. As such, a medium like film demanded these temporal modalities be addressed. In the chapter on *Palindrome* which follows this chapter, the looping mode of the structural cinema is examined for its attempt to explain this shift.[42] Here, however, the arrangement of space alphabetically implies a re-organisation of film is taking place.

Using this image for an analysis of *Zorns Lemma* it becomes possible to show how, upon its completion, Frampton found himself frustrated by the apparent limitations of the positively didactic, structural process for filmmaking which he had created, despite his apparent breakthrough in its form of presentation. It is as if he had already exhausted this form by realising what Deren had two decades earlier, that cinematic time was defined by its modularity and recursivity, as akin to

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[40] Simon Field, "Alphabet as Ideogram," *art and artists*, 7, no. 5 (August 1972), 22-8. Field's title refers to Eisenstein's notion that 'the film-frame can never be as inflexible as a *letter of the alphabet*, but must always remain a multiple-meaning *ideogram.*' Eisenstein, cited in Field, "Alpbaet as Ideogram," 26. The Eisenstein quote comes from an essay written in 1929 called "The Filmic Fourth Dimension," and concerns montage in the Soviet sound film. See Eisenstein, *Film Form,* 64-71.

[41] Maya Deren, *An Anagram of Ideas on Art, Form and Film* (Yonkers, NY: The Alicat Bookshop Press, 1946), 5. Born Elenora Derenkowsky in Kiev in 1917, Deren was brought to the United States by her parents in 1922, after fleeing growing anti-Semitism in the Ukraine. See *Maya Deren and the American Avant-Garde*, ed. Bill Nichols (Berkeley, CA: University of California Press, 2001), 3.

[42] Deren, *Anagram*, 6.

a loop or the cycle which gives *Magellan* its shape. This analysis will also show that his return to the cloud, the subject of the next chapter, is one reason why his earlier film, *Palindrome*, would be included in its entirety in the *Magellan* cycle and *Zorns Lemma* would not.

### 3.1.2 The Matrix

> *My notion was that by coming at this kind of material very finally I could get after the anaesthetized area of the brain and evoke some sense of the real joy of experience. To an extent the film does that… What bothers me is that it borders on the edge of audience manipulation, like a tearjearker melodrama.*
> Hollis Frampton's description of *Zorns Lemma* to Deac Rossell

Alongside metahistory and the atlas, Frampton also settled on the significance of the concept of the matrix for realising *Magellan.* I argue that *Zorns Lemma*, in part, was Frampton's attempt to establish what the matrix meant for film. For example, the Kodak film stock with which he worked at the dye-transfer lab was called 'Pan Matrix Film 4149'. But the film print was also to become synonymous with its status as a 'score' for artist-film in a performative sense. It was the implications of this complex for film which provides another basis for Frampton's experiment.

A more recent example may help to unpack this idea. In the introduction to the text *8 Metaphors (because the moving image is not a book),* the contemporary artist-filmmaker, Luke Fowler (b. 1978), is described by the book's editor, Isla Leaver-Yap, as working through his contemporary three-part project, *A Grammar For Listening* (2009), in a direction heading from sound and image towards text. What Fowler calls his 'collaborative matrix score' demonstrates his means for communicating the act of recording while at the same time presenting the work on film.[43] This process, whereby the film acts as both the score and the performance of the work, collapses

[43] Isla Leaver-Yap, "Introduction," in *8 Metaphors (because the moving image is not a book)* ed. Isla Leaver-Yap (London: LUX, 2011), 10. Luke Fowler, *A Grammar for Listening* (2009, 16mm, colour, sound, 58mins).

any distinction which could exist between the technical and the conceptual on film, whilst engaging notions of recursivity and feedback that Fowler has adapted from systems theory. In this way Fowler is participating in a mode of filmmaking that also corresponds to earlier works like *Projection Instructions,* a film by Morgan Fisher made in 1976 whereby 'the film is a performance piece in which the score is visible but the performer is not'.[44] But this simultaneous interaction also relates it to the arts of memory found in ancient rhetorical strategies, recalling the use of architecture to arrange word-images spatially, as in the theatre. As a new medium, film figured a mode for inscription which could facilitate a complex interaction of meaning. Artificial memory is that which, seemingly paradoxically, organises the inorganic, and film appears to address this threshold directly. The matrix of the film strip as both the ground and the performance of the work prepares this recursive framework for the artist working with the medium, and remains important for understanding how both Frampton's idea of metahistory and the model for *Magellan* came to be figured in contrast to the *Zorns Lemma* experiment.

The use of the matrix as a 'score' was an innovation Frampton had adapted and developed from the earliest intellectual montage strategies elaborated by Eisenstein, expanding on the idea of 'metric montage' which Simon Field found to be present in *Zorns Lemma.*[45] By conflating montage with compositional structures adapted from music, discrete images and sound recordings could be arranged according to a complex set of directorial commands by using the grid of the Cartesian plane for mapping pitch (y-axis) to time (x-axis), for example, demonstrating both 'vertical' and 'horizontal' montage.[46] In a similar way, Iannis Xenakis (1922-2001), whose design for the Philips Pavilion at Expo '58 in Brussels

[44] Morgan Fisher cited in Thom Anderson, "Twelve Films by Five American Filmmakers (1979)", in *Slow Writing: Thom Anderson on Cinema*, ed. Mark Webber (London: The Visible Press, 2017), 76. Morgan Fisher, *Projection Instructions* (1976, 16mm, black and white, sound, 4mins).
[45] Simon Field, "Alphabet as Ideogram," 26.
[46] An example of this is the illustration included as a folio in *Film Form:* Eisenstein's analysis of a scene from his own work, *Alexander Nevsky* (1938).

was based on the musical notation for his composition *Metastaseis* (1953-4), demonstrated a similar possibility for the conflation of music with architecture, which, while novel in its demonstration, also returns to antiquated ideas for spatialising sound.[47] Again the idea of the memory theatre is present in this example and as I have shown above, the metaphorical outcome of this interminably detailable practice in its utility for visual art leads back to the idea of the atlas. Toshiya Tsunoda (1964—), who worked with Fowler on his project, notes that the 'recorded material is like a map,' which can be related to the matrix of the film plane as an abstract field of operation taking place in actual and identifiable locations.[48] Furthermore, the collapse of the film and the score—along with the collapse of the real world location with the cinema—recalls the 'map of the Empire whose size was the Empire,' in Borges' short story 'On Exactitude in Science'.

In mathematics, the topology of different points creates a set upon the matrix, as a spatial manifold. For Frampton, this was understood as akin to the score that will also become the presentation of the work. By composing for the atlas, Frampton's work signifies an attempt to abbreviate the world in a certain way, aiming at a globally replete, though subjectively particular, totality. In *Magellan* this aspect, the spatialising of information, was exemplified by the meticulously planned sections appropriately titled *Matrix*. With *Zorns Lemma*, however, Frampton instead focussed on the particular importance of the cut, the splicing together of film, as what he calls its 'deliberate *act* of articulation'.[49] By doing this he found that the maximal, fully-ordered subset of elements proposed by the mathematical axiom could metaphorise even the most distinguished of our cultural achievements, the

[47] For a discussion of the Philips Pavilion at Expo '58 see Marc Treib, *Space Calculated in Seconds: The Philips Pavilion, Le Corbusier, and Edgar Varèse* (Princeton: Princeton Architectural Press, 1996).
[48] See the chapter by Luke Fowler with Lee Patterson, Éric La Casa, Toshiyo Tsunoda and Christoph Cox, 'Reflections on a grammar,' in Leaver-Yap (ed.), *8 Metaphors*, 15-36.
[49] Frampton's emphasis, 'Notes on the Film,' is a collection of typewritten script elements and handwritten notes, no date, in the collection of Anthology Archives, New York. "*Zorns Lemma:* Script and Notations," *CA*, 196.

grammar of language. This is done first through the recording of a lone female voice, and followed by the use of multiple female voices at the end of the film.

The word matrix is of course a commonly used term for signifying arrays of numbers, formed as tables or grids in rows and columns, which derives from the Latin word for 'womb'. Etymologically, this linking of the film's organic mode with the mathematical abstraction of the set of discrete elements also serves to collapse any distinction between the matrix as a structural base with the maternal figure of the 'school-marm'.[50]

In a document titled "Proposal for Magellan", however, Frampton clearly seeks to distinguish the work from the film finished in 1970. 'The structure of the main section,' he writes of *Zorns Lemma*, 'was determined by the reading-out of a single predetermined matrix of 108 rows by 24 columns, one row at a time, with each element in the matrix occupying one second of viewing time'.[51] To this must be added the final row of all the images which replace the sets of alphabetically ordered words which have made up the section so far. Forty-eight minutes into the film, a wordless set of 24 shots replaces the alphabet with wordless images, making the final, 109th row an exception to the completed sets of the alphabet (fig. 3.5). In *Magellan*, Frampton again uses the idea of the matrix, but seeks to complexify it. What he calls the 'Pans' are one minute in length as opposed to one second, and the

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[50] Cf. Artist and theorist Bracha Ettinger has conceptualised what she calls the Matrix as a part of the symbolic register in the field of psycholanalysis because, as she argues: 'Symbol is wider than the Phallus, and we have to introduce non-phallic symbolic spheres alongside the phallic sphere.' Bracha Ettinger, "Matrix and Metramorphosis," *differences: A Journal of Feminist Cultural Studies*, 4, no. 3 (1992): 176-208. First applied to mathematics in the mid 19th century by the English mathematician and Royal Society fellow James Joseph Sylvester (1814-1897), the term also bears a mineral and geological significance as it is used to describe the structure of rocks. See the entry by Alan Tucker, "Matrices and Matrix Algebra," in *Encyclopedia of Operations and Research and Management Science*, eds. Saul I. Gass and Michael C. Fu (Boston, MA: Springer, 2013), 950-954. Geological formations described as matrices can be found in the entry, "Petrology," by John Flett Smith in the *Encyclopedia Brittanica*, ed. Hugh Chisholm, vol. 21 (11th ed.) (Cambridge: Cambridge University Press, 1911), 332.

[51] See Frampton, "Proposal for Magellan", Hollis Frampton Archive, Anthology Film Archives, NY.

subset ordering the 'reading-out' isn't set by the alphabet, but the days of the year. As an experiment then, *Zorns Lemma* exhibits Frampton's insistence on the matrix structure of rows and columns and also settles the work's one-hour limit into a neat temporal frame.

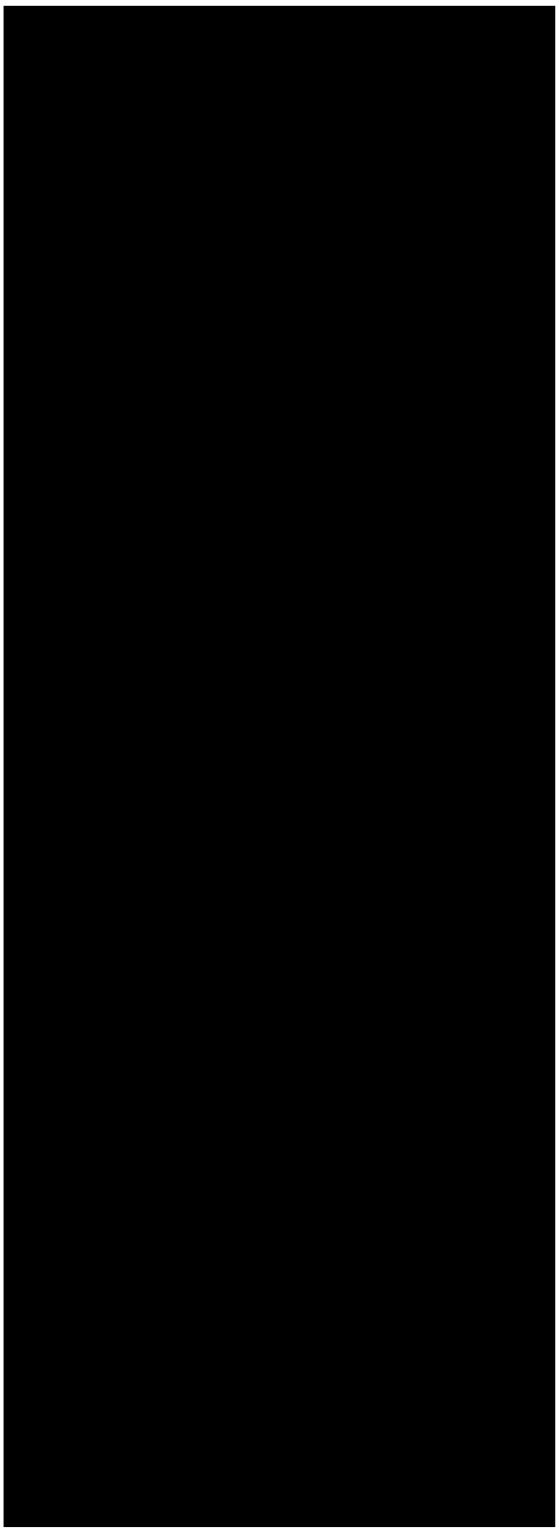


Fig. 3.5 The matrix of all the one second elements
in the central section of *Zorns Lemma,* ordered alphabetically.
(Source: Clint Enns, "Frampton's Demon," 2016.)

The structural and positive arrangement of the work only goes so far in explaining the conceptual density of the work, however. The 'Knight's Tour' of every location set out by the matrix is a metaphor of the infinite film, as Frampton suggests in the "Metahistory" essay published a year after *Zorns Lemma*'s premiere, and while this allows only one possible elaboration of the tour, it suggests the spatial relationship established between the elements and the need for a 'Tour of Tours'. 'The board is a matrix of rows and columns beyond reckoning,' Frampton explains, 'whereon no chosen starting point may be defended with confidence' (fig. 3.6).[52] What this meant for *Zorns Lemma*, as feature-length film, is that it ultimately remains a preparatory sketch, an experiment for what Frampton subsequently saw as the metahistory of film: 'the possibility of constructing a film that will be a kind of synoptic conjugation of such a tour, a Tour of Tours, so to speak, of the infinite film, or of all knowledge, which,' for *Magellan* at least, 'amounts to the same thing'.[53] In realising this after the fact, *Zorns Lemma* remains an attempt at a tour of a particularly "closed" set of elements unrelated to the atlas, in this case the 24 characters of Latin alphabet (where I/J and U/V are conflated), conveniently matching with the 24 frames per second rate of film.

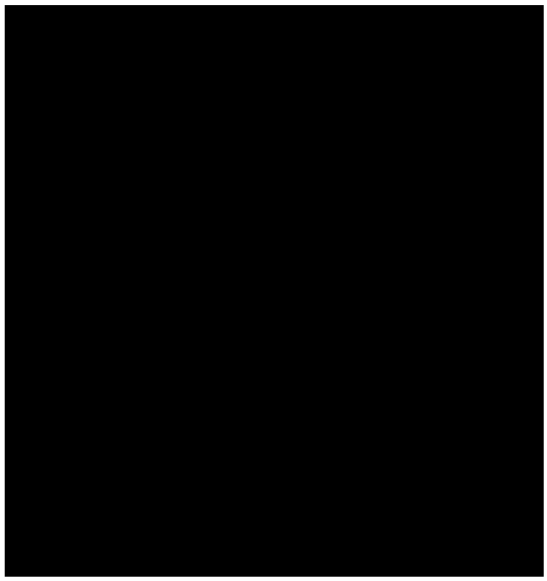


Fig. 3.6 A 24x24 matrix diagram depicting one possible 'tour' of the knight across the chessboard.

[52] "Metahistory," *CA*, 138
[53] Ibid.

Frampton's belief in the possibility of 'montage as supreme ordering', as it would be proposed by Christian Metz, was therefore subject to the productive content for the cinema as an artform which is reflected in images that had already been introduced by the camera onto a celluloid matrix.[54] As Frampton's notion of metahistory has been shown to correspond to a spatial turn, it is ultimately at odds with the dominance of a 'textual' approach Frampton attempted with *Zorns Lemma*, and this difference is marked by the sub-set of elements making up the English alphabet. The linguistic turn, as it was narrowly defined by cinema semiotics, and exemplified by Metz' application of linguistic analysis to cinema, simply couldn't contain the infinite sets of wordless images allowed by photography.[55]

To understand Frampton's approach then, it nevertheless remains useful to think of the problem of cinema as speaking, 'only in neologisms', as Metz did, and he also proposed that if 'every image is a *hapax*,' or unique, it is also the case that every image contains all other images in their potentiality.[56] This is the basis of the problem which Frampton figured the matrix could be called upon to solve. Not just chains of signifiers, images situated themselves within what Frampton would call, when referring to *Zorns Lemma*, a 'matrix of filmthoughts', and followed what he would come to realise in the seven-part series he called, in a way that anticipates Metz' own arguments, *Hapax Legomena* (1971-3).[57] The image, then, is not just a problem for semiotics, and spatialising these relationships upon the matrix created

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[54] Christian Metz, "The Cinema: Language or Language System?" in *Film Language: A Semiotics of the Cinema* (1974), trans. Michael Taylor (Chicago: University of Chicago Press, 1991), 31.
[55] Henri Lefebvre presented his study of space at the same time as Metz was publishing his work of cinema semiotics. Lefebvre's work was introduced to Anglophone audience by Fredric Jameson's analysis of what he calls the 'spatial turn,' in *Postmodernism, or, the cultural logic of late capitalism* Durham: Duke University Press, 1991), 155ff. See Henri Lefebvre, *The Production of Space* (1974), trans. Donald Nicholson-Smith (Oxford: Basil Blackwell, 1991).
[56] Metz, "The Cinema," p. 69.
[57] Hollis Frampton, interview with Peter Gidal in Gidal (ed.), *Structural Film Anthology*, 62.

by thinking through film is a principal link between Frampton's metahistorical project and existing traditions of artificial memory as spatialised by the theatre.

Thinking through this shift—from semiotics to memory—the tempo of the montage becomes a focus, leading back to the question of musical composition, to the film as a score. Michael Snow had made this point with his notes for *Wavelength* a few years earlier, by emphasising the 'gifts of both prophecy and memory which only film and music have to offer'.[58] The "instructional" aspects of *Zorns Lemma*, then, do not propose language in the sense of linguistic signification, rather as the elaboration of a score-like structure of discrete images which follow the alphabet towards idiosyncratic and novel systems of notation. Frampton's archives are full of examples of such material, from the poetry of Mallarmé to the science of computation. Following Kamilla Elliot's sense of the confusion that necessarily arises from any interdisciplinary analysis, the enduring and fundamental distinction between words and images, it can be seen how the problems present in Yates' early interest in modern memory techniques, provides us with a way of maintaining the conflations of historical forms on film.[59] The matrix, as one such form and which has no singular directionality, is the field upon which these conflations can be laid out.

### 3.1.3 "distinct non-synchronisation"

When *Zorns Lemma* was premiered not all reviews of the film were glowing in their praise. Reporting on its New York Film Festival premiere at the Lincoln Center for

[58] Michael Snow cited in Annette Michelson, 'Toward Snow, part 1,' *Artforum,* vol. 9, no. 10 (Summer, 1971): 30.
[59] Kamilla Elliot, *Rethinking the Novel Film Debate* (Cambridge: Cambridge University Press, 2003), 8.

*The New York Times*, writer Howard Thompson seemed far from enthusiastic about the work:

> For 45 minutes the screen clicks—one, two, three, etc.—the course of the alphabet, as pinpointed to the first letter of various photographed signs, labels and images implying the letter. Over and over and over it goes.[60]

Yet in his recollection of the silent central section of the film, Thompson inadvertently described a feature he had perceived in the work despite his otherwise indifferent feelings towards it. The regularity of the one second pulses of images, beginning with the tin-foil alphabet at the commencement of the central section, gave rise to an aural expectation in the long sequence of edited frames, a metronomic effect, according with Frampton's idea of film's fundamental relation to the musical score. This is a sensory quality perceived by the spectator as an idea, however, directly linking film to image-consciousness and technical effects in the mind of the observer. This aspect of *Zorns Lemma* follows from the one-second syncopation Frampton had used for the first time in his filmmaking one year earlier, for *Palindrome.* The slippage between experimental film and the avant-garde development of serial music—a compositional technique developed as a way of breaking with traditional musical forms in Vienna in the 1920s—through the matrix score was, however unwittingly, made explicit in its questioning of language during *Zorns Lemma's* official premiere. Excessive aspects present in the work, then, are of

[60] Howard Thompson, "Screen: 3 Visit Pig Butchery in Fontaine's 'Double Pisces Scorpio Rising'," *The New York Times*, September 14, 1970, 48. The film was premiered alongside Dick Fontaine's 58-minute feature, *Double Pisces, Scorpio Rising.* In the credits listed in the review, David Hamilton is listed as the assistant to Frampton for the production of the film. Frampton calls him his 'key grip' and notes his assistance in the deliberate incorporation of 'metric errors' into the film so that Frampton wouldn't know where they were. Frampton, "*Zorns Lemma:* Script and Notations," *CA*, 198. Hamilton also appears in the film's replacement image for the letter 'H', as the man walking around the corner in the shot. MacDonald notes that in the scene Hamilton briefly reappears after completing his walk, revealing the conceit of the image. MacDonald, *Screen Writings,* 64.

course the results of a rigorously structural and systematised approach to the subsets of characters providing the formal hierarchy for other aspects of the film, allowing other harmonic elements to emerge in the work, such as the interactions of colour and the grain of the voice.[61]

The letters of the alphabet were employed by Frampton because they are the basic set of elements used for childhood education. Contrasting with this is the mathematisation of the formal qualities of written text which seem to exaggerate the arbitrariness of the film's organisation of word pictures in the central section. But the possibility of film as an elaboration of a 'system of consciousness' which exceeds the structural positioning of experimental film seemed possible if it was to be based on clock time.[62] If the documentary aspect of *Zorns Lemma* shows how memory techniques are already encoded by examples such as the primer, it also relates the formal aspects of the film's search for a meta-language of cinema to the historical specificities of the modes of production present in the time the film was made. As such, the rhythmic aspect of the pulsing images on film was a completely new feature for the techniques of artificial memory. The role sound could play in this didactic strategy was only made clear when it was seen as the collapsing of the film-strip onto the score for the performance of the work as music, a vertical montage strategy which was initially dedicated to sound but was now made applicable more generally through its relation to the idea of the matrix.

The aural link which is then posited between images using clock time, in the silent central section of *Zorns Lemma*, is not immediately apparent for its relation to the alphabet on film. However, it can be understood if it is approached through the technical specificities of the mechanism. In the film theatre, sound and vision

[61] Melissa Ragona foregrounds sound in Frampton's work, despite the fact that she never distinguishes between sound and montage in her essay. Ragona, "Hidden Noise." Texts like Siegfried Kracauer's *Theory of Film,* paid particular attention to the role played by sound, which is often elided in preference for the images on film. Siegfried Kracauer *Theory of Film: The Redemption of Physical Reality* (Princeton, NJ: Princeton University Press, 1960), 124ff.
[62] Frampton, *Circles of Confusion*, 10.

can only be given by the non-coincidence of these modes on the film-strip in a spatial relation that is then re-composed as synchronous for playback. The question of spoken sound as it responds to the formalisation of language as text problematises the technical elaboration of a solution to this feature in its one-second 'clicks'. Accordingly, these disparate aspects of the medium must be simulated if their orchestration is to appear in sync, despite the 'distinct non-synchronisation' of the apparatus when it came to the dream of sound film, a thought which Frampton dwelled upon following his reading of Eisenstein's 1928 'Statement'.[63] This distinct non-synchronisation between the sound-track and the image-track is made explicit in the final section of *Zorns Lemma* when the one-second cycle changes from the image-track to the sound-track for the reading of Grossteste's treatise on light. If it is both the structural and systematic understanding of the film which is at stake here, this tension reveals further implications for the idea of the spoken word on film, as Frampton would note in his brief text on sound on film for *October* in 1981, titled 'Film in the House of the Word'. 'A consequent celestial mechanics of the intellect might picture a body called Language,' he writes, 'and a body called Film, in symmetrical orbit about each other, in perpetual and dialectical motion'.[64] However, there are basic structural reasons why the film is assembled as a system of working parts, which necessarily creates a feedback loop for the elaboration of the work as a whole. This feedback loop, therefore, is what expands upon the model of the memory apparatus—as one outcome of its automation. This autopoietic basis of

[63] For example in Hollis Frampton, 'Film in the House of the Word,' *October,* 17 (Summer 1981): 61. Reprinted in Frampton, *Circles of Confusions,* 81-5; *CA*, 166-70. See Sergei Eisenstein, Vsevolod Pudovkin and Grigori Alexandrov, 'A Statement on Sound', reprinted in *Film Manifestos and Global Cinema Cultures: A Critical Anthology*, ed. Scott McKenzie (Berkeley, CA: University of California Press, 2014), 566-7. The statement was first published in Russian as 'Zayavka' in *Zhizn' iskusstva*, 32 (5 August 1928), pp. 4-5. The translation appears in a slightly different form as 'Statement on Sound,' *The Film Factory: Russian and Soviet Cinema in Documents, 1896-1939*, eds. Richard Taylor and Ian Christie, (Cambridge, MA: Harvard University Press, 1988), pp. 234-35. This version begins: 'Our cherished dreas of a sound cinema are being realised... The whole word now speaks of the 'silent' that has found its voice.' Frampton believed the text to have been authored by Eisenstein.
[64] Ibid. *CA,* 169.

the film is the animation of the inorganic in time, allowing for the inclusion of the necessary axis of sound.

The standard design for 16mm film projectors relies on a 26-frame gap between the image projection gate, which comes first in the path taken from the film reel, and is situated between the lens and the light-bulb.[65] The optical sound head follows in a later position along the film's path through the projector, which Frampton at one point in the "Metahistory" essay calls a 'mechanical virtuoso performer'.[66] Optical sound, which is printed on the opposing edge to the film's sprocket holes, can therefore only be projected in time with corresponding images on the film by printing the sound-track aligned to a different point from the light-gate which directs the images towards the screen. In most cases this standard procedure will occur 26 frames in advance of the images' projection. Coordinating a film's images in sync with its sound-track means the spectator can "hear" the same images which they see projected from the projector gate onto the screen. Otherwise the coincidence of the soundtrack with the images that are projected at any one time would place them slightly more than one second behind (given the 24 frame per second playback rate). Put simply there are two separate tracks encoded onto the strip of sound film—the image-track and the sound-track—and these are often 26 frames out of sync in order for the mechanical virtuoso performer to re-compose the work 'in perpetual and dialectical motion'. This synaesthetic aspect of the apparatus therefore comes to correspond to a general condition for modernity as both 'open' and oriented to the surface of the body of the subject (or even the 'body called Language' and the 'body called Film' as Frampton states), more recently analysed by Susan Buck-Morss as a question of operative images in considering the implications

[65] Paul Arthur, "Structural Film: revisions, new versions, and the artifact," *Millenium Film Journal*, Vol. 1, No. 2 (Spring-Summer, 1978): 11.
[66] "Metahistory," *CA*, 138.

for memory by technologies such as the cinema.[67] The information must be externalised and outwardly organised for its coherent display.

When speaking about *Magellan* at the 1975 screening at the Eerie County Public Library, Frampton revealed his interest in this aspect of the film apparatus by suggesting that 'if a work then consists of 26 entities let's say'—in the present case of the film-strip he was referring to the image pixels or cells in the sequence—'and we are developing, or that there is something causal going on in there, then somehow everything about 26, shot Z or what-have-you, is implied in shot A.'[68] As a clear reference to the semiotics of cinema, this idea of meta-language encoded in the cinematic apparatus is found to recapitulate the alphabet. Given the (conveniently expanded) 26 letters of the modern Latin alphabet, the looping recapitulation of the film's final frame to the first is recognised as encoded within the ensemble of ciné-film as such.[69] This aspect to the film apparatus, like the 'recursive logic of autopoiesis' also described by Pamela Lee in her recent analysis of conceptualism, was surely not lost on Frampton as he presented *Magellan* in the context of systems art and serialist modes from the period.[70]

As opposed to the arbitrariness of the alphabet spaced out one second at a time, Frampton perceived this feature of the film ensemble to be an almost divine confirmation of the increasingly emboldened position film could enjoy in relation to language, and therefore to history, whereby 'a ritual of systemic religious belief and practice' was suggested by the artform's ongoing excavation and complex relations to

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[67] Susan Buck-Morss, "Aesthetics and Anaesthetics: Walter Benjamin's Artwork Essay Reconsidered," *October*, 62 (Autumn 1992): 3-41.
[68] Hollis Frampton, *Solariumagelani* at Erie County Public Library, Buffalo, NY. 19 March 1975, 1 audio cassette. Hollis Frampton Collection, 1963-2001. Harvard Film Archive, Fine Arts Library, Harvard University, Cambridge, MA. HFA Item # 10031.
[69] Another example could be the fact that the first 100 whole numbers contains 26 six primes.
[70] Pamela Lee, *Chronophobia: On Time in the Art of the 1960s* (Cambridge, MA: MIT Press, 2004), 75.

everyday temporality.[71] Film, with its recursive linking of the film-frame to language, was responding to our altered experience of time brought about by industrialised modernity and explicitly aesthetised in film, as at most co-determined with language and therefore not subordinate to it.

With *Magellan* Frampton would attempt to convey this aspect through the use of the calendar and the solar cycle that the cinematic circuits of the projection apparatus could imitate at a micro-level. If the matrix related film to language, it could also provide a material example of non-linear time. As such it also needed to address the conventionality of the narrative form for history. The mimetic transformation of language photographed for the cinema therefore folds back upon the film's visual content as information received for the synchronous playback of its soundtrack. It follows that this aspect of film also places the arbitrariness of its composition into question.[72]

Of course, the other specificity addressed by Frampton involved the 24-frame per second playback rate of the projector, and these standards were not to be taken as merely contingent upon the mechanical necessities of the apparatus. In accordance with his interest in the meanings which lay behind seemingly arbitrary elements for film, they were excavated to show a direct correspondence between language as well as to clock time (to the 24-hour day, for example). Frampton's attempt to explore the conditions for film's projection, then, artificially renders its

[71] This quote comes from Frampton's reading of Walter Benjamin's 'Work of Art' thesis, which was given as a lecture titled 'The Invention Without a Future,' for the series 'Researches and Investigations into Film: Its Origins and the Avant-Garde,' held at the Whitney Museum of American Art, New York, November 17, 1979. CA, 173.

[72] In a letter to the editor at *Artforum* dated 21 January, 1975, Frampton takes issue with a reference by the reviewer Alan Moore to his work *(nostalgia)* as a 'discourse on the nature of memory in time,' due to its disjunction of sound and image in the film apparatus. Moore's overtly formal insight into the '*condition* of alienation', understood as a political act in reference to Godard's *Weekend* (1967), suggests Frampton's sensitivity to abbreviations of the history of film in preference for cliché examples and also to the use of disjunction, which he understands to be a 'fundamental strategy of modernism'. Hollis Frampton, "Letter to the Editor," *Artforum*, 13, no. 7 (March 1975): 9. Republished in *CA*, 163-5. The letter refers to Alan Moore's review in *Artforum,* 13, no. 5 (January 1975): 68.

sensory phenomena in a moment of technically assisted synaesthesia, as the recapitulated effect of the entire work. It is this basic premise which is elaborated as the structure of *Zorns Lemma*, whereby the combination of time and language could be effected through the intervention of the anomic images. Again, the idea of the memory theatre as a topology of things experienced in time emerges as the base of these concerns and leads to a systematisation of its elaboration. *Zorns Lemma*'s addition of sound to the arts of memory, as a mnemonic strategy already present in music, reveals film as a technical ensemble. Words and things, linked by images, now featured an inscribed aural mnemonic too, provided by the mechanical rhythms of the projector, and borrowed from musical score. In this way memory was brought back into contact with something it was always been connected with, the rhythmic poetics of the song.

### 3.1.4 No Future

*There is no such thing as time.*
Hollis Frampton, November 11, 1962, *Dialogues*

In 1979 Frampton again used Louis Lumière's infamous statement—*"The cinematograph is an invention without a future"*—as the title of a presentation he gave at the Whitney Museum of American Art (as it also appears as the epigraph to the "Metahistory" essay). Here he expressed more plainly his belief that it was possible, as a philosophical speculation, that the statement in fact harboured a profound insight (which, like the New York Times reviewer imagining sound in *Zorns Lemma*, may have been unintended). Until the past 'has been examined, has been subjected to a critical, a theoretical analysis,' Frampton extrapolated, 'there can be no

future'.[73] In this way, Frampton's insistence on the importance of historical analysis gives the moment a more generous reading, opposed to the commercial aspersions on the technology more readily parsed in Lumière's pronouncement.

For Frampton, film had brought about entirely new possibilities for consciousness, an idea he had by that stage been attempting to elaborate for some time. In his mind film facilitated a new project, 'which thing, once it is fully constituted,' he expected, would 'constitute a kind of counter-machine for the machine of language'.[74] While still struggling to appropriately name this task, he was nevertheless aiming at nothing less than the re-invention of epic history on film, 'a Tour of Tours,' as he had suggested earlier in the decade, 'of the *infinite* film, or of all knowledge, which amounts to the same thing,' with which he endeavoured to pursue in *Magellan* through the atlas model.[75]

I've argued that *Zorns Lemma* is an experiment, one that Frampton produced entirely on film. According to an initial analysis by Simon Field, this film consisted predominantly in a mode of 'non-"dramatic" systematic structure,' whereby 'anticipation is built up,' and where the 'past and prediction of the future are played upon' as an effect of language and enumeration.[76] At this point, Frampton's interest in the relationship between temporality and what Field terms—following Frampton's statement in the "Metahistory" essay—'all knowledge', requires a more formal framework. The documentary alphabet and subsequent replacement images that make up the silent central section of *Zorns Lemma*, at the rate of one second per letter, sought to resolve this problem as the major premise of the film: 24 frames

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[73] "The Invention without a Future," *CA*, 180. Hollis Frampton, "The Invention without a Future," transcription of an audio recording (now lost) of a lecture for the series "Researches and Investigations into Film: Its Origins and the Avant-Garde," Whitney Museum of American Art, New York, November 17, 1979. Published in *October*, 109 (Summer 2004): 64-75, ed. and annotated by Michael Zryd.
[74] Frampton cited in 'Interview at the Video Data Bank,' a transcription of a videotaped interview by Adele Friedman for the Video Data Bank, School of the Art Institute of Chicago, 1978. *CA*, 186.
[75] "Metahistory," *CA*, 138.
[76] Field, "Alphabet as Ideogram," 24.

per second recapitulated the 24-letter alphabet (as did the 26-frame space between the sound and image gates). In opposition to systematicity, however, Frampton found in the montage matrices of images he had developed for making the film that the creation of a system was only one part of the compositional procedure. As even Deren had presciently noted in her anagrammatic essay, 'cultural memory' was also at stake in the artwork, and the 'deep recesses' for locating this aspect were not conducive to overly positive and explicitly systems-oriented thinking.[77] In contrast to this the matrix presented itself as the intersectional grid upon which film could exceed its systematicity, just as *Zorns Lemma* could be seen to exceed its characterisation as a demonstration of structural film, almost as soon as it had been announced by Sitney. But the question remains: how does it do this?

By 1979, the idea of 'no future' had reached the mainstream from the sub-cultural incursions of punk music. The Sex Pistols' refrain in 'God Save the Queen' (1976) had made explicit an experience that the philosopher of technics Bernard Stiegler has since described as related to the growing awareness of a technical de-temporalisation, calling for a politics of memory in the era of '*light-time*', a presentism that is now more commonly addressed as contemporaneity.[78] Frampton understood the problem of film's temporality to revolve around the question of why it was subordinated to language as such, suggesting instead the possibility of a 'counter-machine' for language. If *Zorns Lemma* was meant to depict this move from the alphabet to images in order to signify this translation of time, it did this using the matrix to locate and structure the position of images.

The first public screening of *Zorns Lemma* occurred five months prior to its more official 'premiere' at the New York Film Festival, in the *Cineprobe* program at the Museum of Modern Art on the 14th of April, after which Frampton was asked

[77] Deren, *Anagrams*, 18.
[78] Stiegler, *Technics and Time, 1,* 276.

about film's relation to memory.[79] In this way the film also signifies the initial moment of a kind of migratory route between both the art gallery and the film festival. By the beginning of the 1970s Frampton had apparently come to better terms with MoMA after his conspicuous involvement in the Art Workers' Coalition protests in the previous year.[80] Even so, at the time of his return to *Cineprobe* on the 18th of February 1975, nearly five years later, Frampton could now summarise his presentation with the apparent authority of an artist-filmmaker who was now portrayed as 'the most intellectually challenging filmmaker in North America'.[81] Like the Borgesian poetics of totality in which the theory of metahistory was couched, the subjective experience of Borges' image of a 'point where all points converge,' which he called the false aleph, was initiated by questioning the relation of the film image to the prescribed systems for written language.[82] In Borges' story the Aleph operates like a camera obscura. The figure itself—א—operates as the first letter of the semitic *abjads*, a writing system which emphasises consonants, and the aleph was subsequently adopted by the mathematics of set theory for representing infinite sets. In this way the aleph signified the undiscoverable but imaginary centre related to that unfindable viewing room described by Frampton in relation to the infinite film.

In Borges' story, the aleph is found in the cellar of a friend's house. The protagonist Daneri is a tragic figure who could also be compared with the figure of

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[79] An even earlier screening date for the film, April 3, is recorded by Jonas Mekas and may have been a private screening. This generally fits the time-frame for the "Cineprobe" screening, however, and it may have been the same screening Mekas reports. See Jonas Mekas, 'movie journal," *The Village Voice*, April 16, 1970, 54. Reprinted in Jonas Mekas, *Movie Journal: The Rise of the New American Cinema: 1959-1971* (New York: Macmillan, 1972), 381.

[80] This moment will be discussed in the next chapter, in relation to the production of *Palindrome*. Frampton's letter to MOMA's curator of film, Donald Ritchie, marked January 7, 1973 is another example of the tense relationship to the institution that Frampton had to manage. "Letter to Donald Ritchie," *CA*, 159-62.

[81] *CC*, vol. 1, 21.

[82] Jorge Luis Borges, *The Aleph and Other Stories, 1933-1969: Together with Commentaries and an Autobiographical Essay*, ed. and translated by Norman Thomas di Giovanni in collaboration with the author (New York: E.P. Dutton, 1970), 29.

Magellan. In many ways, *The Aleph*, is also a story that questions our ideas about time. What was the future of this undiscoverable centre? If Frampton could make a link to the 13th century notion of the 'fabric of the world', as gleaned from Grosseteste's treatise on light and the infinite, the idea had been permitted a rather long period of gestation.[83] This process of gestation also gave rise to the identification of cultural memory in the contemporary sense, as it required a particular understanding of time as not only historical. It is this possibility which excited Frampton about Lumierè's premonition about film as 'without a future'.

As has already been shown, Frampton's filmmaking set out to investigate the conditions for relating words and things through images, a model for the art of memory. Considering artist-film's reliance on the film-strip as a poetic project to be undertaken in a new medium, and yet to have a future, W.J.T. Mitchell's identification of what he calls 'narration as enumeration,' allows the classical rhetoric of memory to re-emerge as a systematic technique.[84] Tempo, as quantifiably regular timing, is an undeniable part of memory. In her thesis on the memory theatre Yates demonstrated the complex inter-relation between the basic elements for the organisation of memory which relied on a series of conflations and underwent a dramatic upheaval in early modernity. Relating this to the discrete modes of the material and to the development of derivative mathematics, and accounting for rates of change as a substitute for the function of narrative, we arrive at film as one answer that can be provided to clear up Yates' concerns for the disappearance of memory as a technique by the 18th century. The complicated subjective effects brought on by developing the science of mathematics—statistics, probability—meant that cultural memory was now required to produce new meanings, which Yates nevertheless felt unable to pursue. In *Zorns Lemma* the

[83] On Grosseteste's status as a medieval figure quite seriously engaged by Frampton see Luke A. Fidler, "The Praxis of the Tractrix," *postmedieval: a journal of medieval cultural studies*, 7 (2016): 96-114.
[84] W.J.T. Mitchell, *Picture Theory: Essays on Verbal and Visual Representation* (Chicago: University of Chicago Press, 1994), 195.

complexification of enumeration is represented by Frampton's interest in set theory. By echoing the Lumière's vision of a film with 'no future,' Frampton understood that by confronting the confusion over time as no longer operating as a dependable continuum, an imperative for the study of film could be found.

Set theory, as the mathematics of ordering, operates alongside and often precedes modernism's interest in aleatoric innovation, leading back to the 'spectre of narrative' which, as Frampton noted in an exhibition text from 1972, haunted the cinema precisely because it was cinema which had usurped it.[85] The memory theatre, it has been shown, was sublimated by the emergence of the 'new science' of the fact which, according to Frampton had subsequently emerged in the art criticism of Lessing in the 18th century, and as such had become an avalanche of recorded historical events by the time photography had first appeared in the 19th century.

As I have argued in the first chapters of this thesis, the "survival" of the art of memory can therefore be linked to the arrival of the cinema, where it addresses itself to the art of modernity as an index of cultural memory. This was what the editors and writers of *October* had understood intuitively by placing their emphasis on the significance of film. In Frampton's mind, however, it was only through the production of the artwork, the modern form for poiesis, that the investigative work he had embarked upon could be properly undertaken.[86] This jeopardised linearity was accounted for by the anagramatic complex permitted by the matrix foreseen by Deren, and the apparent impossibility of the future noted by the Lumières required a new organisation for understanding images (as prophetic, in Michael Snow's terms) and by using conscious arrangements. In this way, as early practitioners of film, like Jean Epstein, had already noticed, film was inextricably tied to the

[85] "A Pentagram for Conjuring the Narrative," *CA*, 140.
[86] This is a generally accepted argument made in relation to Frampton's work which is also to be found in Federico Windhausen, "*Syncretic Practices*," 129; it is also highlighted by Lisa Zaher in her study of Frampton as a photographer, and related to Frampton's thinking of a 'long-history'. Zaher, "By Mind and Hand," 9.

emergence of the mathematics of set theory. In responding to this, however, it could offer only a poetics of the work, and in turn provided the aesthetics of modern memory.

### 3.1.5 Poetry or Poiesis?

The expanded notion of poetic production as poiesis, and its relation to the artwork on film must be distinguished from that espoused by Sitney in relation to the North American filmmaker avant-garde, especially in his more recent attempt to frame Frampton as a poet of the cinema. In the revisions of his *Visionary Film* thesis on structural film, and then more explicitly in his later essay in *Eyes Upside Down*, Sitney proposes a more rigorously literary model for understanding Frampton's films.[87] The relationship between the work and the production into presence of a new form, a 'counter-machine for the machine of language,' in a *poietic* sense. It required the realisation of something that needed to be understood as "originary". By founding an original space within which to present his work, Frampton could address film on his own terms, and in that which he makes available as the filmic 'residue' of his own ideas about art.[88]

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[87] P. Adams Sitney, *Visionary Film,* 1979, 397; *Eyes Upside Down*, 98-122. Perhaps most significantly, Frampton is not included in Sitney's most recent book *The Cinema of Poetry* (New York: Oxford University Press, 2015), although he does note in a chapter on Brakhage that 'more than any other of the filmmakers of the American avant-garde cinema, Frampton shared Brakhage's commitment to modernist poetry.' Sitney, *Cinema of Poetry,* p. 161.

[88] Hollis Frampton, 'An Evening with Hollis Frampton,' *Cineprobe*, February 18, 1975, Sound Recordings, 75.7, The Museum of Modern Art Archives, New York. The *Cineprobe* program began in 1968 as a forum for independent and experimental film and by 1982 was claimed to be the longest running program of its kind in North America. Filmmakers were generally present at the screenings to discuss their work with the audience. "Cineprobe: 15th Season Begins November 22', Press Release Archives, Museum of Modern Art Press Release #41 (November 1982), https://moma.org/momaorg/shared/pdfs/docs/press_archives/5985/releases/MOMA_1982_0041_41.pdf?2010.

At about the same time as Frampton was discussing his work for MoMA's *Cineprobe* series, Giorgio Agamben proposed an image of modern art in opposition to the aesthetics of the 'open work' described by Umberto Eco a decade earlier. As an object that 'circles the split that cuts through it,' the work of modern art is given a lucid contemporary reading of its meaning for art history by Agamben, whereby its origin is obscured by a crisis in modern aesthetics.[89] How this relates to the matrix for *Zorns Lemma*, I argue, depends on the way in which the work is framed. While often seen as a structural film, or alternatively as a film related to systems aesthetics, the work ultimately demands to be figured as an artwork elaborated not only on the matrix of film, and as a reflection on its material, but on the demands these new approaches make on memory. It is in this sense that the work can be described as 'modern', and only from this position can it be shown why the *Magellan* cycle would reject the emphasis Frampton had placed on letters and their enumeration in *Zorns Lemma,* in preference for a different model, which relied upon a matrix that was non-hierarchical and organised as opposed to well-ordered. *Magellan*'s privileging of perspective and exploitation of the spatial and topological aspects of film, not as a strictly linguistic or abstractly geometric work, but as a score that is its own performance, relates to *Zorns Lemma* only through a formal affinity. Following his production of the film, Frampton realised that there had emerged a fundamentally new possibility for film as a question of the work of art, which separated the modern artwork from the contemporary period by inaugurating its technical redundancy—Frampton points to the invention of radar in the "Metahistory" essay—in line with Deren's understanding of film as temporally 'simultaneous' in 1946, immediately following World War II.

*Zorns Lemma* therefore appears to focus Frampton's interest in the question of film as an artform, and to introduce the idea of language by focussing on the formal qualities of the alphabet as the basic material for poetry. It is important to

[89] Agamben, *Man Without Content*, 102.

remember that as early as 1956, when he was 20 years old, Frampton was engaged in translating ancient Greek and at that time had aspired to become a poet. One example, in a letter to the Pound acolyte David Gordon (1929—) dated 23 May 1956, shows Frampton providing a gloss on Sappho's *Ode* as it was translated by an obscure Australian poet named William Fleming:

> PLOK-: verb *pleko* (Latin *plico, plecto*) means twist, weave, braid. We get *plait,* from the same Indo-European stem. Also had sense of *clasp, embrace*; I think Longus uses it to describe the twinings of Daph. & Chl. Two easily derived nouns: *he ploke*, anything woven, a web; *ho plokos*, a lock of hair, braid, curl.[90]

While the rundown of one part of the epithet *doloplokus* (*δολόπλοκε*) suggests Frampton's sensitivity to the polysemous economy of the poem, the adjective with which Sappho describes Aphrodite in the fragment dated to the 6th century BCE supplements her proper name.[91] Given Frampton's movement from language to images would eventually be mediated by photography, it was the relative weight of tradition (in the above case exhibited in the etymology of one part of a word) which shows how Frampton was so easily seduced by film's relative freedom. As an art that did not yet have the armature of millennial discourse as did poetry, photography could also evade the problem of language difference—Frampton had tried reading Sappho in Chinese ideograms, as well as in German. It seems photography provided

[90] Letter from Frampton to David Gordon, 23 May 1956, cited in David Gordon, 'An Epitaph for Hollis Frampton,' *Framp's Homer:* The Text of *Iliad*, Book I, Lines 1-52 as Written Out in 1956 by *Hollis Frampton:* To This are Added, Two Odes of Sappho, A Memoir by David Gordon, and Explanatory Notes by Various Hands, ed. Reno Odlin (Samizdat, 1990), 12. The lyric poem is usually called 'Hymn to Aphrodite' and is also referred to as Fragment, or Poem 1 as it survives in its entire 28 lines.

[91] The most common translation of the word is 'wile-weaving', see Ann L. Klinck, *Woman's Songs in Ancient Greece* (Montreal: McGill-Queens University Press, 2008), 67. Fleming's unconventional translation 'rusée personnage' in the French, is all the more perplexing as it becomes polylingual and for Frampton is still 'too foxy, male'. See Frampton, *Framp's Homer*, 13. Fleming's translation is reproduced on page 34.

a new front in simultaneous and polysemous representation which attracted Frampton for its global potential. And while he would remain wedded to the idea of meaning in the selection of elements for the production of the work as informed by etymology, photographic images provided something more than polyvalence: they opened up a space for linguistic indeterminacy in a way that even highly such concentrated terms could not. Film's discrete images presented only the set conditioned on the cut, and not on the proper name. Gordon remembers it in the following way:

> In his experimental work on Sappho he broke the verbal elements down into etymological bits of meaning, sound and action, attempting to forge a verbal instrument with ideogrammatic potencies.[92]

As we will see, this tendency from lyric to film—something which Gordon also recognised in his epitaph to Frampton—prepared him for the examination of these elements at close range, at the "cellular" level. In a similar way, *Zorns Lemma* therefore maps a transition from verse to montage in Frampton's thinking of the set of elements that could point to an image as a constellation, as Borges imagined in *The Aleph,* 'where all points converge'. Furthermore, the lemma is also the name for a verb in its canonical form for the lexeme, like an entry in the dictionary. How to achieve this level of insight for film was precisely the issue.

It is necessary, therefore, to see *Zorns Lemma* as Frampton's experiment with the montage matrix, undertaken for testing the boundaries of formal filmmaking through a program for arranging images by time and by type. But it was by experimenting with filmmaking that he arrived at the artwork, in a way that corresponds to Agamben's reading of Martin Heidegger (1889-1976) and his requirement for the artwork as revealing an origin, its poiesis. Put simply,

[92] Gordon in Frampton, *Framp's Homer,* 18.

Frampton's approach to *Zorns Lemma* follows his consideration of the invention of techniques for the documentary capture and reproduction of discrete images which was made possible by photography in the 19th century, and the subsequent intervention that photography then made into the domain of written communication.[93] Placing distinctions between the modern notion of the document and the documentary mode aside, the question of memory and communication remains central to these concerns, because it is as if Frampton has tasked himself with making a device for remembering something which does not yet exist, which encapsulates the notion of poiesis.

Although a change had arrived to break up the purely perspectival assessment of the image after photography, as Stan Brakhage noted in a letter to Frampton upon his first encounter with *Zorns Lemma*, trying to 'escape that rhetoric and outright propaganda associated with the "Old Doc" school of film-making,' he writes, was part of the game for developing a domain for artist-film.[94] What linked all filmmaking at this stage, however, was the necessity of the cut for montage. Reviewing *Zorns Lemma* for the *Film Culture* journal, Mark Segal noted that it was against the conventions which presented 'decisions about where to cut and what to juxtapose being made on an intuitive, arbitrary basis,' that Frampton had so far staked his filmmaking practice.[95] The cut was the location whereby artistic choices, emphasising some form of genial, i.e. original, expression was to be rejected by artists dedicated to extending the modernist practice of subjective effacement. Meaning and arbitrary signification demanded redefinition in the context of the automatism of the cinematic apparatus. However, the idea that 'the structure or

[93] On the development of photography as a document see Nesbit, *Atget's Seven Albums*, 14-18. On the emergence of photography from the domain of writing see Sekula, "Photography between Labour and Capital," 213-22. For the best explanation of his move into photography from painting and poetry, which he often discussed in interview, see Hollis Frampton, "Hollis Frampton on Hollis Frampton" (1977 transcript), cited in Frampton, *Recollections/Recreations*, 110-1.
[94] Stan Brakhage, "Letter to Hollis Frampton, November 22, 1971," Department of Film and Video Archive, *Carnegie Museum of Art,* Pittsburgh, PA, 2.
[95] Mark Segal, "Hollis Frampton/Zorns Lemma," *Film Culture*, 52 (1971): 89

system set up by the filmmaker' (or even a 'system of structuring' as Segal says a few lines later) defined the limits of the film, requires revisiting, as it relies upon an ambiguous assumption of film as a positive model for ordering things).[96] The film therefore, is marked by the transition from words to things, indexed as a poetics of the set and marked out by the arrangement of its image elements upon a matrix. If it begins with the alphabet and ends in the medium, *Zorns Lemma* marks a moment of translation from normative communication to some kind of private or unknown language. But it also marked a more general movement from artwork to film, and vice versa. As represented by its screening at MoMA, followed by the NYFF screening at the Lincoln Center later in the year, *Zorns Lemma* came to occupy the liminal space between the institutions of the gallery and the cinema.

Frampton replied to Brakhage's letter by noting the limit point of the name as a pure form of poetry in the realm of language, which he then describes as like a bubble bursting in 'extreme slow motion', even as he tried to move toward elaborating these documents, and documentation as indexical images 'into film'.[97] In the 20th century context of a global culture for modernity, the arrival of film meant everyday communication was no longer to be maintained primarily through written correspondences and discourses recognised in language alone, but would gave rise to a new 'turn' mediating these externalisations, one in which, as the media theorist Vílem Flusser noted, 'technical images are produced by apparatuses'.[98] This new

[96] Ibid., 95. The review is dated 'May 1970' at the end of the text.
[97] Hollis Frampton, "Letter to Stan Brakhage, January 26, 1972," reproduced in the *Millenium Film Journal,* 16/17/18 (Fall-Winter 1986-7): 212-3. Republished *CA,* 157-8. See Scott MacDonald's reference to the distinction between document and documentary maintained by Bill Nichols in the introduction to *Avant-Doc: Intersections of Documentary and Avant-Garde Cinema* (Oxford: Oxford University Press, 2015), 9.
[98] Vilém Flusser, *Towards a Philosophy of Photography* trans. Anthony Mathews (London, Reaktion Books, 2000), 21. This book was first published in 1983, elsewhere Flusser wrtites: 'Texts have recently shown themselves to be inaccessible. They don't permit any further pictorial mediation. They have become unclear. They collapse into particles that must be gathered up. This is the level of calculation and computation, the level of technical images.' Vilèm Flusser, *Into the Universe of Technical Images,* trans. Nancy Ann Roth (Minneapolis: University of Minnesota Press, 2011), 7. This book

paradigm for the production of images was evident in their competition for the same space that had been dominated by the printed word for the previous four centuries, on the front pages of the daily newspapers, for example images now competed with words (figs. 3.7a & b).[99] Put simply this meant that images were no longer to be produced by, nor were simply the domain of, artists any longer.[100] What remained was the problem of cutting, of how to approach decision-making or selection, and still allow for the re-entering of the artwork into the flow of everyday images, images which had to be 'cut' from their documented reality.



Figs. 3.7a & b Front pages of the New York Times, July 21st, 1869 and July 21st, 1969

was first published in 1985. The idea of this turn in relation to depiction is also found in Mitchell, *Picture Theory,* 11-34.

[99] More recently the front-pages have begun to accomodate moving images. This is the topic of conversation between filmmaker Harun Farocki and Flusser in a short-film in which they discuss the design of the German newspaper *Bild* as an example of something Flusser was explicitly referring to in his theories of new media. See Harun Farocki, *Schlagworte – Schlagbilder: Ein Gespräch mit Vilém Flusser* (1986, video, colour, sound, 13mins).

[100] This is something Frampton makes explicit in his review of a show of photographs by his partner Marian Faller at the Edith Barrett Gallery, Utica College of Syracuse University, Utica, New York, March 22-April 12, 1981. "Notes on Marion Faller's Photographs," *CA,* 103-4.

The automatism involved in the production of a photograph, emblematised by what Abigail Solomon-Godeau has called the 'mini-guillotine' of the shutter, presents itself initially as an aesthetic issue for the status of the image as an artwork understood as absolutely present (to the point of death).[101] One response to this problem in the discourse of art, which had historically privileged the artist's virtuosity and the indexical status of their 'hand', was to see it as a crisis caused by conventional media. Furthermore, the proliferation of mass-produced aesthetic objects also created issues in the identification of the artwork which was now dispersed and constantly moving through a network of relations brought on more generally by what computer scientist Philippe Dreyfus had termed 'informatics' in 1962.[102] American critics inspired to pursue the agenda set by European aesthetics, such as Rosalind Krauss and Stanley Cavell, nevertheless expanded upon the requirements for invention from within the medium's 'automatism'.[103] Their address to the subjectivity of the artist by expanding upon the essentialism of Greenberg's model for the critical evaluation of the work necessarily belies the work of invention that concerned Frampton and Brakhage on film, however.

Alternatively, all artwork after the introduction of photography could now be understood as the result of the intervention by "apparatus theory" for producing technical images, also identified by Flusser.[104] The notion of the selection of work as intentional, as opposed to its production, demonstrates how the artwork had been forced to renegotiate its position in relation to representation following the

[101] Abigail Solomon-Godeau, "Dispatches from the Image Wars," *Artforum,* 42, no. 10 (Summer 2004): 61.
[102] Bernard Stiegler, *Technics and Time 2: Disorientation* (1996), trans. Stephen Barker (Stanford: Stanford University Press, 2009), 101-3.
[103] Diarmuid Costello, "Automat, Automatic, Automatism: Rosalind Krauss and Stanley Cavell on Photography and the Photographically Dependent Arts," *Critical Inquiry,* 38 (Summer 2012), 841. On the conventionality of photography as producing discrete images see Peter Geimer, "Image as Trace: Speculations about an Undead Paradigm," *differences: A journal of Feminist Cultural Studies*, 18, no. 1 (2007), 7-28.
[104] For example the collection of essays edited by Philip Rosen includes Jean-Louis Baudry, Pascal Bonitzer, Mary Anne Doane, Teresa de Lauretis, and Lyotard in the 'apparatus' section of the book. See *Narrative, Apparatus, Ideology: A Film Theory Reader*, ed. Philip Rosen (New York: Columbia University Press, 1986).

introduction of automatic processes, while photography became the primary representative of this shift. This second-order aspect to representation suggests the emergence of a practice involving the selection of work from the archive of technical images, which collects historical artefacts as a kind of tertiary memory for society—as neither communicative or collective in their articulation—now understood more generally as "cultural" memory. Claiming for film the status of artwork means addressing the question of how these images are organised.[105] Frampton's answer was found in the importance of the matrix. As such, *Zorns Lemma* was Frampton's first work on film to be recognised as significant for its challenge to the form of the artwork itself. Like Michael Snow's *Wavelength,* in which Frampton had himself acted as the dying man, this new work required a name, and "Structural Film" had appeared as a discourse preparing these works for an assumption to the status of art.[106] But the name was not forthcoming for images on film, hence the difficulty for understanding the strange system of reference *Zorns Lemma*'s replacement images proposed.

In the analysis I give in the second part of this chapter focusing on the 2702 cuts in the *Zorns Lemma*—as opposed to the shots which make up its contents—the sense in which the cut signified 'the deliberate *act* of articulation,' demonstrates how Frampton understood this film to be an experiment, and therefore how his idea of a metahistory of film had emerged subsequent to it.[107] In his response to one critical engagement with *Zorns Lemma*, which had suggested it was essentially a filmic elaboration of the axiom of choice and the mathematics of set theory,

[105] An attempt to address this issue by Georges Didi-Huberman is given by comparing the clinical archive of photographs from Charcot's psychopathology to the *kulturwissenschaft* undertaken by the *Mnemosyne Atlas* in Aby Warburg's research library, who terms this emergent intervention into technical images 'the creation of iconographic repertories.' Georges Didi-Huberman, 'Dialektic des Monstrums: Aby Warburg and the symptom paradigm,' *Art History*, 24, no. 5 (November 2001): 628.
[106] In his notes to *Zorns Lemma,* Frampton states at one point: 'The film is a kind of long *dissolve*, not quite the way WAVELENGTH is a zoom, but nevertheless.' "*Zorns Lemma:* Script and Notations," *CA*, 197.
[107] Ibid., 196.

Frampton made it clear that the mathematical model, Zorn's Lemma, was not a theory for describing 'all of the possible relations in a set,' but rather one that is '*hierarchic*, in that it proposes a possible meaningful "tour" of all elements within a set with regard to only one operation—discernment of their "ordering," or the relative preponderance of their *shared qualities.*'[108] In the film's emphasis on the selection and arrangement of images in alphabetical order, their organisation was only one way of ordering the material. Frampton subsequently figured a set of rules which were immanent to the work yet illuminated by the logic of set theory.

This meant that the film appeared to investigate how a 'counter-machine for the machine of language' might operate through the matrix montage of images Frampton had set out to develop. Clearly, if the "tour" was a way to meaningfully navigate the infinite set of all film, the alphabet had provided a readymade pathway for the organisation of the images. This would be his solution to the problem of the narrative insistence on linearity. It allowed Frampton to represent what Borges had proposed was the poiesis presented by the transfinite numbers which made it possible for representation by the alphabet, and which followed the mathematical development of sets in the work of Georg Cantor (1845-1918).[109] It was in this way that it had prepared a path to *Magellan* as a film, as the matrix had provided a solution to the problem of installing images in complex spatial arrangements. In fact, *Zorns Lemma* had also begun as an idea for the gallery, as a photographic series documenting and arranging words which Frampton had commenced at about the same time as he perceived *Magellan* as an installation work. The series he had titled

[108] Ibid., Zorn's Lemma as a mathematical formulation for set theory is described in its relation to Frampton's film by Clint Enns, although the definition given by Enns does not shed much light on understanding Frampton's film as such, "Frampton's Demon: A Mathematical Interpretation of *Zorns Lemma*," *Leonardo*, 49, no. 2 (2016): 156-60.

[109] Borges is referring to Cantor's use of the aleph, the first letter of the Hebrew alphabet, as the representative symbol for transfinitude. See Georg Cantor, *Contributions to the Founding of the Theory of Transfinite Numbers,* trans. and with an introduction and notes by Philip E. B. Jourdain (New York: Dover, 1915).

*Word Pictures*, however, revealed the problem of tempo, of time, which meant Frampton would only be able to complete as a film almost eight years later.

## 3.2 The Cut: *Word Pictures*

*The photographic act is a complex "cut" in space and time, dimensionless, in itself, as the intersections and figures in Euclid's Elements…and, in the mind, precisely as real.*
Hollis Frampton, "Digressions on the Photographic Agony" (1972)

In 1973 Frampton made a point of drawing a strict distinction between his practice of still photography and his films in a two-part interview for Jonas Mekas' 'movie journal' column in *The Village VOICE*, following his completion of the seven-part series *Hapax Legomena.*[110] It can be assumed that the problems presented by this transition had also been brought to his attention during the production of *Zorns Lemma.* There is a very simple reason for this which Frampton included in his notes for the film: the project had originally commenced as a photographic series under the title *Word Pictures.* This idea in itself was extensive, in that it had consisted of 'more than two-thousand black-and-white stills made in 1962/3, which I proposed to stand-animate,' which Frampton details in order to explain his decision to eventually transpose the entire work onto 16mm ciné-film (fig. 3.8).[111]

The representation of what he calls a 'spatial paradox' between words and their photographic depiction in the space of their appearance was what had initially prompted Frampton's idea for the work, and included the cinematic animation of the frames, which he had envisioned as possible to shoot in sequence from the prints he had made. When it came to animating the images in sequence, however, Frampton was faced with the fact that, as he says, the 'rephotography looked like just what it was: like a filmed image of a flat object'.[112] Importantly, the series of word pictures that would eventually come to make up the main part *Zorns Lemma* suggested a particular problem for the modernist trope of flatness as one such apotheosis for the work, albeit one that collapsed the Greenbergian idea of

[110] Jonas Mekas, "movie journal," *the village VOICE,* January 11, 1973, 67; "movie journal," *the village VOICE,* January 18, 1973, 71-2.
[111] "*Zorns Lemma:* Script and Notation," *CA,* 196.
[112] Frampton cited in *CC*, vol. 1, 48.

painting's refinement to flatness on the canvas onto the apposite flatness of text. For forty-five minutes, the one-second images that make up the central section of *Zorns Lemma* emerged directly out of this initial idea, creating 2700 'places' for the word images in the film, and 2701 cuts required to show them all.



Fig. 3.8 Hollis Frampton, 'Air' from the series *Word Pictures*, 8x10in. black and white photograph, 1962/3, Walker Art Museum. Gift of Marian Faller.

Frampton's focus on the cut as an idea can be related to his involvement as a friend and collaborator of sculptor Carl Andre (b. 1935), dating from his work in timber from the late 1950s, which was executed with a Radial Arm Saw. Andre was from Quincy, Massachusetts and attended Philips Andover Academy between 1951 and 1953, where he first met Frampton who was to be his high-school roommate. Frampton reconnected with Andre when he arrived to stay with him in New York

'early in the spring of 1958'.[113] By this time Andre's thinking about the cut was moving from the literal to the figural, and at one point he 'realised that the wood,' in his own words, 'was better before I cut it'.[114] Almost immediately the cut suggested a sympathy between the materiality of words given the objectification of language by typewritten text. The ability to isolate individual words as objects, as not only signifiers but also referents, allowed for their treatment as images to be arranged. But this movement also necessitated a temporal succession, and the cut presupposed the organisation of these objects.

Jumping forward to his review of a massive retrospective of the work of photographer Paul Strand (1890-1976) at the Philadelphia Museum of Art in 1972, written during the production of the *Hapax Legomena* series which followed *Zorns Lemma*, Frampton addresses what he calls the 'principle of organization' in photography. The issue, it appeared, was how to re-compose the 'whole terrain of the world,' leading Frampton to posit a more foundational problem for the medium: 'Still photography has, through one and another stratagem, learned to suspend or encode all but one of our incessant intuitions: I refer to what we call *time.*'[115] For Frampton, who ends the essay by quoting a passage from Borges, Strand represents the bracketing out of time as the intuition that is precisely not at stake in photography.[116] For Frampton this distinction, and the timelessness of the

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[113] "Letter to Enno Develing," *CA*, 279. This letter describes Frampton's relationship with Andre as an introduction to the the exhibition catalogue *Carl Andre* (The Hague: Gemeentemuseum, 1969), 7-13. The letter was also reprinted in *About Carl Andre: Critical Texts Since 1965*, eds. Paula Feldman, Alistair Rider, and Karsten Schubert (London: Ridinghouse, 2006).

[114] Carl Andre quoted in Anna Moszynska, *Abstract Art* (London: Thames and Hudson, 1990), 206. The quote is dated to 1959 from around the time he made the sculpture titled *The Last Ladder*.

[115] Hollis Frampton, 'Meditations Around Paul Strand,' *Artforum*, 10, no. 6 (February 1972): 57. Republished in Frampton, *Circles of Confusion*, 127-136; *CA*, 58-66.

[116] The Borges quote, from *A Personal Anthology*, reads: 'Through the years, a man peoples a space with images of provinces, kingdoms, mountains, bays, ships, islands, fishes, rooms, tools, stars, horses, and people. Shortly before his death, he discovers that the patient labyrinth of lines traces the image of his own face.' Jorge Luis Borges, *A Personal Anthology*, ed. Anthony Kerrigan (New York: Grove Press, 1967),

photographic image, would mean that a series of still photographs became unacceptable for his vision of the work, because the cut involved time as well as space, and motivated the principle of organisation.

To expose time, Frampton chose to add sound to his film by using voice recordings for *Zorns Lemma*'s soundtrack. Either side of the central section of pulsing word pictures, the film is buttressed by the two shorter sections heavily weighted towards their spoken sound-tracks as the dominant aspect of the sequences. The film's imageless first few minutes begins with the voice of a woman (the last section features the Grosseteste treatise on light). Marcia Steinbrecher, Frampton's wife at the time, recites out loud the 24 letter-rhymes for teaching and remembering the alphabet. The rhymes come from the *Bay State Primer*, a Puritanical abecedarium for children that was a popular memory aid for learning the order of the alphabet. Also known as the New England Primer, it begins ominously enough, with the couplet "In Adam's fall, we sinned all" for signifying the letter A (fig. 3.9).[117] The function of the primer, then, sets the terms for the alphabetical sequence that follows by exceeding its stated purpose, transmitting the order of the alphabet. Its supplementary function, of course, is indoctrination into a particular world-view.

In *Zorns Lemma* the presence of the primer suggests that memory is harnessed by instruction first and foremost, in that it foregrounds the rhetorical relationship of words and images. But the cut remains present here too, the "word pictures" which follow are posited on the enframing of the series as a sequence of "word objects", which appear in the primer in a morphologically similar arrangement to the film strip. In this way Frampton seems to be positing a direct link between the

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203. It should be noted that Paul Strand had also shooting making motion pictures since 1921, when he made *Manhatta* with Charles Sheeler.

[117] Steinbrecher was Frampton's wife at the time this section of the film was made. They separated in the year following its first screening. Sitney, *Eyes Upside Down*, 107. On the tradition of the New England Primer dating back to 1777, as a question of the ideological construction of historical memory as well as a history of publishing in America, see Kyle B. Roberts, "Rethinking the *New England Primer*," *The Papers of the Bibliographic Society of America*, 104, no. 4 (December 2010), 489-523.

memory systems of early modern figures described by Yates, like Camillo and his emblematic use of images, and the surviving didactic strategies for indoctrination.

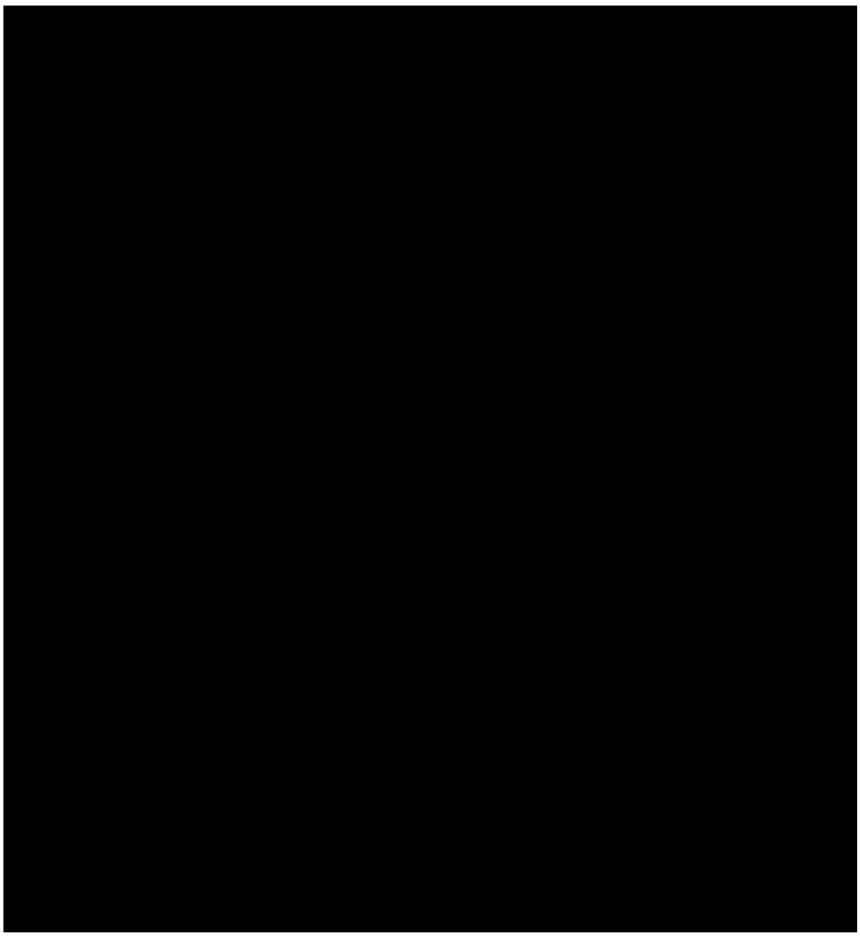


Fig. 3.9 The first page *The New England Primer* (New York: J. Paterson, 1798).

In his review of a commemorative and retrospective exhibition of Frampton's other 'non-film' work, which followed his death in 1984, at Buffalo's Albright-Knox Gallery in New York, Christopher Phillips reflects on the distinction between words and things from the perspective of still photography and its relationship to conceptualism. Phillips furthermore distinguishes this aspect from Frampton's interest in photographic series.[118] Referring to the literary compendium

[118] It appears that this exhibition, or one similar, titled 'Recollections, Recreations, Resurrections,' was planned for 1982 at the University of New Mexico, Albuquerque. It may have been cancelled due to Frampton's ill health, and relocated to be held in Buffalo, NY at Albright-Knox after his death. In his CV it is the last item that appears, marked as a 'Non-film Retrospective' in the section titled 'Hollis Frampton: Exhibitions, Screenings, Lectures'. One wonders how this exhibition, had it not been recast a memorial, would have changed the perceptions

Phillips writes that 'Frampton insists,' after citing Mallarmé's idea of "the Book" as the paradigm for the word and the archetrope for literary modernism, 'that the relation of the Cinema to the still photograph is of quite a different order'.[119] If the photograph was to film as the word is to a book, the sequential nature of the images would remain non-problematic, and parsing them in a sentence-like structure would make sense. However, the link to be made, which Phillips notes was reflected in Frampton's interest in the possibilities of conflating the book with the film, concerned this very assumption. Interestingly, the conceptual basis of this formulation remains unexplained by Phillips:

> *Word as image.* In the photographic series *Word Pictures* (1962-3), Frampton sought to exploit the oscillation that takes place between our consciousness of the materiality of the script—here, environmental words isolated from the visual continuum of the urban landscape—and the evocation of its signified. Unable to devise a satisfactory presentational form for these still photographs, Frampton ultimately transposed the idea to cinema in *Zorns Lemma.*[120]

Since then, Frampton's proximity to photographic conceptualism has remained fraught, and any possible dialogue with other works by artists like Douglas Huebler

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of his work with photography. *CV,* 28. Recent restagings of his photographic series by New York-based gallery Room East has begun to address to address this question, http://www.roomeast.com/exhibitions/hollis-frampton/.

[119] Christopher Phillips, "Word Pictures," 63. Phillips review of the exhibition is essentially a run-down of Frampton's relationship to some other photographic projects contemporary with his own, making the point that Frampton's interest in a 'narrowly defined art-photography tradition,' in the mode of the F-64 photographers, precluded his involvement with more conceptual photographic concerns such as those undertaken by artists such as Ed Ruscha and Dan Graham during the same period. Phillips, "Word Pictures," 66. Archetrope is a term used by Franklin D. Rogers and Mary Ann Rogers in *Painting and Poetry: Form, Metaphor, and the Language of Literature* (London: Associated University Press, 1985), 62.

[120] Ibid., 71.

(1924-1997), such as his *Variable Piece #70: Global 81* (1973), seems only able to be prefigured by the abortive attempts Frampton made to find a suitable mode for collecting his photographs in series.[121] Although a number of images from the *Word Pictures* series have now found their way into collections, the selection of black and white images eventually exhibited in Buffalo under the title *Word Pictures* is only mentioned by Phillips in passing. Furthermore, it is listed as one of the sets of 'photographs made in series' in the most recent analysis of Frampton's photography by Lisa Zaher, but its relationship to the development of *Magellan* has been subordinated by its links to *Zorns Lemma.*[122] Is it possible that the series was originally related to images imagined for the ARENA section of *Clouds of Magellan* in its 1963, and which he called 'didactic hoaxes'? And what may be at stake in the possibility of establishing a relationship between *Magellan* and *Zorns Lemma* as based on the *Word Pictures* series?

Indeed Frampton chose not to include *Word Pictures* on the list of his 'Still Photography' series he included on his resumé in 1982 (in fact nothing prior to 1971 appears).[123] Nevertheless, Gerald O'Grady's text for MoMA in 1990 maintains the significance of the project for the genesis of the work, repeating what Frampton had already stated in interviews, that '*Zorns Lemma* began as a series of 2000 black-and-white still photographs of the urban environment.'[124] In this way O'Grady marks the importance of understanding the work for its question of a double simultaneity: *word as image,* and of Frampton as operating here (and as he did throughout his life)

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[121] Huebler's statement on his systems of documentation as a kind of framing seems directly to respond to a similar impulse explored by Frampton in the preceding years: 'The world is full of objects, more or less interesting; I do not wish to add any more. I prefer, simply, to state the existence of things in terms of time and/or place.' Douglas Huebler cited in *Six Years: The Dematerialisation of the Art Object from 1966 to 1972*, edited and annotated by Lucy Lippard (Berkeley and Los Angeles: University of California Press, 1997), 74.

[122] Zaher, "By Mind and Hand," 44. A number of prints from this series are now held in the collection of the Walker Art Center in Minneapolis.

[123] CV, 15.

[124] Gerald O'Grady, 'The Films of Hollis Frampton,' MoMA 1990, reprinted in O'Grady, *Scrapbook Encomium,* 8.

as both photographer and filmmaker. The migration of the photographic project onto ciné-film, however, must be highlighted as a decisive moment for Frampton's understanding of just what was at stake in their distinction, and the cut—as it also relates to Andre's work—becomes the crux of the shift into filmmaking that Frampton first envisioned in the early in 1960s.

However, following his death Frampton was more comfortably quoted as an artist who maintained that photography 'should in no way be regarded as an originary instance' by Phillips, who then cites Frampton's belief (announced in the "Metahistory" essay) that a photograph is just 'an isolated frame taken out of the infinite cinema'.[125] But it is not certain that Frampton's position on photography and cinema was not subject to change, and the 1962-3 photo series that Phillips made the title of his essay retains a spectral presence throughout Frampton's subsequent film work. The illusion of movement, as it is engendered in the spectator of film by the exploitation of the *phi* phenomenon by the projection apparatus, shifts the register of the 'that has been' of the photograph—as that which goes without saying—from death to life, and in turn simulating a particularly 'normal' mode of time.[126] This standardisation of the 'time-image,' which Jacques Rancière suggests signifies a 'rupture' in the logic of the set of images defined as the 'movement image' following the work of Gilles Deleuze (1925-1995), has also been understood to inaugurate a mode of temporality now commonly referred to as

[125] Phillips, "Word Pictures," 63.
[126] Roland Barthes, *Camera Lucida*, trans. by Richard Howard (London: Vintage, 2000), 77. The *phi* phenomenon is posed in contrast to the colloquially accepted notion of the persistence of vision and emerges out of Gestalt psychology. It is addressed by Hugo Munsterberg in his 1916 essay *The Photoplay* (New York: D. Appleton & Co., 1916), 67-9. This question was addressed again during Frampton's time in Joseph Anderson and Barbara Fisher, "The Myth of Persistence of Vision," *Journal of the University Film Association*, Vol. 30, No. 4 (Fall 1978): 3-8. The LA-based filmmaker, Morgan Fisher made a work titled *Phi Phenomenon* in 1968, featuring an irregularly ticking clock. Morgan Fisher, (1968, 16mm, black and white, silent, 11mins).

cinematic time.[127] Furthermore Deleuze's notion of 'the universe as cinema in itself, a metacinema,' in the 1980s, comes close to the sentiment which Frampton had proposed in 1971.[128]

Cinematic time has been theorised more recently in the work of both Bernard Stiegler and Mary Ann Doane, each of whom present distinctive sets of questions for the technical and phenomenological problems that arise from this mode of being. However, they both do so by describing a mode that cuts between the ecstatic and everyday modalities prefigured in work on temporality in the philosophies of Edmund Husserl (1859-1938) and Henri Bergson (1859-1941) in the late 19th century, just as the cinema was first emerging.[129] Because it was offered by the fundamental problematic for thinking through the conceptualisation of technics in the 20th century, the question of technology as organisation was also addressed by Ernst Cassirer (1874-1945) in the 1920s, and the philosophical work attempting to equate being and temporality made concrete by film appears in the same period as the existential analytic developed by Martin Heidegger.[130] Ultimately both Cassirer and Heidegger demonstrate a paradoxical limit to the logic of an 'organisation of the inorganic' of matter as either of technology or of nature. As an idea formulated by Stiegler at the end of the 20th century, the necessity of technical objects in the production of thought is understood to be signifying a retentional finitude that is

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[127] Jacques Rancière, *Film Fables*, trans. Emiliano Battista (London: Bloomsbury, 2006), 117.

[128] Gilles Deleuze, *Cinema 1: The Movement Image,* trans. Hugh Tomlinson and Barbara Habberjam (London: Continuum, 1992), 59.

[129] See Mary Ann Doane, *The Emergence of Cinematic Time: Modernity, Contingency, the Archive* (Cambridge: MA, Harvard, 2002); Bernard Stiegler, *Technics and Time, 3: Cinematic Time and the Question of Malaise* (2001), trans. Stephen Barker (Stanford: Stanford University Press, 2011).

[130] Heidegger's critique of neo-Kantianism helped to thematise what Cassirer called the 'core of the concept of image, the concept of symbol'. Cassirer cited in the "Davos disputation between Ernst Cassirer and Martin Heidegger," Appendix IV to Martin Heidegger, *Kant and the Problem of Metaphysics*, fifth ed., enlarged, trans. Richard Taft (Bloomington, IN: University of Indianapolis Press, 1997), 194. See Ernst Cassirer, "Form and Technology (1930)," trans. Steve Lofts, Antonio Calcagno, John Krois, and Wilson Dunlavey, in *The Warburg Years (1919-1933): Essays on Language, Art, Myth, and Technology*, trans. and with an introduction by S.G. Lofts with A. Calcagno (New Haven, CT: Yale University Press, 2013), 316.

located in the image, and alternatively can be presented as a form of tertiary memory—the storage of knowledge as prosthesis, and akin to cultural memory.[131]

The question of memory returns at the moment time is foregrounded as the fundamental issue for the cinema. Its arrival as a new model for structuring what was once a rhetorical category, through the cut of the cinematic montage between the symbolic and the 'real' time of being-as-such, is in addition to the spatial turn of the image on the film frame and from photography. In emphasising the matrix as the formal category for its elaboration, similitude had become simulation, and likeness was spatialised. This is what is at stake in the cut, and is present in *Zorns Lemma* only if it is approached as a work addressed to the temporality of cinema through the question of memory. When the word pictures are eventually replaced by a single set of repeating, idiosyncratic images, the new alphabet which begins with the image of a raging fire is incomprehensible. The origin of the work then, follows Frampton's thinking that a tradition for film needed to be invented in order to give it meaning as a new way of organising images both consciously and externally.

### 3.2.1 The Matrix and Organisation in Series

As they were never exhibited during his lifetime it is difficult to determine how Frampton had originally planned to arrange the black and white photographs, containing words like 'Air', 'Time', and 'Moon', that made up the *Word Pictures* series. The images from this project that remain exhibit the meticulously cropped shots taken (like *Zorns Lemma*'s would also be) in and around Manhattan between 1962-3.[132] In multiple interviews Frampton repeats that he had, by the time of *Zorns*

[131] 'A tool functions first as image-consciousness,' Stiegler, *Technics and Time, 1*, 255.
[132] While the Frampton document *CV* begins with *Reasonable Facsimiles* (1971), he does include a number of exhibitions of his still photographs at various galleries beginning in July 1965 at the Peninsula Gallery in Palo Alto, California, through

*Lemma*, amassed thousands of images documenting this environmental text which was always on display in the city, a treasure trove of physical, concrete language, what David E. James has called 'an Empire of Signs'.[133] Nevertheless, he undertook to shoot these again following his dissatisfaction with the 'stand-animated' stills—this time making a series of portraits using a 16mm Bolex camera. The Swiss-made device was portable and could be easily and nimbly operated by hand. He then cropped these to isolate the one-second shots (24 frames).

When discussing the alphabetical ordering of the images in *Zorns Lemma* during an interview with Peter Gidal, Frampton enthusiastically recounted his realisation that to order the images alphabetically by their first letter was, paradoxically, to simultaneously make them 'as random as possible' spatially in their relationship to their original physical locations.[134] It seems therefore that Frampton had, at least partly, come to realise that a move into ciné-film, which more readily equated the tempo of parsing text, was one way to address the fact that photography and language were completely opposed to one another. This is important because, like the procedure recounted above, in order to show this Frampton had to consider a suitable way to force them together within the film frame. However, the problem he foresaw with controlling the presentation of sequences or rows of images remained similar to his thinking about the *Word Pictures* series. Furthermore, he explained to Gidal:

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May, 1970 at Konrad Fischer Gallery in Düsseldorf. *CV,* 15; 18-19. Frampton had of course exhibited other of his photographic series earlier on. For a history of his photography, from *Ways To Purity* (1959) to *ADSVMVS ABSVMVS* (1982), see Zaher, "By Mind and Hand," 99ff. Eight different prints from the *Word Pictures* series are now held by the Walker Art Center, Minneapolis, and are all inscribed: 'Word Pictures, 1962-3 (no.) Hollis Frampton Print Biff Hendrich, 1984'. They were gifted to the center by Marion Faller in 1993. See Walker Art Center accession numbers 1993.211.1-8.

[133] James, *Allegories of Cinema*, 255. See MacDonald, "Interview with Hollis Frampton, p. 26; Gidal (ed.), *Structural Film Anthology,* 64. This interview was conducted by Gidal in London on 24 May 1972, and is followed by "Notes on Zorns Lemma" by Gidal and a letter sent to Gidal by Frampton on *Zorns Lemma*. Ibid. 73-4; 75-77. The interview is reprinted in the Spring 1985 edition of October as Peter Gidal, "Interview with Hollis Frampton," *October*, 32 (Spring 1985): 193-117.

[134] Gidal, *Structural Film Anthology,* 65.

> I'd been working for a long time in series, sometimes long series, and there were things that began to trouble me about the still series. Such as, if you have a bunch of photographs that you believe cohere even in book space, let alone on a gallery wall or something like that, there's no way to determine the order in which they're seen, or the amount of time for which each one is seen, or to establish the possibility of a repeat . . . so that had already made me think of the film. As a kind of ordering and control, a way of handling stills.[135]

Abstraction to a sequence of letters ordered alphabetically ensured that the collection of stills Frampton had amassed for *Word Pictures* could at once be rigorously systematic and, at the same time, subjected to a randomisation process which spatially distorted the images with respect to their indexical relationships to the things they depicted. This sense suggest *Zorns Lemma* as a project was thoroughly opposed to the logic of the atlas and rather figured as an index in a book. However, the legacy of photographic organisations of course often obscures this reflexive solution to a problem of presentation by recourse to a 'dumb' mode of photographic decision-making, one which attempts to negate any aesthetic or formal concerns retained by the artist in preference for a delegated and systematic mode for both production and display.[136] In this way time becomes foregrounded as the reason for the arrangement of the images in sequence. Recalling Frampton's idea in the

[135] Ibid., 64. This idea is recounted elsewhere by Frampton, and is also included as the soundbyte in the features of the DVD release *A Hollis Frampton Odysssey*, Criterion Collection (2012).

[136] For example the development of photo-conceptual practices developed by artists such as Ed Ruscha or Douglas Huebler. On the strategies developed for the eradication of artistic intention see Gordon Hughes, "Exit Ghost: Douglas Huebler's Face Value," *Art History*, 32, no. 5 (December 2009): 894-909.

"Digressions" essay, that film 'is a continent bounded by time', the emergence of an Empire of Film appears to usurp the Empire of Signs.[137]

One undated negative by Walker Evans (1903-1975), which is now in the collection of the Metropolitan Museum of Art in New York, provides us with a point of comparison for *Word Pictures.* Workers load a neon sign out of a truck, and the absurd scale of the sign, and the word 'DAMAGED', fabricated in neon, dwarfs the men struggling to handle the adjectival descriptor (fig. 3.10). While Frampton did not comment on Evans' work anywhere in his writing, as an bastion of North American photography, Evans' legacy nevertheless looms large over the practice of photography for modern art in the 20th century.[138] Like Evans, perhaps, Frampton was not interested in the contravention of the artistic intentionality of the photograph, however much he chose to incorporate some aspect of contingency into his work.[139] However, photography had always relied on the chance encounter with a composition. This was at the base of its automatic ensemble—the photographic artist was only its chief operator.[140] Yet much of the contemporary conceptualism rejected by Phillips as an influence on Frampton at the time—projects by Ed Ruscha (b. 1937), and even Sol LeWitt—now appear more important for figuring Frampton's work as related to a new approach to image making which has otherwise been framed as a sophisticated homage to modernist photography. By the early 1980s, Frampton's work with Les Krims (b. 1942), for example, seems to give the lie to any sense of his unreflexive adherence to an earlier style of portraiture, a discussion

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[137] "Digressions," *CA,* 12.

[138] The photograph was shown at Albright-Knox Art Gallery in 1932, as a part of the exhibition "Modern Photography at Home and Abroad." The best writing on Evans' work remains Luc Sante, *Walker Evans* (New York: Phaidon, 1999). An exhibition of his work at MoMA between January 27 and April 12, 1971 would not have failed to catch Frampton's attention. See *Walker Evans,* introduction by John Szarkowski (New York: MoMA 1972).

[139] Such as the random insertion of the 23 or 25 frame 'errors' mentioned above.

[140] Robin Kelsey, for example, has recently demonstrated how chance is a fundamental condition of photography in his book-length study. Robin Kelsey, *Photography and the Art of Chance* (Cambridge, MA: The Belknap Press of Harvard University Press, 2015).

which frames his appearance as a 'modernist' photographer and addressed more recently by Lisa Zaher, responding to the course set by Phillips in 1985.



Fig. 3.10 Walker Evans, [Workers Loading Neon "Damaged" Sign into Truck, West Eleventh Street, New York City], print of black and white film negative, 2 1/2x4 1/4in, 1928-30. The Metropolitan Museum of Art, New York.

However, Frampton's attention to the grand aesthetic of still images provides a further consideration for his shift into ciné-film. A major part of the technicolour process, in which he was trained, was the separation of the image into three colours and the transfer of the film to a print of the image through what was called the matrix of separation negatives (fig. 3.11). The process in which Frampton specialised as a technician not only provided him with the requisite materials for understanding the medium, but also furnished him with the fundamental questions emanating from the still image of the camera original to the print stage, a kind of production process whereby the separation and elaboration of the original image into three colour dyes was a further intervention into the photographic act as a cut

in time by the technology for producing the work as a processed outcome.[141] The resulting vividly coloured prints left no trace of their three-part registration on the matrix, however. Therefore it was within these parameters that the possibility of film involved itself in something like the structural re-composition of the world.

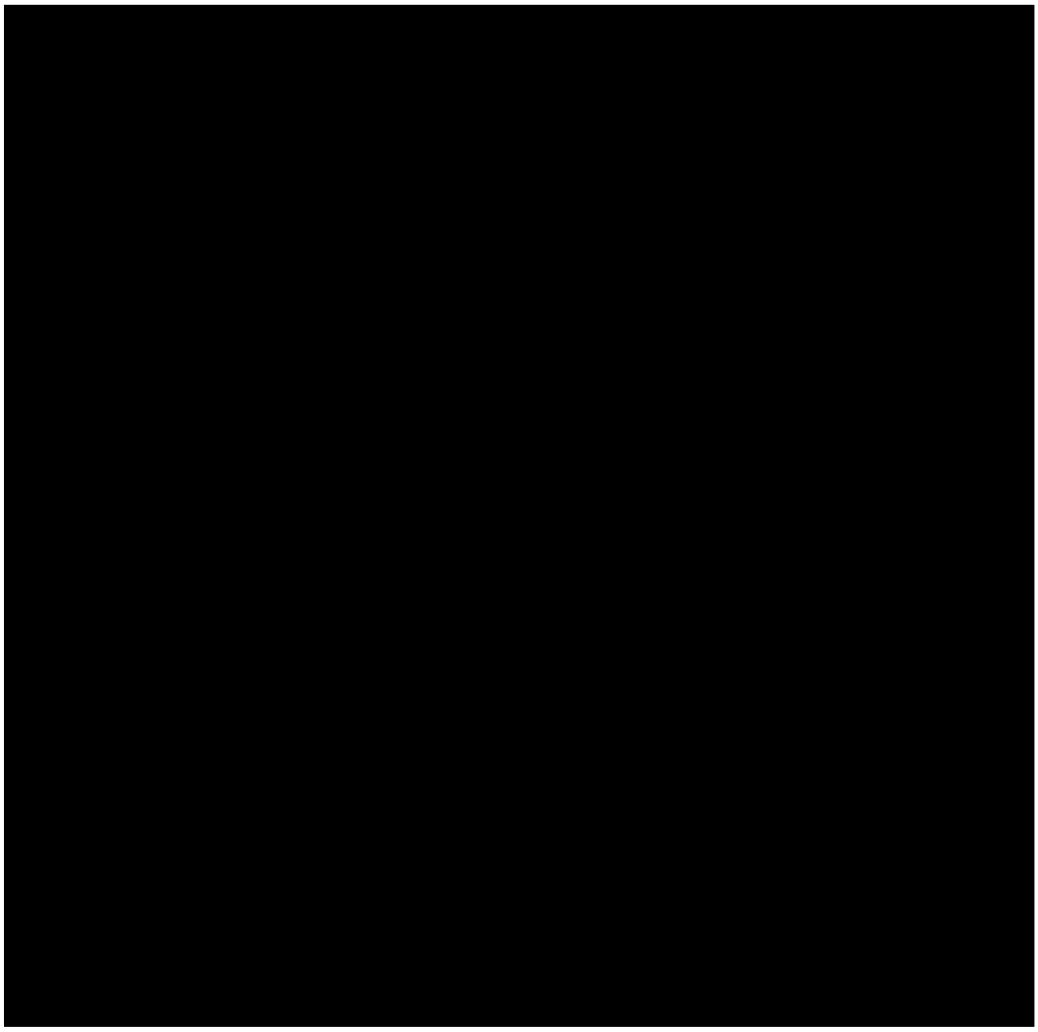


Fig. 3.11 Dye Transfer print from separation negatives, from *Technicolor News and Views*, April 1955. Note the hexagonal schema of the diagram. George Eastman Museum, Rochester. (Source: https://eastman.org/technicolor/technology/dye-transfer-printing)

[141] The dye transfer process was developed in the 1930s and marketed by Eastman Kodak until its discontinuation in 1993. In fact the process began its slow decline in the mid-1970s when new technologies arrived to supersede the complex printing process. More recently, James Browning describes the imbibition process by noting that 'Dye Transfer works by creating a relief image in gelatin. The thickness of the gelatin on the matrix is proportional to the amount of exposure the area receives. This is accomplished by exposing the matrix through the base.' The three colour dyes used in the process are cyan, magenta, and yellow. See James Browning, 'Dye Transfer Materials,' accessed 25 July, 2017, http://dyetransfer.org/Site/Dye_Transfer_Resources_files/DyeTran.pdf.

3.2.2 Concrete Poetry: Fluxfilms and Typewriters

The cut emerges as a central theme in Frampton's recorded dialogues with Carl Andre from the same time as the *Word Pictures* series, 1962-3. At this point both artists were engaged in formalising their interest in a kind of 'weird concrete poetry', as David E. James puts it in relation to Frampton, which would focus and inform their respective artistic practices for the remainder of their careers.[142] As I will show, both Andre and Frampton pushed language towards its "asemic" mode of inscription, where the mark-making became meaningless in its extreme form of writing. Even though he was engaged in collecting the images for *Word Pictures* in a documentary mode, a comparison with Andre's own work on the plasticity of text at that time reveals their shared interest in the possibilities of a formal poetry which at its basis made text a material object.

Andre's works on paper are often presented as evidence of the fact that his work, as he himself says, 'took the English language for subject matter,' while Frampton worked on a similar set of problems on film.[143] Mediated by the typewriter, which facilitated the correspondence they conducted between 1962 and 1963, whilst sitting in each other's presence, their word games were subsequently collected and offered in edited form as *12 Dialogues,* in 1980. The *Dialogues*' specific emphasis on their development of the discourse on sculpture and painting shows how, with respect to both montage and poetry, the metaphor of the cut became a principle concern for both artists.[144]

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[142] James, *Allegories of Cinema*, p. 257.
[143] *Dialogues,* 75.
[144] For example Liz Kotz focusses on Andre's poems in her analysis of the dialogues, writing: 'For both Andre and Frampton, this isolation of the word is understood not simply as a selection of individual words but as what Andre terms a "cut".' Liz Kotz, *Words to be Looked at: Language in 1960s Art* (Cambridge, MA: MIT Press, 2007), 141. SO important was the concept to Andre he even titled a collection of his writing after it: Carl Andre, *Cuts: texts 1959-2004*, edited with and introduction by James Meyer (Cambridge, MA: MIT Press, 2004).

In a letter to Reno Odlin from that time, Frampton makes mention—from the typewriter at the processing lab where he'd recently been made the night manager—of 'a series of dialogues twixt me & the Andre on sculpture, photography & consecutive matters,' which they had commenced in the third week of October, 1962.[145] This larger movement towards the idea of concrete poetry is maintained by both Frampton's and Andre's apparent proximity to work related to Fluxus, a collective of artists founded in Germany in 1962. Fluxus remains a largely under-explored influence upon both artist's practices through the idea of words *as* images, particularly in print. When Frampton describes Andre's *First Five Poems* as 'the nursery school of a new curriculum,' his emphasis on Andre's naming-poems as extracts from an operation undertaken on the dictionary proposes the idea of the work as a form that they could now claim 'contains all dictions'.[146] Of course, each of Andre's five poems consisted of one word only: green, five, horn, eye, sound.[147] In this instance the dictionary is an example of the 'maximal fully ordered subset' of the partially ordered set of all words, just like for Frampton where the alphabet provided the 'maximal fully ordered subset' of all letters, following the axiomatic statement of Zorn's Lemma for the mathematics of order. Andre, with his *First Five Poems*, had seemingly discovered another, hermetic subset, but for Frampton, the principle needed further testing.

Fluxus' presentation as a coherent artistic entity comes closest to the artist-filmmaker avant-garde through the 37 films that make up the *Fluxfilm Anthology* (1962-1970), compiled by Fluxus' founder George Maciunas (1931-1978). Maciunas, whose playful response to Sitney's "Structural Film" essay was published as a critical and corrective synoptic table soon after Sitney's essay first appeared in 1969, was involved with *Film Culture* as a vehicle for the expanded arts (as well as an

[145] The letter to Odlin is marked '20 October 1962 (Typewriter at photo lab)'. *Letters,* 1962, 28
[146] *Dialogues,* 75.
[147] Ibid.

expatriate Lithuanian like the Mekas brothers), and indeed referenced his own 'Expanded Arts Diagram' from issue 43 of *Film Culture* as one 'proposed correction of error' for Sitney's theory.[148] One film, *Fluxfilm 29 Word Movie* (1966) by Paul Sharits, appears to prefigure *Zorns Lemma*'s central section, with its long list of seemingly random words flashing by on single frames for three and a half minutes.[149] Another figure associated with Fluxus, Emmett Williams (1925-2007), created a phenomenological demonstration of the formal encounter with typewritten language in an alphabetical arrangement, implying a multi-dimensional physicality to the medium, and confounding its flat two-dimensionality. These works therefore help to explain and contextualise *Zorns Lemma* as a part of the larger environment for the expanded arts of the period, as opposed to the narrower discourse on "Structural Film".

As against the presentation of text in its depthlessness and flatness, Williams' work explicitly addressed both terms of the dominant model for modernist formal criticism: the idea of medium specificity and the refinement of the work in text to a form of painterly presence.[150] Williams' *Meditation no. 2* (1958) creates a multi-directional organisation for the alphabet arranged in a 27 by 27

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[148] George Maciunas, "Some Comments on *Structural Film*, by P. Adams Sitney, (*Film Culture No. 47, 1969*)," dated Dec. 5 1969. The table was re-published in *Film Culture: An Anthology*, ed. P. Adams Sitney (New York: Praeger Publishers, 1970), 349. Frampton's name does not appear in Maciunas' table, which parodies the ideas put forward by Sitney's "Structural Film" essay, pointing out apparently obvious 'errors' with the argument and the coherence of those works around its principles. On Frampton's complex relationship to structural film in particular see, James Peterson, *Dreams of Chaos, Visions of Order: Understanding the American Avant-Garde* (Detroit: Wayne State University Press, 1994), 95ff; R. Bruce Elder, "The Structural Film: Ruptures and Continuities in Avant-Garde Art," *Neo-Avant-Garde*, eds. David Hopkins and Anna Katharina Schaffner (Amsterdam: Rodopi, 2006), 119-142. The *Fluxfilm Anthology*, is available through Re:Voir / Anthology Film Archives (1962-1970).

[149] Despite the fact that it makes no explicit mention of Sharits' films, on the Fluxfilms see the chapter 'The Production of Lived Time in Fluxfilms,' in Natasha Lushetich, *Fluxus: The Practice of Non-Duality* (Amsterdam: Rodopi, 2014), 86-95.

[150] Scott MacDonald suggests the influence of Williams on Frampton in an interview with the filmmaker Robert Gardner about the Carpenter Center, when Gardner recalls inviting Williams to stage a "Happening" at Harvard in the early 1960s. MacDonald, *Avant-Doc,* 61-2.

square grid of letters beginning with 'a' at its centre. Expanding outwardly to the letter 'm' at the four points on the horizontal and vertical axes, the alphabet zigzags diagonally towards the final letter 'z' at the four corners of the square. The overall impression left by this organisation is labyrinthine and creates a thoroughly illusionistic, yet negative space, which diagonally hones in on the central letter 'a', boxed in as it is by eight sentinel 'b's (fig. 3.12).



Fig. 3.12 Emmett Williams, *Mediation No. 2*, 1958.

Williams, an American writer and editor who had lived in Europe from 1949, working alongside other artists related to Fluxus, such as Daniel Spoerri (1930—) and Robert Filliou (1926-1987), has been contrasted to Andre's concrete poetry more recently by Johanna Drucker, describing what she has called their

shared 'work in performance'.[151] While the performative element of Andre's poems lie in relation to his sculptural practice—formalised by *Spill (Scatter Piece)* (1966)—the poems act almost as textual scores for his serial installations by creating a rigorous and disciplined set of procedures that can then be enacted on the chosen matter. Not unlike the 'matrix score' of film mentioned at the beginning of this chapter, the spatial relationship of linguistic elements was foregrounded to create a new facet for the material. The internationalist aspect of this 'concrete' poetry, however, is notable here in that it related the work of a globally diverse cohort of artists taking a visual and formal compositional approach to explore a form of poetry that relegated the meaning of the text to a position of secondary importance in preference for its overall 'look'. In her essay from 1968, 'A World Look at Concrete Poetry' in *Concrete Poetry: A World View,* Mary Ellen Solt notes how Williams' interpretation of the Poundian imperative to 'make it new' suggested to him that 'poetic content' could be found in 'material substance' too.[152] While the comparison to Andre has been made—Andre types the 'make it new' credo in a reply to Frampton during the dialogues—Frampton's work on film has not as yet been considered in relation to works by Williams, or Fluxus for that matter, despite his collaborations with Andre.[153] This is significant for the fact that, as we shall see, one aspect of the Fluxus work was the recovery of mnemonic and magical uses of text from antiquity.

There are also further examples of Williams' approach which resonate with Frampton's interests, which are discussed in the same 1968 essay by Solt. 'In an unpublished novel THE CLOUDS (1954-55),' she writes of an early William's work:

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[151] Johanna Drucker, "Visual Performance of the Poetic Text," *Close Listening: Poetry and the Performed Word*, ed. Charles Bernstein (New York: Oxford University Press, 1998), 159.
[152] Mary Ellen Solt, "A World Look at Concrete Poetry," *Concrete Poetry: A World View,* ed. and with an introduction by Mary Ellen Solt, co-edited by Willis Barnstone (Bloomington: Indiana, 1968), 50.
[153] *Dialogues,* 76.

> Aristophanes, "a deceased button-hole puncher" administers the following eye-ear test to the hero:
>
> SENSE SOUND
> SONSE SEUND
> SOUSE SENND
> SOUNE SENSD
> SOUND SENSE
>
> By making a progressive exchange of letters, the poet transforms sense into sound, sound into sense. From this simple permutational poem, Emmett Williams would go on to become a master of the concrete permutational method.[154]

The permutational method, of course, results in a privileging of the spatial relations in the text over its written relationship to language as such, and led to a model of the destructive creation of language based on a technical ability to figuratively cut the words up letter by letter, resequencing them and exploiting the reprographic methods available at the time (the typewriter being only the most obvious example).

When Solt's text first appeared, Williams was performing alongside Michael Snow and Joyce Wieland at the 'Pyromanopera' event in Madison, New Jersey for the Eighth International Artists' Seminar at Fairleigh Dickinson University, in June 1968 (fig. 3.13). It is entirely possible then, given Frampton's relationship to Andre, as well as to both Snow and Wieland, that Frampton (given his proximity to Snow and Wieland) would have directly encountered his work at that time, or indeed in Manhattan, when Williams performed at Nadstand on the Mall in Central Park on the 28th of September, 1968.[155] The idea of Williams' permutational approach informing upon Frampton's poetic sensibilities when directed towards the

[154] Solt, "A World Look at Concrete Poetry," p. 50.
[155] Emmett Williams, *My Life in Flux – and Vice-Versa* (London: Thames and Hudson, 1992), 256-9

'material substance' of the *Word Pictures* series is suggestive, at the very least, of some form of cross-pollination, especially given the spatial emphasis of *Zorns Lemma's* subset of alphabetised images replaced by a set of non-verbal shots.[156]

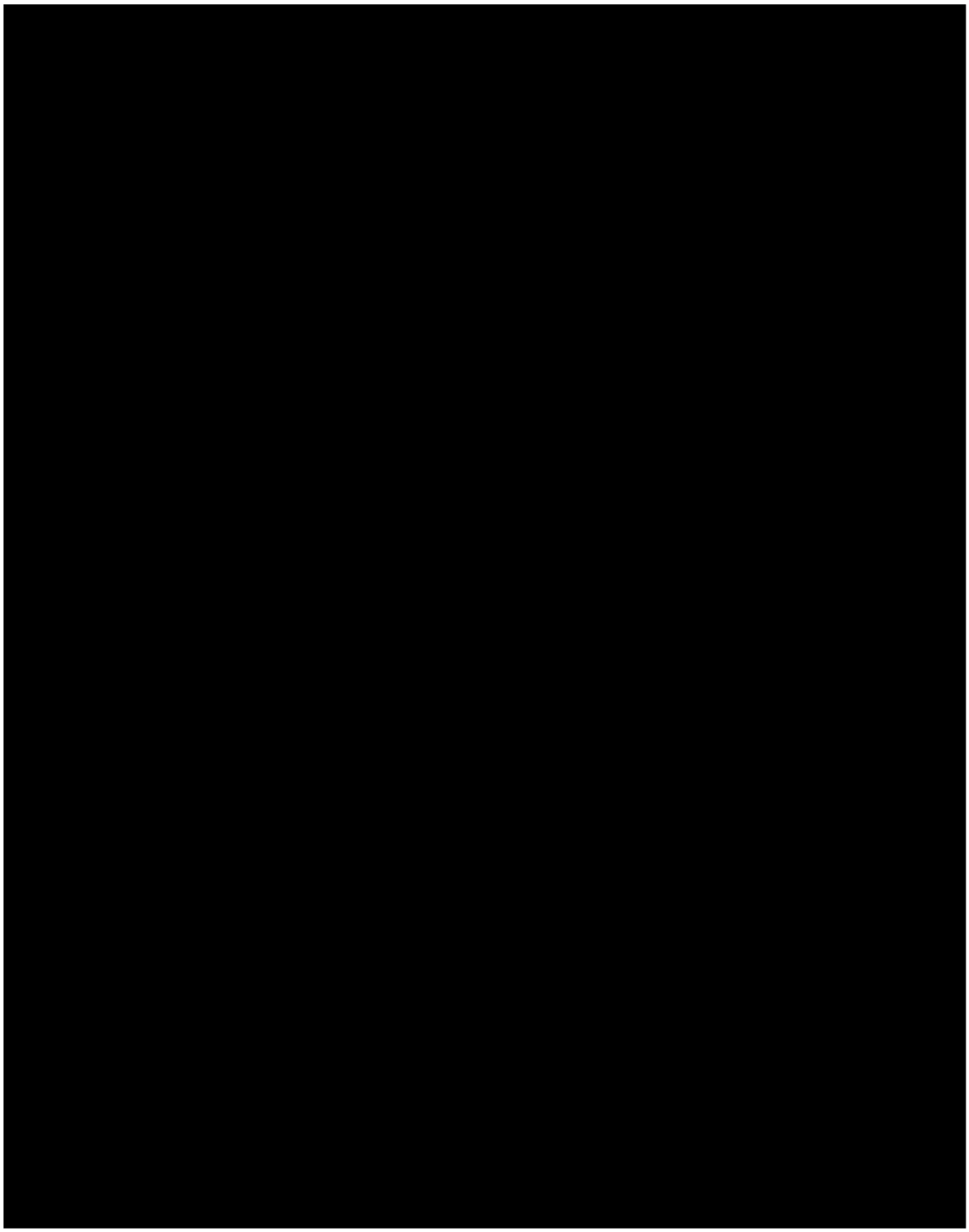


Fig. 3.13 Poster for 'Pyromanopera', Eighth International Artists' Seminar, feat. Williams, Wieland and Snow et. al. Fairleigh Dickinson University, Madison, NJ, July 24, 1968.

[156] This link was first suggested to me by Scott MacDonald in a conversation at his house in June 2014.

Furthermore, Williams' first performances in New York in 1966 involved his staging of *The Ultimate Poem*, a work which dates back to the mid-1950s and his involvement in the Darmstadt Circle which, as well as the aforementioned Spoerri, then included artists like Claus Bremer (1924-1996), Joseph Beuys (1921-1986), and Dieter Roth (1930-1998), even though the latter was based in Iceland at the time. As he explained to his partner, the artist Ann Noël (1944—), in a letter dated 14 February 1973, *The Ultimate Poem* was a rule-based system for the automatic production of a text work:

> Here are the rules of the game, vintage 1956:
>
> > Choose 26 words by chance operations – or however you please.
> >
> > Substitute these 26 words for the 26 letters of the alphabet, to form an alphabet-of-words.[157]

Williams' alphabet of words was then substituted once more, or replaced, by shifting the terms one place across by employing a cyclical procedure. In 1966 he did this using an IBM computer and thus named the poem for that iteration by giving the three letters of the computer's brand name corresponding to the chance list of words substituted for the alphabet, resulting in the title 'red up going'.[158] This randomisation of the text based on chance and substitution, coupled with their ordering, was a basic principle also followed by *Zorns Lemma*.

These procedures also follow a path described by the Fluxus artist George Brecht (1926-2008) in his text *Chance Imagery*, written in 1957 and first published in

[157] Williams, *My Life In Flux*, 247.
[158] Ibid., 248-9. The letter was published as the introduction to Emmett Williams, *A Valentine for Noël: Four Variations on A Scheme* (Barton, Brownington, Berlin: Something Else Press, 1973), n.p. See John Cayley, "Beyond Codexspace: Potentialities of Literary Cybertext," in *Media Poetry: an International Anthology*, ed. Eduardo Kac (Bristol, UK: Intellect Press, 2007), 110-2.

1966 by Higgins' Something Else Press as a Great Bear Pamphlet.[159] In it Brecht considers 'significant images' which may 'occur as a result of processes over which we exercise no selection at all'.[160] These 'Irrelevant Processes', as Brecht names them, seek to suture the artificial distinction erected between nature and the technical in the image, revealing a basic impulse concerning the reasons chance began to be engaged by artists under the conditions of industrial modernity. As we have seen, the lines parsed by the alphabetised images reveal an equivalent poetic, and the apparent meaninglessness of the randomisation is made significant by the surprising relationships that emerge effortlessly from the procedure. In effect they are aiming at repairing the link that has severed the human from a direct encounter with the environment. This is a key supposition of modernism and it is achieved through a particular understanding of the 'image' as it is understood phenomenologically.

If the proximity of Williams' permutational poem to Frampton's operational approach in *Zorns Lemma* is not yet clear enough, what Solt called the 'cinematic organizational principle' of his book of poetry *Sweethearts* (1967), should help to provide the kinetic link between the concrete poem and film. As a 'flip-book' the material retains its poetic character without being wedded to its signification. Meaning was found, rather, in the kind of computation which made IBM so relevant to the enterprise. If both Andre and Frampton's interest in the materiality of language in print shows how the concrete nature of the work must be ordered, the inorganic 'organised', the transformation of this work into sculpture (on Andre's part) and film (on Frampton's) would ultimately distinguish their work as distinct from concrete poetry as such.

In Williams' *Sweethearts* the spatial position of the word 'sweethearts' on the page also determines the appearance of other words—not unlike Sharits' *Word*

[159] George Brecht, *Chance Imagery* (New York: Something Else Press, 1966).
[160] Ibid., 23.

*Movie*—by the elision of different combinations of the letters in the title. The reader is also encouraged to animate the book by flipping its pages from back to front.[161] Frampton's interest in the 'spatial paradox' of words depicted on film, links his awareness of Greenbergian formalism—of a reduction to visual flatness in the picture plane—to the constellations found in William's poetry (fig. 3.14), as much as to Cage's compositional indeterminacy, as shown in its relation to his work *Atlas Eclipticalis* (fig. 2.7). Further connections between Fluxus poetry and the kinetic and automatic aspects of the cinema could also be made through the figure of Maciunas.[162]



Fig. 3.14 A page from Emmet Williams, *Sweethearts* (New York: Something Else Press, 1968), n.p.

[161] Williams writes in the explanatory notes: 'the structural and textural characteristics of this erotic poem cycle derive from the 11 letters of the word *sweethearts.* unluckily for the poet 3 of these 11 letters are *es* and 2 others occur twice so that there are only 7 different ones for word building. from these letters are extracted all the words that make the poem. the position of each letter on the page is determined by its place in the word *sweethearts.* no single poem can be more than 11 letters wide or 11 letters deep. in addition to the word poems there are kinetic metaphors also constructed from the 11 letters of sweethearts.' Emmett Williams, *sweethearts* (New York: Something Else Press, 1967). Solt notes 'the cinematic organizational principle of the book, which is to be read back to front.' Solt, "A World Look at Concrete Poetry," 51.

[162] Hannah Higgins, *Fluxus Experience* (Berkeley, CA: University of California Press, 2002), 17ff.

Dick Higgins (1938-1998), who studied with Cage in New York and published Williams' books through *Something Else Press* (which he had founded in 1963), provides a further link between the permutational practices of what he called 'pattern poetry' and the early modern image theory of Giordano Bruno, whose text *On the Composition of Images, Signs & Ideas* (1591), Higgins edited and annotated for a 400th anniversary reprint by the New York publishers Willis, Locker & Owens in 1991.[163] Higgins also made a 20-second film that is included as the second work in the *Fluxfilm Anthology*, titled *Invocation of Canyons and Boulders (for Stan Brakhage)* (1966), placing him firmly within the milieu of the filmmaker avant-garde at the time. Notably, Bruno's importance for early modern memory arts is fundamental for both Warburg as well as Yates, the latter describing this late Bruno work as an 'architectural memory system of terrible complexity'.[164] It may be possible then, within the nexus of elements provided by the Fluxus comparison, to show how this aspect to their engagement recovered more than just the elemental aspects of poetry in its crystallisation of composition by using substitution, replacement and combination.

Ultimately, however, the visual poetry engaged by both Andre and Frampton at the time of the *Dialogues*, and followed into photography by Frampton with the *Word Pictures* series, can be figured in relation to the tradition of images that encode words as a 'mnemonic device', as Vincent Katz has more recently noted in relation to Andre's work.[165] Like the *Bay State Primer*'s abecedarium, appearing at the beginning of *Zorns Lemma*, the complex conditions for the structural logic of form was a part of Andre's approach to sculpture through typewritten text as well as found objects, as much as Frampton's work can be seen to have similar concerns for

[163] Giordano Bruno, *On the Composition of Images, Signs & Ideas,* trans. Charles Doria, edited and annotated by Dick Higgins, foreword by Manfredi Piccolomini (New York: Willis, Locker & Owens, 1991). Bruno's text was first published in 1591.
[164] Yates, *Art of Memory,* 286.
[165] Vincent Katz, "Carl Andre's Lyric Heart," in *Carl Andre: Sculpture as Place, 1958-2010* (Beacon, NY: Dia / New Haven, CT: Yale, 2014), 263.

Andre's work from the perspective of the photographic document. By attempting to reach back to the very elemental conditions of the poem as a collection of linguistic elements that could be abstracted as discrete and modular objects—especially when their primary engagement was with 'writing it down'—both Frampton and Andre were responding to a branch of poetry that was at once performative and abstract, just as it was directed towards the image as an overall impression of the work.[166] While they were both enamoured with these possibilities for new modes of dialogue that had been made possible by the typewriter, the letters more easily isolated in an alphabetic sense, the possibility of permutation as a metonym for the overall potential of the image clearly suggested to Frampton that letters and words, as images, were not unlike the isolated frames taken from the infinite cinema. As a maximal fully ordered subset, the dictionary therefore provided the grounds for a particularly productive nexus of the alphabetical and the numerical.[167]

### 3.2.3 Set Theory 1

In his dialogue with Frampton on the 'movies' on January 13, 1963, Andre introduces the 19th century mathematical theorisation of infinity by referring to the work of Richard Dedekind (1831-1916). He does this in order to describe an apposite way to think through the operation of the cut, as something that does not produce a quantity, but which is empty like 'the cut a pair of scissors makes across a piece of paper'.[168] In this way, the absence created by the cut does not incise the material but

[166] ibid.
[167] Another link could be Frampton's apocryphal exhibition of photographic work in Germany in May 1970, at the Konrad Fischer Gallery in Dusseldorf, of which no record remains, but for a line in Frampton's *CV*.
[168] Carl Andre in *Dialogues*, 55. It is possible that Andre was conflating the Dedekind cut with the mathematical axiom of the empty set here. The Dedekind cut is a theory of partitioning a totally ordered set into two non-empty sets, and thus carries

separates an entire field into two parts, reducing at the same time as producing. By doing this Andre aims to reveal something about the basic conditions for the set, in that it also allows for an operation without a positive (or indeed a negative) value, rather defining a zone of operation. The indeterminacy of the cut is better defined in relation to its exclusion from the other, which comes from the cut itself. This idea therefore implies 'the movies' are in fact conditioned by their relation to a different order than to the subtractive logic of editing out excess film material.

In an essay on space and number, philosopher Cornelius Castoriadis remarks upon an anecdote concerning the development of set theory in the late 19th century. 'Dedekind wrote to Cantor,' he recounts, 'saying that he visualised sets as bottomless bags. Cantor replied that he personally pictured them rather as an abyss.'[169] While Castoriadis' account may be overcoded, a related version of the story is recorded in Dedekind's *Werke*, where he describes sets as closed bags, the contents of which nothing is known.[170] That Cantor may have imagined sets as an abyss is illuminating for the fact that the abyss and the infinite are brought into a spatial relationship by the collection of the set, made evident by the cut, which here also corresponds to the paradox of observation in systems theory and provides no determinable inside or outside. The link Frampton makes between Andre's use of the cut for his concrete works in language and sculpture, can be seen through his interest in the location of 'sets', only identifiable through their 'sub-sets' of image matrices. When put into practical use for *Zorns Lemma*, whereby any image could be re-figured as an 'isolated frame taken from the infinite cinema,' it is revealed how

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suggestive implications for the idea of sculpture Andre was occupied with at that time.

[169] Cornelius Castoriadis, *Figures of the Thinkable* (Stanford: Stanford University Press, 2007), 252.

[170] In his own words, Dedekind wrote that he 'imagined a set as like a closed bag, which contains certain things which can't be seen, and about which nothing is known, except that they are definitely present. Some time later Cantor gave his notion of how to recognise a set: He lifted his colossal figure and described a grand gesture with his arm raised, and then he said with an indistinct look: 'I imagine sets like I imagine an abyss'.' Richard Dedekind, *Werke,* vol. 2 (Braunschweig: Vieweg, 1932), 449. My translation.

Frampton understood this infinity as the partially ordered set of all film. Furthermore, this set may be symbolised by the black screen in the cinema, an abyssal void, and a metaphorical representation of infinity in a way which is not dissimilar to the non-objective presentation of the 'black square' in painting. By negating the idea of space and representing the abyss as an infinity, a point prior to the origin is figured as the ground for the set. As a kind of anti-pictorial yet purely representational concept, and because it is metaphorical, the set then emphasises the theory of the cut for montage, and the technical application of this idea is subsequently applicable to the production of the work as a spatial matrix.

*Zorns Lemma*'s title therefore refers to a mathematical formula that is both generative and open, yet the axiom of choice is a function of set theory allowing for the infinities offered by the set, rather than providing any bounded solution to it.[171] The briefest description of Zorn's lemma, as Frampton himself defines it, reads: 'Every partially ordered set contains a maximal fully ordered subset'.[172] Frampton's deduction of Zermelo-Fraenkel set theory for dealing with the logical paradox resulting from this version of set theory's own inconsistency—namely that there can be no maximal fully ordered set but only a subset, and therefore no identifiable unity—is adapted (and in fact exceeded by his positing of an identity for the set of film) in his own equation for the infinite film: 'what I imply, is that the maximal fully-ordered subset of all film is not the "shot" but the CUT.'[173] Seen alongside the dictionary, the abyssal emptiness of the cut makes the ordering of this subset of all film incredibly difficult to imagine. Further to the question of articulation, what interests Frampton as much as the construction of the film's images through the logic of the set is its rhythm, returning the closely hewn nature of the cut to the logic of standard time. 'Beyond that,' he continues his elaboration of the cut, 'there

[171] See the chapters "Axiom of Choice," and "Zorns Lemma," in Paul R. Halmos, *Naïve Set Theory* (New York: Springer, 1974), 59-65.
[172] "*Zorns Lemma:* Script and Notations," *CA*, 195.
[173] Ibid., 196.

is the pulse of 24fps, which is truly the maximal fully-ordered subset of all films – and obliquely of our perceptions, since that is the threshold at which they FAIL us.'[174] The images in the central section of the film therefore become somewhat arbitrary, as Frampton emphasises the 2701 cuts which frame the one-second pulses as the most significant factor for the work.

Frampton's atlas then, is a model for the metahistory of film drawn from his notion of an infinite cinema. It is predicated on a logic of selection, but it is ultimately formalised by his insistence on the cut. As a novel strategy developed for modernism by figures bridging both the historical- and neo-avant-gardes, such as by Marcel Duchamp. This approach saw strategies of selection from indeterminacy become the principal way to extend modern aesthetics into the region of radical contingency, of chance and probability.[175] But whereas Duchamp's artistic strategies meant he still needed to sign his readymade artworks, to nominate them in an act of authorisation, Frampton, arriving after the dispersal of authorship by networked media such as television, understood that his own productions could only be registered as a tour of the infinite potentiality of the cinema. This provided a way he could proceed, his position as a spectator having distinguished him fundamentally from the activities of an artist like Duchamp, composing instead from the sub-set of images he selected from within his own work.[176] *Zorns Lemma* therefore represents one way of generating a series of images that were formally coherent yet not expressive of any artistic subjectivity in an originary sense; rather, there was a program for the image which operated on their alphabetisation, and a fully ordered subset of the partial order of words in Manhattan. Set theory, therefore. allowed for

[174] Ibid.
[175] On the relationship of Duchamp to contemporary mathematics, see Linda Dalrymple Henderson, *Duchamp in Context: Science and Technology in the* Large Glass *and Related Works* (Princeton: Princeton University Press, 1998); and *The Fourth Dimension: Non-Euclidean Geometry and Modern Art* (1983) (Cambridge, MA: MIT Press, 2013). Frampton's archive includes references and reproductions of Darymple Henderson's work, which originally appeared in the early 1970s.
[176] See Frampton's comments in *CC*, vol. l, 75.

the simultaneity of these images to emerge. As such, the work suspends historical time by isolating a set of elements that are both drawn from, and become opposed to the mapping of a city through its iconography. Here the atlas appears instead of film, and therefore leaves off from this moment of the "city symphony" with which Frampton had tested his theory of matrix montage. But this was also a problem, and Frampton remained wary of the relativism and ahistorical chaos into which Pound had stumbled with the *Cantos*. With *Zorns Lemma*, Frampton was already prepared for the possibility that he may be heading in the same direction. It was a flirtation with the abyss, which pulled him back to the question of organisation, leading him to the idea of metahistory and the atlas as the model proper to *Magellan*, and providing a meaningful basis for the work as a tour—otherwise, the constellations of stars used to navigate the montage returned to the void of the empty film frame.

Reflecting on the biography of the artist, which Frampton could only see as encoded in the 'set of all sets' for the production of the highly individual work, he understood that any idea of a technical system also required some form of subjectivation. The matrix, as the abstracted 'mother' carrying the photographic information in highly organised arrays, provided the appropriate ground for the presentation of these images, reflecting also on their mode of production. Especially in the sense of the 'Pan Matrix' film stock with which he worked at the dye-transfer lab. The structural logic for the film was drawn, as we shall see in the next chapter, straight from the environment in which he was employed, the darkroom. Again, this is confirmed in *Zorns Lemma* by the relentless images of Manhattan's building which had surrounded Frampton's living environment during these years, prior to his shift upstate.

There is, therefore, a cybernetic aspect to the work which is predicated on a biological idea of feedback, re-introduced as significant for the practice of photography. Frampton's working with the processing of these images linked his own labour with the production of the artwork, and the subjective alienation of the

experience was short-circuited. With his approach—from the photograph to the cinema—a new mnemonic attitude emerges whereby the figure of the agent for remembering is not presented as a centred, rhetorical subject, but rather as dispersed throughout the infinite possible modes of the film's operational images, and against the prescriptions of language. This idea of the theatre of memory no longer required the body of the agent (the king) at its focal point, it has instead sublimated the computational matrix upon which a complex array of indexical images can be arranged.

In a recent book which attempts to deal with the legacy of set theory for modernism, and after giving a short summary of the development of set theory by Georg Cantor, the artist-filmmaker and historian of the avant-garde, R. Bruce Elder, who was also a contemporary of Frampton's, attempts to describe a defining moment in the rationalising project of modernity. Tracing an aesthetic rupture which he argues took place with the publication of the incompleteness theorems in 1931, by the Austrian mathematician Kurt Gödel (1906-1978), Elder makes the link between mathematics and the politics of representation.[177] In attempting to sketch the impasse reached by the formal strand of mathematics, and the conclusion of this project prior to the calamity of WWII, Elder argues that Gödel's paper, 'On Formally Undecidable Propositions of *Principia Mathematica* and Related Systems', marks a significant date for its refutation of the formalist program of David Hilbert (1862-1943). Gödel's incompleteness theorems therefore announced an end to the belief in an axiomatic setting for logical propositions as absolutely achievable. It is here, in this failure of the idea of unity, Elder argues, that a productive space is opened between the formal and the historical models that are the twin grounds for modern art. While Elder presents Gödel's paper as only one example of the crisis which derailed the long-lasting hubris of the 'dream of reason' in the tradition of an

[177] R. Bruce Elder, *Dada, Surrealism, and the Cinematic Effect* (Waterloo, ONT: Wilfrid Laurier University Press, 2013), 48-51.

enlightened—and fundamentally Eurocentric—modernity, the ground inherited by the post-War generation of American artists had already been destabilised by the implications of indeterminacy at a global and international level.[178] While this account may be seductive for its eagerness to draw conclusions about this rather grand historical narrative, by linking both the historical– and the neo-avant-gardes, it mainly seeks to provide an additional commentary concerning the crisis in representation experienced as the abyss of meaning, with Malevich's *Black Square* being given as the iconic image of this rupture. Rather, Frampton's interest in *Magellan* presents a renewal of the possibilities of the tour. As we have seen, Cantor's understanding of the set as an 'abyss' approached a meaninglessness limit for the model as applied mathematics, one which closely resembled the 'non-objective' image of the infinite. As such it is also linked to the aesthetic significance of the *Black Square* and its appearance during World War I, and the coming revolution in Russia.

Elder therefore concludes his arguments about formalism by noting the devastating outcome of Gödel's proof for factual certainty:

> The first phase of Gödel's demolition of the formalist program was to show that any logical system powerful enough to provide the basis for arithmetic was necessarily incomplete. The second was to prove, *contra* Hilbert and his followers, that if a logical system is complete, then it must be inconsistent.[179]

By proving the hubris of this idea of formal totality, the re-opening of chance to the necessity of contingency meant that the historical perspective—albeit one addressed through words—could now return to this highly specialist program for the symbolisation of these relations. Frampton's interest was in the possibility of

[178] Ibid., 50.
[179] Ibid.

montage (understood as the cut) and whether it too could be metahistorical, 'an open set of rational fictions,' as he says at the beginning of the "Metahistory" essay.[180] Through set theory's encounter with the abyss, Frampton's realisation was that these 'rational fictions' must now become the focus, and productively returned to.

In the philosophical system elaborated more recently by Alain Badiou, mathematics is presented as an ontological topos, which formalises the way set theory as a technique can be addressed to seemingly distinct things such as the poetic potential of the artwork in its relation to history.[181] In a similar sense, Frampton (and Andre) foresaw how the distinction between the mathematical formalisation of relationships between discretised objects—even in the very structure of language itself—he could be exploited by this atomisation of textual narrative. For Frampton this suggested the way forward was by privileging the indeterminacy of the photographic film frame. He could do this, he realised with *Zorns Lemma,* through exploiting the automatism of the camera as a technical apparatus. It then became obvious that this would also have implications for memory, which is why the primer—a memory technique—appears first of all, as the aestheticisation of the alphabet, a maximal fully ordered subset of all language. Allied with the cut, then, this discovery of historical objects becomes a way of navigating a 'tour' from all the possible 'tours' allowed by the set. *Zorns Lemma* therefore, is Frampton's experiment in how to present this approach on film. But this subordination to the alphabet did not provide Frampton with an outcome that he found satisfactory. The matrix remained too arbitrary for any meaningful notion of metahistory, which was rather

[180] "Metahistory," *CA*, 131.
[181] 'The ontology prescribed by set theory determines being *qua* being as pure multiplicity "without one", and the language of this ontology is sutured to the presentative position in general through the empty set as nomination.' Alain Badiou, *Mathematics of the Transcendental*, trans. A.J. Bartlett and Alex Ling (London: Bloomsbury, 2014), 13. Elder has also written on Badiou's proximity to Frampton. See R. Bruce Elder, 'Notes on Badiou' (2008), accessed February 12. 2019, http://rbruceelder.com/documents/writing/bibliography/philosophy_aesthetics/2008_Badiou3.pdf.

a 'tour of tours'. To this formal basis something else was needed in addition to the ground upon which contingency had been re-admitted.

Developing their 'dialogues' in writing, the topics Andre and Frampton discussed (sculpture, photography, painting, literature, the movies) during the period in which Frampton was making the *Word Pictures* in New York consistently returned to the cut in its relation to mathematics, which Andre slyly admits that he only 'appreciates... in the sense that we were taught musical appreciation in grade school'.[182] In particular, the significance of the cut and the set for Frampton ultimately lay in the question of how to organise the individual frames into montaged phrases on film. Amongst other influences, the ideas expounded by the Imagist poetry of Pound for example, with its emphasis on the necessity for the "thing" to be 'unmediated by intervening rhetoric', the mathematics of set theory and the cut also suggested the drive towards alternate modes for expression beyond language.[183] Therefore it cannot be overstated that the significance of mathematics for considering *Zorns Lemma* here lies in the aesthetic potential of the theory, which Andre also understood as applicable to formalist modernism. When Frampton notes with excitement his discovery of two stools by Brancusi in the care of Duchamp, whom he had visited for the day on Sunday, February 12, 1961, it is as an appreciator of sculpture that he relays the encounter.[184] Brancusi's sculptural innovations, based on formal repetition, could perhaps also be made to appear on the horizon of the cut, but this argument could only go so far to explain the significance of the work.

At one point in the *Dialogues,* Andre cites Gödel's proof for the necessity of incompleteness in naive set theory. Andre explains the mapping of his terms in a set against the natural numbers, and it becomes apparent that the significance of

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[182] *Dialogues*, 80.
[183] Phillips, "Word Pictures," 68. For the significance of Pound scholar Hugh Kenner for Frampton's thinking at this time, concerning element/field relations, see the more recent essay by Windhausen, "Words into Film," 76-95.
[184] Letter from Frampton to Odlin dated '16 February 1961,' *Letters*, 1961, 3.

this operation for the young artists concerns the very possibility of a kind of arbitrary and automatic productivity for generating their work. What is ultimately at stake is that 'the poetry I am trying to write,' Andre suggests to Frampton, 'is poetry which eliminates the poet, or at least makes the poet transparent in relation to the light cast upon his subject.'[185] This idea, however unwittingly, still appears inflected by the hubris of objectivism inherited from the historical avant-gardes, yet rinsed of the trope of artistic genius. The idea of poetry in cinematic time, however, was a time of light as much as a part of the march to formalism was a part of the enlightenment. These transparencies on film became, therefore, the guiding metaphor of the 'new curriculum' for the poem.

[185] Carl Andre cited in *Dialogues*, 79.

## *Conclusion: Zorns Lemma*'s Artificial Memory

Revisiting *Zorns Lemma* ten years after its debut, Bernhard Lindemann's article for *enclitic* summarised the frustrations many critics felt at the time in their attempts to deduce the film's apparent semiotic systematicity. Following in the wake of the avant-gardes' structural film experiments, and the linguistic turn of critical theory following Structuralism and contemporaneous with Frampton's filmmaking, Lindemann asked:

> Is the film a system of signs to be described with the help of a modified apparatus of linguistic signs? If so, how is this system organised in comparison to language? What units does it exhibit which are relevant to this system?[186]

By phrasing the central problems of modern film semiotics as questions, we are left to wonder what such systems thinking on the relationship between words and images can do when it comes to applying structural linguistics to the cinema.[187] The description of the film as a system which could be positively compared to linguistic signification, such as Peter Wollen's or Christian Metz' cinema semiotics had attempted, ultimately seeks to ratify the film within theories of language and signification, and to elide the image in preference for the word found in the unity of linguistic form.[188] As a principally indexical medium however, film would not so

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[186] Bernhard Lindemann, "Experimental Film as Meta-film: Frampton's *Zorns Lemma*," trans. Bruce Murray, *enclitic*, III, no. 2 (Fall 1979): 137. Lindemann gives an exhaustive list of contemporary literature dealing with the idea of film semiotics in a footnote over two pages. Ibid., 137-8 n19.

[187] The principle presentation on the semiotics of the cinema is Christian Metz' 1964 essay 'The Cinema: Language or Language System?' reprinted in Metz, *Film Language,* 31-91.

[188] On the differences and similarities between Metz and Wollen's cinema semiotics, as well as a comment on the suitability of their approach, see Gilbert Harman,

easily become one more abstract linguistic system, nor did it necessarily aspire to be. This is what *Zorns Lemma* proved for Frampton, and his contention left film semiotics behind for an attempt to define cinema using film. Lindemann's conceptualisation of *Zorns Lemma* as a 'meta-film' suggests that it is not only 'about film' however, because it is clear that the work also attempted to address the very possibility of systems of signification as such. This critical component to the work—alluded to in Frampton's abbreviation of Grosseteste's treatise on light—is in concordance with the general migration from words to images effected in the persistence of a conventional narrative arc in the film. This aspect only emerges when the relationship between the three main sections is made apparent at the end of the film, just as it disappears into the nebulous whiteness of snowfall—or is it a cloud?

'I began with the standard verbal death oriented classical education interested in words, with prose or writing,' Frampton elaborated at the MoMA screening of *Zorns Lemma*, further suggesting that film proceeds by struggling against the dogma that we 'cannot understand a thing unless there are words attached to it.'[189] As well as hinting at this deeper structure of the work, which took Brakhage's call to 'imagine a world before "the beginning was the word",' Frampton extends this by stating, 'I needed to calculate what I believed to be the qualities of the thing itself.'[190] The mathematical basis for the film emerges as a counterpart to the question of how memory perhaps also exists outside of language, figured by place. Furthermore, and perhaps most significantly, when describing the film to another

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'Semiotics and the Cinema: Metz and Wollen,' *Quarterly Review of Film Studies*, 2, no. 1 (1977): 15-24.

[189] Hollis Frampton lecture screening "Cineprobe", MoMA, New York, 1970, op. cit.

[190] ibid. Brakhage, *Metaphors on Vision.* Elsewhere Frampton attempted to go beyond this emphasis on the 'thing' by describing what he called 'stable patterns of energy' opposed to the 'thing-in-itself' conceptualism of Western metaphysics. Hollis Frampton, "A Pentagram for Conjuring the Narrative," *CA,* 140-8. For an analysis of this aspect of his writing see Matt Teichman, "Prelude to the Philosophy of Hollis Frampton," *Film-Philosophy*, 8, no. 33 (October 2004), accessed October 6, 2016, http://www.film-philosophy.com/vol8-2004/n33teichman.

questioner he presents the work as kind of 'filing system', by which he meant that 'the evidence you need to understand it are on the screen, it's in there.'[191] Evidently, given the directness of photographic capture and its abilities to incorporate words, it became apparent to Frampton that the conventional system of language could perhaps be bypassed entirely.[192] A filing system for images, a kind of dictionary on film presented itself to Frampton as an idea to pursue in his experiment with *Zorns Lemma*: relating the alphabetical organisation of the dictionary or the encyclopedia to the anomy of images as such. This was possible only because of the discrete nature of the image series in time, and based upon the matrix as a field for the organisation of images. The idea of the index, as a term linked to semiotics, therefore requires expansion in order to re-introduce the reference work, the subset of language that is ordered alphabetically. The index was no longer just to refer to the coding of signs, but to a set of relations. It is in this way that the index is now able to be related to the matrix.[193]

However, the paradoxical apotheosis to this fundamentally humanist endeavour was also apparent. Following the Borgesian tragedy of the modern search for order which Frampton alludes to at the beginning of the "Metahistory" essay, as the search for the 'qualities of the thing itself', an irony emerges in his stated awareness of the possibilities of his approach. This is a tricky reference, however. Borges' 1939 short story 'Pierre Menard, Author of Don Quixote,' is explicitly referred to near end of the "Metahistory" essay, concerning the quotation of an existing work that would be 'verbally identical' in the story, and that by employing the reproductive specificity of film would become 'almost infinitely richer'.[194] At the beginning of the essay, however, Frampton notes Hugh Kenner's anecdote in *The*

[191] ibid.
[192] On the idea of the 'Thing-in-Itself' in relation to Frampton's interest in the photography of Edward Weston see, Zaher, "By Mind and Hand," 36-9.
[193] For an analysis of the theory of the matrix in the work of Bracha Ettinger, as it is related to psychoanalysis and painting, see Anna Louise Johnson, *Bracha Ettinger's Theory of the Matrix: Contexts and Commentary*, PhD diss., University of Leeds, 2006.
[194] "Metahistory," *CA*, 136; 139n1.

*Counterfeiters,* linking it to the 'seed-time', or proto-history, of the fact in the era of Jonathan Swift:

> Swift's contemporary savants fed dice to a dog. They (the dice) passed through the dog visibly unchanged, but with their weight halved. Thenceforth a dog was to be defined as a device for (among other things) halving the weight of dice.[195]

The allusion to Kenner's literary criticism highlights Frampton's playful approach to systems theory concerning the work of art, presented through Kenner's ironic concept of the counterfeit man, whereby 'systems expect that we will comply with them', yet this, of course, is never really the case.[196] Federico Windhausen has already noted the importance of Kenner for Frampton as indicative of the syncretic character to filmmaking, adapting literary theory as easily as it did critiques of other arts.[197] However this elides a perhaps more buried reference to a similar introductory strategy published for the first time in English in the year before the "Metahistory" essay, the same year as *Zorns Lemma.* Michel Foucault's *The Order of Things* begins with a prefatory statement on the origins of the study, also by citing Borges. Foucault writes:

> The passage quotes a 'certain Chinese encyclopaedia' in which it is written that 'animals are divided into: (a) belonging to the Emperor, (b) embalmed, (c) tame, (d) suckling pigs, (e) sirens, (f) fabulous, (g) stray dogs, (h) included in the present classification, (i) frenzied, (j) innumerable, (k) drawn with a

[195] "Metahistory," *CA*, 131.
[196] Hugh Kenner, *The Counterfeiters: A Historical Comedy*, with drawings by Guy Davenport (Bloomington: Indian University Press, 1968), 41. The reference to what constitutes 'dogness' appears on pages 22-3.
[197] On the importance of Kenner to Frampton's writing see Windhausen, "Syncretic Practices," 2007.

> very fine camelhair brush, (l) *et cetera*, (m) having just broken the water pitcher, (n) that from a long way off look like flies'. In the wonderment of this taxonomy, the thing we apprehend in one great leap, the thing that, by means of the fable, is demonstrated as the exotic charm of another system of thought, is the limitation of our own, the stark impossibility of thinking *that.*[198]

Frampton's influence by Foucault, who was a visiting scholar at Buffalo in the year before Frampton first taught there, has already been established in relation to *Magellan.*[199] However, the resonances between Foucault's citation at the beginning of his text from Borges' story 'The Analytical Language of John Wilkins,' which concerns a missing encyclopaedia entry for the author of a 17th century text on 'philosophical language', and Frampton's program for replacement images in *Zorns Lemma,* is also made clearer by understanding the critique of systems thinking that would only arrive later, with deconstructionist thought.[200]

Whether he was directly influenced by this quote in Foucault's text or not, it is certain that Frampton's thinking was deeply affected by Borges' fiction, and the Argentine author's subtle literary critique of the hubris required in the pursuit of absolute knowledge shows how a taxonomy that posits language as against what Foucault calls the 'exotic charm of another system of thought' can be seen to situate the series of photographic word-images amassed in the streets of Manhattan. Here, the replacement images offer one such example of another system, accessible only to the ensemble that produced them. Rather than a system in any positive sense, the mnemonic specificity of the film's introductory section, the reciting of the Bay State

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[198] Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences – A translation of* Les Mots et les choses (1966) (New York: Vintage, 1973), xv.
[199] See Zryd, "History and Ambivalence," 129-132.
[200] Borges' story originally appeared in his collected edition *Otras Inquisiciones (1937–1952)* (Buenos Aires: Sur, 1952), and in English as *Other Inqusitions,* trans. Ruth L.C. Simms, introduction by James Irby (Austin: University of Texas Press, 1964), 101-5.

Primer, therefore suggests that the subsequent replacement of the alphabet by an array of images tracks a migration of words and things towards a different, as-yet-unnamable system. In fact, this is echoed in title of Foucault's text in the French, *Les mots et les choses* (words and things), which makes explicit the link to classical rhetorical thought. Furthermore, this title suggests Foucault's study is related to the tradition of artificial memory, or mnemonics, from which it was borrowed. By recalling the art of memory as addressed to the mediation of words and things through images, the significance of this aspect of the rhetorical tradition is brought to the contemporary question of knowledge in the era of media (and not just mediums). Foucault's text, however, deals rather with what he calls *epistemes*, and does not seek to engage artificial memory other than in the sense, though not uninteresting, of humanism's technical heritage.

Distinguishing himself from the 'systems' thinking grounded in the discourse on art at the time, *Zorns Lemma* takes a different tack.[201] The example of the 'real' John Wilkins (1614-1672), and his attempts at constructing an 'alphabetical dictionary' for a universal language to replace the Latin, is tempered for Borges by its 17th century utopian hubris. When seen from the perspective of the post-War milieu of the mid-20th century, this literary critique becomes the hidden motivator for Frampton's elaboration of a still utopian belief in the potentialities of film, as aspiring to achieve the same goal for a universal history, albeit after the fact.[202] This ironic aspect to the work is initially proven by references to the humanist forms of the dictionary and the Encyclopedia project inaugurated by Denis Diderot and Jean le Rond D'Alembert in the 18th century, which Frampton mentions in multiple interviews about the film. Thenceforth the encyclopaedic intentions within *Zorns*

[201] For a further example of the relationship between Systems Theory and contemporary aesthetics at the time, see Jack Burnham's lecture "The Aesthetics of Intelligent Systems," *On the Future of Art*, Introduction by Edward F. Fry, Sponsored by The Solomon R. Guggenheim Museum (New York: Viking Press, 1970), 95-122.
[202] See John Wilkins, *An Essay Towards a Real Character and a Philosophical Language* (London, 1688).

*Lemma* reappear regularly in the literature on it. But it is the loss of the way in which the didactic and technical aspect of the encyclopedia in relation to the film places it in the lineage of the early modern memory treatises of figures like Ramon Llull (c.1232-1315/16), a contemporary of Grosseteste's and an influence upon later figures like Wilkins, or to Giordano Bruno (who fascinated both Yates and Higgins), and to the classical development of the taxonomical organisation of knowledge by grounding the film in an area of research not often considered as relevant to the filmmaker avant-garde at the time. That is, of course, the effect of film on what John Michael Krois has also said of Yates' work: that it was concerned with 'memory in a cultural sense'.[203]

In an interview with Scott MacDonald, Frampton explained:

> Well, alphabetic ordering is extremely interesting because it is at once quite arbitrary, and yet it's something that's given to us by the culture and has a vast history, not the least important aspect of which is concerned with two kinds of books: the dictionary, on one hand, which is the diction of dictions or the set of all sets of words of which the language is composed; and the encyclopedia, which does a rather odd thing: namely, it proposes to arrange all areas of human knowledge according to the first letters of their names. In order for something to become knowledge in the encyclopedia, it first has to be nameable; then its name must have entered the language via the written word; and finally that written word must have been standardized. The encyclopedia takes many disparate, disjunct things and groups them together, not even as they are related in language, but as they are related according to the precedence of the graphic signs that constitute their names.[204]

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[203] John Michael Krois, "*Ars Memoriae,* Philosophy and Culture: Frances Yates and After," *Philosophy and Culture: Essays in Honor of Donald Phillip Verene*, ed. Glenn Alexander Magee (Charlottesville: Philosophy Documentation Center, 2002), 150.
[204] *CC*, vol. 1, 50-1.

As I have shown, the problem of the name, the proper name in a secular science of structural linguistics, haunts the images which exceed their capture by the arbitrary system of ordering that remains the central conceit of *Zorns Lemma*. This reference to the set made by Frampton calls into focus the title of the film, *Zorns Lemma*, named as it is after the mathematical axiom formulated independently by Kazimierz Kuratowski in 1922 and Max Zorn in 1935 (problematising even its own naming). The name permits enunciation, but the language must also be pronounceable. In the imagined 'clicks' of the images, and the hum of the projector during the film's 'silent' section, the film speaks, seeking to communicate its proper name.[205]

The atlas of film is a model for locating things by their proper name, it provides a topology of space between elements even in their mutability, and the naming of these elements is a poetic process akin to the idea shared by Frampton and Andre 'that the great natural poem about anything is its name'.[206] The set, then, as a new paradigm for memory, which now relates the images of things to images as such, without the need for the right name, figures the image on film. It is this realisation, of the film's system as an artificial memory device, that now comes to bear on *Magellan.* The hubris of *Zorns Lemma* was that it results in an unsatisfactory banishing of language, a logophobia which Frampton recognised in Eisenstein too, and which has as its agenda 'a universal language,' on the one hand, 'and a perfect machine' on the other.[207] What Frampton would realise with *Magellan*, is that words and images could never replace one another, as they appear to be on a different register altogether, and as such required mediation.

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[205] On the 'silent' cinema and its foundations in sound see the chapter "When Film Was Deaf (1895-1927," in Michel Chion, *Film, A Sound Art*, trans. Claudia Gorbman (New York: Columbia University Press, 2009), 3-18.
[206] *Dialogues*, 75.
[207] "Film in the House of the Word," *CA*, 168.

# 4. Cloud: *Palindrome*

*Even where it is introduced into a picture by mechanical or conventional means, in the West cloud marks the limitations of a representation that is governed by the finite nature of linearity. Beyond a certain point, a proliferation of clouds, more or less deliberate and controlled, seems to be a symptom: it signals the beginning of the dissolution of an order (but not its deconstruction).*
Hubert Damisch, *A Theory of /Cloud/*

The ubiquity and vicinity of clouds in the earth's atmosphere means that they have come to symbolise the coalescence of the natural world with an ideal environment which necessarily includes the celestial, or universal. Mediating this division, clouds are often framed in opposition to the technics of time; the weather accords with its own rhythms and only recently has human impact been considered as factor in assessing the climate of the globe. For Frampton the cloud represented the possibility for a navigation that points outside of the mechanical time of the apparatus, as the Clouds of Magellan. The final chapter of this thesis engages this understanding and figuration of the cloud through Frampton's silent film *Palindrome* (1969). I argue that this recursive film is important for understanding Frampton's interest in clouds as a figure of the formal unrepresentability of the infinite film, and is able to be understood as a unique atlas of itself. In contrast to *Magellan*—for which *Palindrome* will be scheduled to play on the 30th of December—the film is deliberately isotropic and as such operates as a long loop, and provides a model for *Magellan* as an atlas of the history of film.

In simple terms, clouds are commonly categorised by the meteorological sciences and assembled into types: Stratus, Cumulus, Cumulonimbus, and Cirrus. However, the cloud comes to figure both the natural phenomena that appear between the earth and sun, and therefore act as a symbolisation of the obscure limits of knowledge. Writing on *Zorns Lemma*'s use of a medieval treatise on light, Luke Fidler pointed to the fact that Roberte Grosseteste, the bishop of Lincoln, had used the cloud when referring to divine reflection, in a remark 'in his *Super Psalterium* that the obfuscating cloud allows us to see the sun'.[1] Frampton's interest in the significance of clouds also concerned stars beyond the sun, where the cardinal points became indeterminate nebulas. These are the 'clouds' which were noted by Magellan at the same time as he navigated the straits of the Tierra del Fuego, and were later called the Magellanic Clouds. While these two irregular dwarf galaxies

[1] Fidler, "The Practice of the Tractrix," 106.

are in fact over one hundred thousand light-years away from the earth, the clouds of photochemcial emulsion which give *Palindrome* its contents, are of a different, yet related order. In the film one-second cycles of 'sets' of images made from the waste ends of rolls of film animated by Frampton in the Technicolor lab where he worked in New York. The frames fogged by their inconsistent exposure to light and chemicals are organised to create a palindrome on film, parsing the same forwards as backwards, locally and globally, and even upside down during its 22-minute running-time. This approach to the question of a semiotic arrangement of the figure of the cloud returns us to the question of structural film that will conclude this chapter and this thesis. One focus of the argument will be the work of the semiotic art historian Hubert Damisch, who locates what he calls /cloud/ at the limits of perspective for the history of art, and as particular to the theory of painting. It will also be shown how this shift, from painting to film, demonstrates Frampton's decision to include *Palindrome*, as he says, 'in its entirety in *Magellan* as one of the *Dreams,'* and subsequently marks it as a significant work for understanding his approach to the possibilities of the film form, and ultimately for *Magellan* as an atlas of film.[2]

[2] Hollis Frampton cited in MacDonald, 'Interview with Hollis Frampton," 7. This line is also cited in Henderson, "Propositions," 130.

## 4.1 Clouds and the Dissolution of Order

On the 18th of April 1972, Annette Michelson showed Frampton's film *Palindrome*, which he had first screened three years earlier, to her students at New York University, with Frampton sitting in on the class. Michelson began by introducing the film as 'the central exception to Frampton's oeuvre'.[3] Frampton himself would call it 'overtly Webernian', referring to Anton Webern (1883-1945), the 12-tone composer of serial music from the Second Vienna School. With its use of 'serial procedures', Michelson argued, the work almost immediately engenders a malaise in the viewer attempting to understand its complexity.[4] For the entirety of the film, not much more than the title and the credit distinguish the film's frames, which pulse in repetitive, 24-frame groupings. Given Michelson made these comments as Frampton began working in earnest on *Magellan*, and after *Zorns Lemma* (and when he had nearly completed the *Hapax Legomena* series), they must be considered at face value: as a critical appraisal from someone who knew his work intimately, perhaps second only to Frampton himself. In the classroom, Frampton responded to Michelson by arguing that it was the experience of 'sensing but not perceiving' in the film that made watching it somewhat disjunctive.[5]

The film is finished on colour 16mm film stock and runs for 22-minutes in complete silence. *Palindrome*'s contents were produced by re-printing the cloudy emulsions that appear on the waste ends of film-rolls during processing, which Frampton had salvaged from the cutting room floor of his job as a laboratory technician at Technicolor, Inc in New York (fig. 4.1). Following his death in 1984, Michelson postulated what she saw as another 'central' tendency in Frampton's work in an essay on the thetic and semiotic resonances in Frampton's films. His

[3] Frampton and Annette Michelson, April 18, 1972, New York University, New York. Hollis Frampton Archive, HFA#10025.
[4] Ibid.
[5] Ibid.

insistence on the problem of narrative, she argues, was one that set him apart from other filmmakers in the American avant-garde of the period. Speaking explicitly of *Palindrome,* she wrote that it:

> derives not merely from its literary model, but just as surely from Frampton's experience of serial composition, employed by Schoenberg and Webern. Frampton's correspondence is, in fact, probably unique in its demonstration of interest in both the constraints of serial composition and the aesthetic of chance.[6]

Michelson's reference to the experimentalism of the period links Duchamp to Cage in the art milieu of post-WWII New York. Her hypothesis also accords with Michael Nyman's recognition of a distinction between the avant-garde and experimental arts that he argues is demonstrated by their respective receptions of Webern—as either constrained or open, respectively: an aesthetic of chance.[7] While other filmmakers of the period had used their knowledge of musical composition for the production of their films—Tony Conrad's *The Flicker* (1966) is the most obvious example—according to Michelson, Frampton was arguably one of the only film-makers who remained concerned to actively address the divide between the modernist requirement for autonomy and repose, in the idea of presence expounded by Michael Fried for example, with the new ideas of the artwork as dispersed into and mixed within the environment in which it was situated. To do this, I argue, Frampton settled on what art historian Hubert Damisch inadvertently presented as

[6] Annette Michelson, "Frampton's Sieve," *October* 32 (Spring 1985): 160.
[7] Michael Nyman, *Experimental Music: Cage and Beyond* (Cambridge: Cambridge University Press, 1999), 29. This text was first published in 1974.

a symptom in the visual iconography of modernity in 1972, what he called the 'proliferation of clouds'.[8]

It is the structure of *Palindrome* that relies upon a non-compositional strategy for the elaboration of a set of 'chance imagery', which Frampton then used to directly address the dialectic of chance and constraint suggested by Michelson. Michelson also notes this was an issue of formal abstraction which in the late 1960s Frampton had made his own by using film.[9] A metaphor of this binary approach to the question of intentionality was also supplied by the philosopher of science Karl Popper, when presenting the Arthur Holly Compton Memorial Lecture at Washington University in 1965. Remarking on the categorical distinction of determinacy, which he posed as like a clock, and indeterminacy as like a cloud, Popper argued that no less than the very possibility of freedom was at stake.[10]

In Frampton's film a palindrome is completed across four determined axes—the prime (forward), retrograde (backwards), inverse (upside-down), and retrograde-inverse (upside-down and backward). Within its frame, the chance abstractions of the cloud-like emulsion are layered, conflating their implicit orientations. In this way the palindrome foregrounds a spatio-temporal arrangement, as opposed to its literary model, as was made clear by Michelson in 1985. The constructed aspect of the work also gives it a visual depth distinct from Frampton's other films. Furthermore, the architectural historian Sotirios Varsamis has more recently

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[8] Hubert Damisch, *Theory of /Cloud/: Toward a History of Painting* (1972), trans. Janet Lloyd (Stanford: Stanford University Press, 2002), 202.

[9] Michelson's claim that Frampton was the singular exemplar of this approach can be challenged retrospectively by comparing the work of Morgan Fisher in LA at the time, and his approaches to both painting and filmmaking. See note 347 of this thesis. Morgan Fisher, *Conversations* (Aspen, CO: Aspen Art Press, 2012).

[10] Karl R. Popper, "Of Clocks and Clouds: An Approach to the Problem of Rationality and the Freedom of Man." This was the second Arthur Holly Compton Memorial Lecture presented at Washington University on 21st of April 1965. The paper was published in Karl R. Popper, *Objective Knowledge: An Evolutionary Approach* (Oxford: Oxford University Press, 1979), 206-255. Federico Windhausen suggested the significance of this essay in a paper he delivered on the work of Chris Welsby and William Raban at LUX in London, October 2017. See Federico Windhausen, "Systems and constraints: Contexts for a British cinema of 'intentional limitation'," *Moving Image Review & Art Journal*, 6, nos. 1 and 2 (2017)" 90-101.

extended research on the poetic tradition of constructing palindromes into the domain of architecture. In doing this, Varsamis suggests that the palindrome, as a form of constrained writing, is primarily a spatial form which is to be considered within the family of the anagram, and related therefore to a notion of topological symmetry.[11]



Fig. 4.1 Hollis Frampton, frame from *Palindrome* (16mm, colour, silent, 22 mins., 1969).

At some point after he had completed *Palindrome*'s set of cloudy, 'biomorphic' images Frampton realised its importance for his work as a whole. More so than his other films from the time, such as *Artificial Light* (1969), which also functions by re-presenting the same set of images in different configurations and orientations,

[11] See Sotirios Varsamis, "The Tradition of *Spatial Writing*: The Case of the Palindrome in Between Literature and Architecture," *Footprint,* 10/11, Architecture Culture and the Question of Knowledge: Doctoral Research Today, (Spring 2012): 143-164. Varsamis also notes Jean Baudrillard's interest in the palindrome as it interrupts the linear flow of historical time. See Jean Baudrillard, "Hystericizing the Millennium," *Arts and Opinion*, 2, no. 5 (2003) accessed August 2, 2017, http://www.artsandopinion.com/2003_v2_n5/baudrillard.htm. The essay was originally published in Jean Baudrillard, *L'illusion De La Fin: Ou La Greve Des Evenements* (Paris: Galilee, 1992), 161ff.

*Palindrome* revealed itself to be a successfully preparatory study, an experiment which had exceeded its hypothesis. If its contents were synonymous with the material of film itself, the clouds of emulsion re-purposed by Frampton as abstract yet organisable images, could perhaps also function as the locations for the organisation of his 'metahistory of film'. Every frame of palindrome can thenceforth be seen to stand in for a scene from the infinite film, allowing Frampton to focus on the formal aspects of the work.

By the mid-1960s Frampton had come to understand that narrative and linear history had been fundamentally compromised by the arrival of film. Given this assumption, his work was dedicated to the construction of a utopian monument, one which he linked to Tatlin's spiralling 1919 proposal of a monument-in-motion to the Communist International. Out of the cinema, *Magellan*'s seasonal cycles would revolve interminably. Like a locked groove on a record, *Magellan*'s guiding principle was the loop, the return. Its geometry, unlike the rigid directionality of the sentence, was cyclical in a way that Frampton understood through the palindrome.

Frampton's concern for film as an art-form is perhaps best articulated in 1979, during his Whitney Museum of American Art lecture, 'The Invention Without a Future', where he highlights what he calls the 'tentative attempts, at once complete and approximate,' undertaken by anyone working in the camera arts, 'to construct something that will amount to an arena for thought, and presumably as well, an arena of power, commensurate with that of language'.[12] Arena was one name he had used for describing the design of what would become *Magellan*, as far back as 1964. In the meantime, Frampton set out to produce other works which have not all been examined here, but can also be framed as experiments on film. If these films are understood to be experiments, their hypothesis was *Magellan.* Apart from the fact that various constraints provided the ordering systems for the production of his other film experiments, the mathematics of prime numbers for

[12] "The Invention without a Future," *CA,* 181.

example (or the palindromic structure Brune Jenkins finds in other films like *Manual of Arms* (1966), *Information* (1966), and *States* (1967)), it is the films made slightly later, *Zorns Lemma* and those which were completed for *Magellan*, which have been the emphasis of this thesis so far. This is because these works best demonstrate Frampton's approach to film as a question of cultural memory. Earlier experiments like *Palindrome*, however, as I argue in this chapter, also helped to formally ground his approach.

By February 1, 1981 Frampton records that he had in fact completed eighty-six films to date, 'running some 30 hours'. Given *Magellan* was planned to run for 36 hours, it could be said that Frampton came closer to realising his opus than perhaps even he had allowed himself to imagine.[13] Accordingly, a certain selection of the films from the sum total of his work began to be reincorporated as parts of *Magellan.* That he recognised *Palindrome* in particular as important for his filmmaking as a whole, a film which was made while he worked as a dye-transfer technician matching three part-colour separations and using the dye-transfer matrices for printing still images, suggests that it is here that important aspects for *Magellan* may be located.[14] As the 'Second Dream' of the fictional protagonist Magellan, *Palindrome* appears as the ninth film in the cycle (fig. 2.1).[15]

At the end of his study of perspective, Damisch posits what he calls 'a geometry of the sentence,' as a way to figure how thinking through painting offers an alternative paradigm of the image: 'The formal apparatus put in place by the perspective paradigm is equivalent to that of the sentence,' he writes, 'in that it assigns the subject a place within a previously established network that gives it

[13] He then lists only 58 by name in the same CV and a number of these films would also appear as a part of *Magellan. CV*, 2; 11-14.
[14] See Frampton's biographical note in Jenkins and Krane, *Recollections*, 111.
[15] *Palindrome* was programmed to follow *Letters of the Name* (scheduled Dec. 29), the first four of the fourteen parts of *Cadenza*, the first two of the seven parts of *Mindfall*, and the 'First Dream' titled *Ludus Luminis, Ludus Chromaticus* (all scheduled for Dec. 30). It was to be followed by the 'Third Dream' titled *Natural History*, a fourth and a fifth dream (untitled at Dec. 1 1978), and 'Sixth Dream' titled *Hexachordum Apollinis.* This makes December 30 a particularly busy day in the *Magellan* schedule.

meaning'.[16] It is clear that Frampton also understood this as a form to be tested by film. *Palindrome*, as a temporally recursive creation, a kind of industrial-material gyre, is Frampton's way of moving from the geometry of sentence to the constellations of the atlas. This idea finds its clearest articulation in *Palindrome* by focussing on the clouds of emulsion that make up its contents. Whereas *Magellan* was based on the calendar year, approximating the degrees of a circle with its 36-hour length, Frampton's interest in the spiral formations of inscriptive media appears to locate his early work by connecting it to the material conditions of the cinematic apparatus: from the phenakistoscope to the roll of film itself, and onwards to the spiralling revolutions of the hard-disk drive.[17] It is here that *Palindrome*'s cycle of cloudy film images presents itself as a work which best represents this essential character of the film spool, which migrates from literature to images, and in fact provides an overt instantiation of Frampton's understanding of the mnemonic potential of the recursive form through the figure of /cloud/, as Damisch designates the figure, as a limit point for the semiotics of the sign.[18] In the final analysis of Frampton's work, my concern for the persistence of technical memory from out of the archives of modern art, will therefore be brought to its conclusion by emphasising the strategies for the production of signification behind one of his least commented upon films, with the purpose of shedding more light on the internal mechanics of *Magellan* and the way in which the atlas of film transmits meaning through images.

As discussed in previous chapters, the atlas has been understood by the Warburgian example for art history as developed in recent years by Georges Didi-

[16]Hubert Damisch, *The Origin of Perspective* (1987), trans. John Goodman (Cambridge, MA: MIT Press, 1994), 446.
[17] Patrick Clancy describes Frampton's 4 minute film *Quaternion* (1976), as an 'undulating gyre' in the Film-makers' Coop listing, accessed Febraury 21, 2019, http://film-makerscoop.com/catalogue/hollis-frampton-quaternion.
[18] Damisch explains the convention of using the forward slash to designate /cloud/ in the following way: 'The word will appear between two forward slashes (as in the title to the present work) every time that the analysis requires it to be identified as a signifier'. Damisch, *Theory of /Cloud/*, 14.

Huberman. As a researcher into his work, Chari Larsson notes how 'Didi-Huberman is quick to differentiate the atlas from related reference works like the encyclopaedia and the archive'.[19] In a kind of *nachträglichkeit*, or deferred action, the atlas is only revealed as such through Didi-Huberman's recovery of Warburg's intuitive project which distinguishes itself within the category of reference work. For Didi-Huberman the atlas represents that which, as Larsson continues, 'does not behave systematically like the encyclopaedia or exhaustively like the archive. The atlas "chooses".'[20] To end here then, with the development of a program for Frampton's experiments with film necessitates that the analysis begin by engaging with the work's operative structure as an intentionally "closed system" which must provide a select point of entry and exit from its chance encounters with the film frame.

Overall *Palindrome's* rhythmic systematicity is based on the 24 frame, one-second pulse that is retained by Frampton for *Zorns Lemma*, yet it is the images of the cloudy emulsions which figure the films abstract contents throughout. This aleatoric or chance element to the work, corresponds to the idea of divination in the atlas, and provided Frampton with a test pattern for its structure. *Palindrome* is a work which allows for the choice of the images for their organisation, not unlike like the knight's move, which much choose its tour of the given spaces of the chess-board. Furthermore, like the figure of the knight, the meaning of the selection becomes indeterminated with the author of the work, with the artist, the result is a conflation of representation with appearance, giving the work its idiosyncratic character. In the arrangement of the cloudy images in *Palindrome,* the question of divination and prediction also reveals the conscious articulation of memory to be a fundamental theme of Frampton's work as a whole.

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[19] Chari Larsson, "Thinking Things: Images of Thought and Thoughtful Images," *Transformations*, 27 (2016): 6-7.
[20] Ibid.

Watching *Palindrome,* it is clear that a strictly symmetrical logic was able to be somewhat loosened by Frampton, and the first image in the film fades up for nearly two seconds, while the film's final image, a retrograde inversion of the first, does not fade out at the end of the film and also lasts for two seconds, or 48 frames. Furthermore, the four-second structure for the phrases over 40 'second' sets does not lead to the 22-minute outcome of the film, in fact it appears quadrupled, so as to be oriented L—R, R—L, and the same again flipped on the central horizontal axis, IL—R, IR—L and finally doubled around the centre point—which is in fact a cut, because the numbers are even—to create the overall palindrome. These inversions and reversals are made possible by the double-perforated film strip which can be mounted in the film projector in these four different orientations (while also requiring that the 16mm film has no sound recorded on the film's optical track).[21] Finally, the set variations within the single frame images also appear to flutter and drift during their 24-frame duration, hovering slightly in their superimpositions throughout the film. This artefact of the printing process creates a sense of depth, a perspectival web into which we enter the images optically, and matching Frampton's initial interest in the 'illusionist content' of the films' use of waste ends. The images are, therefore, neither flat nor non-objective abstractions, yet they still manage to maintain a sense of spacelessness, a paradoxical experience that Frampton no doubt deliberately pursued for the film, and which he then expanded upon for *Zorns Lemma.*[22] The 'clouds' of waste material that are the outcome of this process towards illusion, participate in a delicate balancing act between the determinate (clock) and the indeterminate (cloud).

[21] There being no space for a soundtrack on double-perforated film. The main difference being that in two instances the film's emulsion will be faced out, and the in the other faced in. This only requires a slight adjustment to the focus to fix any visible difference, however.

[22] At a lecture a Pittsburgh University delivered on the 8th of November, 1971 Frampton at one point declares: 'I love paradoxes.' Hollis Frampton Collection, 1963-2001. Harvard Film Archive, Fine Arts Library, Harvard University, HFA item # 10058.

Structure, of course, is a term that has been applied to a set of films and filmmakers who came into contact with the existing artist-filmmaker milieu in the 1960s. This means that by approaching *Palindrome* as a filmnemonic, a reassessment of the significance of "Structural Film" when applied to Frampton' work, will reveal its significance for distinguishing between the artist-filmmaker avant-garde and experimentalism. How structural film may relate to /cloud/ as a perspectival limit, given Sitney's insistence on the relative simplicity of what he called this 'minimalist' phase of filmmaking, now seen through the diffracted lens of cultural memory, means *Palindrome's* appearance at the same time as the "Structural Film" essay allows /cloud/, as a signifier of the limits of perspectival representation, to problematise any exclusively formalist assessments of Frampton's work within the artist-filmmaker milieu.[23] However, what will frame the question of how Frampton's work conceived of film as a system for memory is the relationship of the film to the serialism of the photographic image on the film-strip.

### 4.1.1 Isotropy and the Loop

That *Palindrome* is completely silent suggests its literary referent privileges a reading of the film. Silence coupled with rhythmic images however, as the *New York Times* reviewer of *Zorns Lemma* had noted, gives way to the suggestion of an internal sense of aurality. This "sounding-off" that is perceived, rather than heard, in the mind of the spectator, means the film's continuous cycle of one-second shots "sound" out in our expectation of their continuation. In addition to the film's title at the beginning

[23] This is the term used as Sitney concludes the essay. Sitney, "Structural Film," 10. He finishes his identification of structural film with the statement: 'In the next years we can expect several more and inevitably both a climax and degeneration of the mode' suggesting a teleological or ends-oriented reading of the movement. Ibid. On the continuing legacy of structural film see the more recent essay by Jonathan Walley, "Identity, Crisis: Experimental Film and Artistic Expansion," *October,* 137 (Summer, 2011): 23-50.

of the film as its only legible content, *Palindrome* ends with the second half of a Latin palindrome appearing in white text on a black ground: ET CONSVMIMVR IGNI. When unfolded it reads: *In girvm imvs nocte et consvmimvr igni.* Frampton's signature ideogram, combining his initials, HF, is the final credit included at the end of the film.[24]

By comparing Frampton's recollection of the film's construction with the listing for *Palindrome* in the Film-makers Cooperative Catalogue (entered by Frampton himself) as well as a later description by Gerald O'Grady, a nexus of information on the film further helps us to unpack what could be called it's 'overall shape'.[25] Beginning with the palindrome, neatly dividable in two halves due to its even amount of letters (32 characters which make up seven words, separated by six spaces), the Film-makers' Cooperative Catalogue No. 7 (1989) lists the film with the following description:

> "The menacing latin palindrome IN GIRVM IMVS NOCTE ET CONSVMIMVR IGNI (By night we go (down) into a gyre / and we are consumed by fire) serves as epigraph to this animated film. Anima is imparted to 12 variations on each of 40 congruent phrases, metamorphosed from the chemically mutilated flesh of colour film itself. Internationales Forum de jungen Films, Berlin, 1972." -- H.F.[26]

The discrete basis for the multiplication of the film's phrases from 40 seconds to 480, expands the film to 8 minutes. From here the 4-second structure of each pulse,

[24] In some versions I have seen the second half of the palindrome is the only part included, prior to the ideogram signature, implying that the text be read RL then LR as it appears on screen. It is not aparent whether Frampton made this change to the structure of the film after showing it with the palindrome halvs at both ends, as reported by O'Grady et al. below.
[25] Gerald O'Grady was head of the Media Studies Center, at SUNY Buffalo, where Frampton worked from 1973. He authored the filmnotes for Frampton's films at MoMA in 1990.
[26] *Film-maker's Cooperative Catalogue,* 168.

containing the one-second phrases, extends the film beyond its final length, where it is concluded by the antique phrase, suggesting both movement, embodiment, and the expense of energy.[27] The palindrome, therefore, must also reduce the phrases which appear in their specific orientations over the 22-minutes of the film.

Gerald O'Grady, for his part, contributed to our understanding of the film by providing the Museum of Modern Art's filmnotes after Frampton's death. In 1990, O'Grady elaborated on *Palindrome's* composition in the following way:

> This film is made from non-photographic footage which Frampton rescued from the waste bins of a processing lab where he worked as a technician. It was those ends of celluloid strips to which the physical clips of the processing machine had been attached, letting in chemicals to work on the emulsions, and generating forms which looked like the biomorphic images of action painting. From the single frames of 24 such images Frampton generated forty different phrases, each one second long, and then, continuing to foreground the potential contributions of film processing to film composition, made twelve variations of these forty-second pieces – a black and white version, a black and white negative, a color negative, a print through blue and yellow filters, through magenta and green filters, etc. All of these rolls were then intercut with each other, interwoven backwards and forwards from a central point. The film has 360 isometric sections, and its construct resembles a literary palindrome, a sentence which reads the same backwards as forwards, as in "Madam, I'm Adam." Frampton's film is

[27] In 1978 the artist and writer Guy Debord (1931-1994) released an essay-film consisting of a montage of still photography and scenes from the history of cinema titled *In Girum Imus Nocte Et Consumimur Igni.* In it he claims: 'I am going to replace the frivolous adventures typically recounted by the cinema with the examination of an important subject: myself.' Guy Debord, *In girum imus nocte et consumimur igni* (1978, 16mm, 81mins, black and white, sound). For a complete transcription of the soundtrack translated into English by Ken Knabb see *Bureau of Public Secrets,* accessed September 2 2016, http://www.bopsecrets.org/SI/debord.films/ingirum.htm.

> prefaced by the first half of the Latin palindrome, IN GIRVM IMVS NOCTE and concludes with its second half, ET CONSVMIMVR IGNI – "Into the whirlpool we go down at night and are consumed by fire." While constructed out of "found" throw-aways, the film is thoroughly organised in accord with the principles of serial music and we encounter the paradox of a set of mutable unrelated images being ordered according to a set of rigidly-fixed rules. Like action painting, the images create their own expectations, due to their position within the frame, the unevenness of their damaged images which create perspectival indicators, their chance combinations of colours, and the superimpositions which have been created in the act of processing them. The film's tension is in the extension of pretension.[28]

Echoing the earlier synopsis by Frampton himself, and apart from contributing his own translation from the Latin, O'Grady also adds the further information that the film is based on the 'principles of serial music' and consists of 360 isometric sections. If the sections referred to are the four-second sequences, the resulting film would be exactly 24-minutes in length. The two-minute discrepancy casts doubt on the veracity of this claim by O'Grady, but it is suggestive given the relationship the number 360 has to the degrees of a circle.

A series of isometric drawings published by Sol LeWitt in in 1982 shows how the translation of figures into virtual space also transforms them on flat, 2-dimensional surfaces into abstract shapes with the illusion of depth, by conforming to drafting standards used in architecture (fig. 4.2).[29] A cube becomes a hexagon, in 2-dimensions. With *Palindrome,* however, isometry appears to be problematised (although not excluded) by the fact that a four-way printing of the image from the

[28] Gerald O'Grady, *Palindrome* filmmnotes for MoMA (January, 1990). The version of the film I have seen only contains the second half of the palindrome which appears at the conclusion of the film.
[29] See Sol LeWitt, *Isometric Drawings* (New York: Paula Cooper / John Weber, 1982).

sets of matrices in the printing process remain observable in the film's complex outcome, and foregrounded for the viewer by their layering.



Fig. 4.2 Sol LeWitt, *Isometric Drawing / Wall Drawing #366 BB, Cube Without a Cube* (c.1982).

In fact, what O'Grady may have meant to say was that the idea of the film is related to the isotrope, rather than to isometry as such. This approach suggests a diametrical opposition to a rigorously linear, or geometrically spatialised history, and could explain why Frampton came to settle on the expanding form. As it is made evident by *Magellan's* calendrical cycle, this "all-round" approach required an immanent topological structure for the systematic generation of the film to take place as a complete work (and again explains O'Grady's attribution of a 360-piece

film as suggestive of a circle).[30] Isotropy is a term for describing a spatial uniformity extending in all directions, and helps to further elaborate the film's recursive tension. Specifically, however, it emerges in a conversation held between the artist-filmmaker Paul Sharits and Frampton, approximately four years after he had completed the film, at SUNY Buffalo on March 1, 1973.[31] Frampton is interested in Sharits awareness of isotropy and its applications for film, which he notes is a feature of Sharits' work at around the same time as he had made *Palindrome*:

> About two or three years ago you said in a lecture at the Millenium [Film Workshop] in New York and I believe it was of PIECE MANDALA [1966] – that it represented an effort to make a film that was fully isotropic, that wherever you sliced it would be pretty much the same. And it would be one way that you had thought of doing that was to make not only completely symmetrical, but also then by implication or as a way of promoting isometry, circular, so that it could be arranged as a vast loop and run on forever. Well, of course we have other works of art which are loops. *Finnegans Wake* is a loop, which happens to be cut into... Does that preoccupation with loops in any way reflect an effort to annul at least the standard kind of, as you put it, arrow model of time?[32]

Sharits' reply—'Definitely, is the answer.'—places Frampton's thinking about isotropy squarely in the period in which he had produced *Palindrome*.[33] Yet because the film is conspicuously absent from their conversation, Frampton never explicitly

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[30] Frampton also comments on the importance of isotropic filmmaking in the question time after the screening of *Zorns Lemma* at MoMA on the 14th of April 1970, op. cit.
[31] "Paul Sharits interviewed by Hollis Frampton," March 1, 1973. Transcribed by John Minkowsky in O'Grady, *Scrapbook Encomium,* n.p.
[32] Ibid. Paul Sharits, *Piece Mandala / End War* (1966, 16mm, colour and black and white, sound, 5mins).
[33] Ibid.

claims that he had linked the literary concept of the palindrome to isotropy, and thus to the loop. However, he does name James Joyce's 1939 text *Finnegan's Wake*, an important source for Frampton in general, and for his work on *Magellan* especially, and he attributes to that work the characteristic of the loop. Reading the *Wake* from the last line into the first, the 'Doublends Jined' also commented upon by Brian Henderson in relation to Frampton, does allow for the possibility that the narrative has been 'cut into,' as Frampton puts it, rather arbitrarily perhaps by Joyce.[34] It therefore means the work could also figure as a kind of textual loop different to, but not unlike, a palindrome.

In his 1922 epic, *Ulysses*, the apotheosis of the modernist novel, Joyce includes the sentences: 'Madam I'm Adam. And Able was I ere I saw Elba,' two English palindromes which are spoken in a row by the character Lenehan.[35] Importantly, the position of the two palindromes here is significant for the fact that the topic of discussion is the famous line—repeated by Frampton in the "Metahistory" essay—that history is the 'nightmare from which you will never awake'.[36] Joyce is deliberate in his linking of this idea of history to its pithy dismissal by Lenehan in the seemingly banal wordplay. However, given the polyvalence of the expressions, both literally and figuratively, it is possible their implicit references to conception in the Garden of Eden and Napoleon's time of exile on the Italian island of Elba, respectively, gives the two palindromes a more significant metahistorical weight.

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[34] James Joyce, *Finnegan's Wake* (1939) with an introduction Seamus Deane (London: Penguin, 1992), 20. Henderson, "Propositions," 135.

[35] James Joyce, *Ulysses* (1914-1920), with an introduction by Declan Kiberd (London: Penguin, 2000), 175. In *Ulysses* the onomatopoeic nonce word '*tattarrattat*' also appears, spoken by Molly Bloom. The term was apparently invented by Joyce and, at 12 characters long, is considered the longest palindromic word in English. Joyce, *Ulysses*, 884. Oulipean author Georges Perec (1936-1982) wrote the longest palindromic work ever written in French in 1980. At 1,247 words, the text was published in the collection of his writing, *La Clotûre et autres poèmes* (Paris: Hachette, 1990).

[36] Joyce, *Ulysses*, 174. The citation on history originally appears as a statement by the principle Joyce character, Stephen Dedalus, on page 42.

Frampton's brief encounter with Sharits on the topic of the loop suggests the approach is embedded in both filmmakers' processes, appearing to legitimate Sitney's argument for the form as significant to structural film. However, after further examining the historical situation surrounding Frampton's presentation of *Palindrome,* the significance of the loop as a recursive strategy for an isotropic film implies an approach to the film as a technology for storage—a technique for memory which has its own immanent temporality. The narrative flow of history is also changed by the film form, and because these projects loop back on themselves, they suggest repetition. Repetition, like rhythm, also suggested the isolation of the 'mnemonic processes' that Frampton located as essential to film as an art.

Upon its completion, *Palindrome* received little critical attention, and has since attracted only marginal commentary within Frampton's body of work. The Film-makers Cooperative Catalogue lists no premiere screening of it in 1969. In fact, its first significant appearance at a film festival occurs almost three years later, at the *Internationales Forum des jungen Films* in 1972, which took place in Berlin between the 25th of June and the 2nd of July.[37] The earlier date for the film can be confirmed however, by Jonas Mekas' diary entry on January 1, 1970. In it he lists the works he had seen month by month throughout the previous year, apparently his way of diarising his year by using the memories of certain films he had watched. Under the entry for June, alongside Andy Warhol's *Blue Movie,* Sharits' *Touching*, Brakhage's *song 27*, and Ken Jacobs' *Soft Rain, Airshaft,* and *Window*, Mekas ends his list with Frampton's *Palindrome.*[38] In the same month as the Stonewall Riots near Washington

[37] See Jens Brinkmann, "Das Internationale Forum des Jungen Films: Vom "Anti-Festival" zur profiliertesten Sektion der Berlinale," *zeitgeschichte online*, accessed 8 September, 2016, http://www.zeitgeschichte-online.de/film/das-internationale-forum-des-jungen-films.

[38] Jonas Mekas, "movie Journal," *the vilage VOICE*, January 1, 1970, 46; *Movie Journal: The Rise of New American Cinema, 1959-1971* (New York: Macmillan, 1972) 366. He also lists Mike Jacobson's first one-man show at the Cinematheque, the Maysles Brothers' film, *Salesman,* Glen Denny's *Nyala,* Robert Kramer's *Ice* which was previewed at the New Yorker, also where Jim McBride previews *My Girl-friend's Wedding.*

Square, and rock band The Who toured their opera, *Tommy*, to the Fillmore East in Manhattan's lower east side, Frampton's film was first screened privately, but exactly where and to who else besides Mekas remains unclear.[39] Importantly, despite the formal recursivity of the loop as a closed system, it is the situation of the film in its historical context which will shed more light on its relationship to Frampton's larger project, *Magellan*, as an atlas on film. The Vietnam War, in the wake of the Tet Offensive provides a further historical backdrop to the moment of fraught political engagement by artists in New York at the time (and I will return to this in the second part of the chapter).[40]

If the structure of the isotrope allows for the looping mode of film production, it also suggests a re-alignment of historical time. Against the continuum, the film's presentation as a discrete palindromic phrase within a bounded playback time collapses the interminably looping presence which lies within the work back onto its appearance in the New York avant-garde, and it is predicated therefore on the empty cut that opens it to history. Memory, as stored in the technical object, reappears here as linked by both the technical specificities of the apparatus to its poiesis: information needed an imaginary structure in order to be recalled. In the film, narrativity meets its counterpart in the biomorphic 'object' on the screen.

[39] In 1981 Frampton's CV lists no screenings for June of that year, but does mention screenings at the Resistance Film Festival, Philadephia in July of 1969, as well as at a group show at the Jewish Museum, New York in the same month. *CV*, 18.
[40] Richard E. James writes that for the last half of the sixties 'the war in Vietnam was the largest single determinant of other economic, social, and cultural developments in the United States, eventually becoming the master metaphor by which they were understood.' James, *Allegories of Cinema*, 195.

4.1.2 Serialism

Peter Weibel has noted how serial composition had continued as a feature of the Viennese avant-garde after the Second World War, especially as a concern for artist-filmmaking. In the catalogue for the 1979 exhibition at the Hayward Gallery in London, *Film as Film*, Weibel cites the importance of Brakhage on the European filmmakers in the 1960s, but names Austrian filmmaker Peter Kubelka (b. 1934) as 'the Webern of film'.[41] The subterranean connection, via Brakhage, between Frampton and Kubelka, who had made the early black and white flicker film, *Arnulf Rainer*, on 35mm film in 1960, is significant for the link it also suggests between the modernist avant-garde and the idea of experimentalism through the practice of serial composition. Weibel also quotes Kubelka's colleague, the Actionist artist Hermann Nitsch (b. 1938), who lists 'the serial principles of construction, the twelve-tone technique of Schönberg, the twelve-tone pieces by Hauer, the extreme frugality of Anton Webern's music,' as pre-WWII composers engaged with the idea of a 'keyless' music involving all twelve notes of the chromatic scale, and who were important influences on Viennese formal filmmaking at the time.[42] Kubelka's reduction to the binary flicker of film at its most basic and extreme poles—alternating clear and black frames—led him also to the design of the Anthology Film Archives' Invisible Cinema in a way that, given its basis in Benthamite architecture, was a particularly dominating and rigorously modernist monument to

[41] Peter Weibel, "The Viennese Formal Film," in *Film as Film: Formal Experiment in Film 1910-1975* (London: Hayward Gallery, 1979), 111. The exhibition at the Hayward Gallery ran from the 3 May – 17 June, 1979. It was based on an exhibition organised by Birgit Hein and Wulf Herzogenrath held in a number of galleries in West Germany in 1978.

[42] Nitsch is contrasting Arnold Schönberg (1874-1951) with composer Josef Matthias Hauer (1883-1959), both of whom contributed to the development of the 12-tone technique. He continues, 'the pictorial effects of Mondrian and the novels of James Joyce were in many respects the starting-points for Viennese art after 1945, and in particular, direct preconditions for the films of Kubelka...one cannot overlook the pronounced musicality in his films, which is identifiable even in their light rhythms.' Ibid.

spectacle culture for New York at the beginning of the 1970s.[43] Kubelka was also a part of the committee for the Essential Cinema program, inaugurated and funded by Jerome Hill (1905-1972), which based the New York avant-garde in a mode of canonical thinking about the advanced filmmaking pursued by Mekas and Sitney, amongst others.[44] The trajectory of serial music, which drew the emphasis away from tonality in musical composition and towards their spatial relationship, was therefore built into the architecture of New York's neo-avant-garde. Its numerical basis in the twelve tones of the musical scale, dividing neatly into film's 24 frames-per-second standardisation, was then doubled by the 48 notes of the tone-row: the prime, retrograde, inverse, and the retrograde inverse. A visual representation of this relationship, a clock-like diagram of the equal relationships between the twelve tones, can be found on the cover of the Philips record *Josef Matthias Hauer – Das Zwölftonspiel*, released in Austria in 1973 (fig. 4.3).

[43] The brutalist isolation of viewers in the design for the Invisible Cinema as individual cells, recalls the atomised theatres for the instruction of criminals that were a feature of Jeremy Bentham's Panopticon. See Julian Hanich, 'The Invisible Cinema,' in Giovanna Fossati and Anne Van Den Oever (eds.), *Exposing the Film Apparatus: The Film Archive is a Research Laboratory* (Amsterdam: Amsterdam University Press, 2016), 344-353. The cinema was in operation from 1970-1974.

[44] The Essential Cinema Reportory collection lists 330 film titles assembled between 1970-75 by the Anthology Film Archives Selection Committee, James Broughton, Ken Kelman, Peter Kubelka, P. Adams Sitney, and Jonas Mekas, accessed 15 August, 2017, http://anthologyfilmarchives.org/about/essential-cinema.



Fig. 4.3 Josef Matthias Hauer, *Das Zwölftonspiel* (Philips LP 6599 333, 1973).

This link also grounds the emergence of the contrast Weibel would make between 'early' structural film based on formal organisation and the focus on the problems of visual perception—also noted by Michelson—in later structural filmmaking. It is in this sense, given Weibel points out that 'Webern's row-technique provided the key-note for serial and aleatory composition,' that the distinctions between the avant-garde and experimentalism for film collapse, as I examine further below.[45] What remains, of course, is the formlessness of the clouds which exists between these two apparently incommensurable modes, a figure to which Frampton had continuously referred: from his destroyed first film, which he titled *Clouds Like White Sheep* (1962) and which Sitney recalls was related to 'an unnamed long film of cloud patterns dissolving into one another,'[46] through to *Magellan*.

[45] Weibel, "The Viennese Formal Film," 111.
[46] Sitney, *Eyes Upside Down,* 99.

James Peterson is one of the few scholars to have addressed *Palindrome* in detail, questioning the nexus of artistic practices given by the principle of substitution, which Frampton had noted was a cornerstone for composing in film. 'Can the perception of rhythm, for example,' Peterson asks, 'be simply transposed from sound to image?' Given that he then goes on to suggest that 'the abstract images in *Palindrome* are members of an artificially constructed permutational set and cannot be so ranked,' his concern is that any rationalisation of *Palindrome* is not as straightforward as it is for musical notation.[47] This is because the abstract images of the film are formless in the same way that /cloud/ appears as the ungovernable limit for perspective, and becomes a symptom of the cinematic *dispositif*.[48] However, by referring to the complicity of sound and colour measured on the spectrum as frequencies of sensory oscillation, Peterson elides the deliberate relativism of the serialist aesthetic, and ultimately concludes that 'like musical sound the images are abstract: but unlike musical notes, they are "unconnected," in the sense that the relationship between them cannot be spatialised.'[49] However the spatialisation of images, I have argued, is precisely what is at stake in Frampton's work. Film frames, considered materially—even from the waste basket—are very much connected by their spatial relationships. Therefore, the origins of the cloudy images of *Palindrome* as waste ends of film can be connected to the political interest Frampton took in the conditions for labour organisation and art-workers at the time, which is the subject of the second part of this chapter. Understood only formally, 'hearing or seeing a coherent "tone row",' for Peterson meant, 'the viewer sees [in *Palindrome*] only a collection of unrelated images.'[50] But this is not the case,

[47] Peterson, *Dreams of Chaos,"* 117.
[48] Damisch is thinking of Ruskin's writing on the representation of clouds in painting when he remarks that /cloud/ was used to mask the return of something supressed'. Damisch, *Theory of /Cloud/*, 230. John Ruskin, *Modern Painters* (1843-60), 5 vols. (Urbana, IL: Project Gutenberg, 2010). See chapter one of part two, section three of the first volume, "Of the Open Sky," 204ff.
[49] Peterson, *Dreams of Chaos*, 117.
[50] Ibid.

as even an initial viewing of *Palindrome* shows how morphologically similar the printed images are, and the awareness of their production as located from the cutting room floor of a film processing lab resolves any formal crisis in their coherence.

Although *Palindrome* is silent, the lack of a tonal mode or discernable hierarchy in twelve-tone music problematises the ranking of the notes in a way that accords with this correspondence between the film's images. *Palindrome*'s frames all look related because they are, in their differences, interchangeably similar. What Peterson has called the 'byzantine permutations of *Palindrome*' in its apparent remediation of Webernian serialism furthermore excludes the fact that this may not have been the only relationship Frampton was attempting to test with the film.[51] The search for an acceptable form for the film as a distinct work, through the elaboration of a 'closed system', also allowed Frampton to approach the 'axiomatic substructure' of film, for the first time perhaps, as a 'bio-morphic' entity with its own 'anima'—as his own notes to the film proclaimed.[52]

Furthermore, Frampton highlighted the fact of the film's polyvalent compositional arrangements when he suggested to Scott MacDonald that 'it is not the willfulness of a composer, of an artist, that one is hearing, but the generative power of the set of rules, whose consequences are being systematically worked out.'[53] As an autopoetic "system" uncovered by the filmmaker, Frampton aimed to allow *Palindrome* to have a life of its own. The 48-point matrix of the tone row (4x12) produced a formal structure within which Frampton could work systematically. Extending the palindromic structure, rendering the same phrase when parsed forwards and backwards, it could also be extended by including two further spatialised dimensions as a directional continuum related to the 12-tone row: its inversion and its retrograde inversion. This allowed for a further cancelling effect

[51] Ibid., 119.
[52] See Frampton's notes to the film in the *Film-maker's Cooperative Catalogue, op. cit.*
[53] Frampton interviewed by MacDonald, "The Early Years", 124.

upon the orientation of the diapason, or chromatic scale, in effect targeting our expectations of a narrative arc as moving directionally forward from beginning to end. As it relates to the techniques for communication, this becomes a problem for memory.[54]

*Palindrome*'s apparent recursivity is no better explained than by the concurrent emergence of the looping mode of presentation for inscriptive media, first adapted for work by experimental composers like Halim El-Dabh (1921—) in Cairo in the 1940's and then at Columbia University in New York in the 1950's. As well, the development of the loop and its subsequent use in the *musique concrète* of Pierre Schaefer (1910-1995) and the *Group Recherches Musicale* (GRM), which used recordings on tape as substitutes for traditional musical instrumentation. These appeals to recorded media's privation of live performance would become a feature of new compositional approaches in the post-war avant-gardes and in contrast to the score demonstrating the tonality of the work to be performed.[55] Looping, as a totalising outcome of inscriptive media, now enjoys unquestioned status as the standard presentational mode for the installation of recorded or inscribed time-based arts in the context of the gallery. This is particularly visible in the case of 16mm film projections of films installed for exhibition, whereby a feedback device sends the film spooling off the take-up end of the projector and back to the

[54] Frampton ended his paper on composition, with a quote from Samuel Beckett's recently published *First Love* (1973), suggesting the forgetfulness engendered by the technical invention: 'And I will tell, by the same token, for those kind enough to listen, according to a system whose inventor I forget, of all those moments when, neither drugged, nor drunk, nor in ecstacy, one feels nothing.' "Notes on Composing in Film," *CA*, 156. The publication of the text in *October* uses an alternative quote from *First Love*, similarly about forgetfulness, beginning with the image of a lemon tree. The image of the lemon, which Frampton based a seven minute film upon in 1969, the same year he made *Palindrome*, appears to be a relate to the idea he shared with Robert Huot that the word lemon appears at the exact centre of Joyce's *Ulysses.*
[55] Thom Holmes, *Electronic and Experimental Music: Technology, Music, and Culture*, with contributions by Terence M. Pender, 4th ed. (New York: Routledge, 2012), 154; 156-7.

mechanism's input.[56] Despite this fact, *Palindrome* was never shown as a loop during Frampton's lifetime, nor has it been exhibited in this way since—in this sense it remains a work for the cinema, more so than the gallery.[57] The question of the palindrome as a looping form also means that the totalising aspect of the work's compositional arrangement results in its understanding as a closed system, given its replete and organised symmetry.

As a recursive structure, *Palindrome* reveals that it aims to address its retentions—what it contains—as a question of memory. Given the work models the inscriptive form of the film as recursive, the formal significance of recording and organisation are brought to the fore, despite the fact that it also appears to cancel any reading of the work by operating against narrative continuity. Philosopher Bernard Stiegler has suggested that prosthetic memory, that which is itself occulted in the memory of antiquity by the mythical theft of fire, is a memory which 'must be transferred onto external supports... as fetishes of the imagination, and "projection screens" for all of its phantasms'.[58] Fire here, represents technics, and the discourse on artistic productions and their materiality converges with the discourse on the phenomenology of time (and also recalls the replacement image for 'x' in *Zorns Lemma*). The looping mode of presentation represents a particular cut in this cumulative structure for linear progression, encoding the political and social indices of the period in which it was made. For Stiegler, developing Gilbert Simondon's thesis on the anticipation in the transindividual basis of the human as

[56] Clint Enns, in a recent piece on the idea of a filmic palindrome, following Frampton, writes: 'In his current research into *Magellan*, film scholar Michael Zryd examines one of the major tensions Frampton is navigating in the cycle, namely, the tension between fragmentation and totality. One of the ways a fragment can be turned into a totality is through the loop.' Clint Enns, "A Brief Analysis of Hollis Frampton's Palindrome and How to Construct Five Types of Filmic Palindromes," *Millennium Film Journal*, No. 63 (Spring 2016): 67. Enns refers to Mike Zryd, "Hollis Frampton's Comic [sic] Inventory: Parables of Photography and Totality in *Magellan*," a work-in-progress paper presented at Propriomedia: Colloquium Series in Media Studies at OCAD University in Toronto, Ontario on October 24, 2014.
[57] In recent years, both MoMA and the Metropolitan Museum of Art have installed Frampton's films, *Poetic Justice* and *Gloria!* respectively, as loops in the gallery.
[58] Stiegler, *Technics and Time, 3,* 53-4.

the 'default' for our technical distinction, this idea of time is found to be re-modelled in the *dispositif* of the cinema, and as such it is exemplified by Kubelka's artistic intervention into serialism on film. It is this idea of time, I argue, that places these works in relation to cultural memory, in its proximity to artificial memory, rather than to the idea of history as a form for narrative. If individuation is understood as a question of temporality, the arrival of film and cinema introduces a principle, recognised by Stiegler as the reason to 'connect disparate elements together into a single temporal flux,' jeopardising the possibility of any distinction and resulting in a conflation of these elements.[59] Frampton, it seems, understood this as a question of cinema and the possibility of metahistory as providing a path lined with the proper monuments for the navigation of film. As it is examined further below, the presentation of *Palindrome* as an isotropic work based on serial composition shows how the idea of the loop as a cyclical form could be used to produce film objects whereby a totality could be managed and maintained through montage. One way Frampton chose to expose this autopoietic structure was through amplifying the disjunction of film as ordered and determinate, to the point where the indeterminacy of the endeavour reveals itself as the content of the work. In *Palindrome,* as in other of his films, this aspect is left to be figured by /cloud/, which recognises that a 'higher power', or rather 'transmitted knowledge' is what lies behind the works complexity, in its divination.

While there are a number of recent theories related to the significance of a looping mode for presentation, it seems Frampton was aware that he would prefer to preclude this outcome for the interminable display of his work in the gallery, and therefore the possibility of overemphasising its medium-specificity, by only ever showing the work as a cinematic presentation on screen. This was important for how the film was received; it is as cinema, and not only as film, that *Palindrome*

[59] Ibid.

addresses its technical apparatus.[60] This leads back to the particular tensions suggested by Frampton's continuing use of the concept of structure for the elucidation of his idea of film, for example when he says, in an interview with Scott MacDonald, that:

> the making of a film is an action which may be seen as comprising two stages. At first, the material of the film is generated. That material is nothing else but the image-bearing film strip; to generate it is to film a pretext, that is, to impress images upon the photographic emulsion. Then, the cinematic material is structured. To structure the cinematic material is to determine, by whatever means, which film strips shall enter the composition and which shall not; whether they shall enter the composition entirely or in part; and in what order the film strips shall be joined.[61]

Brian Henderson, writing on *Magellan* in 1985, noted something similar when he says, comparing the work to its literary touch-point in Joyce's *Finnegan's Wake*, that 'Like the *Wake*, *Magellan* is a work of double ends joined—its ending is joined to its beginning in a perpetual loop.'[62] The solution Frampton found for his entry into a work such as *Magellan*, is ultimately a question of its perspectival indeterminacy, of the emptiness of the cut, and therefore of the atlas as an incomplete map of an infinite domain too complex to envision as a totality. The interminability of the atlas, as the 'total form' of the work is particular and fragmentary, therefore the experiment presents a form which Frampton undertook to elaborate in *Magellan,* highlighting the fundamental mode of cinema, which like the atlas, is dedicated to

[60] On the loop in contemporary art and performance see Katherine M. Gough, "The Art of the Loop: Analogy, Aurality, History, Performance," *TDR: The Drama Review*, 60, no. 1 (Spring, 2016): 93-115.
[61] MacDonald, "The Early Years," 109.
[62] Henderson, "Propositions," 135. Furthermore he writes, '*Magellan* is the largest loop film ever made, the longest film ever looped.' Ibid., 136.

the search.[63] As a film which reached, at least according to Brakhage, 'absolute perfection', *Palindrome* returns us to the question of structural film from the side of the modernist divide which saw composition outsourced to automatism through its encounter with serialism. From its looping mode, which is never reproduced as a loop, it becomes important to consider just how composition in film as a structure which always corresponds to montage is in fact always a question of re-composition—the interplay of the determinate and the indeterminate allowed by the model of the atlas. In this case, *Palindrome* provided a model of the atlas that referred only to itself.

### 4.1.3 Feedback

By the late 1960s P. Adams Sitney had become a cornerstone for the community of filmmakers and critics around the *Film Culture,* a journal founded by the brothers Jonas and Adolfas Mekas in 1954. When Sitney proposed the term 'structural film' to describe a new wave of American avant-garde filmmakers, it was a label meant to both follow on from and distinguish earlier innovations. For the 24 year-old Sitney the concern was for the expansion and examination of the film form, leaving behind the primarily expressionistic perspective, best represented by the 'lyric film' works of Brakhage.[64] In "Structural Film" Sitney proposed to locate a new generation of

[63] Following the simple formulation given by Godard: 'The film is the search.' Jean-Luc Godard cited in J. Hoberman 'The Film is the Search,' *Artforum*, 54, no. 3 (November 2015): 281.

[64] Parker Tyler, "Stan Brakhage," in *Stan Brakhage: Filmmaker*, ed. David James (Philadelphia: Temple University Books, 2011), 23. This introductory essay on Brakhage appeared in the same issue of *Film Culture* which mourned the death in relative obscurity of a master of early cinema, Erich von Stroheim (1885-1957), linking the historical avant-garde filmmaker to the contemporary figures of the American avant-garde. It also contained an editorial polemic from Mekas regarding the state of funding for the journal, which had been forced to switch from a bi-monthly to occasional publication due to a lack of income. See Parker Tyler, "Stan

artist-filmmakers along a developmental continuum, and Sitney therefore names an earlier generation—figures like Kenneth Anger, Gregory Markopolous and Brakhage—in order to reveal Frampton as a part of new generation that included Michael Snow, Paul Sharits, Ernie Gehr, George Landow (who subsequently changed his name to Owen Land), Tony Conrad, and Joyce Wieland as practitioners of a 'cinema of structure' who had emerged to refine the practice of artist-film from the complexity of its origins to the simplicity of demonstrating its formal essence.[65]

At the beginning of the essay Sitney writes that a film is a structural film when 'the shape of the whole film is predetermined and simplified, and it is that shape which is the primal impression of the film.'[66] In retrospect Conrad and others sought to distance themselves from what they understood to be a 'fashionable doxology' following from the act of christening their formal approach to filmmaking, related as it was to the concurrent modes of minimalism and the emergence of conceptual art at the time.[67] As such, Sitney argued somewhat forcefully to identify these filmmakers who were only '*apparently* in the opposite direction of the formal tendency'.[68] The significance of this ongoing critical grouping of these works in 1969 becomes more important, however, for the way it was thenceforth received and built upon.

Against the features Sitney identified for structural film—the fixed image, the flicker, and the practice of re-photographing the film frame, it is the figure of the loop which endures here in its relation to *Palindrome*. My argument is that Frampton's basic explication of the 'structure' of his work arrives in his expansion of the literary form of the palindrome into filmmaking, which is brought into focus

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Brakhage," *Film Culture*, IV, no. 3 (18) (1957), 23-5. For Mekas' editorial see the contents page of this issue.

[65] Sitney, "Structural Film," 1.

[66] Ibid.

[67] Conrad cited in Jonathan Walley, "The Paracinema of Anthony McCall and Tony Conrad," *Avant-garde Film*, eds. Alexander Graf and Dietrich Scheunemann (New York: Rodopi, 2007), 372.

[68] Sitney, "Structural Film," 1. Emphasis in original.

by the significance placed on the looping mode picked up by Sitney as specific to 'structural film'.[69] In this sense Frampton's approach can be shown to both incorporate and exceed the features narrowly defined by Sitney in the "Structural Film" essay. This formal focus has led to criticisms that "Structural Film" unfairly constrained the reception of these works by the artist-filmmakers (and unnecessarily excluded others), who were concerned with a far broader set of questions related to film.[70] Here it is proposed that Sitney's argument, in spite of its subsequent revisions, remains helpful for its attempts to locate the basic terms established by these filmmakers for film as both a temporal and spatial art form, within a relatively limited scope for elaborating certain aspects of their work.[71]

In future discussions of the applicability of the term 'structural' to his work Frampton would state his own hesitations before using the term. To Robert Gardner on *Screening Room* for example, he responds to the charge by saying: 'I prefer to think of myself as a filmmaker. With the proviso that I have worked independently.'[72] Prior to a closer analysis of the legacy and meaning of this debate as a 'discourse network' linking the production of a group of films and filmmakers both locally and internationally, *Palindrome*'s relation to the idea of the 'infinite film' theorised in the "Metahistory" essay, suggests Frampton's response to structuralism was concerned

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[69] Ibid. 5 Sitney also posited that this new type of film consisted of a 'language of *conjunction,*' and '*metaphor*'.

[70] Particular to Frampton's case is the essay by Bruce Jenkins, "A Case Against "Structural Film"," *Journal of the University Film Association,* 33, no. 2 (Spring 1981): 9-14.

[71] There are three versions of Sitney's essay times. It was revised in the Winter of 1969 and republished in the *Film Culture Reader: An Anthology*, ed. P. Adams Sitney (New York: Praeger Publishers, 1970), 326-348. It was again revised in 2002 for the third edition of the anthology of his writing, first published in 1974 as *Visionary Film: The American avant-garde 1943-2000* (Edinburgh: Edinburgh University Press, 2002), 347-370. In the revisions of this attempt to define the new cinematic moment in New York, Sitney also calls on Russian Formalist Victor Shklovsky's *Art and Technique* (1917) for the explanation of the temporal mode of perception synced by ciné-film, and highlighted as fundamental to the structural films strategy the notion of defamiliarization, as if to slow things down would allow for greater contemplation of the automatic apparatus of the cinema. Sitney, *Film Culture Reader* (1970), 326; 335.

[72] Hollis Frampton cited in Robert Gardner, *Screening Room with Hollis Frampton* (Boston, MA: WCVB-TV, January 1977). In this interview Frampton also notes his high-school milieu included the future documentary filmmaker Les Blank (1935-2013).

moreover with the question of composition on film as aimed at the formal possibilities for the invention of a tradition, and therefore the memory of film.[73] Furthermore, I argue it is as a question of composition that *Palindrome* must be understood as directed towards what Frampton termed the 'mnemonic process' of photography, in the "Digressions" essay, and therefore to the utopian image of Atlantis as the mythical figure for the atlas as informing the *Magellan* cycle.[74] Finally, what Frampton calls 'art's most ancient and permanent function: the didactic', is also found to be present in the structure of the palindrome, a literary model that proposes a multidirectional legibility, at once forwards (left to right) and backwards (right to left) on the page. As much as this model suggest its continuous looping back on itself, the model of feedback on the space of the page, the formal recursivity of the 'geometry of the sentence', as Damisch noted, also provided a conceptual basis for the film. But Frampton still needed to adjust his thinking of another dimension of the apparatus: clock time.

### 4.1.4 Set Theory 2

There is a possibility that the mathematical notion of the set has been unneccesarily conflated with the idea of the set of the cinema. As what lies before the camera, the set is also the location where the scene is to take place. Sitney describes the looping mode of structural film as a characteristic exhibiting the 'immediate repetition of shots, exactly and without variation'.[75] While isotrope has been established as the

[73] This term is adopted here for the production of films, photographs, and texts alike. As Friedrich Kittler noted, contra Foucault's notion of discourse analysis, that 'all libraries are discourse networks, but all discourse networks are not books.' Friedrich A. Kittler, *Discourse Networks, 1800/1900*, trans. Michael Metteer with Chris Cullens, foreword by David E. Wellbery (Stanford: Stanford University Press, 1990), 369.
[74] "Digressions," *CA*, 15; 21.
[75] Sitney, "Structural Film," 1.

dominant mode for Frampton's film, its significance should not be established as apposite to Sitney's terms for the loop only. An initial investigation of *Palindrome*'s contents begins on the cutting-room floor, and ends with the semantic limit of /cloud/ as a signifier of the indeterminate. In an interview with Scott MacDonald, Frampton speaks in depth about his interest in the discarded ends of the film rolls he was processing at the Technicolor lab. His decision to make a film out of a set of junk film material occurs to him at a point when he has become tired of assessing the aesthetic judgements made by the photographers who have taken the images he is employed to print. Accordingly, his thinking through the set allows him to narrow the potentially infinite amount of waste film material that he could choose to use.

Frampton's focus on the waste ends of the film roll is to be distinguished from the notion of the "*readystroyed*" as a strategy which had emerged in Europe in response to the idea of the readymade artwork. This is because *Palindrome* sought something other than the 'multiple destruction' of the waste ends of film such as Nicole Brenez has noted in the films of Lettrist artist Maurice Lemaître (b. 1929), whose *Un oeuvre* (A Work, 1968) was also called *La Poubelle du labo* (The Lab Bin).[76] Similarly, Frampton's use of the darkroom appears to be at odds with Noam M. Elcott's recent characterisation of what he has called 'artificial darkness', as a product of modernity 'inaugurated with the sacrifice of the empirical spectator ("the public disappears"), phenomenological space ("the art principle of spatial negation"), and the institution of architecture ("the architecture of nonarchitecture").[77] Rather, Frampton deliberately sought out the recuperation of these waste images for their political expediency as opposed to the deliberate images made by the camera (which

[76] Brenez describes Lemaître's '*poly-automatisme*' work as 'a dynamic synthesis of four symbolic modern art traditions: collage, the aesthetic of waste, the readymade, and faith placed in creative chance rather than mastery'. The work was also named *L'Enfer du cinema* (*Cinema Hell*). Nicole Brenez, *"We support everything since the dawn of time that has struggled and still struggles": Introduction to Letterist Cinema*, trans. Clodagh Kinsella (Berlin: Sternberg Press, 2014), 22-3.
[77] Elcott, *Artificial Darkness,* 63.

accord more with Elcott's idea of photography). By extending his interest in modernist poetry to the realm of film's concrete materiality, Frampton adopted the muddied ends from rolls of 35mm film found at his workplace to construct *Palindrome* as a long metrical montage "composed" in a kind of filmic verse directed towards organisation, settling on the twenty-four frame sequences—one second of clock-time—to create a set of forty phrases from the 'found' images which he had collected and then prepared in advance of the film's looping mechanics.

Generating a number of phrases from the subset he had salvaged and reorganised from the waste film ends, a hermetic "alphabet" of images soon appeared on individual film frames. Neither code nor glyphs, they nevertheless provided a thoroughly formless unity for the clouds within each frame and combined to work up to the level of "images". What I have termed /clouds/, adapting Damisch's proposal for the vocabulary of perspective in painting, allows for the preservation of indeterminacy in the film's otherwise rigorously resolute mechanics. Given that the film is completely silent, there is an apparent correspondence being made between the speed of the frames, and the idea of reading as ordered by the meter of the verse.[78] Frampton described his process to MacDonald in the following way:

> At the time the material for *Palindrome* was collected, I was working in a lab where professionals brought in sheets and rolls of film for processing. All the processing was done by automatic machinery. The waste at both ends of the rolls, where the machine's clips had been attached, was cut off and tossed into the wastebasket. The physical deformation cause by the clips, and the erratic way in which the clips let in chemicals to work on the emulsion, produced images. It struck me that by far the most interesting images

[78] At one point in his notes he proclaims the dactylic hexameter of Homer's *Illiad* as his rhythmic model.

> produced in the process went into the wastebasket. The dull ones were put in boxes and sent back to the customers. I began to collect the waste images and mount them as slides. There was something there, a modulated image that could be decoded as having illusionist content, volume. They just didn't resemble anything specific. The set I chose for *Palindrome* tended towards the biomorphic. They resembled action painting, too, in the sense that while much is made of the emphasis on two-dimensional surface, one can decode de Kooning's paintings or Pollock's or Kline's as containing perspective indicators. In time, I started thinking about using them in a film.[79]

From his description of these 'volumes' it can be assumed that Frampton began by working with film negatives made using 35mm film stills, given that the 'images' were mounted initially as slides.[80] After deciding on a 'set' he programmed the order of the display of these images as a time-based work by employing the conventions of the film apparatus as his guide:

> I started by generating a short roll of images that primed the pump. Forty phrases of twenty-four single frames were generated by animation. Then a set of variations was made at the lab, which produced the following: an image of the original roll (colour, single layer); a continuous tone, black and white version; a black and white negative; and a colour negative. Other sets were produced by printing the original roll superimposed on itself, so that the blocks of image fall on top of each other, but so that we see the images first to last on one level, last to first on the other. A colour positive, colour negative, black and white positive, and black and white negative were made

[79] Frampton cited in *CC*, vol. 1, 122.
[80] For a history of the darkroom and its separation of chemical darkness from mediated darkness see the chapter "Studios: Dark Rooms, Glass Houses, Black Tunnels," in Elcott, *Artificial Darkness*, 34ff.

> in that way. Then came a set made from the black and white positive; on the forward pass, the original was printed through a yellow filter, and on the reverse pass, through blue, and another done the same way, except with magenta and green filters. Those generated rolls were intercut with each other, interwoven around the centre point.[81]

Each of the forty phrases, which produced one second each of cycling images, was manipulated to form the complex palindromic structures which would parse the same from back to front and top to bottom like the tone-row (and also in both positive and negative on film). The effect was achieved by printing the forty initial sets that provided the basis for the twelve variations described above in three different groups of four processes. In the film, before the image settles on one frame for an entire second, it is spaced by one second, or 24, solid black frames—perhaps the 'continuous tone' which stands out as the odd (or 13th) variation in Frampton's description of the process.

Frampton summarises his procedure by noting the result is that 'the palindromicity of the film is local as well as global'.[82] By this he means the recursive logic of the palindrome is found in the individual image pixels, or frames, of the film as well as in the shorter sequences, or phrases, and ultimately across the entirety of the work. This added dimension to the existing notion of the palindrome at once solves the issue of translation, as the form has been re-articulated according to the demands of the film frame which can be oriented in six different ways, giving the film a multi-dimensional quality. As the film runs for 22 minutes, its regulated pace cycles through the forty 'sets' of one-second each, and then back through them, using a larger common structure of four-second blocks: a single frame image held on-screen for one second (24-frames), a 24-frame set animation (one second), a

[81] Frampton in *CC*, vol. 1, 123.
[82] Ibid.

single frame image (different to the first), 24-frames of black (one second). If the black is seen as a break, the resulting quantitative tempo approximates a dactylic hexameter on film, the poetic meter of the epic. If the form of the film can be explained, the question of the film's contents must now be posed for understanding how the set of cloud-like waste-ends also provided a model for the organisation of images addressed to the metahistory of the atlas.

### 4.2 Organisation: Filmmakers vs. Modern Art

One month before the earliest screening of *Palindrome*—the screening noted in Mekas' diary—Frampton, with the artist-filmmakers Ken Jacobs and Michael Snow, published an open letter to the Museum of Modern Art in the May 1969 edition of the *Filmmakers' Newsletter*, across the bulletin's first two pages. Titled 'Filmmakers vs. MOMA', it was part of a larger initiative which had been gaining momentum at the time under the banner of the Art Workers' Coalition (AWC). The eight-point list of demands addressed to MoMA concerned its administration of the museum's Film Department, and perhaps more pointedly films' relationship to the Fine Arts Department generally. The artist-filmmakers addressed their concerns for the status of their work as collected by the institution which was to become, as Michelson put it years later, 'the prime conservator of film as artistic production'.[83] Despite its status as a private enterprise, MoMA was admonished for its aggressive privation of artists' work. The point of this intervention, in which the authors state unequivocally that galleries and cinemas 'used and supported by the public have public responsibilities,' meant the institution was left somewhat exposed to this critique by the artists they relied upon to exhibit new work.[84] A further explanation to the editor of the *Filmmakers' Newsletter*, Suni Mallow, stated: 'This was in fact read in open hearings at the School of Visual Arts on April 10th,' the note apparently addended to the letter by Frampton, who lists his own address and phone-number for any 'blasts or blesses,' which he promises to transmit to the Coalition himself.[85]

A large number of artists in and around New York had become involved with the AWC by the time of the April 10 meeting, and the status of film in the collection was only a part of their agenda (fig. 4.4). The proceedings of these

[83] Annette Michelson, "Poesis/Mathesis," 5.
[84] Hollis Frampton, Ken Jacobs, Michael Snow, 'Filmmakers versus The Museum of Modern Art: To the Public Hearings Committee, Art Workers' Coalition,' *Filmmakers' Newsletter,* 2, no. 7 (May, 1969), 1-2.
[85] Ibid., 2.

hearings were then published in book form in the following months, with the title *Open Hearing*.[86] Julia Bryan-Wilson has more recently framed the correlation between artist labour and working class politics as strictly 'formal', in that an aesthetic role was assumed by artists in the AWC—of which Carl Andre was a principle figure, for example—as actively representing contemporary questions of labour in the public sphere and the arts as a nexus of cultural production in the city.[87]



Fig. 4.4 Open Hearing flyer, *AWC Documents* © Artworkers Coalition, 1969.

[86] Art Workers' Coalition, *Open Hearing*, accessed September 6, 2016 http://primaryinformation.org/files/FOH.pdf. The original AWC documents have been gathered and can be viewed at http://www.primaryinformation.org/projects/art-workers-coalition/#. See also Julie Ault, "A Chronology of Selected Alternative Structures, Spaces, Artists' Groups, and Organisations in New York City, 1965-85,"; and Lucy R. Lippard, "Biting the Hand: Artists and Museums in New York since 1969," in *Alternative Art New York*, 1965 – 1985, ed. Julie Ault (Minneapolis, MN: The Drawing Center/University of Minnesota, 2002), 23-4 and 79-120 respectively.

[87] Julia Bryan-Wilson, *Art Workers: Radical Practice in the Vietnam War Era* (Berkeley: University of California Press, 2010), 44. Bryan-Wilson recognises the fundamental ambiguity of labour as it is figured in Andre's work, when she writes that 'Andre's art foregrounds labor while also disavowing it,' suggesting that it is the dialectical understanding of production allowed by art that is a motivating feature of Andre's use of industrial materials. Ibid., 45.

The instantiation of the AWC had followed from an intervention by the artist Takis (Panayotis Vassilakis, 1925—), whose claim to artistic control over the exhibition of his work *Tele-sculpture* (1960) came into direct conflict with MoMA's counter-claim of their ownership of it.[88] As a result of the stand-off, Takis was compelled to remove his work from the exhibition on the 1st of January 1969. The show, which was titled 'The Machine Seen at the End of the Mechanical Age', ran from the 27th of November 1968 to the 9th of February 1969.[89] In the ongoing climate of protests against US aggression in Vietnam—highlighted by the 400 signatures on the 'End your silence' letters published as an anti-Vietnam war rally-cry in the New York Times on both the 18th of April and the 27th of June 1965—heightened public tensions were further amplified as a result of perceived failings on the part of the Johnson administration's handling of the war.[90] Furthermore the combination of the Tet Offensive and the brutality of the 1968 primary election season—including the assassination of Robert F. Kennedy (1925-1968) on the 6th of June and the nomination of Richard Nixon (1913-1994) who would go on to defeat Hubert Humphrey (1911-1978) and George Wallace (1919-1988) in the presidential election—contributed to the highly politicised climate of the period. In response

[88] 'Takis wrote a letter to MoMA's organizer of the Machine Show, Dr. K.G. Pontus Hulten, stating that if "Tele-Sculpture" was to represent his work in the exhibition, he did not want to be represented at all. In his letter, he also wrote that his more recent works were easily accessible to the museum. Despite Takis's request, MoMA put his "Tele-Sculpture" in the Machine Show.' See "Art Workers' Coalition demonstrates for artists' rights, 1969," *Global Nonviolent Action Database*, accessed July 26, 2018, http://nvdatabase.swarthmore.edu/content/art-workers-coalition-demonstrates-artists-rights-1969.

[89] Takis at this time figures as an artist working mainly within the field of kinetic art in the expanded field of sculpture in the 1960s, and his work, like *Ballet magnétique* (1961) for example, appears to be in direct dialogue with the mechanical possibilities for movement suggested by film. The title of this work recalls Fernand Leger and Dudley Murphy's earlier film work, *Ballet mécanique* (1924). See Lee, *Chronophobia*, 94-5. During the careful staging of the removal, Takis was accompanied by the poet and artist Farman, Willoughby Sharp, Elizabeth Grenier, and "Do".

[90] See Bryan-Wilson, *Art-Workers*, 4-5. Artist and designer of the L.A. *Peace Tower* (1966), Mark di Suvero (1933—) had gone one step further and refused to show work in the USA from 1967 until the end of the war. Ibid., 8. For Bryan-Wilson's account of Takis' 'kidnapping' of his own work, see pages 13-14. Frampton's signature was not included on either of the 1965 ads.

many artists began taking steps to assert themselves publically in the face of corporate and institutional interests by arming themselves with the expanded social analyses provided by the New Left and the civil rights movement, particularly in the wake of the assassination of Martin Luther King on April 4, 1968.[91]

Despite the ongoing focus on the conditions for artists engaging institutions such as MoMA, the conceptual tenor of Frampton's *Palindrome* at first glance seems to maintain a strict sense of autonomy from the types of social engagement advocated for by contemporary social and political interests within the AWC, and there is certainly a critical distinction to be maintained between Frampton's work and his political engagement at the time.[92] However, given he had incorporated his employment as a laboratory technician as the basis for the work, there are a number of parallels which can be made between the conditions for the film's production, its production as an insular and isotropic work, and the events surrounding its presentation.

This means that when watching *Palindrome,* we are guided into its web of biomorphic images by remaining highly conscious of the fact of its mechanised clock-time pulses. In effect a durational yet temporally suspended space is opened in the repetitive repleteness of its organisation, viewed in the hermetic architecture of the cinema. In this way, the immersive anticipation of the images and the issue of memory across its entirety are the immediate demands made upon the spectator in

[91] Ibid., 5. Frampton is asked by Michael Snow about his feelings on the present political situation at the end of an interview published in *Film Culture.* The then 32 year-old Frampton (suggesting the interview actually took place in early 1969) replies that: 'As a man, that's conscious of his own processes and his own mortality, I suppose I have the same feelings as a rat or a chipmunk would have in the face of the advent of any American President. Namely, that nothing is going to happen that isn't going to make the total environment of out planet more, and ever again more inimical to the conscious existence of conscious life of any kind.' Frampton cited in "Hollis Frampton interview by Michael Snow," *Film Culture*, nos. 48 and 49 (Winter and Spring 1970): 11.

[92] Not all artists were convinced by the activities of the AWC. See for example Jack Burnham's dismissal of the AWC as 'politically inept,' while concluding that 'art is becoming a matter of ecological insight,' in his essay, 'Real Time Systems: "...using the untapped energy and information network of the day to day environment",' *Artforum*, 8, no. 1 (September 1969): 50; 55.

the theatre.[93] It is this focussed attention required of the viewer which results in a sense that Frampton is aiming at both disorienting or disrupting our perception of the film, as well as attempting to sharpen it. By linking the work to similar demands made upon the public by the political activities of the civil rights movements at the time, as a question of organisation, I argue that we can see in *Palindrome*'s mode of formal abstraction a compulsion to organise that also suggests its connection to the events surrounding its production.

Initially then, *Palindrome*'s presentation of the re-printed waste 'images' seem to have little to do with the political events surrounding the AWC and its activities at the time. Hal Foster's writing on minimalism, for example, argues that art's relation to the [quote] 'other ruptures of the 1960s...is very difficult to produce'.[94] Yet there are some important points to be drawn out of Frampton's thinking, at least outwardly in terms of film's role in its relation to the public more generally at this moment. This is especially the case if we consider film in conflict with the museum's collection of contemporary art at the time. In point eight of the MoMA letter, 'as a reminder to the Museum and as encouragement to those working in other arts and now anxiously considering alternatives to the Museum-and-gallery hierarchy,' Frampton, Jacobs and Snow point out:

> that filmmakers long ago abandoned all hope of using the established commercial channels for distribution and exhibition. We have our own cooperative distributors, our own theatres, our own free and uncoerced judgement of what may be done with our work, by whom, how, and when.

[93] See the discussion of this aspect of the film between Frampton and MacDonald, *CC*, vol. 1, 46.
[94] Hal Foster, 'The Crux of Minimalism,' *The Return of the Real: The Avant-Garde at the End of the Century* (Cambridge, MA: MIT Press, 1996), 68.

> We feel we best serve our own needs and, ultimately, those of the community as a whole by these means.[95]

The exhibition model desired by these artist-filmmakers, as it was imagined by the three liberal figures of the New American Cinema, had its basis in earlier avant-garde alternatives such as Cage and Duchamp, and bordered on anarcho-syndicalist ideas of absolute freedom for their work. The museum of film they envisaged, would be an 'impersonal public repository where our most permanent work will be maintained in trust for the whole people'.[96] To make this argument, the filmmakers suggested an interweaving of the public with the private institutions of art by basing the proposal on their belief that film had a social role equivalent to the antique rhetorical axiom to "'teach, to move, and delight" them: because we believe that art belongs to the whole people.'[97] Furthermore, this demand for artist-film as didactic and therefore to be made perpetually available was given alongside the reminder that a condition of the acquisition of artworks by MoMA stipulated that they be sold on after 20 years, in order to refresh the collection (reiterating the terms of the 1947 agreement with the Whitney and the Metropolitan Museums for ensuring the exhibition of works by living artists only). Their aim, therefore, was to create for artist-film an exceptional status for their work in relation to the museum, for the distribution and for the preservation of artist-films. Somehow, at the same time,

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[95] Frampton, et al. "Filmmakers vs. MoMA," 2.
[96] Ibid.
[97] Ibid. Frampton uses the same line with Carl Andre on the 24th of February 1963, where Frampton writes: *'Ut doceat, ut moveat, ut delectet.* The didactic possibilities of photography are endless.' The phrase, which can be translated as 'to teach, to move, and to delight,' is from Quintillian (c.35-c.100CE) in the *Institutio Oratoria*, which in turn was a gloss on Cicero (106BCE-43BCE). *Dialogues*, 70. It is also possible that Frampton was referring to Pound here, who had recovered the phrase for his own ends from the writing of Rodolphus Agricola (c. 1444-1485). See Hugh Kenner, *The Poetry of Ezra Pound* (Lincoln: University of Nebraska Press, 1985), 287. This book was first published in 1951.

they saw themselves as standing in solidarity with other artists and professional staff across the broader arts sector.[98]

Reflecting on the role of the film festival as a model for the rise of annuals, biennales, triennales, in contemporary art, Frampton, Jacobs and Snow also questioned the adoption of what they call a 'competitive mode' for the selection and presentation of new work.[99] As such, the networking, programming, and the politics of display—all present in the document—must be seen alongside the production of Frampton's films at the time, and for *Palindrome* in particular. This is necessary in order to make manifest the abstract sequences of information as addressed to (what I have called) *filmnemonics*, that is, Frampton's attempt at structuring film's civic role. Indeed, the realisation that *Palindrome*'s images came from the waste-bin of a commercial film lab furthermore suggests that despite the fact Frampton never explicitly addressed it in his films, *Palindrome* marks his formal engagement with the culture of spectacle and the present conditions of artistic-labour.[100]

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[98] Frampton's interactions with MoMA continued into the 1970s. As well as cancelling a MoMA lecture planned for November 7, 1973 called 'Time and Photography,' in solidarity with the Professional and Administrative Staff Association, who were then striking over pay deals, Frampton also wrote to the then Curator of Film at MoMA, Donald Ritchie, objecting to Ritchie's proposal to hold a retrospective of Frampton's work, which would be 'all for love and honor and no money is included at all…' After Frampton's protestation at the unfairness of the request, a compromise was negotiated and the programme went ahead between March 8 and 12th, 1973. The letter is to be found in the exhibition file, "The Films of Hollis Frampton," March 8, 1973 through March 12, 1973, Department of Film Exhibition Files, 408, The Museum of Modern Art Archives, New York. The letter is also republished in full in *CA,* 159-162.

[99] Frampton, et al. "Filmmakers vs. MoMA," 2.

[100] In this sense Frampton is following and even developing upon a noted paradoxical tendency of conceptualism, which Benjamin H.D. Buchloh attributes to Yves Klein in the late 1950s when he writes: 'the critical annihilation of cultural conventions itself immediately acquires the conditions of the spectacle, that the insistence on artistic anonymity and the demolition of authorship produces instant brand names and identifiable products, and that the campaign to critique conventions of visuality with textual interventions, billboard signs, anonymous handouts, and pamphlets inevitably ends by following the preestablished mechanisms of advertising and marketing campaigns.' This double bind is made all the more potent by Frampton, whose spectacularisation of the banal in the cinema in fact works by annihilating itself: hardly anybody it seems, was interested in watching the 22-minute work. Benjamin H.D. Buchloh, "Conceptual Art 1962-1969:

In his *Screening Room* interview with Gardner in 1979 in fact, Frampton remembers his time as a lab technician—knowingly and ironically—as a 'fringe benefit of the necessities of life'.[101] The reality was much different however. Frampton, without a qualification, or tertiary degree, was only able to teach and lecture on film-related engagements intermittently in the 1960s. It wasn't until his employment as an Assistant Professor at Hunter College in 1969 that Frampton would find further 'fringe benefits' for his practice, making a virtue of necessity at SUNY Buffalo in 1973 following an invitation from Gerald O'Grady to teach there. And it was at the Media Studies Centre that he would eventually be made a full professor in the year before his death. While his worker-solidarity flavored his writing, his demonstration of the role photography could play in addressing the problems of historical materialism was made manifest through the work itself.[102] This question of the status of the artwork on film troubled him more so than any pervasive sense of alienation, leading to his articulation of the idea of metahistory in 1971. For Frampton the recursivity of the palindrome provided a way to symbolise the autonomy of artistic-labour in the relatively liberal environment of the USA after WWII. It is in this sense that the cloudy images making up the work's contents can be seen to shuttle from the life of the artist to the work on film. In a similar way to that envisioned for *Magellan*, the circularity of the endeavour rearranged the expectation of traditional forms of both history and the production of technical objects as labour, again resulting in implications for memory.

With its focussed compilation of alternatively pulsing then pausing images, *Palindrome* now gives the impression of an algorithmic scanning, of an automated

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From the Aesthetic of Administration to the Critique of Institutions," *October*, 55 (Winter 1990): 140.

[101] Frampton cited in Robert Gardner, *Screening Room with Hollis Frampton* (Boston, MA: WCVB-TV, January 1977). This remark on his filmmaking at the time was picked up on by Michelson, who later described his making of virtue out of necessity as it related to Frampton's own practice. Michelson, "Poesis / Mathesis," 4.

[102] On Frampton's 1979 lecture on the relationship between Marxist economics and Edward Weston's *Daybooks*, for example, see Zaher, "By Mind and Hand," 21-47.

labouring over information. The viewer very quickly becomes aware that there will be no content other than the abstract clouds of emulsion, as such meaning is generated through the work's reference to the processing of its information. "Information" as such, is of course a key to the social and historical moment in which the film emerges, following as it does Frampton's film with that name from three years prior.[103] While that film provided four minutes of random abstractions in silent black and white, by featuring a bare lightbulb shot in multiple exposures, it had no definitive reason for its beginning or end. At the editing stage, therefore, a motivation for the way the film could be cut together needed to be found. The self-annihilating order of the palindrome opposed the dominant structures of thought conditioning the market for artist-film, and even then *Palindrome*'s isotropic boundedness on film provided a question of organisation opposed to order, producing a tensile structure which satisfied a social framework for delivering the set of images. This was a solution to the problem of artist-filmmaking that Frampton had discovered not only in his literary forebears, but as a figure of serial music. Ultimately, it was the discarded, the cut, of cultural memory, which populated Frampton's work on *Palindrome*, and his interest in the politics of the period was therefore figured by the cloud as the dissolution of an order, not it's deconstruction, as Damisch noted.

### 4.2.1 *Information* and the *AWC*

If there is a duplicity to the camera arts, it is located in its participation in the radical destabilisation of the distinction between the interior and exterior life of images. From the imagined to visible—what philosopher Hans Blumenberg has called the 'postulate of visibility'—it is this concern, more than any other, which

[103] Hollis Frampton, *Information* (1966, 16mm, black and white, silent, 4mins).

establishes the basis for Frampton's work in film.[104] Furthermore, it is clear that the newly photographic conditions for the production of art, alongside the growing industrial economy of images, required a renewed approach to the politics of the visual. It is in this sense that Frampton's films are concerned with art as technique, as no longer an imitation of nature but rather—as Blumenberg found to be present in writer and war-photographer Ernst Jünger's 1932 novel *The Worker*— in the idea of 'organic construction'.[105] Organisation is another word for this process, which celebrates technological distinction and innovation rather than romanticising nature. Accordingly, it was this same impulse which motivated artists like Frampton to turn to film and furthermore to the 'didactic' basis of photographic practice as it related to history, seen as both a pedagogical and orthographic strategy.[106] This instructional aspect, made explicit by the alphabetic primer used in *Zorns Lemma*, is particularly evident in the experimental mode pursued by artist-film against the perceived emphasis on naturalism in the works of Brakhage and Markopoulos, and because of the emergence of the discourse on information in systems theory.

It is therefore worth recalling that in 1969, the year Sitney's "Structural Film" essay first appeared, Frampton also produced a number of other works on film.[107] Furthermore, two of his earlier films were also based on the model of the palindrome, *Information* and *States,* made in 1966 and 1967 respectively.[108] These

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[104] Hans Blumenburg, *The Genesis of the Copernican World* (1975), trans. Robert M. Wallace (Cambridge, MA: MIT Press, 1987), 621.
[105] Hans Blumenberg, ""Imitation of Nature": Toward a Prehistory of the Idea of the Creative Being," trans. Anna Wertz, *Qui Parle*, 12, no. 1, The End of Nature (Spring/Summer 2000): 24. Ernst Jünger, *The Worker: Dominion and Form* (1932), edited and trans. Laurence Paul Hemming with Bogdan Costea (Evanston, IL: Northwestern University Press, 2017).
[106] As Frampton notes in the Digressions essay. "Digressions," *CA,* 21.
[107] As well as *Palindrome,* the films Frampton also completed in 1969, the same year as Sitney's "Structural Film" essay, include: *Artificial Light* (1969), 16mm, colour, silent, 25mins; *Carrots and Peas* (1969), 16mm, colour, sound, 5mins 30secs; *Lemon* (1969), 16mm, colour, silent, 7mins 30secs; *Prince Ruperts Drops* (1969), 16mm, colour, sound, 7mins; *Works and Days* (1969), 16mm, black and white, silent, 12mins. *CV*, 11-2.
[108] *States* was revised in 1970, with Frampton re-making the shots of smoke for the film.

works, along with *Palindrome*, can be grouped together because they approach film in its essence as a medium, a medium that nevertheless had its own light source built into it, creating a technical ensemble or apparatus.[109] This period of his work also participated in what Michael Fried claimed at the time was the literalised 'embrace of objecthood and temporality' in the advanced art of the period.[110] As a challenge to the dominant discourse on modernism, which concerned the status of art as a self-contained object with its own immanent sensibility, the problems with bridging these concerns for a media theory of technical objects follows on from Friedrich Nietzsche's remark in the late 19th century that technologies like the typewriter were in fact also 'working on our thoughts'.[111] What artists discovered was that any possible distinction between nature and organic construction is also focussed by the technical and the artificial.

With *Palindrome* the question appeared as one of systemic orientation; Frampton had become concerned with a new kind of perspectival approach to images in motion. The shifting relationship between time and history, which he had identified in film, could only be addressed by metahistory as an 'open set of rational

[109] Bruce Jenkins writes of *Palindrome*, 'It is the second of Frampton's films to be composed from non-photographic footage (Heterodyne was the first) and the third of his films to exhibit a palindromic structure (after States and Information). Palindrome may well be Frampton's most obsessively organised film: it is highly structured both globally and on the level of individual shot interpolations.' Jenkins, "The Films of Hollis Frampton," 158. Jenkins is paraphrasing Frampton himself in an interview with Scott MacDonald published in 1980, where he discusses his early films with MacDonald: 'Two general things: first, the palindromicity of the film is local as well as global; and second, it does have a certain diction that's small enough to be recogniseable.' Frampton cited in MacDonald, "The Early Years," *October*, no. 12 (Spring 1980), 123.

[110] Michael Fried, 'An Introduction to my Art Criticism,' *Art and Objecthood: Essays and Reviews* (Chicago: University of Chicago Press, 1998), 46. Although he is speaking ironically about Frampton's friend and collaborator Frank Stella, Fried's reflection on his 'Art and Objecthood' essay, which was first published in 1967, suggests the terms at stake for the understanding of what constituted a break with modernism in the critical discourse at the time. Furthermore, Frampton's friendship the sculptor Carl Andre had resulted in the two working together in the *Dialogues*, to develop a response to the reductive nature of criticism on art at the time, which had surreptitiously privileged painting.

[111] Friedrich Nietzsche cited in Friedrich Kittler, *Gramophone, Film, Typewriter* (1986), trans. with an Introduction by Geoffrey Winthrop-Young and Michael Wutz, (Stanford, Ca.: Stanford University Press, 1999), 204.

fictions'.[112] Rather than in the relationship between perspective and the visual paradigm, such as has more recently been suggested is a problem of attention in modernity by Jonathan Crary, it is this turn in the phenomenological displacement of presence in the 19th century which effects a shift towards discrete images as markers of historical perception.[113] This becomes both a means for individualised transcendence and at the same time a rendering of the subject to 'control and annexation by external agencies', ultimately addressed to the combination of knowledge with visual form.[114] When looking for 'precise information', as George Didi-Huberman notes, the atlas provides a model for an approach to thinking through the externalisation of knowledge by spatialising, and therefore distantiating the relationships between these elements through the discourse of phenomenology.[115]

Thinking in terms of scale, Frampton also understood the crux of his filmmaking as addressed to the correspondence between distribution and didacticism when he admitted his disappointment with *Palindrome*'s reception in an interview with Scott MacDonald, ten years after its initial screening. Lamenting the fact that the film was now shown only 'three times a year in a nation of 240 million,' Frampton highlighted the importance of the film in his catalogue.[116] Clearly, any immediately political intent to the work could only have been lost on its audience by 1979. It is certain, however, that the context of the AWC promoting a reformist agenda at the time *Palindrome* first appeared, especially in the wake of the wider demonstrations and protests in the previous years and leading up to the 1968 Presidential elections, was intimately tied to the film's production. What role was played by the institutions for art and artists at this moment was the principle

[112] "Metahistory," *CA*, 131.
[113] Jonathan Crary, *Suspensions of Perception: Attention, Spectacle, and Modern Culture*, (Cambridge, MA: MIT Press, 1999), 4-5.
[114] Ibid. p. 5.
[115] Didi-Huberman, *Atlas,* 14.
[116] i.e. from the Film-makers Coop. Frampton cited in conversation with Scott MacDonald, "Interview with Hollis Frampton," 176.

question being asked, and it was the necessity of cinema spaces for the screening of their works which required the cohort of filmmakers to take a position on the issues they were facing.

The best example of this can be found in the show curated by an associate curator at MoMA, Kynaston McShine (1935-2018), appropriately titled *Information.* Held between the 2nd of July and the 20th of September 1970, McShine's show sought to foreground site-specific art-works which were responding to the contemporary moment, works such as *MOMA POLL* by the German-born artist Hans Haacke (1936—). Concerned as he was with instantiating an institutionally critical approach to the production of contemporary art as activated, like film was, only from within the architectural spaces of the museum's galleries, Haacke's artistic interventions understood information—under the influence of Marshall McLuhan (1911-1980) and systems theorists like Buckminster Fuller (1895-1983), both of whom featured heavily on the recommended reading list in the catalogue for *Information*—in a way that was overtly political and aimed to permit provocations towards the institution in an activist sense.[117] This also accords with McShine's gambit, understanding that the museum was compelled to respond to (and collaborate with) artists directly, following Takis' call for their transmutation into 'information centers', directly after the action to remove his work from MoMA's galleries in 1969 (fig. 4.5).

[117] A description of the work can be found on page 57 of the exhibition catalogue, without the question concerning the Rockefellers. Kynaston McShine, ed. *Information*, exh. cat. The Museum of Modern Art, July 2 – September 20, 1970 (New York: MoMA: 1970). For a critical reflection on the information-based art curation from the 1960s see *Information,* ed. Sarah Cook (Cambridge, MA: MIT Press, 2016).

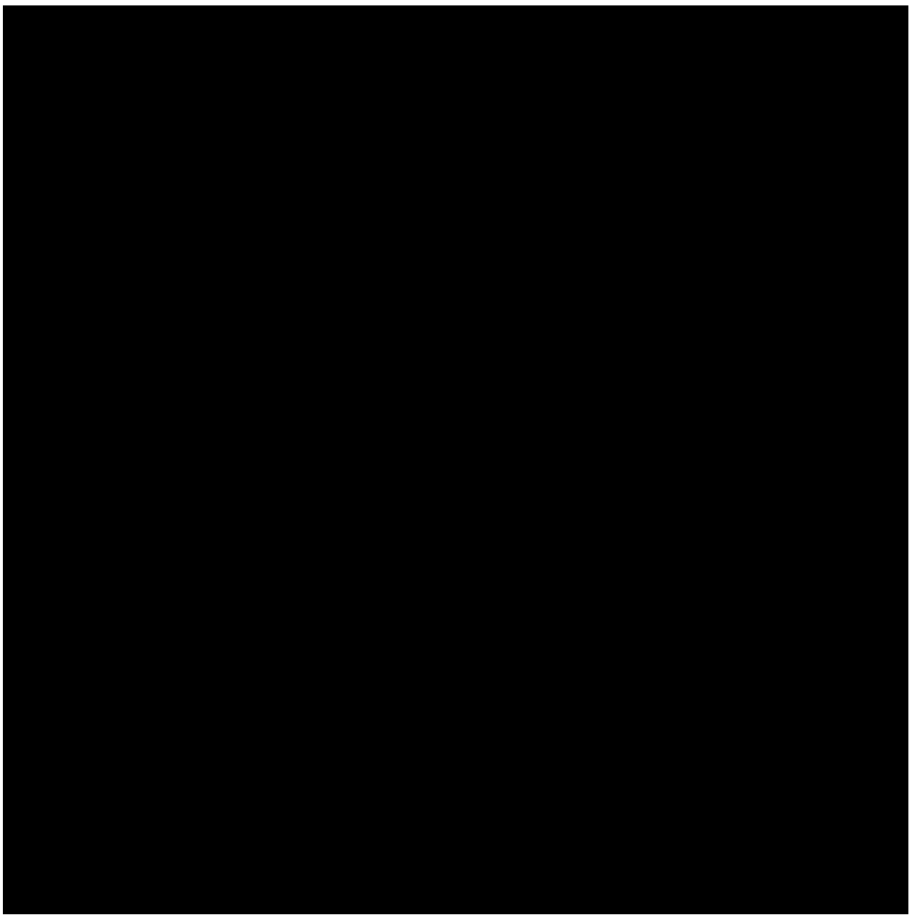


Fig. 4.5 Takis' statement following his action to remove his work *Tele-sculpture,* from display at MoMA on the 1st of January, 1969, *AWC Documents* © Artworkers Coalition, 1969.

Frampton's 1966 work, *Information*, may be edited palindromically, but as it is based on an elemental interaction between light and darkness it is clear that if it was so, this arrangement was deemed suitable only for establishing a limit for the film's montage, which had used a light bulb as its only content. The 1969 presentation of *Palindrome* in the context of the AWC, the Vietnam War, and the Stonewall Riots, however, suggests that Frampton could now re-focus his research into film towards a political intention, presenting "waste" images in the same moment that he was a signatory to a dicument asking for 'direct action' against the state's threats to defund museums and galleries.[118] When considered only for its

[118] See the letter dated April 18, 1969 addressed to Mr. Thomas J. Cuite, Chairman of Finance Committee, New York City Council, and signed by 45 artists including Andre, Robert Huot, Hans Haacke, Farman, and Frampton included in *Artworkers Coalition Documents 1*, 1969.

formal concerns, its recursivity and the structural approach, *Palindrome*'s historical specificities become too easy to leave behind.

The waste ends of the film provide the material which gives further significance to the production within this climate of dissent, proposing an alternative arrangement for the way film can be screened. This meant that when McShine included a selection of Frampton's films in the exhibition's screening program—including *Palindrome*—it worked to reveal something of the didactic intentions underlying the whole exhibition.[119] Furthermore, in McShine's acknowledgments for *Information* he reveals the way in which he had come to believe that it was his task as the curator to point out that it was the museum itself which had provided the conceptual impetus for much of the work. Expressing his wish 'that this exhibition be "an international report" of the activity of younger artists' McShine then further focussed this curatorial impulse by focussing on what he called 'communication systems'.[120] Interestingly, the museum was now apparently operating in real time, in a way that accorded with the wishes of the authors of the 'Filmmakers vs. MoMA' letter from the year before.

Following this moment of apparent solidarity from the institutions, the AWC's last protest was held at the Guggenheim Museum on May Day 1971, after the Museum's decision to cancel a planned solo exhibition by Haacke, because the contents of the work of included the names of the owners of property titles for Manhattan's real estate slums. The overtly political agenda of a work like *Shapolsky et al. Manhattan Real Estate Holdings, A Real Time Social System, as of May 1, 1971,* left the institutions unwilling to play the game any longer, nor to further engage the

[119] *Palindrome* was shown alongside five of Frampton's other recently completed films during the *Information* exhibition: *Surface Tension* (1968), *Artificial Light* (1969), *Carrots and Peas* (1969), *Lemon* (1969), and also *Zorns Lemma* (1970). Interestingly, Frampton's film *Information* (1966) was not selected to be shown during the exhibition (neither was *States*), and yet this also dates the first public screening of *Palindrome* after its debut in 1969. The catalogue states: 'Most of the films will be shown in the galleries in the "information machine" during the exhibition, and, for a more careful viewing, in the auditorium.' McShine (ed.), *Information*, 193.
[120] Ibid., 1.

provocative tactics then developing as a more militant strand of conceptual art. As a result, a retreat ensued, and an alternative approach needed to be found for exhibiting and showing work in a climate of hostility to the apparently depreciative value of conceptualism, which also affected the reception of artist-film.

### 4.2.2 The Avant-Garde and Experimentalism

One way through this apparent impasse, was to align film more closely with its performance, and to emphasise its relationship to music. In the development of a twelve-tone program for a keyless music, the palindrome was also a form employed by avant-garde composition. This is, of course, another important point of departure for understanding the compositional strategies Frampton was adapting for his experiments on film in the period prior to their screening during the *Information* exhibition at MoMA. Considering his own admission when speaking about *Palindrome*, that 'procedurally the film is flatfootedly Webernian,' its musical aspects becomes especially relevant for presenting the conflation of the musical score with the work on film.[121] As it was shown in the previous chapter, composing on film meant the score became identical with the work, and vice-versa. In the lectures collected as *The Paths to the New Music*, Webern lists his reasons for his belief in the

[121] *CC*, vol. 1, 46. Frampton's full answer reads: 'At the time I made *Palindrome* I was, as I periodically do, giving thought to serial music. Procedurally, the film is flatfootedly Webernian. One of Webern's mature procedures was to make a *generative* row—often it was a hexachord, in which the last six notes are the retrograde inversion of the first six—and then to manipulate that row rigorously (although I don't think Webern was averse to "cheating" here and there). In this music, one is very quickly aware that some definite set of principles is making the piece sound as it does, and a lot of energy that goes into hearing it is an attempt to figure out those principles. Unless one spends a long time with the score, and sometimes not then, one can never quite get back the full set of rules. There's always a certain tension, a certain malaise in listening: one listens with a double effort, a double concentration because it seems at once an oddly willful, mutable music, and yet at the same time it is not the willfulness of a composer, of an artist, that one is hearing, but the generative power of the set of rules, whose consequences are being worked out. That fascinates me.'

importance of the twelve-tone composition as based in its recursion, by noting 'this way of circling—never calling things by their right name—using one substitute after another for the basic chords—preferring to leave open everything that's implied'.[122] The lecture of the 29th of January 1932, one of a series of sixteen given in a private house in Vienna between January 1932 and April 1933, is eventually followed by his description of Schoenberg's pursuit of 'polyphonic thinking' in the penultimate lecture, and of the 'horizontal and vertical' axes of the musical material in its spatialised order.[123] Now, the relationship to the museum can be understood as distinguished by the avant-garde and what Branden W. Joseph has more recently claimed is the experimentalism of indeterminacy striving 'to undermine or overcome the constraints of a priori structures or overarching aesthetic forms,' which he finds in work following the influence of John Cage.[124] As such, the tension between unity and contingency plays out in the pursuit of a more fundamental music which attempted to occlude the 'right name' required by the work for acceptance into the galleries of modern art.

Compositional innovations by the historical avant-garde, such as the development of the tone-row by the composers Berg and Hauer, inadvertently precipitated ways for addressing the question of vertical montage in film, as it was also imagined by Eisenstein. Berg, for example, had included many of these modes in his plans for the opera *Lulu*, a project which, like Frampton's *Magellan*, would remain incomplete at the time of the composer's death in 1935 after he began working on it in 1929. Detailed notes for the work include the incorporation of a silent, palindromic film at the opera's centre (fig. 4.6).[125] Webern, to whom the

[122] Anton Webern, *The Path to the New Music*, ed. Willi Reich, trans. Leo Black (London: Universal Edition, 1975), 47. His example is relevant too, Schoenberg's "Music for a Film Scene" (Op. 34, 1930).
[123] Ibid., 35.
[124] Branden W. Joseph, *Experimentations: John Cage in Music, Art, and Architecture* (New York: Bloomsbury, 2016), 24.
[125] In the published libretto for the work, for which George Perle describes 'the palindromic musical structure and the quasi-palindromic scenario' of the Film, it is

tautological line '*als was ich bin*' in Berg's *Lulu* was dedicated,[126] proceeded to develop further strategies for composition using the tone row, the production of which employed metrical and frequential symmetries based on inverted and retrograde 'rows' including all twelve notes of the chromatic scale, which were also extended from the form of the palindrome.[127] The link between the opera and the atlas may be mediated here by the theatre, and it is the insistence on the architectural significance of the palindrome that remains important for comparing an opera like *Lulu* to *Magellan*, especially in terms of the technical distinctions required for memory.

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determined that: "the film sequence—in accordance with the symmetrical course of the music—should also be quasi-symmetrical (ie., it should run forwards and then backwards)." See George Perle: *The Operas of Alban Berg,* vol. 2 *Lulu* (Berkeley: University of California Press, 1985), 150. Frampton also cites Berg in his writing, most significantly in his "Notes on Composing in Film," which will be discussed in more detail below. *CA*, 151. Another musician film-maker, Dmitiri Kirsanov (1899-1957) made his 1926 film *Brumes d'Automne* in relative isolation. In an interview Kirsanov notes it was 'put together according to musical formulae'. Dmitri Kirsanov cited in Walter S. Michel, "In Memoriam of Dmitri Kirsanov, A Neglected Master," in Sitney (ed.), *Film Culture: An Anthology* (1970), 38.

[126] The section of Act II, Lulu's Song includes the line: 'I have not once in my life ever tried to be something other than what I have been taken for; nor have I once in my life ever been taken for something other than what I am.' Alban Berg, *Lulu: Opera in three acts* (Chandos Records, CHAN3130(3), 2006), 160.

[127] Frampton's reference to George Büchner in the Metahistory essay is significant in that it can be extrapolated to suggest Berg's 1921 version of the opera, *Wozzeck*. Based as it is on the Büchner play, which was also unfinished at the time of Büchner's death, it relates serialism as significant for the idea of metahistory, and to the history of unfinished works more generally. "Metahistory," *CA*, 133.

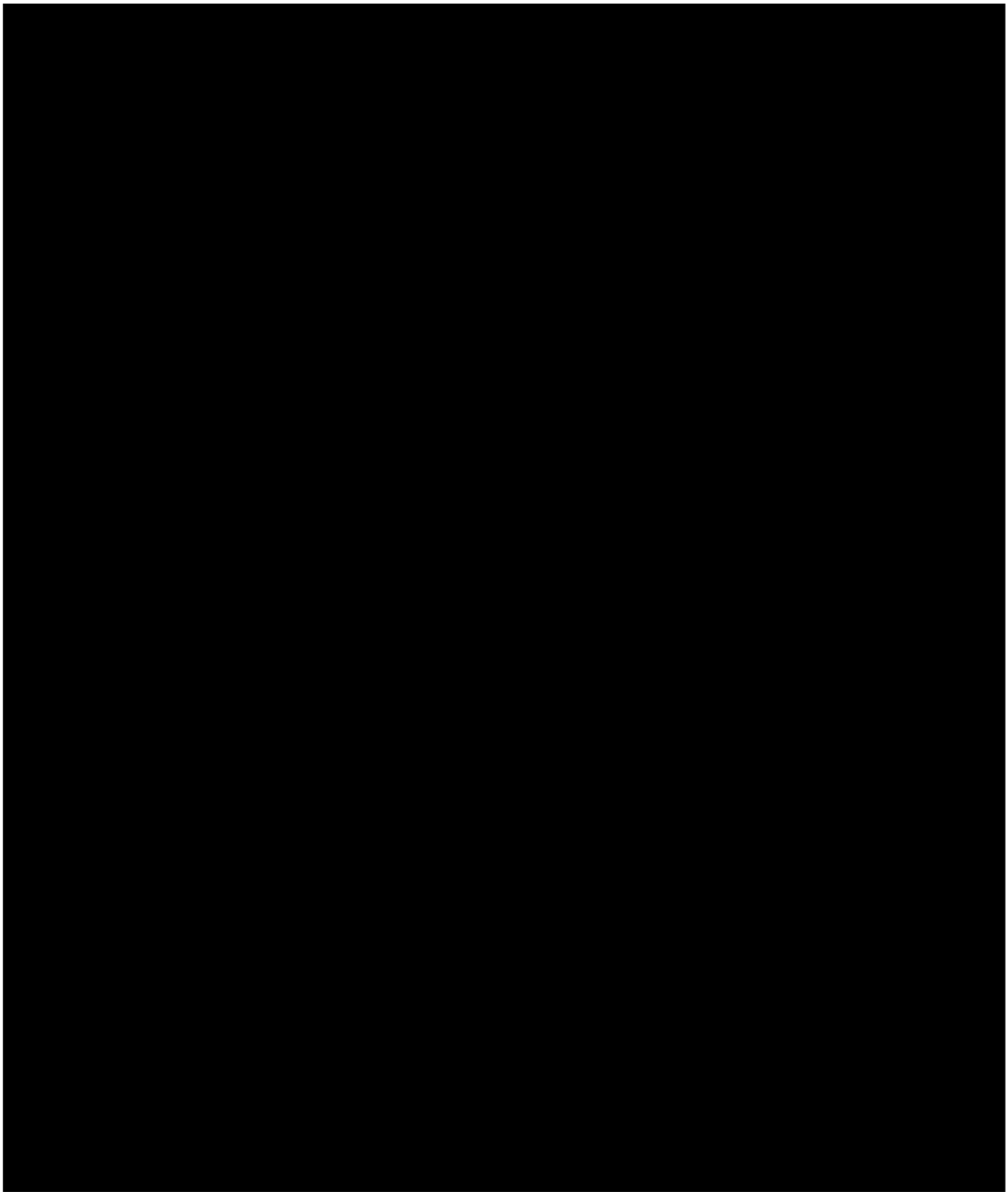


Fig. 4.6 Alban Berg, 'Film' from *Lulu*, in George Perle, *The Operas of Alban Berg,* vol. 2 *Lulu* (Berkeley: University of California Press, 1985), p. 152. The scenario of the Film Interlude of *Lulu* is included as the 7th Illustration in Perle's book.

The group of composers, referred to as the Second Viennese School, and to which their teacher Arnold Schoenberg (1874-1951) and social theorist Theodor W. Adorno (1903-1969) also belong, began to formalise this new approach to composition which was discovered and keenly engaged by Frampton as an elegant

solution to the question of compositional arrangements he had sought for the ordering of his early experimental films such as *Information, States,* and *Palindrome.*[128] The tone-row is strictly ordered (a note may only be repeated once all of the notes in the row have been played) and prepares the way for the introduction of a form of programmatic determinacy into musical composition, radically rearranging the possible outcomes for work that was no longer to be found exclusively in the deliberations of the composer's expression. Ordered by a set of technically determined contingencies, more so than simply aleatoric, the systematic framing of compositional procedures utilised these complex geometrical symmetries as an aesthetic of repleteness for the work. This interplay of generative rules with indeterminacy in composition, is identified as a development towards what has also been called non-composition, as a key strategy for modernism which I return to below.[129]

To be sure, Frampton had been concerned with the question of sound and experimental work on film from at least 1950, when he first saw Eisenstein's *Alexander Nevsky* as a teenager, a fact he reveals in a letter to the editor of *Artforum* in 1975, where he quotes Eisenstein (with Alexandrov and Pudovkin), from the 1928 statement on 'the silent thing that has learnt to talk,' originally published in *Zhizn' Iskusstva.*[130] Frampton then continues: 'To this day, *no* filmmaker known to me

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[128] Adorno, who studied composition in Vienna, is also mentioned here because of his significance as a theorist of aesthetics and montage. Furthermore, Adorno's work links figures like Warburg to the film avant-garde through the idea of composition. The development of a twelve-tone technique by the Austrian composer Josef Matthias Hauer independently of Schoenberg, in 1919, is marked by the fact the Adorno's writing on Hauer's significance for the development of new compositional techniques in music frustrated the legacy of the composer. Schoenberg and Hauer, it seems, co-developed the twelve-tone idea in the early 1920s. On the relationship between Schoenberg and Hauer, see John Covach, "The Quest of the Absolute: Schoenberg, Hauer, and the Twelve-Tone Idea," *Sacred Music: A Journal of Theomusicology,* 8, no. 1 (Spring 1994): 158-77.

[129] Covach also makes this point in relation to Schoenberg and Hauer's approach to twelve-tone music in the 1920s. Covach, "The Quest of the Absolute," 160.

[130] Eisenstein et al. cited in Hollis Frampton, "Letter to the Editor, *Artforum,*" *Artforum*, 13, no. 7 (March 1975): 9. The letter is dated January 21, 1975 and

(Eisenstein included) has given full and systematic attention to the questions [they had] raised at that time.'[131] The tenor of the letter, which responds to the reviewer's suggestion that Frampton's work is derivative of Godard's, is evidently hostile. However, Frampton ultimately restates Godard's belief in 'making a film that was a political act,' focussing on the coincidence of a film's form with the industrial conditions that enable it to exist as popular art.[132] The issue, it seems, remained in the idea of the experimental work on film, as Frampton had traced it not only to the Russian filmmaker avant-garde but also to the Second Viennese School.

Reflecting on the significance of the subsequent shift in compositional strategies for 20th century music, Michael Nyman's discussion of the idea of experimentalism, as specific to the domain of music and distinct from the avant-garde, is useful here. Appearing for the first time in the late 1950s, the introduction of process as an experiment directed towards composition leads, Nyman contends, to a departure from the absolute control maintained by the composer and towards the formalisation of improvisation (as it relates to jazz). 'For all things are now equal,' Nyman writes of the experimental approach, 'and no one thing is given any priority over any other thing,' thereby recalling the global model also shared by the atlas.[133]

Experimentalism as a practice is a name that is also applicable to film from the same period. It is the adaptation of this mode of thinking through the re-arrangement of a traditional order, as indebted also to Cage, which declares the significance of the legacies of both experimental and avant-garde composition for *Palindrome*, despite the fact that for Frampton, experimental work had already been

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postmarked 'Eaton, New York'. It is reprinted in *CA*, 163-5. The Soviet journal evolved from a newspaper and contained the Leningrad theatre programs.

[131] Ibid. In the letter Frampton also allows that Kirsanov's *Rapt* (1934), which he hadn't seen, may add to problem of the sound-image disjunction raised by Eisenstein, suggesting Frampton's belief in the significance of Kirsanov's work on film as formally innovative as well as aesthetically successful.

[132] Ibid.

[133] Nyman, *Experimental Music,* 29.

announced as an explicit feature of Russian filmmaking during the period between the world wars.

Initially it appears that what Nyman calls the 'limiting structure' of the avant-garde as a tradition maintains its hold over Frampton, as a figure of the North American neo-avant-garde, and he understood composition as of principle importance to the production of work on film, coincident as it was with montage.[134] Webern's compositions, extant in the 31 works he published during his lifetime, lends a specific force to the distinction between experimentation and the avant-garde, however, one that can also be related to the museum's preference for the avant-garde over the experimental. 'In fact,' Nyman writes,

> a useful way of illustrating the technical and conceptual differences between the experimental and the avant-garde is to examine briefly their different reactions to the music of Webern in the early fifties – they might have been talking about two different composers.[135]

Nyman argues that the reason for this division, around their assessment of Webern's compositional innovations, appears to come despite the fact that limitation and control are present as notable features in his serial works, and 'within this controlled, note-to-note procedure there emerged indeterminate, extra-serial configurations,' as well as 'irrational non-linear static spatial groups.'[136] Accordingly, Nyman privileges the music which moved towards what Benjamin Piekut has also noted are the anti-teleological procedures of the everyday in music, highlighted by the work of Cage, and which seems to do away with formal hierarchies in compositional modes.[137] Frampton, as a filmmaker, could be seen to have straddled

[134] Ibid., 31.
[135] Ibid., 37.
[136] Ibid., 38.
[137] Piekut, *Experimentalism Otherwise,* 5.

both of these assessments, however, given his understanding of serialism was set out in the following way:

> When Schoenberg, Webern, and Berg received the tradition of music into their hands, a norm of composition stipulated that the deforming criterion of tonality must be superimposed upon the centerless grid of the chromatic scale. Reasoning that the extraction of a subset of diatonic intervals from that scale amounted to the acceptance, *a priori*, of a nucleus of melodic material, the serialists deleted entirely the axiom of tonality and *substituted* for it another: that every work must be generated in its entirety from melodic material that would guarantee its access, at any moment, to an unconstricted field of compositional options. Only a row that comprised the entire chromatic octave could do this.[138]

While it remains important to return to Frampton's thinking of the tone-row as an 'unconstricted field,' and to serialism for *Palindrome*'s strategy of substitution more generally, a further encounter with this tension between the 'options' of composition and the idea of non-composition as elaborated by the historian of avant-garde painting, Yve-Alain Bois, will be useful here. As an artistic process for the production of purely visual works, such as *Palindrome* is, non-composition allows us to return to the ideas of musical serialism as a spatial relationship mediated by time, which Frampton figured in the clouds which appear in *Palindrome,* and subsequently directed towards *Magellan*, and which intermingle with the visual strategies with which he had conflated them.

In addition to *Palindrome's* political and conceptual tendencies, the combination of compositional techniques derived from serialism produced a work which, as a programmed and over-determined arrangement of cloud-like images

[138] "Notes on Composing in Film," *CA*, 151.

requisite to a musical performance, was composed in advance of its execution. Opposed therefore to its improvisation, *Palindrome* was occluded from any sense of its reception before the work was finished. As a standard definition of modernism, it is important that it now be contrasted with an experimental practice which saw the artwork as active only in the context of its performance, as not isolated from its social situation. What *Palindrome* figures in Frampton's work—in addition to its situation within the political moment of the AWC—points to a particular form of substitution: by taking an aural compositional practice and transforming it into a visual spectacle through the film apparatus, his work is also able to be understood as experimental in the sense identified by Nyman, meaning it can be understood somewhat paradoxically as both a "closed" and "open" system at the same time.

Along with the printing process—and in a way that was not unlike what would come to occur in the central section of *Zorns Lemma*—this experimental aspect was executed through a silent migration from sound to images, from serial notation to the montage matrix figured in the laboratory of Technicolor, Inc. The importance of *Palindrome* for *Magellan*, which also adopted the recursive form of the palindrome and serialism, becomes clearer when we consider that the work as a whole is addressed to the migration of knowledge formerly encoded in script, to film as a mnemotechnology which adopted the fundamental narrativity of music and performance as cultural memory.

### 4.2.3 Painting: Transfer and Organisation

In the *Dialogues*, Andre and Frampton discuss their divergent opinions on the recent work of painter James Rosenquist (1933-2017) at length. At one point in the discussion, which took place on the 22nd of September 1963, they turn to the question of painterly abstraction. 'What is Ellsworth Kelly but broken images?'

Frampton queries.[139] Andre's response offers his thoughts on Kelly which suggests how his departure from the imitation of nature is significant for understanding Kelly's painting as abstraction:

> Ellsworth Kelly has painted paintings which concern themselves with the division of colors one from the other with the invisible precision of a sharp late shadow. Kelly's work reminds me of the shadows in the *Tum'* [sic] of Duchamp. It is important to Kelly that he and his manipulations be invisible in terms of his image. Kelly has an ideal derived from nature by way of his observations of the sun streaming through his rubber plant.[140]

Turning their discussion instead to the compositional methods preferred by other American painters of the period—from their mutual friend Frank Stella (b. 1936), through to Rosenquist (whom Frampton regards a close friend while Andre rejects for his Pop art sensibilities), in contrast to colour-field painters like Kelly (1923-2015)—the dialogue re-purposes their ideas concerning the cut and extends it as a theme into painting as similarly re-oriented around the notion of the set. The role of painting in Frampton's thinking about film and the visual field, has not been commented upon at any length. The present question then, concerns how *Palindrome*, ostensibly a work ordering cloud-like abstractions, leads us back to the problem of perspective, given the dimensionality of the film-strip—which collapses the set of clouds onto its material base, and flattened them, quite literally, before re-animated them in a way which gives the film its microscopic identity—relates to the atlas as a perspectival model in contrast to history.

While appearing morphologically closer to the series of abstract paintings by Clyfford Still (1904-1980), which he began in the late 1940s (Frampton often lists

[139] *Dialogues*, 88.
[140] *Dialogues*, 91.

his interest in other abstract expressionists like De Kooning, Pollock, and Kline in his interviews), the images in *Palindrome* are first and foremost instances of transfer, even if they are only of the discarded remains producing the cloud-like emulsion stains during the processing of the film in a commercial lab. In fact, Frampton had paid close attention to Still's work in the early 1960s, noting his particular displeasure with Still's painting technique when he encountered it in the gallery.[141] Nevertheless, he did note its suitability for photography. 'Very often the paint is ill-applied, or hastily applied', he writes of Still's work to Reno Odlin in early 1961, 'so that he gains a great deal in bookplate or kodachrome.'[142] Kodachrome was a colour film stock which Frampton was well aware of, from his work at the Technicolor lab. While Still's work photographed well, seen directly 'in museum or gallery it is almost never handsome,' Frampton declared, noting in passing that he nevertheless preferred Still's paintings over what he calls the other comparable 'environment' painters like Barnett Newman (1905-1970) or Mark Rothko (1902-1970).[143] As such, Still became a point of reference for painting's relationship to film in Frampton's thinking at the time.

In the *Dialogues* however, Andre's reference to the painter Ellsworth Kelly may suggest a better analogy with what is happening compositionally in *Palindrome,* when the film appears more than five years later. In the 'division of colours' noted by Andre, Kelly's approach reveals a new mode of arranging elements within the frame, one which presented possibilities for the artwork not previously seen before. Kelly was an American artist who, having managed to have 'entirely missed abstract expressionism' while in France after the Second World War, developed what Bois calls a painterly strategy of 'non-composition', along the way to the production of

[141] Lucy Fischer mentions Still in relation to Frampton's *Summer Solstice*, in particular the gestural abstractions of the action-painters referenced in quotidian images of cows in a field. Fischer, "*Magellan,*" 8.
[142] Hollis Frampton letter to Reno Odlin, 16 February 1961. *Letters,* 1961, 3
[143] ibid. By this Frampton means 'canvases so large they ingest the viewer.'

the monochrome panels for which he is best remembered today.[144] Kelly's early work, therefore, provides a model that is both a precursor and a counterpoint to the compositional strategies elaborated by Frampton for *Palindrome* in particular, given its use of visual references found within Frampton's own dark-room environment.

In June 1949, Cage, whose interest in chance and indeterminacy concretised the notion of experimentalism proposed by Nyman, was in Paris to meet with composer Pierre Boulez (1925-2016), and happened to be staying at the same hotel as Kelly. It is following this encounter, Bois proposes, that Kelly took to abstraction in the mode that Bois pursues, given the resonance of the "already made", as an act of what he terms 'transfer'. By looking to sever the indexical relationship to the referent in his drawings and collages of the late 40s and early 1950s, Kelly abstracts his work in a way which distinguished his process from any performative connotations carried through expressionism.[145] Furthermore, Bois' identification of the influence of new music on Kelly's work, as also approaching a non-compositional strategy in his early abstractions, allows us to see how Kelly set out to privilege chance as a way of 'reaching a state of uncontrol', as Bois notes.[146] In these works, against the more Gestalt form for 'automatic' writing, Kelly in fact appears to be approaching a position akin to authorial erasure, as opposed to any sense of unconscious elaboration (fig. 4.7).[147]

[144] Yve-Alain Bois, "Kelly's Trouvailles: Findings in France," in *Ellsworth Kelly: The Early Drawings* (Cambridge, MA: Harvard Art Museum, 1999), 32.
[145] Yve-Alain Bois, "Ellsworth Kelly in France: Anti-Composition in Its Many Guises," in *Ellsworth Kelly: The Years in France, 1948-1954* (Munich: Prestel Verlag, 1992), 15.
[146] Ibid.
[147] Bois, "Kelly's Trouvailles," 24.



Fig. 4.7 Ellsworth Kelly, *Brushstrokes Cut into Forty-Nine Squares and Arranged by Chance* (1951), cut-and-pasted paper and ink on paper, 13¾ x 14in. Museum of Modern Art, New York.

Recalling Fore's arguments about Eisenstein in the years before WWII, it is perhaps not so much Kelly's interest in non-composition, as it was his attempts at 'over-coding' the work with conceptual strategies, which explains his drift into abstraction and relates his ideas about de-composing the image. This distancing from realism was nevertheless destined to remain tied to it through this negation. While it can be shown that Frampton was also concerned with the development of techniques for minimalist sculpture in his ongoing discussions with Andre, it is certain that a different type of openness to chance was required for Frampton to embrace the as yet un-composed images presented by the cloudy film ends that he selected as the basis for *Palindrome,* grounded as they were in photography.[148] Where

[148] See for example the section in *Dialogues* whereby Frampton references 16th century Italian polymath Gerolamo Cardano (1501-1576), what he calls 'Cardan's Solution in the model' as sculptural research, to which Andre responds 'You prefer

Kelly had applied the grid form for the division of the picture plane to deal with his chance abstractions, following the act of transfer, Frampton returned to the question of compositional arrangement in series and, because of film's temporal sympathy with music, applied the generative logic of the tone-row to create an organisational structure for the sets of images he had generated from the transfer.[149] This kind of thinking, between Webern's serialism and the visual grid for the palindromic text, is perfectly encapsulated by Frampton's series of twelve photograms of alphabet stencils which he duly titled *Hommage to Webern*, and are dateable to 1963, and to the period of the *Dialogues* with Andre (fig. 4.8).[150]

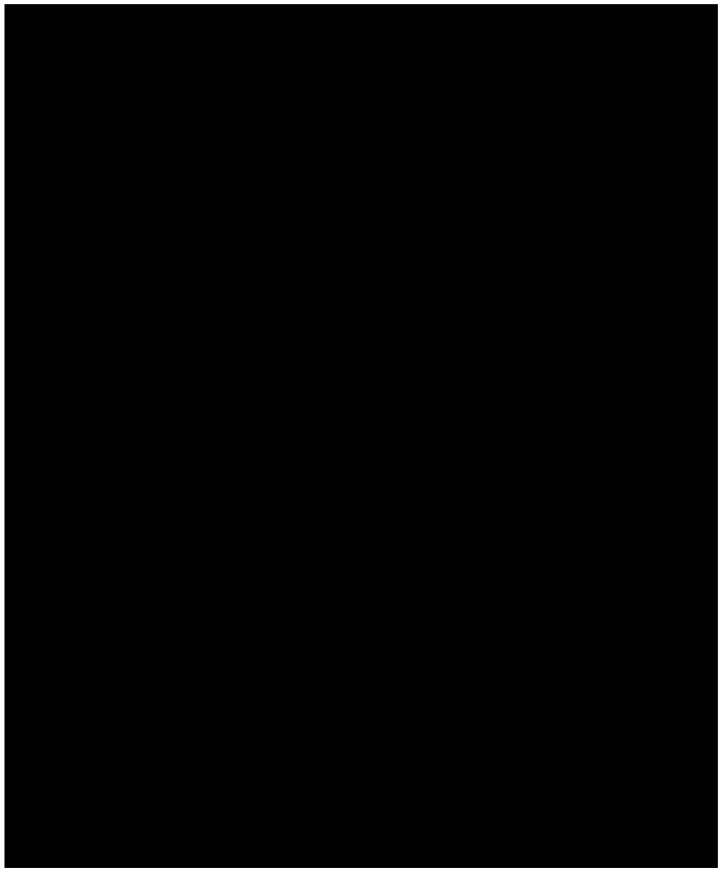


Fig. 4.8 Hollis Frampton, *Untitled Homage to Webern* (date unknown), black and white photogram, 10x8in. Walker Art Center (Gift of Marion Faller, 1993).

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to make photographs...You need and want to make photographs. You have a great advantage over the sculptures and painters.' *Dialogues,* 15.

[149] It should also be mentioned that later abstract works on film, dealing with the chance processing of damaged or un-exposed film has a history that runs at least from Brakhage to Nathaniel Dorsky's 1983 film Ariel, which is a cameraless film employing out of date stock. Nathaniel Dorsky, *Ariel* (1983, colour, silent, 18fps, 16mins).

[150] Frampton makes reference to these prints in a letter to Odlin dated 15 July 1963. *Letters,* 1963, 26.

If non-composition is defined here as an approach to the production of the work, and as a technical term Bois developed specifically for Kelly, the work of art becomes tied to artists' attempts to relinquish their decision-making control in order to better negotiate the determinacy of the material and the indeterminacy of the work's contents. This is a strategy which hews very close to how *Magellan* came to be planned, as a combination of both chance-based and highly deliberate decisions made by Frampton. Importantly, there is also a paradoxical limit which is unveiled in the dialectical moment of this impulse to compose the work as ordered rather than organised, which Bois had also foreseen: 'for the disorder of chance to manifest itself, it has to be opposed to the strictest possible order; organisation is needed for the unorganised to appear as such.'[151] It is this reliance on organisation which Frampton came to understand as necessary for his accomodation of contingency, and it is this tension which supplies the limit condition for *Palindrome*'s series of cloudy images. In his exploration of serial compositional techniques as a means to generate the content of and positions for the images in this palindromic film, he then elaborated the success of this experiment by using it in his plans for *Magellan* as well as incorporating *Palindrome* as a key for understanding the work. Organisation, of course, is what frames the contingent information found in an atlas, which, rather than being ordered like an archive, is selected like an organic code known only to the author. Therefore, to relinquish control was to politicise this procedure by recognising the partiality of the arrangement, as opposed to the illusion of its universality.

Following the initial act of transfer, the set of film prints are run through a series of procedures which aim to permit chance to re-appear. Following Piekut's reminder that unlike the fact whereby a 'successful performance of Cagean indeterminacy' only had to rely 'upon a performer who had already internalised the expectations of the composer', the "performer" of Frampton's work consisted rather

[151] Bois, "Ellsworth Kelly in France," 25.

of the film in the projector and relied on the audience in the cinema attempting to engage with the ramifications of the work.[152] Between the visual determinations of the painter, and the composer of musical events, a film like *Palindrome* could only have emerged to navigate the tension which figures the organisation and presence of the observer in the collapsing of the work's score onto the work itself. Again, this procedure implicates memory as what is at stake in the work.

Just as aleatoric contents can only be identified if placed within a rational method for enframing them—if we think again of Andre's scatter works like *Spill* (1966)—within the gallery space as a process piece, the discourse on Minimalist sculpture applies as well to the untitled constructions produced at around the same time of the *Dialogues* between Andre and Frampton. It can be shown, then, that Frampton set the 40 fundamental sequences for the permutational generation of the filmic palindrome as a structural support for what was in fact a random and formless set of images not unlike other experiments in composition attempted by Andre at the time (fig. 4.9). The return, therefore, to the chance arrangements discovered in the cloud-like set of film-ends selected by Frampton in 1969, figures an increasingly logical compositional organisation which was presented as a framing device over the original set of images. In effect, this reveals *Palindrome* to be an experiment in how to navigate the infinite film and therefore directly applicable to the metahistorical impulse of the atlas for *Magellan*.

[152] Piekut, *Experimentalism Otherwise*, 25.

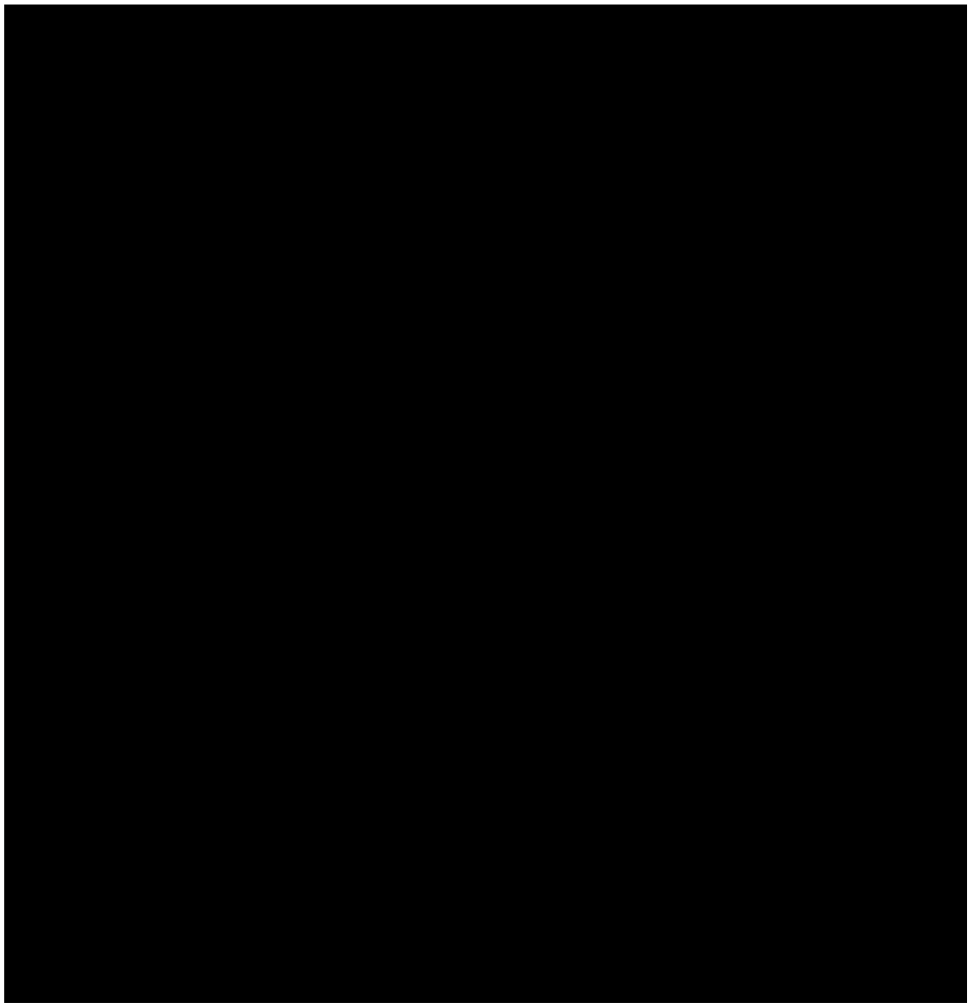


Fig. 4.9 *Untitled* (ca. 1958-1963), printed board collage on board, 19 5/8 x 19 1/8, inches (49.8 x 48.6 cm), Framed: 28 1/2 x 28 inches (72.4 x 71.1 cm), ARG# AC1963-083. Andrea Rosen Gallery, New York.

As Bois finds in Kelly's earlier French experiments, so too Frampton (as well as Andre) engages the problem that inevitably arises, namely that 'in order to show chance, in order to make randomness visible, one had to systematise it.'[153] The navigation of both the determinate and the indeterminate is suggested, therefore, by their coterminous relationship. Frampton's attempt to show this on film, however, complicates the issue further. The apotheosis of this paradox is found of course in Frampton's use of alphabetic order for *Zorns Lemma.* In the arbitrary ordering of the names of things found in the New York streetscape, the "real" environment is completely randomised by their alphabetised appearance in the montage matrix.

[153] Bois, "Kelly's Trouvailles," 25.

The dialectic between composition and non-composition, abstracted to a given set of elements—for example to a list—therefore reveals the limits which exists between deliberation and the systematic instrumentalisation of the experiment. The promotion of a film's structure, rather than its composition, then, was one outcome of filmmaker's insistence on contingency—the implicit argument being that some impulse, or activity, was required to motivate the undertaking of a film. For Frampton, it appears, this contingency became the lack of a tradition suitable for explaining the very existence of film in the first place.

### 4.2.4 Structural Film and Structuralism

The contested use of the term 'structural' for describing an approach to film in the 1960s has been reprised more recently in an interview with Michelson by Mark Webber in 2013. Recalling the lecture 'Art and the Structuralist Perspective' which she gave at the Guggenheim Museum a few months prior to Sitney's "Structural Film" essay appearing in *Film Culture* in 1969, Michelson suggests a fundamental confusion of the terms had arisen from the outset.[154] Accordingly, this meant for her that the term 'structural' for describing film 'was obviously a name chosen by somebody who didn't care about, and probably didn't know very much about, structuralist theory,' and furthermore that Sitney, as she notes in 2013, 'didn't really take note of what he termed "structuralism"'.[155] In the last part of my analysis of

[154] The paper the Guggenheim lecture series, delivered on 18th of February, was published as "Art and the Structuralist Perspective," in *On The Future of Art* (New York: Viking Press, 1970), 37-59.

[155] Annette Michelson cited in "Annette Michelson by Mark Webber," in *Speaking Directly: Oral Histories of the Moving Image* (San Francisco: San Francisco Cinematheque, 2013), 25. On the 25th of August 1972 Frampton wrote to Peter Gidal, saying 'Personally, I believe Structuralism is a term that should have been left in France, to confound all Gaul for another generation.' Hollis Frampton, "Letter from Hollis Frampton to Peter Gidal on *Zorns Lemma*," in Gidal (ed.), *Structural Film Anthology*, 77. On the British response to Sitney's thesis see Peter Gidal, "Theory and Definition

*Palindrome*, I want to demonstrate that this problem, read retrospectively, can highlight how the conflation of incommensurable forms is necessary for understanding Frampton's work on film, as it has been developed throughout this thesis so far.

In her Guggenheim lecture, which was delivered in the same year as *Palindrome* appeared, and after extolling the novelty of the approach predominantly formalised in French anthropology, Michelson proceeds to recount a conflict between the French discourse on structuralism, as what she called 'the scientific methodology so closely analogous to that of modern aesthetics,' and to approaches to contemporary art and its discursive frameworks in New York at the time.[156] Furthermore, Michelson, who had spent the majority of the previous two decades living in France, claimed that anthropology had persistently sought (with reference to the work of both Claude Levi-Strauss (1908-2009) and Sigmund Freud) to 'reject contemporary aesthetic forms,' by which she meant the novel productions of the modernist avant-garde.[157] She then goes on to speculate why this may be the case:

> The source of the conflict would seem to lie principally in the application of the linguistic model and of the semantic function to our contemporary painting and sculpture, which resist the notion of any authority or model, any notion of code and message in their stubborn claim for autonomy, immediacy, and absoluteness.[158]

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of Structural/Materialist Film," in Gidal (ed.) *Structural Film Anthology*, 1-21. The essay was originally written in 1974 and updated for publication in the anthology, which centered around the work of the London Filmmakers' Co-operative and its members' relationship to their North American counterparts.

[156] Michelson, "Art and the Structuralist Perspective," 51.

[157] Ibid. Specifically she is referring to contemporary painting and sculpural works such as those produced and theorised by Robert Morris (1931-2018), and the tradition that links Morris to the historical avant-garde exemplified by Piet Mondrian (1872-1944), for example.

[158] Ibid.

Without referring to film, Michelson sticks to a modernist paradigm for the work which she believes must escape its structural elucidation as instrumentalised knowledge. She does this by returning to aesthetic claims for modernity made in the lead up to art's 'ambivalent' relationship to the sciences.

Gesturing to Flaubert's idea of writing a 'book about nothing', the unfinished *Bouvard et Pecuchet*, which is positioned by its antagonistic relation to Diderot's *Encyclopédie* project, Michelson briefly attends to a singular trajectory within modern aesthetics.[159] Her identification of a "self-annihilating nothing"—the same concept which will be elaborated by Giorgio Agamben as a kind of anti-structure in the very idea of arts poetic production into presence—is then placed into a particular arrangement with time in a phenomenological sense and opposed to the Structuralist method:

> There is an epistemology of modernism that questions the object as it questions the word, thereby questioning the sign. Art, in questioning mimesis, redefines and loosens its relation to the signified, aspiring, however, as if by compensation, to the most radical and most enveloping signification of all, to that of an absolute presence. Poetry, consenting, through Mallarmé, to be poetry only, aspires to be "the Orphic explanation of the world," of a world "meant to end in a book." That book, unwritten, is prepared for by Mallarmé's supreme effort, *Un Coup de Dés*, in which the primacy of the work as symbolic sign is questioned at every point of utterance by the felt necessity to make meaning palpable, as it were, directly perceptible through the recognition of the space and silence from which it emerges, which can sustain it on the page and in the ear and in the mind.[160]

[159] See the 'Introduction' to *Bouvard et Pecuchet* by Lionel Trilling. Gustave Flaubert, *Bouvard et Pecuchet* (New York: New Directions Press, 1954), v*ff*.
[160] Michelson, "Art and the Structuralist Perspective," 52.

Here Michelson's appears to adapt the phenomenology of Michael Fried's recent notion of art and modernist poetry as aspiring to absolute presence, as operating conversely against its signification. As an influence upon Frampton and film as much as it was a shibboleth to others in his artistic milieu, the phenomenological view of the work as transcending its objectivity demands to be placed within the context of the artist-filmmaker avant-garde—which as Frampton understood 'produces no object'—like music.[161] This idea of presentness, which for Flaubert is also found 'as the earth sustains itself with no support in the air,' is apposite to the qualities of /cloud/, which Damisch calls, elaborating on the formulation of a schematic by Brunelleschi, 'a body "without a surface",' and which 'cannot be "described" or reduced'.[162] As such, the signification refers only to that which cannot be signified, or which lies beyond signification. However, if it is also the case that, as Michelson says while reflecting on the phenomenology of Maurice Merleau-Ponty, 'our perception of the work of art informs us of the nature of consciousness itself,' the intervention of a conceptual critique into the meaning of the work dislodges the primacy of its immanent autonomy.[163] It is the intervention of this tension, of the meaning of the work, which I have argued *Palindrome* resists at the level of signification, but by principally demanding its spectators undivided attention, the lesson appears to be precisely one about the structure of the work in its isotropic autonomy.

This attempt at a purity in the encounter, unburdened by didactic explication, is supported by Michelson's critique of the semiotic basis of structural anthropology. By 'throwing a missionary's mantle of the semiotic over the nakedness of art's presence,' Michelson suggests, the impulse to determine the meaning of our encounter with the work leads to its covering over by an imported

[161] "Metahistory," *CA*, 138.
[162] Damisch, *Theory of /Cloud/*, 127. Flaubert is cited, from an letter to Louise Colet written in January 1952, in Michelson, "Art and the Structuralist Perspective," 51.
[163] Michelson, "Art and the Structuralist Perspective," 57.

discipline, which furthermore seeks to prove its social and anthropological significance. 'Garments of this sort are notoriously unbecoming,' she concludes.[164] But the sense in which Michelson was at that time also thinking of artist-films, like Frampton's, and her willingness to consider it in her presentation at a seminar 'On the Future of Art' at the Guggenheim Museum as following on from the development of 'Concept art' to 'conceptualism', is further obfuscated by her concession to the diagrammatic elegance of the scientific approach. Instead, she proposes that, 'structuralism may have more to say about the richly semantic field of film', and by this it is not clear where exactly the distinction between art and film may lie.[165] (It is also to be recalled that her lecture followed one earlier in the series delivered by the 'metahistorian' Arnold J. Toynbee.)

The delicate tension of *Palindrome*, and all artist-film of course, is that it attempts to occupies the space opened up between art and film (in the sense proposed by Michelson). The descent into the anti-form of non-knowledge, identified in George Bataille's 1929 notion of 'l'informe' (formlessness), could also provide the base materialism apposite to what Frampton had eventually called his interest in 'the chemistry of dirt', when referring to *Magellan.*[166] The formless presence of *Palindrome*'s cloudy emulsions, nevertheless, are also highly ordered by

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[164] Ibid.
[165] Ibid., 58.
[166] Frampton cited in *CC*, vol. 1, 73. It was only in 1996 that the concept of 'formlessness' was re-introduced to the contemporary art vernacular by Rosalind Krauss and Yves Alain-Bois with their exhibition, *Formless: A User's Guide,* at the Centre Georges Pompidou, Paris, May 22 – August 26, 1996. The alphabetical index structure of the accompanying text reflects aspects of Frampton and Andre's work in the 1960s. Frampton is briefly mentioned by Bois in the introductory text as the photographer of Andre's 'pre-minimalist, scatological series of cement works', and not as an artist as such. Andre objected to the photograph's inclusion in the *Formless* exhibition, reasoning that they were not representative of his work. This is despite their inclusion in the 1980 publication *12 Dialogues.* See Yve-Alain Bois, "The Use Value of "Formless"," in Rosalind Krauss and Yve-Alain Bois, *Formless: A User's Guide* (New York: Zone Books, 1997), 24. On Bataille's idea of 'non-knowledge' see Georges Bataille, *Inner Experience* (1943), trans. and with an introduction by Leslie Anne Boldt (Albany, NY: State University of New York Press, 1988), 52-55. George Bataille, *Unfinished System of Non-Knowledge,* ed. with an introduction by Stuart Kendall, trans. by Stuart Kendell and Michelle Kendell (Minneapolis: Minnesota University Press, 2004).

their structured and determined position in the temporal montage of the film as a work of serial composition.

In a way that also predicted the idea of the artist as ethnographer as one outcome of conceptual approaches to art, Michelson therefore seems to see in film the possibility of reconciling the 'logic' of structuralism with the non-referentiality of the modernist work.[167] Because of film's photochemical base, the automatist indexing of the image to a real event relied upon a complex mediation at once entirely abstract and at the same time entirely embedded in the 'structuring' of reality. In Frampton's work, this 'real' is found in the cloudy residues of emulsion that precisely signified the 'nothing' of the modernist work, but which could nevertheless be adopted into this 'richly semantic field of film' as signifying the labour of the artist and lab technician. Michelson's critique of Structuralism then, reveals Frampton's strategy of balancing his relationship to both poiesis and mathesis, to formlessness and formulation, as Michelson explains in her editorial eulogy to him in *October*, following his death in 1984.[168]

That this idea of film and cinema is furthermore linked by Michelson to Renaissance perspective suggests her positing the form within the history of art as such. Erwin Panofsky's writing earlier in the century, after all, had suggested the possibilities for the continuation of the iconographic analysis in the cinema.[169] This potentiality, by the time of the "Structural Film" essay by Sitney, had already undergone a myriad of formal iterations, however. The 'structuralist' filmmakers

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[167] Lisa Zaher notes Michelson's essay, alongside Jack Burnham's *Structure of Art* (1971), is relevent to Frampton's work in photography for better understanding what she calls his approach to the 'phylogenic structure of consciousness', which Frampton had undertaken on film. Zaher, "By Mind and Hand," 203. Jack Burnham, *The Structure of Art*, assisted by Charles Harper and Judith Benjamin Burnham (New York: George Braziller, 1971; revised, 1973).

[168] Michelson, "Poesis / Mathesis," 4-6. She rhetorically writes: 'What, in our times, worked to obscure Frampton from a proper understanding? First among other factors, his work as a filmmaker.' Ibid., 4.

[169] Erwin Panofksy, 'Style and Medium in the Motion Pictures' (1936, revised 1947), *Three Essays on Style*, ed. Irving Lavin with a memoir by William S. Heckscher (Cambridge, Mass.: MIT Press, 1995), 91 – 125.

Sitney identifies are, by 1969, largely through with any mode of 'non-referential work' for dealing with the film medium, and in fact seek to expand on the medium's inherent qualities by beginning to incorporate, as Frampton does, references to the history of film as a way out of the work's vulgar materialism. What Didi-Huberman would perhaps call the *sovereign accident* of the "Structural Film" essay by Sitney, therefore remains of central importance for elucidating the status of the filmic non-referent that in fact avoids adhering to only one aspect of the semiotic trinity—icon, index, symbol (as it was elucidated by the pragmatism of Charles Sanders Peirce (1839-1914))—in preference for a complex presentation of the machinations between the automatic apparatus in its theatrical mode and across the referential divide.[170]

Indeed Michelson had already written in 1966 of ciné-film's appearance as 'unique in the history of Western culture,' where for her the force of 19th century aesthetic concerns—in particular she refers to the wax museum tableau of the Musée Gravin in Paris, noting Panofky's suggestion of movement as additional to stationary works as rather fulfilling their desire for movement—could now be seen to prefigure the appearance of the cinema.[171] And it is Michelson, it seems, who understood better than Sitney just what was at stake in this moment of what she calls films' 'radicality', when she writes:

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[170] On the concept of the *sovereign accident* for art history against its mimetic and semiotic heritage see Didi-Huberman, *Confronting Images*, 252.

[171] Annette Michelson, "Film and the Radical Aspiration," *Film Culture*, 42 (Fall 1966): 34-42; 136. This paper was given at the 4th New York Film Festival in 1966. On the reception of radical film at the time of the festival see "The Festival, the factory, and feedback," in Andrew V. Uroskie, *The Black Box and the White Cube: Expanded Cinema and Postwar Art* (Chicago: University of Chicago Press, 2014), 173ff. It must be noted that Uroskie underplays the significance of Tony Conrad's screening of *The Flicker* at the festival that year, held between the 12th and the 22nd of September. On Michelson's legacy see Richard Allen and Malcolm Turvey, eds. *Camera Obscura, Camera Lucida : Essays in Honor of Annette Michelson* (Amsterdam: Amsterdam University Press, 2002). On *The Flicker* at the NYFF in 1966 see Joseph, *Beyond the Dream Syndicate,* 279.

> If the crux of cinematic development lies—as I think it does—in the evaluation and redefinition of the nature and role of narrative structure, we may say that the history of academicism in film-making and film criticism has been that of the substitution of novelistic forms as values for theatrical ones.[172]

Even by 1966 Michelson foresaw that the 'formal integrity' for the belief in film as a redemptive activity 'ultimately dissolves,' in the work of practitioners such as Brakhage, in whom she rightfully detected attitudes shared with the action painters and expressionists who were his peers.[173] As a form that could only be 'animated by a sense of structure,' Michelson realised that film had become another location for the aesthetic process which covers experience in its moment of revelation.[174] In the French theoretical rollout of 'structuralism' to which Michelson was so attuned, Roland Barthes (1915-1980) had already figured this awareness of the idea of composition as 'essentially an activity' fundamental to the idea of production.[175] By drawing on a network of relationships 'to other modes of analysis or creation,' Barthes presented his understanding of structuralism in 1963 as an essentially ideological process which sought to 'recompose the object in order to make certain functions appear'.[176] Composition then, is foregrounded for the organisation of the work as material for the re-making of the world, and it is precisely this impulse which is echoed by Frampton in 1971, in his "Metahistory" essay:

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[172] Michelson, "Film and the Radical Aspiration," 37.
[173] Ibid., 42.
[174] Ibid. Michelson's essay also appears in Sitney (ed.), *Film Culture: An Anthology* (1970), 404-21.
[175] Roland Barthes, "The Structuralist Activity (1963)," *Critical Essays*, trans. Richard Howard (Evanston, Il: Northwestern University Press, 1972), 214.
[176] Ibid., 216.

> If we are indeed doomed to the comically convergent task of dismantling the universe and fabricating from its stuff an artifact called *The Universe*, it is reasonable to suppose that such an artifact will resemble the vaults of an endless film archive built to house, in eternal cold storage, the infinite film.[177]

Furthermore, this aspect is something which cannot be so easily evaded by film, given its basis in the montage of images ordered in series.

In 1970 Sitney's postscript to the "Structural Film" essay introduced and focussed upon another work of Frampton's which dated from the same year as *Palindrome* (which it appears Sitney had not yet seen). Instead, Sitney speaks about *Artificial Light* (1969), which processes and re-orients images of Carl Andre and others, holding forth in a New York loft. After listing the permutational arrangement of the same shot sequence of *Artificial Light*, Sitney writes: 'It should be obvious from the outline that the filmic phrase functions like a tone row in dodecaphonic music and serial composition.'[178] With this, as well as Sitney's encounter at a Millenium Film Workshop lecture, with what he termed Frampton's 'atemporal alternative to the history of cinema,' the formal hypothesis of structuralism arrived at by Sitney is undone by its incorporation of tradition and

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[177] "Metahistory," *CA*, 137.

[178] Sitney, "Structural Film," in Sitney (ed.), *Film Culture Reader* (1970), 347-8. By 1979 Paul Arthur would make a point of noting the evolution of Sitney's treatment of Frampton, writing: 'For instance, where, in *FCR* [the Film Culture Reader version of "Structural Film"], Frampton is presented as the "most critical case of the ambiguity of the definition of structural film," (to my mind, an accurate assessment), by *Visionary Film* he is safely ensconsed within the canon.' Paul Arthur, 'Structural Film: Revisions, New Versions And The Artifact. Part Two,' *Millenium Film Journal,* nos. 4/5 (Summer-Fall 1979): 122. In *Visionary Film,* first published in 1974, Sitney writes that Frampton, along with Michael Snow, Paul Sharits, and George Landow, are filmmakers 'whose whole work lies within the domain of the structural film'. P. Adams Sitney, *Visionary Film* (1974), 412. By 2002 this line in the text had been softened to read 'whose work largely lies within the domain of the structural film'. Sitney, *Visionary Film* (2002), 352.

concern for cultural memory made possible by the model of the atlas.[179] Serial composition, substituted by film, allowed structure to emerge as the necessary adjunct to both the modernist remediation and recomposition of the artwork as much as for the critical analysis and the subsequent navigation of its historical material. It follows then, in Sitney's own words, that Frampton saw the horizon of his work as precisely directed against the conceptual notion of structure as the 'newest historical phase of the formal cinema,' and rather towards the invention of the ways to access the very basic qualities inherent to film in its own history.[180] Frampton's decision to place *Palindrome* within *Magellan*, then, perfectly encapsulates this ambivalence within structuralism as a semiotic anthropology opposed by the phenomenological critque of Michelson, and as a purely formal assessment of the cinema. Frampton's turn towards the atlas is therefore revealed by its accommodation of both the determinacy and indeterminacy of the endeavour. If the impulse of structuralism was a question of re-composition, its conflation with Sitney's notion of structural film is thefore not to be understood as concerned with its novelty, but rather with the invention of a tradition worthy of the name.

[179] Sitney, "Structural Film," in Sitney (ed.), *Film Culture Reader*, 348.
[180] ibid. For an example of the continued identification of his work as based in 'structural organisations' for the rejection of narrative, Frampton, coupled with stills from his film *Zorns Lemma,* is now posited as the prime example of the structural approach to film in the introductory textbook on film and the cinema by Timothy Corrigan and Patricia White, *The Film Experience: An Introduction* (New York: Bedford /St Martin's, 2012), p. 303.

## *Conclusion: Palindrome* and Cultural Memory

Frampton's obsession with the formal repleteness of the film form is best understood when *Palindrome* is understood via the 'serial attitude' of conceptualism, which at the time was concerned to order material in ways that removed the intuitive decision-making process common to the tradition of the artwork.[181] *Palindrome's* lulling of the viewer into a kind of hypnotic complicity with the transferred and re-ordered conflation of the avant-garde with experimentalism is mediated by the film's cloud-like images, even while it remains tied to the rhythmic clock-time of its four second cycles. The resulting layers of the simultaneously generative and de-generating 'cells' produced in order to expand and contract the entire film work, demonstrates the film's concurrent organisation of its determinate and indeterminate features. As such, the relationship of the work to both the institutional spaces of the museum, of MoMA, where it was shown in 1970, and the theatres run by the Film-makers Coops, which operated against the historicising role of the institution, shows how Frampton attempted to figure his work in-between the artistic divisions existing in the period. By allowing the film's 'unity' to cover its own tracks, *Palindrome* furthermore deletes the path taken by the film by inverting its form on its return. This negation is most clearly shown in an analytic video version used as a teaching aid for understanding the film, produced more recently by Frampton's colleague at SUNY Buffalo, Steina (1940—) (fig. 4.10). *Palindrome*, therefore, begins and ends around its empty centre, reinforcing the significance of the cut for montage. But it also operated in the space between the official and the alternative, leading to the idea of cultural memory. It is in this

[181] See Mel Bochner, 'The Serial Attitude,' *Artforum*, 6, 4 (December 1967), 28-33. Reprinted in *Conceptual Art: A Critical Anthology*, eds. Alexander Alberro and Blake Stimson (Cambridge: Mass.: MIT Press, 1999), 22-7. Bochner alludes to Kelly, and photographer Edweard Muybridge as prototypical serialist image makers, as well as to composers from the European avant garde such as Boulez and Arnold Schönberg. One could also compare Georg Lukács' thoughts on composition and abstraction as a 'paradoxical fusion'. Lukács, *Theory of the Novel,* 84.

renegotiation of the work's relationship to its historical situation that I have argued that *Palindrome* prepares the way for *Magellan*, and provides itself as a formal articulation of the atlas of film. By organising the images into a spatial relationship, Frampton takes the indeterminate effects of the cloudy film-ends and determines the frame-sets isotropically, as he says: 'both locally and globally'.



4.10 Comparative analysis video of the two halves of Hollis Frampton's *Palindrome,* by Steina.

Frampton presented "Notes on Composing in Film" at a conference titled 'Research and Composition' which was held at the SUNY Buffalo in 1975. Beginning with an anecdote from Ezra Pound, which suggested the poet must first learn and then *un*learn to write, Frampton addressed the conditions for the production of a work on film. Revising this formula for the era defined by Barthes' argument for the 'death-of-the-author', Frampton grounds his own compositional approach in terms of reading and *mis*reading 'as for the activity of poetry, so also for poesis at large.'[182] It is this idea, of a productive misreading, which allows the relationship between Structural Film and Structural Anthropology to emerge as one

[182] Hollis Frampton, "Notes on Composing in Film," *October,* 1 (Spring 1976): 105.

more theme for his work, just as it does in the idea of conflation as a productive exercise for the aesthetics of science. By deriving this path through the artistic phylum, from literature to music, and from his modernist predecessors, Frampton arrives at film as an artform he admits is only now 'verging on adolescence'.[183] However there is an instructive consequence to be found in this youthful emergence of film as for 'poesis at large', which is revealed by the apparently contradictory statement which Frampton makes towards the end of his lecture: that 'the whole history of art is no more than a massive footnote to the history of film.'[184] The disorienting temporality of post-modernist relativism, it seems, allows Frampton to posit film as both younger, yet prefiguring, art history as such. Furthermore, this demonstrates the peculiar logic of the metahistory, as akin to that which 'circles the split that cuts through it'.[185] By negotiating both the formal and the political conditions for its production, *Palindrome,* I have argued, figures at the centre of this idea of film.

In the published essay that followed his lecture (appearing in the first edition of the *October* art journal edited by Michelson with Rosalind Krauss and with Jeremy Gilbert-Rolfe), Frampton outlines the four modifications to 'narrative structure' which he determines may be employed by those who have discovered the 'axiomatic substructure' of their chosen artistic tradition: substitution, constriction, augmentation, and displacement.[186] This modular approach to the abstract conceptual categories which Frampton proposes to follow along medium-specific lines certainly allowed for an idiosyncratic explication as to their application. In the first instance, the substitution of the tone-row from music appears especially relevant for *Palindrome*, although it is the elaboration of displacement as the final modification, and as a Joycean strategy for dealing with the privilege of denotation

[183] Frampton, "Notes on Composing in Film," 108.
[184] Ibid., 109.
[185] Agamben, *Man Without Content*, 102.
[186] Frampton, "Notes on Composing in Film," 106.

in literature by 'making of the word a swarm of covalent connotations equidistant from a common semantic center,' which makes it most significant for the isotropic construction of what Frampton calls the 'closed system' of the film and its subsequent re-composition as a discretised 'organic code' that transcends its technical objectivity.[187] This addition to the idea of the work as simply a practice in artificial memory, therefore, extends the idea of metahistory towards the discourse on cultural memory that I have positioned it throughout this thesis. The indeterminate character of the work's cloud-like contents, beyond its formal arrangements, allow for a reading of the political intent of the work on film to operate beyond the given framework for modernist art as apart from the longer cultural traditions for representation. This negotiated position is what makes *Palindrome* such a compelling work in Frampton's catalogue.

Furthermore, as it was subsequently scheduled for inclusion in the longer film cycle, *Palindrome* provided a model for how to structure *Magellan* in a way that maintained its coherence. This problematises readings of the latter as addressed only to the openly utopian aesthetics of the historical avant-garde. Ultimately it appears that the generative potential of the musical tone-row which Frampton had 'substituted' to create the production of the phrases for *Palindrome* are the key for understanding the work as organised, as opposed to ordered, and Frampton provides this as an example central to the notion of substitution of one axiom for another, i.e. in 'the tradition of music', of tonality for melody.[188] It is the idea of substitution which permits the conflation of these modes, where Frampton grounds the work of composition on film as a deliberate *mis*reading of the traditions of literature and painting.

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[187] Ibid., 109. This reference furthermore recalls Frampton's argument to Robert Huot that Joyce constructed *Ulysses* around the central word in the work, 'Lemon' about which Frampton produced 7 minute film in the same year as he made *Palindrome.* Hollis Frampton, *Lemon,* 16mm, colour, silent, 7mins 17secs, 1969.
[188] Ibid., 106.

The keyless outcome of the twelve-tone row emerges in opposition to the cultural expectations and appreciation of music as harmonic, pushing back upon and shaping the cultural practice itself. The row made up of all notes available in the diapason, or musical scale, emerges from the substitution of the entire chromatic octave for any melodic mode and by producing an erasure of melodic expectation opens a space for a new encounter with music. While this may impact on memory trained to focus on melody, it is the degree to which the disorientation from the expected performance of the work leads to new demands on the spectator that Frampton has found to focus the encounter.

Just as Ellsworth Kelly relaxed his approach to non-composition in his work in the moment of discovering the monochrome panel as a "visual alphabet", the infinite permutations offered by the grammatical structuring of the frame as the basic filmic unit sets Frampton on a course for the production of his films which allows him to conflate the idea of the alphabet itself with the axioms he has found in the film apparatus, opposed to the contents of the image in each frame of film and leading him instead to the significance of the cut as the maximal fully ordered subset of film between its images.[189] In this way *Palindrome* also prepares the way for *Zorns Lemma,* which Frampton would complete in the following year.[190] And while the precise source for Frampton's interest in the form of the palindrome must remain a speculation (although it is most probably to be found first and foremost in his keen interest in Joyce, whose archives were to be acquired by SUNY Buffalo

[189] Bois, "Kelly's Trouvailles," 28. Kelly's original proposal for a book, *Line Form Color*, consisting of 40 pages of monochromatic panels and abstract compositions aimed at addressing painting to architecture, suggested it 'will be an alphabet of lines, forms, values, and colors, having no written word.' The proposal was originally rejected by the John Simon Guggenheim Foundation in 1951, and was only brought to completion in 1999 to accompany the exhibition of his early drawings. Ellsworth Kelly, *Line Form Color: 1951* (Cambridge, MA: Harvard University Art Museums, 1999).

[190] It is also in this way related to Frampton's use of the Wade-Giles syllabary of the Chinese language to accompany the sequence of single frame shots that make up the 'journey' film *Ordinary Matter* (*Hapax Legomena V*), 1972, 16mm, black and white, sound, 36mins.

between 1950 and 1968), it is certain that in his films from this period the importance of a particular notion of totality and symmetry emerged as a central concern of his work. If Frampton remained interested in the significance of the aesthetics of chance and concrete poetry, his work remains in proximity to Fluxus figures like Dick Higgins, who had begun to collect examples from all over the world of what he called 'pattern poetry'—including palindromes—in 1967.[191] By focussing on the discrete film frames and their frame rates, it is not hard to see just how great the demand for rigorous composition could be. Nevertheless, Frampton also allowed for the contingencies of organisation, opposing the strictures of order. At either end of this spectrum film must either be wholly determined and enframed—like a clock—and on the other, formless and indeterminate—like a cloud. With *Palindrome*, Frampton had found a way to accommodate both of these extremes, and it was in this way that he moved a step closer to realising the atlas on film that he envisaged for *Magellan.*

[191] Dick Higgins, *Pattern Poetry: Guide to an Unknown Literature* (New York: State University of New York Press, 1987), vii.

# 5. Clouds over the Matrix: The Atlas and the Total Artwork

*If written language is the shelter Recollection found, after her expulsion from the Garden of the Mind… and if Charles Babbage and the computer boys have banished Calculation from the human brain and locked her up in a brass machine… then I suppose a trap can be sprung for Memory as well. Is Memory more than the elastic set of all photographs, or is she less?*

Hollis Frampton, "Incisions in History / Segments of Eternity," *Artforum*, October 1974

## 5.1 Film as Technical Memory and the idea of Universal History

In March 1984 Frampton succumbed to cancer having just turned 48. In the same year a late work titled *Atlas* was published by Jorge Luis Borges, the Argentine writer who was now blind and who had helped to anchor Frampton's writing and lectures to the 'once upon a time' basis of rational fictions, figuring for literature what Frampton had intended for his idea of metahistory.[1] Borges' late work, a compendium of visual and textual documents selected and presented by the author from his own journeys around the world, is described by Georges Didi-Huberman as 'an atlas of the incommensurable, as any real atlas should be'.[2] In 1985 the National Aeronautics and Space Administration (NASA) renamed the Venus Radar Mapper program to Magellan. Established as a program for the mapping of the planet Venus in the late 1970s, the mission was launched on the fourth of May, 1989, aboard a space shuttle named *Atlantis.* It seemed, incredibly, that even though Frampton's project for navigating the 'infinite film' had been cut short by his fatal illness, the idea of the work was, like Tatlin's unrealised *Monument to the Third International*, deeply embedded within the conscious of the United States' exceptionalism and endeavour. *Magellan*'s prefiguring of contemporary events came as surprise, and Jean-Luc Godard would pay a late tribute to Frampton, and his idea of metahistory, alongside Ezra Pound in the final episode of his monumental attempt to organise film on video as *Histoire(s) du cinéma* (1988-1998).

The question remains why Frampton did not call his work an atlas of film. We now know he referred to it as requiring an atlas in his correspondence with Reno Odlin in the early 1960s, but he insisted on calling it *Magellan*, a proper name and not a concept or model, throughout the last twenty years of his life. One answer

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[1] Jorge Luis Borges, colaboración de María Kodama, *Atlas* (Buenos Aires: Editorial Sudamericana, 1984). The "Metahistory" essay begins with the words 'Once upon a time'. "Metahistory," *CA,* 131.
[2] Didi-Huberman, *Atlas,* 58.

for this question could be that Frampton wanted the work to remain firmly in the realm of metaphor, and as such in the sphere of cultural memory more so than history. Magellan, as an explorer, is a figure from history, but he also a figure of memory. This is important for the work, and the way in which it is received. Jan Assmann, for example, has demonstrated how this difference works for cultural memory in his book *Moses the Egyptian*, with respect to the reception of the Mosaic distinction and monotheism more generally.[3] Ultimately, however, Frampton prevaricates on the question of his commitment to conceptualising the didactic program for a metahistory of film as he had attempted to realise it even in the moment of early personal computing technologies. The reason for this may simply be that he was still not sure exactly what it was that he was aiming for, and the delicate balance between the determinable and the indeterminate was always threatening to come apart.

In 2010 a work by the artist and musician Christian Marclay (b. 1955), titled *The Clock*, debuted at the White Cube gallery in London. This work has a running time of 24 hours, or exactly 1440 minutes. Expertly mining the archive of the cinema for scenes depicting or announcing the actual time of the day, it operates ostensibly as a timepiece on-screen. Nevertheless, this enormously popular work makes no further reference to the fact of the cinematic convention determining the 24-frames per second playback time of the cinema, and the entire apparatus' ability to shape our experience of time is buried beneath the expectation of a seemingly inexhaustible pile of culturally recognisable or verifiably cinematic material.

Other than the elegant simplicity of the real-time cinema-clock, Marclay's work therefore offers little in the way of proposing cinema as a temporality that is

[3] Assmann argues that Moses, like the Graeco-Egyptian figure of Hermes Trismegistus, remains a figure of memory and does not appear as historically identifiable. To support this he points out that Hermes and Moses are often conflated throughout the historical discourse on either figure. See Jan Assmann, *Moses the Egyptian: The Memory of Egypt in Western Monotheism* (Cambridge, Mass.: Harvard University Press, 1997), 18ff.

anything different to the determined time of the everyday. Frampton's work, by contrast, took direct aim at the ecstatic possibility of film as forming its own 'continent bounded by time', as he states in the "Digressions" essay. Like the allegory of the discovery of a massive hulk filled with photographs, of Atlantis, the possibility that film provided a way to escape the mundanity of everyday time, and to offer something radically different, was manifest throughout all of Frampton's work. It is this quality, its undeniably utopian seduction by defamiliarisation, which led Frampton to attempt to see in film the possibility of another world, one where film could re-compose the entire history of art. Yet *Magellan* was also firmly rooted in the present, and as I have shown Frampton was often most happily engaged in simply responding to the environment in which he was working at the time. Furthermore, the unapologetic particularity of the project meant that *Magellan* remained partial and personal, even as it proposed to participate in the structural compulsion to reconstruct '*The Universe*' as Frampton had stated in the "Metahistory" essay. Universal history, it seemed, could only operate in the particular examples given by the individuated subject.

## 5.2 The Atlas and Global Art History

Based on the calendrical year, *Magellan* raises the question of how the work should be dated, and therefore historicised, when it was planned to run in perpetuity over the entire 365 days of the year (in fact overlapping by three days at either end and thus screening in perpetuity over 368 days). This question could be posed in the following way: is the 'synoptic conjugation' Frampton described in the "Metahistory" essay, or the 'Tour of Tours' as he also puts it, one that poses memory as something more than the infinite cinema he had imagined, or is it less? Is the synopsis the most suitable way to provide access to the impossibility of 'all knowledge', or is

there still more work to be done in this magical construction? In the pursuit of this one-to-one relationship, of the 'Map of the Empire whose size was that of the Empire', I have argued that Frampton's concept of metahistory is closest to the idea of cultural memory, a latent discourse that sets out to examine formations that are identifiable as 'embodied in literature, works of art, or other media'.[4] It is not only by participating in the work as such, but also in attempting to articulate how cultural memory may be organised in contrast to history, that Frampton's work can be seen to prefigure the concerns raised by many theorists and practitioners for the history of art and the veracity of history as such in the period following his death.

Furthermore, my examination of three of Frampton's films, *Magellan, Zorns Lemma*, and *Palindrome*, and my comparison of these works to the model of the atlas and the technical form of the memory theatre, proposed the concept of conflation as an important way of figuring the cut in montage, and as it related film to cultural memory. The necessity of conflation as a practice in the cinema and for images on film has allowed for an approach to the work which avoids a compulsion to situate *Magellan,* and in fact all of Frampton's work, within the dominant discourse of film semiotics. Frampton's contribution to artist-filmmaking, more than anything else, may lie in his ultimate refusal to offer a lexicon for the cinematic grammar, or to even attempt to generalise the existence of a language of the cinema in the terms which already existed. Rather, he sought to invent a tradition worthy of the complexity of film within a thoroughly global moment for art history.

My approach to Frampton's work as an atlas of film constantly reinforces the idea of a conscious articulation of the work as active only in the mind of the spectator, in both their material and psychological relationship to film images. As such, cultural memory has provided a method for distinguishing the autobiographical impulse found in Frampton's work in the following way: If

[4] Inez Hedges, *World Cinema and Cultural Memory* (New York: Palgrave Macmillan, 2015), 3.

Frampton is to be equated with the figure of Magellan, the conflation of their subjectivities—a common idea of film as identifying the "stars" of cinema with their characters in "real-life"—demonstrates that film provides a subjectivising impulse for all who encounter the cinema, and that there is no longer any way of distinguishing between the natural and the artificial, the organic from the inorganic, on film. Nothing less than a fundamental re-composition of our relationship to the world was what was required.

I have argued that Frampton's understood this through his opposition to 'the quaintly disinterested art historians of the nineteenth century,' which he named in the "Metahistory" essay as helping to precipitate the factual dismantling of history by science and dating to as early as Lessing's publication of the *Laocoön* essay in 1766.[5] Metahistory, and the infinite film, were Frampton's response to Joyce's "nightmare" of history, one that threatened to engulf the entire 20th century. The atlas of film was different, therefore, to the atlas in history. If *Magellan*'s second-order tour helped to navigate a 'continent bounded in time', the geographic locations for the films are those which were marked on the calendar and provide a global model for the idea of art history. This is prototypical for similar proposals put forward following Frampton's death, in the work of Hans Belting for example, after *The End of the History of Art.* This link suggests that *Magellan* is an atlas for the geography of time as it is determined by the cinema. As such it is akin to Warburg's *Mnemosyne Atlas* project, which attempted a similar 'cinematic' distance for images, and could also be seen as an atlas for the monuments produced by the contested spaces of modernity, and as witnesses to the events of history.

[5] "Metahistory," *CA*, 132.

5.3 The Grammatisation of the Image

The theorisation of this paradigm, of the cultural memory of an event, is apposite to that which has been examined in the philosophy of Alain Badiou, who has based his theory of *événement* (event) on the structural and systemic logic of set theory.[6] In an interview from 2007, included in the English translation of his text *The Concept of Model* (which was first given as a conference in Paris—'on May 1968' as Badiou himself states, meaning at that time) the philosopher reflects that in 1968 he had proceeded from the idea that 'logic was the thought of what was structural and mathematics was the thought of the system structured'.[7] Since then his refinement of this idea has meant he has moved, as he says, from the 'formal' to the 'topological'.[8] I have argued that Frampton's idea of film, and his approach to *Magellan,* developed in a similar way in his theory of film, from structure and structured systems, and onwards towards a topology of film as concerned principally with the image. Frampton's work helped to shift this discursive emphasis from text to image, from the question of order to one of organisation, in the discourse on aesthetics. Ultimately, what Frampton was searching for with *Magellan* was, as he said at Harvard University in 1977: 'a social model for film'.[9]

Along the way, the atlas in art history has threatened to become inexplicably bound up with the idea of totality, of the *gesamtkunstwerk* as the apotheosis of modernism. As an original theory of *Magellan*, Brian Henderson's proposal attempted to link Frampton's work to European modernism as it continued in post-WWII North America. It is now easy to distinguish this idea from its continuity, and

[6] Alain Badiou, *Being and Event*, trans. Oliver Feltham (New York: Continuum, 2005). *Being and Event* was first published in French as *L'Être e l'Événement* (Paris: Seuil, 1988).
[7] Alain Badiou, *The Concept of Model: An Introduction to the Materialist Epistemology of Mathematics,* eds. and trans. Zachary Luke Fraser and Tzuchien Tho (Melbourne: re.press, 2007), 85.
[8] Ibid.
[9] See Appendix 1.

Frampton's encounter with video and digitisation attests to the fact that his world was fundamentally different to the conditions under which the historical avant-garde were practicing their art earlier in the century. In response to Henderson, I have asked the following: Is *Magellan* a return to this 19th century ideal of redemption and utopia, or is it something different? In its resistance to semiotic structure, Frampton's insistence on images as the other side of language, approaches the aesthetic apotheosis of the total artwork through the idea of the atlas. However, the atlas is different from for the presentation of a synthesis of all of the arts, it is selective, it is partial, as Badiou says of set theory, it is a 'pure multiplicity'.

Perhaps the question could be posed differently given the shift, where 'montage' had become 'mosaic', as Timothy Druckrey writes of Stan VanDerBeek's *Movie-Drome* project from 1966. Why did Frampton decide against this impulse to 'temporal and spatial fracture' for *Magellan,* and to stay instead within the theatre and not the 'sphere of probability' touted by the exponents of an expanded, or even exploded cinema?[10] Initially, *Magellan* appeared destined for the coming 'spatial environments' of expanded arts performance, but ultimately it remained a 16mm film project for presentation in the cinema, replete with its large gaps in programming and the inevitable down-time that comes with spacing a 36-hour screening out across an entire year. It is this concession to the partiality to the medium of film, that also shows how *Magellan* escapes the totalising impulse which continued in its attempts at precipitating the indetermination of art and life.

The final form for *Magellan,* however, can perhaps be found in its anticipation of the digital model of the cloud, which has gradually emerged in recent years. An atmospherics of discrete images, controlled by coded gateways and computing algorithms, the cloud signifies the ongoing tension which exists between the determinate and indeterminate experience of representation. Perhaps this, more

[10] Timothy Druckrey, "Sensory Architecture and the Cinematic Imaginary," *Vertical Cinema*, ed. Mirna Belina and Sonic Acts (Amsterdam: Sonic Acts Press 2013), 18.

than anything else, suggests the ongoing relevance of Frampton's work. If we must ask: what does the atlas of film offer to art history? To cultural memory? In the end its incomplete, critical model proposes an intrication, a disentangling of the necessicity of complexity, and of the conflation of the subject in cinematic time. *Magellan* therefore symbolises the interminability of the dialectic, of the work that continues in this way, and finally that the cinema's lack of a future is also its possibility for an emancipatory aesthetics, alongside rather than against everyday time.

# Appendix

*Magellan and Perspective – Hollis Frampton at the Carpenter Center for the Visual Arts, Harvard University, December 1977.*

Transcript marked: Hollis Frampton speaks at the Carpenter Center for the Visual Arts, Harvard University – December 1977.

(HFA Series 1 (54). Box 2, folder 11 Frampton, Hollis. "Harvard Carpenter Center Lecture", pp. 1 – 13. )

[for Robert Gardner interview (Jan. 13 1977) – see Documentary Educational Resources]

5pp. transcribed. From the Frampton archive at Anthology Film Archive.

We are talking tonight about a object that hopes at the same time to engage and escape the academic. That purports at the same time to be discussed, on account of its great length, and the time it will take to make, would like to sustain in some kind of mid-air of entertainment, as the Elizabethan phrase went, and at the same time to evade definition, and that is, it is a kind of monstrocity that is probaby best approached in many ways at the same time. It would be easiest if we could turn temporal perspective around, and imagine not that we were looking at some pieces of something that is coming into existence, because that ill-befits the circumstances, but rather some shreds or shards of something that has come into existence, a large part of which *we* do not have because we have been insufficiently diligent in finding it. I would rather, for this occasion, approach this thing that I am making, which is a cycle of films that I have called *Magellan*, to approach it as a kind of archaeological enterprise, as a sort of new stone-age kitchen midden, as a garbage heap. Now it is I think a kind of commonplace of archaeology, a commonplace of the past, that the most dignified part of the life that we've passed is the toilet and the garbage pile. This distinguishes the past from the future, because of course the future has no dignified part at all. Predicting the future is the only relationship we can have with the future, [it] is a supremely undignified activity. We're sure to be wrong if we talk about the future, if we talk about the past we're always certain to be right because we're matching our own caution against our own meagre possibilities for adventure, after all the only real possibility for adventure we have is to go into debt. And the only debts that we can amass for ourselves are to draw upon the bank of the past. So that rather than cast my work into the supremely undignified posture of prediction, Jeanne Dixon says that Frampton will finish *Magellan* by 1985. Predictions of course are always better than the psychic in the supermarket because they're likely to outlive the psychic, you understand. It would be better to invert time and to look at it as a fragmentary past work. Roland Barthes says that the spectator, the reader, comes into existence when the author dies. I am not now before you in the posture of a creative artist, but rather I am standing here, leaning over, in a kind of semi-morbid state, as a spectator myself, so obviously there is no creative activity going on, I'm a spectator along with you. I would like to be supported in that way, and rather than subjecting myself to the indignity of someone who's saying that I am going to do so & so I would rather say that I have done so & so. Which are these fragments, which you are about to see. And to imagine from these fragments, what the whole work might have been like had the author been able to finish it.

This suits me of course because it maintains the images in the spectrum of the problematic rather than in that of a kind of religion, a dogmatic. One does not, unless one is enormously privileged, come into the world in the state of perfect alienation. The first painters, the first people who had the privilege of being attacked by their fellows for putting pigments on chicken bones instead of the ends of their tongues, came into the world in a state of perfect alienation. Film never had that privilege because it inherited not the alienation of painting, not the alienation of drama, not the alienation of prose fiction, that was far too luxurious, but rather the possibilities for contemplating what it would be like to do the real thing that you were doing. What I mean is, that film immediately wanted to be as complete as full as complicated as satisfying as the novel, as painting, probably as sculpture, probably as prose description, immediately it wanted to do that, and it couldn't, because it was primitive, because it was pitcast, because it was too satisfying as an illusion. We cannot recapture that time. That is not a time of innocence, that is a time when everyone was able to luxuriate in alienation. Film enjoyed 20 or 25 or 30 years of being perfectly problematical. A time when it wasn't even known whether you could make money out of it. It wasn't known whether anybody wanted to look at it, it wasn't known whether it was technically feasible, did it look like a painting that was just springing into motion. Was it acceptable if it did that? Did it look like a drama? Could it talk? Could it not talk? These were unknowns.

It is a great luxury to be totally alienated, to be totally outside of your culture. All of the film we know about is involved in the culture, all of the film that we know about and, in my case deeply care about, is massively involved in a criticism, an attack upon, an attempt to understand the world that we live in, which of course is made up largely of images that come from the culture, and propose to retrieve the possibility of living a life making images. A modest activity, making images that will still be able to claim something for itself from the culture. Now; the culture is supposed to help us. It is supposed to help us get through the world without thinking. We are taught to read not so we can be creative, have interesting thoughts, but so that we can read signs that say "no right turn". We go to school in order to do that not even in order to learn to read but so that we shall be taught to punch in by 8:15 in the morning. By the time we have got out of school, we have learned to punch in by 8:15 in the morning, we have learned to read "no right turn", we have also on our own, looked at 15,000 hours of unregulated, ungoverned, undecoded images, that constitutes our real education. I grew up like that, everyone grows up like that.

Magellan is a film that like all, like all things, since I have not have not had the luxury of perfect alienation but only the partial luxury of imperfect alienation, comes out of an imperfect understanding of my culture. It is probably easiest to imagine it as a project, it it is understood not as a project in drama or a project in literature, but as a project in sculpture, but as one that exists as a work of sculpture that exists in time rather than space.[1]

In the period immediately following a revolution, the 60th anniversary of which recently passed, there was a kind of explosion in the arts in the West, the qualities of which we are not qualified to assess. One of the major projects that came out of the revolution, out of that great change, was advanced by a very young man, a man far younger than myself, who grew old making picture postcards of flowers, I

[1] *Sculpting in Time* is the English title of a book that the Russian artist-filmmaker Andrei Tarkovsky would publish in 1986, just prior to his death. Andrei Tarkovsky, *Sculpting in Time: REFLECTIONS ON THE CINEMA*, trans. Kitty Hunter-Blair (New York: Alfred A. Knopf, 1987).

believe, and died with his major project unrealised. That man was Vladimir Tatlin, and that project was a work that we cannot name, not only a work of sculpture, because it transgressed upon the spaces of Western sculpture, which was called the Monument to the Third International. It was to have been 3 times the height of the Empire State Building, that great phallic erectation into the space of Western capitalism, which combined a group of Euclidean solids, a calendar, a set of civic utilities, a bunch of kinds of information, all at the same time, all rotating at different rates, 1/3 of a mile high, made of glass and steel. The problem with the Monument to the Third International was the problem that art has always had in the vortex of power, mainly that there were more pressing needs. Trotsky, in this case, denounced the monument, saying that the poor must be fed. He was correct, the monument was not built. There are other ways to build monuments. The ways to build them are to build them immaterially, in the mind, in ways that cost the culture little, in ways that, if they succeed, that is to say if they at once entertain and inform the culture within which they subsist, they may endure without costing the culture very much. The failure of Tatlin's great monument informed a number of people of my generation, I think, who had studied that time. So that it might be reasonable to see this work, which is calendrical, which involves a number of different kinds of cultural shapes impinging upon each other and interfering with each other as a kind of answer to an unsuccessful revolution in the arts, and unsuccessful political revolution. It is a work that involves a calendar, a set of modes of seeing, in particular a set of modes extrapolated from a culture in which film is permanently alienated, all at the same time, one after another, all of the above, some of the above, none of the above.

Very well then, out of a possible 36 hours, if I live long enough, and can make enough films, we have a number of segments ...
(Frampton introduces the films, and says he will return after the screening.)

It looks as though, that this is a dissecting table. And we have here something like the chance meeting of an umbrella and a sewing machine. It is a very old and [unintelligible] conjunction. But rather than the ancient model of surrealism, which predicts fertile and problematical conjunctions of that kind, I would rather perhaps think of about a kind of social model for the situation, and for the situation of film...

A social model for film. We're accustomed to think of film as a great inheritor. We have been told to think of film as the fruitful inheritor of all the things that the other arts didn't want. Probably because they were... too...problematical, too disjunct to deal with. But I wonder if there isn't a model that might not interest us more, that perhaps interests me more. And that is to transpose the predicament of of film sideways and to compare it not with the developments of the other arts in the West, about which we're ready to make a certain set of assumptions, namely that they have become civilised, but rather to the gross development of social structure in the West, or over that part of the world we know something about. We are told, or we imagine, that human societies progressed in roughly the following manner, that the oldest cultures of which we have knowledge, and there are very many of them, are hunting and food gathering, foraging cultures that have extremely complex systems of kinship, and speak in different languages. There are still with us on the planet, some remnants of cultures that have begun to practice a certain kind of agrarian habit... Their kinship systems are less complex, they take up less territory, they exhibit more stability. They do a certain number of things for themselves and they war among themselves. And then of course, there are ourselves, the civilised people, who live in advanced agrarian societies, which are more or less

self-sufficient. We do not forage, we do not gather. I wonder... I'm trying to keep the [discussion?] on a polite level, which befits conversation in a university, that is of course a mental institution, I wonder if film, as it has been practised so far, is not the typical art form of a hunting and foraging culture, in which one goes out and shoots it on the hoof. It is a culture for men whose gratifications are for those who like the crunch of the vertebrae between the teeth. Who like the sweetness of hot blood in the mouth, who like then to take it home, as a kind of victory, to the village, so that all can gorge, to draw it, to quarter it, to cut it down, to make stew of it. To enjoy at leisure that thing that the steppes have given the heroical gatherer, or at a lower level, to gather it like roots and berries of a weak foraging culture that [has become] post-carniverous. By that definition animation is perhaps more civilised because it practices a kind of weak cultural agrarianism, it has begun to domesticate its animals, to select them and to produce such things as rabbits that talk. It discards genetic experiments, those of primitive plant breeding and animal selection on the cutting room floor. It produces birds that behave like high-powered automobiles. We are far, as artists by that model, from building the city on the hill. It serves, probably definite cultural needs. [...] because it's an old habit of mine that I can't explain, I would like to not proceed as [...] because I think film is a transitional art that cannot be hung but to practice in as many modes as possible, so as to make some kind of pathway, out of what we believe we think is now the culture into something that we will not recognise is a culture. In other words I would of course like to have it both ways, I would like to be a both an inheritor and a squanderer, I would like to be both creative and pedantic, which is to have both of the sloppiest [...] the culture offers at the same time, I would like to be both an author and a reader, spectator, at the same time. But most of all, I would like to build someplace where a particular person would be at home. Myself, mainly; like myself tonight. I was a spectator, I was a reader, I was a watcher before I was a maker, and while I was a watcher and a spectator, I thought myself to be a protagonist. It was easier in those days because the antagonist was dead. Now the antagonists are alive, but I have suspected that as we have found ourselves in a time that postdates modernism, the protagonist of a work of art has become the spectator. I would like to locate more of the work [...] we're privileged to find in that uncorrupted arena of happiness...[unintelligible] watching that forever suspect arena, creation.

So that I'm trying in this work to make a transition for myself between hunting and a late agrarian culture, at least for art, between making and watching. Between the heroism of a certain kind and a citizenship of a certain kind. To make conjunctions that are perhaps more civilised and more complicated than [...]. Film is already a machine, it is already a sewing machine and a dissecting table, and this is already an umbrella under which we're discussing comparatively safely. That seems too simple a situation for us... and if it's possible, I'd like to open this room for a few questions.

*Questions follow...*

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