

Université de Montréal

Random Patterns?
Orderly Disorder in Contemporary Narrative

par
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Département de Littérature Comparée
Faculté des arts et des sciences

Thèse présentée à la faculté des études supérieures
en vue de l'obtention du grade de
Philosophiae Doctor (Ph.D.)
en littérature, option littérature comparée et générale

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École de Graduate en Études Contemporaines
Random Pattern

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Orderly Disorder in Contemporary Narrative

présentée par:
Claudia Kotte

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Sommaire

Cette thèse prend son point de départ sur le rayonnement du "chaos" dans la pensée contemporaine; elle discute de la pertinence des notions de chaos, de désordre et d'ordre dans l'analyse des récits. Étant donné l'importance du récit comme forme principale de savoir dans toute culture, la fascination pour le chaos a coïncidé avec un nouvel intérêt interdisciplinaire pour le récit en ce qui concerne son organisation et sa légitimité. Depuis Aristote, c'est surtout la notion d'intrigue qui a été identifiée comme le facteur principal d'ordre, même si l'intrigue est perçue de façon plus ambivalente dans les théories récentes de Brooks ou Ricoeur. Le paradoxe productif d'un ordre désordonné revient donc dans la notion de concordance discordante en narrativité. Je me penche ici, dans cette thèse, sur trois textes littéraires contemporains et j'effectue un "reading for the plot" à la manière de Brooks, c'est-à-dire que je vise à dégager les intrigues qui gouvernent ces trois récits.

Palomar, la dernière oeuvre d'Italo Calvino, présente de façon ironique la confusion des savoirs scientifiques et mythologiques et illustre un nouveau mysticisme scientifique. Cette confusion entre physique et métaphysique se traduit, avant tout, par une abondance de descriptions, incluant des listes et des parenthèses. Celles-ci impliquent à la fois les notions de continuité et de discontinuité, d'ordre et de désordre, et elles fournissent au récit une multiplicité de directions au lieu d'en anticiper la fin.

Le chapitre suivant est consacré à l'analyse d'une structure interne dans *A History of the World in 10 1/2 Chapters* de Julian

Barnes. Les répétitions présentes dans les histoires hétérogènes de ce texte signalent un jeu autour de trois intrigues universelles, qui ont été imposées à l'histoire au cours des siècles: L'eschatologie judéo-chrétienne, la téléologie séculière de Hegel, Marx et Darwin ainsi que l'éternel retour du même. Pourtant, si plusieurs histoires de Barnes suggèrent une structure, d'autres mettent en question chacune de ces intrigues et démasquent l'histoire du monde comme un processus sans lois, ordonné uniquement par un narrateur. Cette vision fait écho aux études historiographiques de Hayden White et d'autres, qui ont analysé le rôle de la rhétorique et de la mise en intrigue dans les récits historiques.

Le chapitre suivant traite du chaos dans *White Noise* de Don DeLillo, lequel est produit par les nouvelles technologies d'information. L'accumulation de crises ainsi que l'ubiquité des messages disjonctés indiquent la dispersion des liens en même temps qu'elles provoquent des attitudes extrêmement holistiques et irrationnelles, et plus particulièrement la paranoïa.

La conclusion porte sur plusieurs facteurs de dés/ordre qui reviennent dans les chapitres précédents. Tandis que la concordance peut être associée à la configuration et à l'introduction de liens, la discordance est surtout identifiée à l'épisodicité. La thèse se termine par une réflexion sur l'avenir de la forme narrative, et plus particulièrement sur l'efficacité de l'immense connectivité offerte par l'hypertexte.

Résumé

Cette thèse prend son point de départ sur le rayonnement du "chaos" dans la pensée contemporaine - concept surtout diffusé par les théories du chaos dans les sciences naturelles; elle discute de la pertinence des notions de chaos, de désordre et d'ordre dans l'analyse des récits. Étant donné l'importance du récit comme forme principale de savoir dans toute culture, la fascination pour le chaos a coïncidé avec un nouvel intérêt interdisciplinaire pour le récit en ce qui concerne son organisation et sa légitimité. Depuis Aristote, c'est surtout l'idée d'intrigue qui a été identifiée comme le facteur principal d'ordre du récit, même si celle-ci est perçue de façon plus ambivalente dans les théories récentes de Hayden White, Frank Kermode, Peter Brooks et Paul Ricoeur. Le paradoxe productif d'un ordre désordonné revient donc dans la notion de concordance discordante en narrativité.

Dans mes analyses, je me penche sur trois textes littéraires contemporains et j'effectue un "reading for the plot" à la manière de Brooks, c'est-à-dire que je vise à dégager les intrigues qui gouvernent les trois récits. Le choix de ces textes est motivé non seulement par leur performance chaotique (elle se traduit par une accumulation d'histoires hétérogènes et par la fragmentation du récit), mais aussi par leur réflexion sur des processus de désorganisation dans la nature, dans l'histoire et dans notre société moderne d'information.

Palomar, la dernière oeuvre d'Italo Calvino, présente de façon ironique la confusion des savoirs scientifiques et mythologiques et illustre ainsi un nouveau mysticisme scientifique. Cette confusion

entre physique et métaphysique se traduit par une abondance de descriptions, qui incluent des listes, des catalogues, des phrases elliptiques et des parenthèses; celles-ci manifestent une coexistence du continu et du discontinu. Le mode descriptif essaie de rendre la diversité du cosmos, mais il n'arrive pas à maîtriser l'hétérogénéité infinie. Comme les différentiations quasi-infinies établies par M. Palomar mènent paradoxalement à un nouveau chaos indifférencié et que le descriptif fournit ainsi à l'intrigue de multiples directions, le texte trouble l'ordre linéaire d'un itinéraire. Pour Calvino, la littérature se révèle être ainsi un instrument cognitif pouvant critiquer d'autres formes de savoir et mettre en conflit une pluralité d'approches interprétatives.

Le chapitre suivant est consacré à l'analyse d'une intrigue dans *A History of the World in 10 1/2 Chapters* de Julian Barnes. Les répétitions et les récurrences présentes dans les histoires hétérogènes de ce texte y sont relevées; de leur analyse découle un jeu autour de trois intrigues universelles, qui ont été imposées à l'histoire au cours des siècles: l'eschatologie judéo-chrétienne, la téléologie séculière de Hegel, Marx et Darwin ainsi que l'éternel retour du même. Pourtant, si plusieurs histoires de Barnes suggèrent une structure, d'autres mettent en question chacune de ces intrigues et démasquent l'histoire du monde comme un processus sans lois, déterminé par le hasard et le chaos et ordonné uniquement par un narrateur, l'historien. Cette vision rappelle l'institutionnalisation de l'histoire comme discipline "scientifique" et fait écho aux études historiographiques de Hayden White, Paul Veyne et d'autres, qui ont analysé le rôle de la rhétorique et de la mise en intrigue dans les récits historiques.

Le chapitre suivant traite du chaos dans *White Noise* de Don DeLillo, lequel est engendré par des messages flottants produits par les nouvelles technologies de l'information. L'accumulation de crises ainsi que l'ubiquité du bruit sonore et des messages disjonctés indiquent la dispersion de liens (causals ou autre) en même temps qu'elles provoquent des attitudes extrêmement holistiques et irrationnelles, et plus particulièrement la paranoïa. Au lieu de représenter un monde rationnel, illuminé et cohésif, la société d'information est caractérisée par l'incohérence, l'impossibilité de connectivité et le retour de diverses formes de spiritisme. L'ambiguïté du bruit - en tant que perturbation insignifiante ou message caché - est doublée de l'ambivalence de l'intrigue construite par le narrateur Jack Gladney. D'une part, la mise en intrigue aide à démêler le chaos des bribes d'information et sert à organiser et expliquer le monde; elle permet également au narrateur d'établir son identité narrative et de devenir maître de son destin. D'autre part, l'intrigue introduit sa propre logique; elle est toujours orientée vers une fin, même si c'est précisément cette fin, la mort, que le narrateur cherche à éviter. Dans sa mise en intrigue, l'intriguant est donc à la fois sujet et objet.

La conclusion porte sur plusieurs facteurs de dés/ordre qui reviennent dans les chapitres précédents; tandis que la discordance est surtout associée à l'épisodicité et au manque de liens, la concordance l'est à la configuration, à l'introduction de connections. Plusieurs éléments récurrents signalent l'absence de tout ordre en même temps qu'ils mènent à des excès d'ordre (tels que la superstition et le holisme): la disjonction entre cause et effet, telle qu'elle survient surtout dans l'accumulation de crises et de catastrophes; la fréquence des répétitions

qui révèlent la singularité des phénomènes plutôt que de dévoiler une intrigue; la prédominance de la parataxe, i.e. le principe de conjonction et de disjonction, qui est inhérent, entre autres, aux listes, aux digressions et aux méditations. La thèse se termine par une réflexion sur l'avenir de la forme narrative, et plus particulièrement sur l'efficacité de l'immense connectivité offerte par l'hypertexte.

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I. Introduction: On the Uses and Abuses of Chaos Theory for Literary Criticism

Chaos, as more than one critic has observed, is booming. No longer only designating revolutionary activities or social upheavals in everyday language, chaos has recently become a buzzword in such catch phrases as "deterministic chaos" and "chaos *theory*" and has thus regained part of its cosmological import. Although its importance is still highly questionable, the recent science of chaos is already hailed as the third paradigm change of the twentieth century (after relativity theory and quantum mechanics). The term "chaos" has, of course, a longstanding philosophical and mythic heritage, ranging from Hesiod's *Theogony* over Ovid's *Metamorphoses* to Nietzsche's metaphysical supposition: "Der Gesamtcharakter der Welt ist dagegen in alle Ewigkeit Chaos"¹. A foundational concept in cosmology and a mysterious topic of fascination from antiquity up to the present moment, chaos has variously been regarded as the primordial state of the universe², a void or unformed matter, and has also been extended to refer to any anomalous condition or event outside conventionally sanctioned codes of order, which must be overcome so that civilization can begin or be restored. Although a situation that carries power and

¹ *Die fröhliche Wissenschaft*, Frankfurt: Insel, 1982, § 109. ["The general character of the world, on the other hand, is to all eternity chaos" (my translation)]

² The English word "chaos" goes directly back to the Greek word *χάος*, whose first occurrence dictionaries commonly situate around 700 BC, in Hesiod's *Theogony* (verses 105-116). Chaos in this context refers to a "gaping void, yawning gulf, chasm or abyss". In the theological context, chaos appears in the Hebrew version of Genesis (fourth century BC) as "tohu-vabohu", a dark formless waste that is shaped into order by a God. Biblical allusions also suggest water with its turbulent and vital qualities as the most prevalent natural metaphor for chaos. This designation later influenced Ovid's notion of chaos in the *Metamorphoses*; the poet takes chaos as the original formless and confused material ("rude and lumpy matter") which requires the agency of a transcendental being to give order, harmony, and structure.

potency, chaos's negative connotations of social disorder, confusion, turbulence, unpredictability, and instability have prevailed up to the twentieth century.

Accordingly, the history of thinking about chaos has, until quite recently, been one of devaluation. As Clément Rosset has pointed out, occidental thinking is based on the expulsion of chance, disorder, and chaos, for the task of philosophy and other disciplines has always been considered that of discovering order and structure within an apparent chaos.³ Suppressing the view that chaos and chance might be prior to any genesis of order, Western metaphysical thought has traditionally privileged cosmos or order as the accepted norm so as to reduce, limit, and control the inferior opposite term, chaos or disorder, an anarchic, undesired state, the violation of an ideal social or natural order.⁴ Sanctions and limits to disorder had to be established; pattern had to be imposed upon chaos. In contrast to its rich semantic baggage and its resulting wide spectrum of meanings, chaos can thus be characterized by a simple binary opposition to cosmic order, necessity, difference, and determinism. At least in institutionalized religions, too, only the cosmos is linked to God; chaos, by contrast, is the enemy of the sacred. A

³ *Logique du pire. Éléments pour une philosophie tragique*. Paris: PUF, 1971.

⁴ However, non-Western mythologies (Buddhist, Hinduist, Taoist) and civilizations perceive more of a dialectical relationship between cosmos and chaos and show that binary oppositions do not exhaust the possibilities between structure and formlessness. The ancient Chinese, especially Taoist perspective, sees both terms, disorder and order, as reciprocal and inextricably bound up with each other. Chaos, in this view, also marks transformations and transitional situations, but it represents a fruitful, natural and non-threatening force without which creation would not be possible. As such, chaos is not seen as the antagonist of cosmos, but rather as its partner. Hun-tun, the Chinese principle of chaos represents a rhythmic source of life's regeneration at least in early Taoist religion. Eugene Eoyang even contends that notions of self-similarity and hierarchies of scale also strike Taoistic chords. ("Chaos Misread: Or, There's a Wonton in My Soup." *Comparative Literature Studies* 26 (1989): 271-284.)

positive view of chaos could only exist outside the boundaries of rational, logical structures, as for example in mysticism and literature.

A certain "chaology", which attempts to explore the primordial state of the universe and bring chaos within the confines of ordered human rationality, has existed from early on (in the fields of theology, philosophy, sociology as well as aesthetics), and it is, curiously, experiencing a revival today as the entirely secular study of nonlinear differential equations and "deterministic chaos". In the last two decades or so, scientists have striven to empirically confirm that we are virtually surrounded by chaos. They have discovered "random patterns" in numerous fields, ranging from the growth of populations in biology, weather patterns in meteorology, the spread of diseases, the rise and fall of shares at the stock exchange, to such banal daily incidents as dripping faucets, the rise of cigarette smoke or the onset of turbulence when milk drops into coffee. The resulting "chaos theory" has thus revived the mythic concept of chaos with its rich semantic baggage, yet has rejected the mutual exclusion and logical opposition of order and chaos. Instead of naively exalting chaos and thus merely inverting the hierarchical structure of dualistic thought, the recent science of chaos has given rise to a new understanding of chaos as hidden within order and order emerging out of chaos. Since random noise and disorderly phenomena have been found to yield to patterns that eventually obey scientific laws, interactions between chaos and order can now be perceived. The notion of an orderly disorder is no longer paradoxical, as systems may be stochastic, though not random; disorderly, though deterministic. As a result, chaos is no longer rejected as an absence or a void, but it is considered more fecund and innovative than order.

Bereft of all mythic terror and no longer in need of a God to shape it, today's chaos is spontaneous and self-organizing.

Although recent mathematical and physical inquiry, at least in its popular versions, has strongly fueled the polysemous circulation and reevaluation of "chaos", it has, ironically, revived various fantasies about nature's eccentricities instead of demystifying its mythic baggage. Pictures of fractals, the icons of chaos, which provide visible, almost tangible clues for understanding such qualities as self-similarity, strongly contribute to the mystification of chaos theory in that they suggest a fascinating new world of geometric order on every scale of the universe. Popular scientific publications such as James Gleick's *Chaos*⁵ and Peat's and Brigg's *Turbulent Mirror*⁶, as well as various coffee-table books that reproduce the fractal landscapes of the Mandelbrot set testify to as well as feed into this possibly unprecedented commercialization of scientific knowledge. They exploit chaos by turning it into commodity that appeals to a sense of beauty and astonishment and consequently prompt its transfer to non-scientific realms. While the great merchandizing triumph of chaos theory has led to a backlash within the established scientific community, chaos has become the subject of a "strange attraction" in a number of non-scientific fields. In a sweeping homogenization of aesthetics and science, dubious New Age trends for instance have adapted concepts of self-organization in order to legitimate their spiritual interests and holistic vision of the universe. Chaos now promises liberation from stifling rationalizations and

⁵ *Chaos: Making a New Science*. New York: Viking, 1987.

⁶ John Briggs and F. David Peat. *Turbulent Mirror: An Illustrated Guide to Chaos Theory and the Science of Wholeness*. New York: Harper & Row, 1990.

strained teleologies. It has thus itself become an epidemic or a cult with its proper prophets, icons, rituals and New Age followers.⁷

It is hardly by accident that the fascination with chaos arises at the present moment, i.e. in an age in which numerous kinds of networks have multiplied and in which various metaphysical orders have become suspect. Scientists have labelled chaos theory the paradigm of the era of computers⁸, and the rapid development of information technologies has no doubt crucially influenced our view of chaos and disorder. Chaos's wide popular appeal as well as the term's reevaluation might indeed be symptomatic of our complex computerized technological society. Not only have computers made us aware of complexities and disproportional relations between cause and effect (tiny errors can provoke a major loss of information), but the globalization of information networks has also created highly abstract inscrutable orders, which border on the chaotic and frequently result in disorientation and confusion in everyday life. What is more, natural disasters, spills, and pollution have taught us that ecological systems know no borders, that all levels of being are interrelated. Financial and economic networks, too, not only provide us with global links and homogenize or render simultaneous various worlds, thus effacing local differences; they are also extremely sensitive to minute disturbances, since feedback mechanisms amplify minute differences in input to incalculable dimensions. Phrases such as the "butterfly effect" therefore

⁷See the three issues of "Der Spiegel", # 39, 40, 41 (1993) which traces the "Kult ums Chaos".

⁸ "Poincaré was the person, France the place - but the time and culture were wrong. Lorenz was the person, MIT the place; the culture for chaos is the computer culture, and that was well under way." (Ian Stewart, *Does God Play Dice? The New Mathematics of Chaos*. London: Penguin, 1989, p. 138.)

seem to aptly describe current notions of causation in that they indicate the internal logic that drives the evolution of a dynamic system.

The ubiquity of chaos might, then, correspond to a general tendency in contemporary Western societies to recognize disorders of all kinds to be no longer the exception but the rule. Epidemics, ecological catastrophes, economic crises, random violence, the continual threat of nuclear violence - all of these chaotic incidents have not vanished in spite of long-standing rational civilizational efforts, but they appear to haunt the end of this millenium and are - paradoxically - the order of the day. While striving to order and organize chaotic natural phenomena, our civilizations and societies have ironically themselves become turbulent, chaotic, and catastrophic. Crises are no longer exceptional situations, but permanent states. Simultaneously, planning and ordering schemes are no longer regarded as adequate nor sufficient means to cope with the complexities of daily life, since the risks of uncertainty might well prove more rewarding than the rigid preservation of an order. The diffusion of "chaos" in everyday language may then reflect chaos's omnipresence and might, moreover, indicate that nowadays the term functions largely to describe a dynamic and dissipative world and a confusing multiplicity of ideologies and subcultures rather than to evaluate sociopolitical situations.

Along with the use of the word "chaos", terms such as "crisis" and "catastrophe" reappear in discussions of contemporary culture, especially the "end-time" thought that saturates today's fin de siècle society. As we edge nearer towards the end of the second millenium, chaos suggests a sense of crisis or end as well as hopeful renewal. The

present popularity of apocalyptic discourses may mirror this reevaluation of chaos. Apocalypse, of course, resembles chaos in that it is often used as synonymous for disaster and catastrophe, but also implies a sense of strict order, schedule, and predictability. Unexpected events, which follow no rules and suddenly destroy cosmic unity and order, might be interpreted as marking a transition from cosmos to chaos. Their lawless eruption turns up the undersides of what was considered an ordered cosmos; yet their occurrence also suggests hopeful renewal and the emergence of a new cosmos. The popularity of chaos may thus signal a new direction in our fin-de-millénaire *malaise*. A characteristic cultural symptom, today's chaology offers an integrative, reassuring vision of the universe which confirms trust in scientific progress in that it seems to maximize technological control over what was once conceived as disquieting, but is now seen as a potentially new order. By revealing that chaos is not really chaotic, but rather the condition for spontaneous new order and evolutionary multiplicity, it promises rational salvation at a critical chaotic moment when several emancipatory ideals have lost credibility. Although reflecting our insecurity and helplessness vis-à-vis a loss of orientation, chaos simultaneously domesticates apocalyptic fears and re-introduces evolution and an underlying order through the back door. For the supposed irreducible multiplicity of today's discourse is subtly controlled by a hidden universalism, as Klähn, among others, has rightly argued:

The strange boom of chaos-theories is just a symptom of a general tendency, leading to the step-by-step elimination of radical pluralistic ideas by a strange attraction towards a masked universalism. This preference for general principles has powerful dynamics of its own. It

looks for order in chaos, for identities in cultures, for uniform constituents of power in pluralistic societies.⁹

Chaos theory is thus perceived as the ultimate panacea to cure the aporias of the modern age and is to provide us with a new comforting universal "ideology after the end of all ideologies"¹⁰. The new myth of chaos, in its contemporary context, then serves simultaneously to subvert traditional concepts and create new universalizing ones, now backed up with a scientific basis.

Due to its marketability, its interdisciplinarity as well as its "objective" scientific basis, chaos theory has become the "intellectual darling"¹¹ in a number of disciplines; references to chaos theory have thus not only become popular in contemporary sociology¹², economics and medicine, but also in philosophy and even literary criticism. This transfer has recently caused a major public scandal due to Alan Sokal's hoax, his pseudo-scientific publication in a well-known North American journal of cultural theory and his subsequent attack of the *Impostures intellectuelles* of French intellectuals. Sokal denounces the deformations and distortions that scientific concepts in general and chaos theory in particular have undergone in the thought of a number of continental philosophers, although he evades the question of whether these distortions invalidate recent philosophical concepts and

⁹ "From Entropy to Chaos Theory: Thermodynamic Models of Historical Evolution in the Novels of Thomas Pynchon and Robert Coover." *Reconstructing American Literary and Historical Studies*. Eds. Gunther H. Lenz, Hartmut Keil, and Sabine Bröck-Sallah. Frankfurt: Campus, 1990. 418-431, p.430.

¹⁰ Winfried Menninghaus, "Hesiod - Novalis - Luhmann: Variationen des Chaos." Unpublished paper, 1994.

¹¹ Carl Matheson, Evan Kirchhoff. "Chaos and Literature." *Philosophy and Literature* 21.1 (1997): 28-45, p. 28.

¹² Peter Weingart and Sabine Maasen have examined the remarkable spread of chaos and its metaphorical extensions, especially in the social sciences, in "The Order of Meaning: The Career of Chaos as a Metaphor." *Configurations* 5 (1997): 463-520.

approaches as such.¹³ Especially in the later work of Gilles Deleuze and Felix Guattari, for instance, references to chaos abound. Their final joint work, *Qu'est-ce que la philosophie*¹⁴, conceives of the earth as being fractured into two absolutes: chaos, the infinite primal matter, a *virtual* characterized by the infinite variability and the infinite speed of its forms; and consistency or immanence, the binding together of elements, a totalizing of its multiple components. However, while chaos for Deleuze and Guattari serves as a common denominator, the two philosophers insist on crucial distinctions. The disciplines of art, philosophy and science may all struggle with and take advantage of chaos, yet they do so in different ways.

the first difference between science and philosophy is their respective attitudes toward chaos. [...] Now philosophy wants to know how to retain infinite speeds while gaining consistency, by *giving the virtual a consistency specific to it*. [...] Science approaches chaos in a completely different, almost opposite way: it relinquishes the infinite, infinite speed, in order to gain *a reference able to actualize the virtual*. By retaining the infinite, philosophy gives consistency to the virtual through concepts; by relinquishing the infinite, science gives a reference to the virtual, which actualizes it through functions. (117/18)

Jean Baudrillard, for his part, has adopted the metaphor of chaos and its implications for causality in his *Illusion of the End*¹⁵. While the French sociologist previously alluded to the catastrophe theory of René Thom, he now echoes the vocabulary of chaos theory. Due to the collapse of Soviet imperialism, the gradual emergence of global capitalism, and the arrival of a New World Order, he argues that linear historical thinking has become impossible at the end of this century.

¹³ Alan Sokal, Jean Brimont. *Impostures intellectuelles*. Paris: Odile Jacob, 1997.

¹⁴ Gilles Deleuze, Felix Guattari. *Qu'est-ce que la philosophie?* Paris: Minuit, 1991. [Transl. as *What is Philosophy?* New York: Columbia, 1994.]

¹⁵ *L'illusion de la fin: la grève des événements*. Paris: Galilée, 1992.

Any sense of a destiny is absent today; history resembles a random gathering of turbulent moments, where causes and effects can no longer be discerned.

Although complexity rather than chaos is the keyword in systems theory, Niklas Luhmann explicitly borrows the idea of self-organization or autopoiesis from biological theories. He emphasizes the instability of highly complex systems and defines their complexity according to the capacity of integrating noise and turbulences, thus equally reevaluating disorder as long as it is incorporated within a higher order. Luhmann hence insists on the productive rather than subversive effect of turbulences, which enable the system's functioning and the evolution of a complex order. Nevertheless, his distinction between systems and their environments remains a precarious one: while specific systems represent islands of order, the complexity of their environment borders on the chaotic.

An inclination towards disorder, undecidability, and play marks the general poststructuralist revolt against the structuralism of the late 1950s and 1960s with its scientific and taxonomic pretensions. Claiming to introduce a certain rigor and objectivity into the "subjective" human sciences, structuralism aspires to discovering the codes, rules and patterns which underlie all human social and cultural practices. In their desire to master the world of signs, the early Barthes, Lévi-Strauss, and other structuralists interpret practices as diverse as myths, kinship relations, narrative discourse, and garments as sign systems that work like a language. Trying to uncover a grammar or syntax, they isolate minimal units and examine how these are organized in a system of binary oppositions. However, since the very definition of an opposition

sets in motion a play of meaning which escapes a fixed structuration, the center and structure can easily be undone. Derrida's landmark essay "Structure, Sign and Play in the Discourse of the Human Sciences", given at the 1966 John Hopkins symposium, marks this deconstructive move against structuralism and illustrates a crucial turn toward infinite sliding of meaning and the uncontrollable play of differences without positive terms. In his attempt to think and decenter the "structurality of structure", Derrida questions the basic metaphysical assumptions of Western philosophy and reveals that the human desire for structure, and hence for a center, merely results from a need for security and presence.

the structurality of structure [...] has always been neutralized or reduced, and this by a process of giving it a center or of referring it to a point of presence, a fixed origin. The function of this center was not only to orient, balance, and organize the structure [...] but above all to make sure that the organizing principle of the structure would limit what we might call the *play* of the structure. [...]

The concept of centered structure is in fact the concept of a play based on a fundamental ground, a play constituted on the basis of a fundamental immobility and a reassuring certitude, which itself is beyond the reach of play. And on the basis of this certitude anxiety can be mastered, for anxiety is invariably the result of a certain mode of being implicated in the game, of being caught by the game, of being as it were at stake in the game from the outset.¹⁶

Deconstruction in the wake of Jacques Derrida thus revalues the uncontrollable, playful, and chaotic in that it tries to find disruptive moments in a text, which escape the metaphysical control of textuality and inevitably subvert its stable binary oppositions. The infinite process and play of *différance* collapses all dichotomies, produces the effect of indeterminacy and undoes systematic structures. Chaos, then, becomes

¹⁶ "Structure, Sign and Play in the Discourse of the Human Sciences." *Writing and Difference*. Transl. Alan Bass. Chicago: U of Chicago Press, 1966. 278-293, p. 278, 279.

the result of difference rather than indifference in itself and is situated within the order of infinite oppositions (even though a deconstructive reading is governed by a rigorous "method").

Deconstruction's insistence on contingency is further illustrated by Derrida's argument against the hermeneutic compulsion in psychoanalysis, both against Freud's separation of internal and external accidents as well as against Lacan's factoring out of chance and the sense of destiny in his seminar on "The Purloined Letter".¹⁷ Rejecting the determinism in the letter's itinerary, Derrida stresses the possible misuse of signs (and letters), which lack the arrow of meaning. He thus insists on chance's influence on the movement and meaning of any linguistic unit; the divisible and differential structure of the letter allows for a chance "swerve" that can redirect its itinerary.

Last but not least, literary critics have since examined the theme of chaos in its theological context, i.e. as a space from which cosmic unity and perfection will arise, in the works of Shakespeare, Milton, Blake, and other authors. They thus confirm that a positive concept of chaos has long existed in literature, myth, and other traditions opposed to the traditional paradigm of Western metaphysical thought, which tried to limit and marginalize chaos. In the specific aesthetic context, a positive view of chaos as opposed to classical order notably occurs in the Romantic period, when the early German romantics favored a new "Mischung" or interaction of chaos and order so as to open up a ludic space of poetic anarchy. As Schlegel's condensed formula

¹⁷ See "Le facteur de la vérité." *The Post Card. From Socrates to Freud and Beyond*. Transl., with an introduction and additional notes by Alan Bass. Chicago: U of Chicago Press, 1987. 411-496, and "My chances/ *Mes chances*: A Rendezvous with Some Epicurean Stereophones." *Taking Chances: Derrida, Psychoanalysis and Literature*. Eds. Joseph H. Smith and William Kerrigan. Baltimore: John Hopkins UP, 1984. 1-32.

"Poesie=Chaos" indicates, chaos, and not cosmic order, is now identified with the beautiful. Moreover, the aesthetics of the various avant-gardes in the twentieth century have generally been associated with chaos, regardless of their actual substance or specific traits. While dadaism - the name dada being itself a product of chance, which legend has it, was chosen by random selection from a dictionary - made the aleatory and alogical its program and conceived of chance as an end in itself, surrealism celebrated chaos as an unconscious source of creativity. The line of supposedly chaotic art forms could easily be extended to fauvism, cubism, futurism and so on. The logic of the avant-garde is one of perpetual rupture and renewal. From a historical perspective, therefore, experimental, innovative artistic practices which are opposed to established taste and academic practices are by definition bound to vanish as soon as they have, in their turn, established a code. Chaotic deviation from precedence is thus absorbed into an existing framework and results in a dialectical interplay of sedimentation and innovation.¹⁸

As Peter J. Rabinowitz has convincingly argued¹⁹, the literary establishment and the academy privilege precisely those (by now canonized) works that leave us in confusion until we apply our learned reading procedures to them. What is valued, in other words, is neither the perfectly smooth readerly nor the unmanageably inconsistent text. Instead, it is the category of the not-yet-coherent, which proves to be a

¹⁸ Paul Ricoeur emphasizes this aspect of traditionality according to which every new work, however experimental it may seem, maintains a (conflictual) relationship with a tradition and, in turn, can give rise to new traditions. (See especially vol. I of his *Time and Narrative*. Transl. by Kathleen McLaughlin and David Pellauer. Chicago, London: U of Chicago Press, 1984.

¹⁹ *Before Reading: Narrative Conventions and the Politics of Interpretation*. Ithaca: Cornell UP, 1987.

welcome opportunity for professionally trained readers to apply their rules of coherence to works with "surface" ruptures. Critical manipulation then reveals these "apparent" flaws to be intentional and to bear meaning. It should, therefore, not come as a surprise that chaos theory, suggesting that order is hidden within seeming disorder, is borrowed from the natural sciences as a useful "model" which allegedly furnishes new insights into literary works. Alvin Seltzer's study *Chaos in the Novel/The Novel in Chaos*²⁰ represents an early attempt to analyze a whole range of chaotic novels from the eighteenth to the twentieth century. Seltzer identifies chaotic components in the following novels: in the excessively digressive plots of Laurence Sterne's *Tristram Shandy*; the disoriented minds in Faulkner's novels; the refracted shifting perspectives in Virginia Woolf's work, which attempts to unify and arrest the process of disintegration and decay by imposing a subjective aesthetic order; the arbitrary actions and unclear motivations in Kafka's *Trial*; the gradual deflation of all novelistic structures such as time, setting, character, symbol, and plot and the move towards silence in Beckett's *Unnamable*; Jean Genet's expression of chaotic subconscious life through dream; the *nouveau roman* of Alain Robbe-Grillet, which rejects links with any pre-established order outside its own textual universe; and finally William Burrough's struggle against social, linguistic and other oppressing systems by means of his fold-in and cut-up techniques, which randomly combine textual fragments. Order, in this view, is implicitly associated with the conventions of nineteenth-century realism, while disorder is linked to avant-garde, experimental writing and limited to formal strategies.

²⁰ New York: Schocken Books, 1974.

Curiously, it is precisely these novels which have recently been interpreted by literary critics in the light of the "new critical paradigm" of chaos theory. The strained and forced attempts to relate chaos theory to literature have, however, yielded hardly any insights beyond those quoted, for instance, by Seltzer.²¹ Attracted by the seeming objectivity of a paradigm borrowed from the natural sciences, literary scholars have uncritically succumbed to the *Zeitgeist* and ignored different methodologies as well as diverging theoretical assumptions in the natural sciences and literary criticism respectively. They have seized upon the omnipresent topic of chaos and order in literature by frequently ab/using the decorative terminology of chaos theory in order to simply describe "complex" structures, a problematic notion of causality where chains of events magnify small changes, or in order to

²¹ A selection of these works include: Antonio Benítez-Rojo, *The Repeating Island: The Caribbean and the Postmodern Perspective*, (1992), originally published in Spanish, *La isla que se repite*, in 1989. Patrick Brady, "Chaos Theory, Control Theory, and Literary Theory; or: A Story of Three Butterflies." *Modern Language Studies* 20 (1990): 65-79. Omar Calabrese. *Neo-baroque: a sign of the times*. Transl. by Charles Lambert; with a foreword by Umberto Eco. Princeton: Princeton UP, 1992. Leonard A. Cheever. "Orderly Disorder: Chaos in *One Hundred Years of Solitude*." *Publications of the Arkansas Philological Association* 15.1 (1989): 11-27. Joseph M. Conte. "'Design and Debris': John Hawkes's *Travesty*, Chaos Theory, and the Swerve." *Critique* XXXVII.2 (1996): 120-138. William W. Demastes. "Re-Inspecting the Crack in the Chimney: Chaos Theory from Ibsen to Stoppard." *New Theatre Quarterly* 10 (1994): 242-254. Paul A. Harris. "Fractal Faulkner: Scaling Time in *Go Down, Moses*." *Poetics Today* 14.1 (1993): 625-651. N. Katherine Hayles *Chaos Bound: Orderly Disorder in Contemporary Literature and Science*. Ithaca: Cornell UP, 1990. Ed. *Chaos and Order: Complex Dynamics in Literature and Science*. Chicago: U of Chicago Press, 1991. Harriett Hawkins. *Strange Attractors: Literature, Culture, and Chaos Theory*. New York: Prentice Hall, 1995. Philip Kuberski. *Chaosmos: Literature, Science and Theory*. Albany: State U of New York Press, 1994. Ira Livingston. *Romanticism and the Arrow of Chaos*. Minneapolis: U of Minnesota Press, 1997. Thomas Jackson Rice. *Joyce, Chaos and Complexity*. Urbana and Chicago: U of Illinois Press, 1997. Raylene L. Ramsay. *Robbe-Grillet and Modernity. Science, Sexuality and Subversion*. Gainesville: U of Florida Press, 1992. Gabriele Schwab. "Joyce, Cage, and Chaos." *The Mirror and the Killer-Queen. Otherness in Literary Language*. Bloomington: Indiana UP, 1996. 71-99. Joyce S. Walker. "Romantic Chaos: The Dynamic Paradigm in Novalis's *Heinrich von Ofterdingen* and Contemporary Science." *The German Quarterly* 66.1 (1993): 43-59. Dean Wilcox. "What Does Chaos Theory Have to Do With Art?" *Modern Drama* 39 (1996): 698-711.

vaguely denote a positive view of disorder. Antonio Benítez-Rojo, in his postmodern perspective on Caribbean literature and culture, simply finds chaos theory's perspective appealing and appropriate for the Caribbean heteroclitite archive, since it emphasizes dynamic floating forms that produce hardly predictable effects and direct attention to "the play of paradoxes and eccentricities, of fluxes and displacements." (271) Joyce S. Walker, for her part, has argued that chaos in German Romanticism anticipates today's science on the mere grounds that both underline nature's diversity and that both prefer nonlinear, organic models to the static order of Newtonian paradigms. Her rather commonplace observation that

Chaos theory and Novalis's *Heinrich von Ofterdingen* share a mutually illuminating dynamic paradigm which, in opposition to trends in enlightenment science, emphasizes the wholeness of natural forms and processes instead of their reduction into useful, static components. (53)

could easily have been made without the, in her case extremely simplified, framework of chaos theory and its pretentious terminology. Likewise, Gabriele Schwab has elaborated on "Joyce's anticipatory use of chaos theory" (74) in *Finnegan's Wake* due to a similar obsession with scaling patterns, infinity, recursion, and self-similarity. Her analysis, however, does not yield any new insights into Joyce's work and leads to such vague and banal statements as "One could say that the Great Letter is related to the *Wake* as a geometric fractal such as the snowflake is related to the fractal complexity of a universe." (76)

As Matheson and Kirchhoff have rightly argued, the "conclusions drawn from applying chaos to literature seem possible to establish without the use of chaos" (41) and the "vocabulary of chaos

theory seems entirely superfluous" (42) in most analyses.²² They concede, however, that chaos theory might be a useful reference if a literary work explicitly alludes to chaotic systems, as does for instance Robert Coover's *Gerald's Party* (1986). The author of a *Lingua Franca* article similarly complains about the certain "emperor's-new-clothes air" reflected in the large number of articles relating chaos theory to literature:

And in the hands of literary critics - unburdened by the rigorous demands of scientific proof - chaos and complexity theory risk becoming a sort of interpretative Rohrschach test, with critics happily projecting their intellectual concerns onto the fractals and strange attractors of the new math.²³

Again, the current vogue of introducing chaos theory into literary theory appears less a stimulating theoretical framework than an instructive phenomenon of contemporary culture. For the notion that there is order, pattern, meaning behind an apparently incomprehensible text is a prospect welcomed in times of postmodern fragmentation and Derridean dissemination and when the institutional status of the humanities is more and more threatened by dominant discourses of science and technology. Paradoxically, then, the use of chaos theory serves to establish a new meta-theory in times when critics seem to celebrate the breakdown of all metanarratives. The notion of chaos is, as has been pointed out, sharply double-edged and comfortable to radical and conservative critics alike in that it suggests both decline and renewal, crisis and a new order.²⁴

²² Carl Matheson, Evan Kirchhoff. "Chaos and Literature". *Philosophy and Literature* 21.1 (1997): 28-45.

²³ Steven Johnson. "Strange Attraction". *Lingua Franca* April 1996, p. 47.

²⁴ The use of chaos theory in the work of Alexander Argyros is revealing in this respect. Argyros argues in favor of chaos theory as a product of biological evolution and a remedy against the anarchy of a cultural chaos generated above all by deconstruction.

Kenneth Knoespel, for his part, has revealed affinities between the "two cultures" when illustrating the destabilizing effect of both chaos theory and deconstruction. Both, he claims, register inconsistencies in systems whose logical order previously went unquestioned. Yet Knoespel is careful not to fall prey to a totalizing vision and not to establish a metanarrative of literature and science as does, for example, N. Katherine Hayles, the pioneer in studies on chaos in literature and science. Chaos theory and deconstruction, Knoespel rightly argues,

have such radically different institutional implications that it can be misleading to emphasize their complementarity. While deconstruction subverts efforts to make itself into a universal system, chaos theory [...] is expectantly regarded as a basis for a new foundational synthesis.²⁵

The efforts to subsume poststructuralism or deconstruction and chaos theory under a single model are, then, in themselves revealing since they indicate the desire for a monolithic order disguised as irreducible plurality.

More important, the biologist and philosopher Henri Atlan has vigorously criticized such unifying attempts and has insisted on the incommensurability of scientific and mythical discourses, science being

universe as dynamical and evolving towards increasing order. Despite his highly speculative scientific knowledge, Argyros eventually adopts an evolutionary view of human beings and art, especially literature, and rehabilitates concepts of progress, determinism, globalization, depth, and universals. See his *A Blessed Rage for Order. Deconstruction, Evolution, and Chaos*. Ann Arbor: U of Michigan Press, 1991; "Narrative and Chaos." *New Literary History* 23 (1992): 659-673; "Chaos versus Contingency Theory: Epistemological Issues in Orwell's 1984." *Mosaic* 26.1 (1993): 109-120.

²⁵ Kenneth J. Knoespel, "The Emplotment of Chaos: Instability and Narrative Order." *Chaos and Order. Complex Dynamics in Literature and Science*. Ed. N. Katherine Hayles. Chicago and London: U of Chicago Press, 1991. 100-122, p. 102.

only one game of knowledge among others.²⁶ Atlan discusses these differences in the employment of reason, not only between the sciences and nonscientific traditions, but also within the positivist sciences (i.e. between the natural sciences and the *sciences humaines*). He continually underlines that the two are not commensurate, that their ideas cannot be reduced to a common vocabulary without effacing crucial particularities. The natural sciences and the *sciences humaines* represent different systems of interpretation and explanation with different sets of rules of their own truth and errors as well as with strict limitations on their respective domain of legitimacy. While the natural sciences depart from objective facts, the humanities are based on subjective experience and function according to different criteria of productivity and utility. Moreover, the rationality of literature differs from scientific rationality in that literary discourse values a multiplicity of meanings and levels of meaning while scientific discourse aspires to the absence of all ambiguity and aims at the transparency of a formal language. Atlan thus acknowledges a rationality in symbolic or poetic thought; yet he is careful not to fuse all forms of rational discourse into a single amalgam without considering their context and the direction in which they proceed. Explicitly taking up the issue of self-organization in artistic creation and scientific observation, Atlan explains:

the experience of the creation of information from noise, of order from disorder, in symbolic thought and artistic creation [is not] the same as that produced by scientific observation of nature and of the living world. For in one case we are dealing with experience of the operation of language and thought, in the other with experiences of observations of nature interpreted in physical and mathematical

²⁶ *A tort et à raison. Intercritique de la science et du mythe*. Paris: Seuil, 1986. [Enlightenment to Enlightenment. Intercritique of Science and Myth. Albany: State U of New York Press, 1993.]

theories (information theories, thermodynamics, and system dynamics) [...] the discovery of organizational randomness by the nascent sciences of complexity must not be understood, under pain of being profoundly denatured, as a manifestation and demonstration of an irreducible paradox that leads back to some "higher" or "deeper" elsewhere. Quite the contrary, it is a question of removing, by means of an appropriate formalism, the contradictions that appear in the usage of the notions of order, complexity, and organization, transposed without retouching from their usage in everyday language to scientific discourse on observations of nature. [...] Scientific theories of complexity and organization cannot rest content with observing the contradictions and underlining the paradox. On the contrary, they must resolve these contradictions and eliminate the paradoxes. If, as in the example of complexity from noise, the apparent paradox is eliminated by taking the role of the observer into account, this must not itself induce error by suggesting that it involves a return to subjectivity. Whenever the role and status of the observer are taken into account in the natural sciences [...], we are dealing not with the subjectivity of an individual but of a theoretical being (the ideal physical observer) that is merely a shorthand reference for the totality of measurement and observation operations possible in the given conditions of the practice of a scientific discipline [...] The role shift by this ideal physical observer, to one of individual subjectivity and consciousness, is one of the main sources of misunderstanding and confusion in the spiritualist deviations of quantum mechanics and of course also in those of the new theories of order and complexity. (109/110)

Referring to the case of the Big Bang theory and the notion of genetic programs, Atlan warns that scientific discourses must not become new dogmas which are taken out of the context of the discoveries that motivate them and which are then handed down religiously. Simultaneously, however, Atlan is acutely conscious of the apparent need to transgress the rules of various knowledge games, which he attributes to a nostalgia for the security of a metatheory. With the advent of quantum mechanics, science grew more and more abstract and remote from immediate sensory data, so that unifying attempts reflected this deep need for primal cosmic oneness, for a belief that a

formulated truth exists a priori and that its discovery will automatically lead to applications to reality:

This need seems to be for a true ethics in a civilization (our own) where the traditional sources of ethics, religion and philosophy, have lost their credibility as sources of *true* doctrine in favor of the natural sciences, whereas the latter, necessarily reductionist (even if only 'weakly') and reduced to themselves, are increasingly losing their relevance, as we have seen, with regard to their applicability to the problems of our daily nontechnological life. (313)

Due to the absence of a system of metarules, which would regulate switches from one system to another without interrupting the game, the only task we are left with is to mark the differences between games of knowledge, to compare their rules in order to differentiate them.

Although the revaluation of chaos and the implied disruption of the order-disorder dichotomy serve as a starting point for my inquiry, I am less interested in tracing supposed analogies or affinities between science and literature on the grounds Knoespel and Atlan have outlined. Interestingly, however, the renewed fascination with chaos and order or, to be precise, nonlinear dynamic systems, in the natural sciences roughly coincided with the revival and transformation of narratology in the 1980s when the study of narrative, too, was opened up to a cross-disciplinary inquiry which acknowledged its temporal dimension. Rather than elaborating an ever more complex framework of narratological terminology, critics started to give attention to the centrality of narrative in human societies and explored modes of narrativity, i.e. the extraordinary creativity of narrative manifested by its variety throughout the ages and across all cultures.²⁷ The boundaries

²⁷ In examining non-literary "texts", Lévi-Strauss and Barthes clearly anticipated this development.

of narratology were stretched beyond those of literary prose to include other genres as well as visual media. Disciplines as diverse as psychoanalysis, sociology, anthropology, historiography, even economics and law, started to examine narrative forms of representation in their domain, thus stressing the value of narrativity as a mode of structuring the world and making sense of reality. As Martin Kreiswirth has so neatly put it, "[s]tory is no longer in the spotlight, but the lamp by which other things are seen."²⁸ In Christopher Nash's collection of essays *Narrative in Culture*,²⁹ an economist outlines how economics is a form of storytelling; another scholar emphasizes the construction and justification of legal discourse, while a psychoanalyst re-interprets his discipline as a way of making people re-tell, and therefore understand, their own life stories. Starting with Arthur Danto and his *Analytic Philosophy of History* (1965), philosophers of history, in particular, have formulated a narrativistic rather than a causal-scientific interpretation of history. Rejecting the view that historical conclusions are inferred from evidence, Louis Mink and Hayden White, for example, have maintained that narrative configuration constitutes in itself the historical mode of understanding. In the natural sciences, other studies have discussed the influence of metaphors and rhetoric in scientific accounts. In the case of chaos theory, specifically, N. Katherine Hayles has revealed the gender bias

²⁸ Martin Kreiswirth. "Tell Me a Story: The Narrativist Turn in the Human Sciences." *Constructive Criticism. The Human Sciences in the Age of Theory*. Ed. Martin Kreiswirth and Thomas Carmichael. Toronto: U of Toronto Press, 1995. 61-87, p. 62.

²⁹ Christopher Nash, ed. *Narrative in Culture. The Uses of Storytelling in the Sciences, Philosophy, and Literature*. New York: Routledge, 1990. See also the special issue "On Narrative" of *Critical Inquiry* 7.1 (1980).

implicit in Gleick's popular version of chaos theory³⁰. Narrative analyses of this kind have thus heightened our awareness of how discourses are ordered as narratives and how forms of knowledge and understanding in various fields are themselves essentially narrative in nature. For narrative and narrativization can be considered explanatory in themselves, irreducible and a priori forms of comprehending space, time, and causality, which involve a particular kind of intelligibility. As White suggests, "narrative might well be considered a solution to [...] the problem of how to translate *knowing* into *telling*." ³¹

A specific ordering category within narrative, and perhaps its primary organizing principle, is of course the notion of plot since it arranges incidents into a necessary and meaningful order, thus showing the interconnectedness and significance of seemingly unrelated individual actions. This concept cannot simply be considered a formal element separate from the narrative's semantic substance. It concerns the totality of the represented action with all its causal connections and logical consecution. Even contemporary analyses of plot generally go back to the terms given in Aristotle's *Poetics* where the Greek philosopher defines *mythos* as the dominant principle of order and unity for all the other components of the narrative. Aristotle situates action above all other story components and considers plot, or *mythos*, as the essential infrastructure in both dramatic and narrative works ("the poet must be a composer of plots rather than of verses"). For

³⁰ See for example N. Katherine Hayles, ch.6 "Strange Attractors: The Appeal of Chaos" in her *Chaos Bound*, p. 143-174.

³¹ See Hayden White. "The Value of Narrativity in the Representation of Reality." *Critical Inquiry* 7.1(1980): 5-27, p. 5. White has also pointed out that, etymologically, narrative is linked to knowledge since it derives from the Latin "gnarus" ("knowing, acquainted with, expert") while narro (to relate, tell) goes back to the Sanskrit root gnâ, "to know".

Aristotle, moreover, *mythos* is not simply a vehicle, but simultaneously form and substance, as becomes evident from its comparison with a visual image:

And so, the plot-structure is the first principle and, so to speak, the soul of tragedy, while characterisation is the element of second importance. (An analogous point holds for painting: a random distribution of the most attractive colours would never yield as much pleasure as a definite image without colour.)³²

Aristotle thus denounces arbitrary jumble as futile; only clear design produces the intellectual pleasure of recognizing forms. By analogy, plot or *mythos* has to give tragedy the significant form, i.e. logical patterns of cause-and-effect. For the plot, Aristotle continues, has to be unified, binding together by logical probability (if not necessity) the various incidents of the action. Well-constructed plots should neither begin at a random point nor conclude arbitrarily, but proceed logically from the beginning to the middle to the conclusion.

So then, just as in the other mimetic arts a unitary mimesis is a representation of a unitary object, so the plot-structure, as the mimesis of action, should be a representation of a unitary and complete action; and its parts, consisting of the events, should be so structured that the displacement or removal of any one of them will disturb and disjoint the work's wholeness. For anything whose presence or absence has no clear effect cannot be counted an integral part of the whole. (ch. 8, p. 40)

Again, the unity of plot is not an abstract formal matter, but intimately linked to logical and causal relations. Since coherence is not to be found in the world - history being constituted of random particulars, contingent events, and discrete episodes - the poet must construct a higher intelligibility and turn parts into a comprehensible entity.

³² Aristotle. *The Poetics of Aristotle*. Translation and commentary by Stephen Halliwell. Chapel Hill: U of North Carolina Press, 1987. Ch. 6, p. 38.

While later critics, notably Henry James and E.M. Forster, reversed Aristotle's hierarchy and privileged character over plot, other theorists like Vladimir Propp and Northrop Frye with the *Morphology of Folktales* (1928) and the *Anatomy of Criticism* (1957) respectively attempted to find an order in the immensity of narratives. By classifying types and cataloguing motifs, they ultimately aimed at identifying variations of a universal narrative pattern or deep plot in all of the world's stories. Similarly, although disregarding matters of content, the structuralist enterprise sought to find a single and universal narrative grammar by identifying individual structural units such as actantial functions and discursive registers. Poststructuralist critics, by contrast, have insisted that the logic of narrative derives from a more dynamic and eclectic set of ordering rules, which only together can explain the relations among various components of the narrative. Recent critics have thus confirmed the pivotal role of plot as an all-embracing aesthetic pattern turning an incoherent agglomeration of materials into a closed and significant narrative structure; yet they try to grasp the structuring and destructuring processes at work in the production and functioning of narrative and eventually stress the oxymoronic status of narrative as a dynamic combination of order and disorder.

Drawing from the rhetorical and tropological theories of Vico and Kenneth Burke as well as the literary archetypes of Northrop Frye, among others, Hayden White has engaged in a cross-disciplinary study of historiographical narrative and brought out its aesthetic and representational as well as ideological components. History and fiction, according to White, belong to the same category of discourse, hence

historical texts can and should be regarded as literary artifacts. In *Metahistory*, White has thus analyzed how the different modes of emplotment employed by nineteenth-century historiographers exemplify recognizable literary plots, which can be classified according to Northrop Frye's modes of the romantic, the tragic, the comic, and the satiric. In his later work, however, White comes close to taking an anti-narrativist stance in that he conceives of narrativity itself as always already in the service of orthodox political and social conditions; narrativity as such "is intimately related to, if not a function of, the impulse to moralize reality", and only a refusal to narrate can escape the demand for moral meaning.³³

For Paul Ricoeur, *mise en intrigue* or plotting is essentially a synthesis of the heterogeneous, which provides, at least in part, a poetic solution to the speculative paradox of time. Ricoeur therefore sees narrativity as springing from the interplay of concordance and discordance within the configurational activity itself. Specifically, every poetic composition mediates between chaos and order, contingency and rationality in three respects.³⁴ First, narratives recognize contingency in that they recount incidents which simply happen and then order them into a coherent story, i.e. not just a series, but an intelligible totality. Second, the heterogeneous components of action, agents, objectives, interactions, fortuitous circumstances and intended results are combined into an intelligible whole. Third, narratives turn a potentially open-ended succession of incidents into a configuration resulting from links between a beginning, a middle, and an end.

³³ "The Value of Narrativity ", p. 18.

³⁴ See the three volumes of his *Temps et récit* in general and the essay "Contingence et rationalité dans le récit" (131-146 in H. Hillenaar and E. van der Starre, eds. *Le roman, le récit et le savoir*, CRIN 15 (1986)) in particular.

According to Ricoeur, only the dynamic activity of emplotment transforms the chaos and confusion of our temporal experience, the internal multiplicity of time, which cannot be mastered, into a synthesis of the heterogeneous. At the same time, however, narrative also honors contingency in that it declares one event (the beginning) to be preceded by no other and another (the end) to be succeeded by no other. In the middle, in particular, narratives magnify contingency in that unexpected reversals reorganize the structure built up before. Yet, even peripeteias are always already incorporated into a unified, organized pattern and thereby made intelligible. The apparent crisis of configuration conjured up by contingency is thus overcome. The resulting arrangement of discordance and concordance, contingency and meaning is not only the basis of narrative composition, but the very cornerstone for its intelligibility. However, it should be stressed that Ricoeur does not simply oppose narrative order and temporal chaos; instead, the dialectic of order and disorder occurs on both sides of the equation.

The conception of narrative as both orderly and chaotic is similarly expressed in Frank Kermode's view, from whom Ricoeur borrows the notion of "discordance in concordance". Kermode, in his seminal study of narrative closure, *The Sense of an Ending*³⁵, has interpreted the existence of plot as a result of the human need to create a temporal concordance of beginning and end and to make time cohere. He sees "revelation" as the prototypical narrative structure in Western culture, both in individual lives and in history. The root for this impulse, according to Kermode, lies in one of the central ideas of

³⁵ London: Oxford University Press, 1967.

Western culture, the Judeo-Christian understanding of history, which conceives of time as progressing linearly from Genesis to Apocalypse. Disparate moments always have to be transfigured in a moment of revelation of fulfilled meaning. However, endings today have become immanent rather than imminent, i.e. we are constantly living in a moment of crisis or transition that is generating the sense of an ending and which therefore moves us to producing fictions of concord between past, present, and future. While he affirms narrative's aim at ordering in *The Sense of an Ending*, Kermode stresses its opacity in *The Genesis of Secrecy*³⁶, where he contends that narrative is not only a consolation, but that it can also constitute an obscure puzzle, which may bring on disintegration and indeterminacy. While one tendency in narrative may aim at clarity and orderly succession, another produces distortions and secrets, which escape authorial control and interpretative consensus.

Peter Brooks, for his part, has superimposed a model of psychic dynamics on the functioning of texts. Reading Freud's masterplot as it is developed in *Beyond the Pleasure Principle*, Brooks emerges with a dynamic model of narrative and plotting that "structures ends (death, quiescence, nonnarratability) against beginnings (Eros, stimulation into tension, the desire of narrative) in a manner that necessitates the middle as detour"³⁷. He thus sees narrative's *raison d'être* in its dynamic mechanisms of desire, a negotiation between Eros and Thanatos, the pleasure principle and the death drive, orderly progression and hesitation, revelation and veiling. The contradictory

³⁶ Harvard University Press, 1979.

³⁷ Peter Brooks, *Reading For the Plot: Design and Intention in Narrative*. Oxford: Clarendon Press, 1984, p. 107.

tension between these poles constitutes the motor which makes narrative enter into a state of deviance, detours and swerves before it reaches its ultimate goal, to find an end. Narrative's contradictory logic and double orientation is hence one of "anticipation of retrospection" (23): it anticipates that end when a life achieves meaning and becomes narratable, while simultaneously inventing detours to postpone the reaching of the end. Plot, therefore, emerges as "the internal logic of the discourse of mortality" (22) which enables human beings to deal with their own finality. In this view, plot not only refers to structures inherent in a text, but also to the reader's "competence" and her or his desire, which animates the sense-making process. Both characters in narrative and readers of narrative reach for possession and mastery; their construction of plots reveals deeper human desires for revelation and control that can never be attained.

The kind of orderly disorder, i.e. the interplay of contingency and meaningful order, totalization and detotalization, mastery and uncontrollable desire, that has been found within the seemingly orderly patterns of every narrative - not just avantgarde experimental texts - is, according to those theorists mentioned above, the very basis of narrativity. This dual nature is, in fact, inherent in the word "plot" itself, for to plot, on the one hand, implies control, the visible marking of a plan, the mapping of a future course. On the other hand, however, to plot is also to devise secrets, to conspire, to hide one's intention so that outsiders cannot follow one's trail.

Yet, while plots always seem to work by a double movement, the patterns they impose may well be culture-specific, determined by their historical context and shaped by various disciplinary orders, as Hayden

White and Paul Ricoeur also point out. Michel Foucault's studies of order may clarify this relation of narratives to their extraliterary context and point to yet another way in which literature can represent a disorderly order. On the one hand, Foucault emphasizes that literature, or any discourse for that matter, is by definition linked to a specific discursive order. Discourse, he argues, is always already organized, limited, codified and controlled.³⁸ Established taboos ban what must not be said; disciplinary classifications set limits to the randomness of events in discourse; fixed rituals determine who may speak and who is not allowed access to discourse. Indeed, one might even argue that literary discourse, representing an artificial shape, is all the more subject to certain generic forms or aesthetic orders.

On the other hand, however, Foucault has attributed a particular role to literature in relation to the ordering modes of culture. In his analysis of different regimes of truth from the Renaissance to the present day, *Les mots et les choses* (1966), he has explored the rules that come into play in the very existence of scientific and other discourses and has indicated how cultural modes of ordering determine our perception and knowledge. Startled by the "impossible" Chinese classification of animals, which is cited in a text by Borges, Foucault reflects on the organizing principles societies adopt in order to render the cosmos intelligible. The exotic charm of another system of thought indicates the limitations of our own cultural code and the sheer impossibility of thinking outside of this logic. Foucault thus starts to wonder what orderly system determines how we perceive, describe, class and know things; what kind of invisible perceptual grids, what kind of

³⁸ See *L'ordre du discours*. Paris: Gallimard, 1971, p. 10.

taxonomies and classifications shape our knowledge; how cultures differentiate the chaotic potential of knowledge, which expands all the time, into various disciplinary orders and how they exclude certain discourses by relegating them to non-official, non-scientific realms. The very possibility of empirical knowledge, the distinction between errors and truths as well as the practice of beliefs is not at the mercy of chance, Foucault argues, but obeys the laws of a certain system or epistemological space. Preliminary criteria determine how we isolate, pigeonhole or group phenomena in order to sort out their confusing array. The radical alterity of Borges's Chinese taxonomy eventually derives from the very lack of a foundation that might legitimate the classificatory system. As self-reflexive categories such as "etc", which close the system in on itself, indicate, a fundamental disorder or absence might be at the root of all ordering systems. "The absurdity of this destroys the *and* of the enumeration by making impossible the *in* where the things enumerated would be classified," explains Foucault.³⁹ What is at stake, then, is the Order of all particular orders, the stability of all systems of order in the absence of a metaprinciple.

Literature, however, according to Foucault, is able to question our common grids, to make visible the pure experience of order and of its modes of being, since it is situated in a confused and obscure limit zone between those ordering codes and reflections upon order itself (in scientific theories and philosophical interpretations). By exploring the possibilities of other classifications which appear incongruous, exotic, even unthinkable to us, Borges' text has led Foucault to ironic, yet uneasy laughter, to the experience of order. Literature may, then,

³⁹ *Les Mots et les choses*. Paris: Gallimard, 1966. Transl. as *The Order of Things. An Archaeology of the Human Sciences*. New York: Random House, 1970, p.xvii.

deviate from empirical order and present heterotopias, disquieting sites where paradoxes, discontinuities and the heteroclitite "without law or geometry" proliferate; it is capable of removing the operating table that conventionally separates various forms of knowledge and of destroying the syntax with which we name, speak and think. Literature, in sum, can displace our common cultural modes of ordering and suggest alternative orderings.

Contemporary literature in its experiments with form and deviance from received paradigms may represent a particularly fruitful field for testing the capacity of plot to impose order upon chaos, to transform a succession into a temporal whole and to synthesize the heterogeneous. According to several critics, today's paradigms of composition are exhausted; literature is affected by a crisis, whose symptoms are the impossibility of ending as well as the wearing out of the paradigm of concordance. Narrative as well as other systems of knowledge have undergone a crisis, the result being fragmentation and the impossibility of unity.

My reason for choosing the following works of literature, Italo Calvino's *Palomar* (1983), Julian Barnes's *History of the World in 10 1/2 Chapters* (1987), and Don DeLillo's *White Noise* (1985), was that they all seemed "chaotic" in their very appearance (easily visible in the heterogeneous assemblage of Barnes's novel and the highly fragmentary structure of Calvino's text) and remained largely unintelligible after a first reading, but that they were also linked to notions of entropy and chaos in the scientific sense. While presenting a highly artificial structure, they also draw attention to their processes of

disintegration. Calvino's *Mr Palomar*, for instance, encounters a paradoxical chaotic cosmos where disequilibrium and disintegration are omnipresent. Even though its protagonist persistently tries to find the key to mastering its complexity, his itinerary in search of wisdom fails and closes with an apocalyptic vision of the end of humanity as well as Mr Palomar's death. In its portrayal of numerous shipwrecks on sea, Julian Barnes's *A History of the World in 10 1/2 Chapters* focuses on the swirling dynamics and chaotic components inherent in water while simultaneously alluding to entropic visions of the end of history. The very title of DeLillo's novel alludes to information theory and cybernetics, which prepared for today's reevaluation of disorder as an additional productive source of information. Technology, as it is portrayed in DeLillo's novel, has multiplied the potential for disaster; the excess of information and the constant interference of random noises fails to lead to increasing order, but on the contrary results in a general disorientation. As in Calvino's *Palomar* and Barnes's *History*, things simply happen, one after the other, randomly or according to their own rationale.

The preoccupation with catastrophes and accidental collisions of blind forces leads of course to conspicuous gaps between cause and effect in the very narrative structure these texts display. The episodes in Calvino's *Palomar*, for instance, are serialized and do not seem to be controlled by a plot; yet they correspond to a numerological framework and an intricate system of triad structures according to the author's final note. Similarly, the catastrophic episodes in Barnes's *History of the World in 10 1/2 Chapters*, which belong to different genres, orders of discourse, and historical eras, seem nothing more than a random series

of events. They are not linked on the basis of causality or probability, but simply accumulate and do not seem to add up. Fragmented narrative structures thus mirror how notions of plausibility and causality have become problematic, while fragmentation simultaneously thrills readers with the possibility of secret connections and hidden correspondences. Both Calvino's and Barnes's texts therefore invite an analysis of their narrativity, i.e. of the logic according to which the narrative is generated and unfolds on time. It is precisely the narrative's unusual way of progressing that makes readers scrutinize their narrating impulse. Readers, in turn, become detectives who seek clues in the textual mystery in order to delineate a pattern that might establish connections. Disorder and discordance, in other words, have the ludic effects of a jigsaw puzzle.

While readers themselves have to produce links among the disjointed chapters that constitute Calvino's and Barnes's works - and thus configure a sequence into a totality - it is the first-person narrator of DeLillo's novel who faces the problem of deciphering bits and pieces as parts of a larger intelligible whole. He explicitly struggles with the narrative means of imposing some order upon the accidental events and random noises he is surrounded with in order to derive some meaning from them. The sheer multiplicity of unforeseeable events incites him to develop paranoia and project an order, a plot. The three works chosen here playfully exploit the fact that whatever is included in narrative is thereby already connected and takes on a fateful quality; they challenge readers' habitual ways of establishing causality and sequence. By pushing plausibility to the breaking point and playing with random encounters and accidental events, these narratives offer a

possibility to reflect upon the construction of meaning and intelligibility in narrative, which paradoxically always implies finality, causality, and order.

My interest is therefore a double one: first, I am interested in the workings of narrative, in what shapes a text, gives it a pattern, direction, meaning; in what makes us read forward, and what makes the text finite and comprehensible. Chaos, in these texts, could be equated with the abandonment of criteria of completeness and unity, while order could be conceived of as interconnectedness, emplotment, the creation of links. My literary analyses will therefore examine how processes of structuring and undoing structures interplay in narrative and by what dynamic operations (of discordance and concordance, totalizing and detotalizing) events or episodes are organized into a system which ideally brings about the postunderstanding of the order of action and its temporal features. My approach resembles the one of Brooks in his *Reading for the Plot*; without taking a psychoanalytic approach, I will also read the literary works as "a kind of detective story where the object of investigation - the mystery - is the narrative design, or plot, itself" (294).

Furthermore, if we believe Frank Kermode's claim that the paradigms of composition are also paradigms of endings (at least in the Western tradition), endings and narrative closure take on a significant role. They are to signal the outcome of the plot, reveal an underlying order and eliminate the chaos of mere serial succession. The three texts chosen here emphasize the importance of endings as they address the very nature of finality in their theme; they are fixated not only with the imagery of chaos, but also with the narrative trajectory of apocalypse

and paradoxially advanced by the sense of an ending. However, the simple anticipation of an apocalyptic vision, i.e. the representation of something inconceivable already implies a domestication of its catastrophic elements and its adherence to certain orders of chronology and causality. Narrative visions of the end of time can only announce and eternally postpone closure.

Second, given that narrative is a crucial cognitive instrument, my interest lies in its relation to other cultural ordering systems. How can literature alienate those cultural ordering modes we are used to, i.e. how can those forms of knowledge incorporated into literature come to a crisis? Specifically, in how far do the works of Calvino, Barnes, and DeLillo displace our conventional ways of imposing perceptual grids upon knowledge by incorporating knowledge from the natural sciences, from historiography and information technologies? And in what way do narrative structures (such as plots or outlandish taxonomies) participate in discourses of cognition and interact with other ordering modes of our culture?

Since these literary works are, however, so heterogeneous in their "chaotic" dimension and since they correspond to different paradigms or definitions of chaos, they will be examined separately in subsequent chapters. Further, the disorderly aspects in those texts cannot be delimited by a precise methodology precisely because the dynamics of ordering and disordering differs from one text to another. My analyses therefore simply constitute close readings of the individual narratives.

II. Ordered cosmos or chaotic proliferation?

Problems of Holism and Unity in Italo Calvino's *Palomar*

The seemingly accidental orders created by combinatory connections, both in the material world as well as in imaginary artistic forms, represent a continuing fascination for Italo Calvino. Ranging from DNA to the highly elaborate structures of literature, chance encounters may create decisive configurations in which events are both fated and accidental. The contemporary novel, in particular, ideally appears to Calvino as "an encyclopedia, as a method of knowledge and above all as a network of connections between the events, the people and the things of the world."¹ At least from his *Cosmicomics* (1965) up to *Palomar* (1983), elements of chaotic randomness and orderly networks recur in Calvino's work on both formal as well as thematic levels. For the Italian author not only experiments with various designs and geometrical compositions in narrative; he also plays with geometrical, geographical and cosmic orders and their breakdown in the very contents of his literary work. Paradoxically, this combinatoric narrative structure can only be exhaustive, because it remains finite.

Calvino's preoccupation with disorder and order and the systemic paradox of limited infinitude may perhaps be most conspicuous in his final work, *Palomar*², which is, however, often (mis-)read as Calvino's apocalyptic testament. This fable-like work traces the itinerary of Mr

¹ *Six Memos for the Next Millenium*. Cambridge: Harvard UP, 1988, p.105. "il romanzo contemporaneo come enciclopedia, come metodo di conoscenza e soprattutto come rete di connessione tra i fatti, tra le persone, tra le cose del mondo" (*Lezione Americane. Sei proposte per il prossimo millenio*. Milano: Mondadori, 1993, p. 115/116).

² *Palomar*. Milano: Mondadori, 1994 (1983). [*Mr Palomar*. Transl. by William Weaver. London: Minerva, 1985.]

Palomar, a contemporary, who embarks on a frustrating search for the key to mastering the universe, yet who encounters nothing but disharmony, disequilibrium, chaos and uncertainty. His attempts to acquire knowledge and wisdom are repeatedly frustrated, since his scientific aspirations always enter into conflict with his philosophical scruples as well as his vivid imagination. Palomar neither discovers a hidden harmony in the world nor does he detect an all-encompassing model of scientific inquiry and observation. The incomprehensible, paradoxical chaosmos Mr Palomar encounters seems to stand in sharp contrast to the narrative's highly ordered structure. Calvino's final work is divided into three larger parts, which again fall into three stories, which are once more split into three episodes. The text thus imposes a numerological framework and a pattern of reading according to clearly separated categories. Order and chaos, both narrative and cosmic, therefore enter into a conflicting tension, which permeates the whole narrative.

In my discussion of Calvino's final work I am interested in how *Palomar* frequently echoes recent paradigm shifts and several principles now made popular by chaos theory. Calvino, however, uses fiction to adjust science's vision of the universe, for Mr Palomar dramatizes the ludicrous confusion between various forms of knowledge and rationality so as to reveal the underlying order that separates institutionalized scientific discourses from other marginalized, more esoteric forms. After tracing Calvino's ambiguous fascination with both order and disorder in his previous works, I will illustrate how Mr Palomar problematizes relations between the part and the whole, facts and contexts, micro- and macrocosm. I further wish to explore what

makes readers relate an episode of Calvino's text to the whole, and what pushes them to move forward in this highly descriptive, seemingly static work. In this narrative of words and silence, description and meditation, exactitude and distortion, how is the series of episodes linked or unified?

While Calvino's earlier fiction is often characterized as belonging to a social-realist stream, his texts from the mid-1960s onwards can hardly be said to form part of the mimetic tradition where linguistic signs are meant to represent the external world. Instead, Calvino uses symbols such as numbers, mathematical tables or even cards as playful devices in order to structure his literary worlds, which are therefore *about* structures, patterns and plots. He seems to be fascinated with abstract patterns and possible connections in a culture which he sees as predominantly discontinuous. As early as in 1970, in an essay on the phantastic, Calvino admitted that

For me the main thing in narrative is not the explanation of an extraordinary event, but the *order of things* that this extraordinary event produces in itself and around it; the pattern, the symmetry, the network of images deposited around it, as in the formation of a crystal.³

Calvino, then, uses narrative not as a means of representing an exterior reality, but rather as a form of exploring orders and structures. His "poetics" is of course closely connected to the OuLiPo (Ouvroir de Littérature Potentielle) workshop for experimental literature in which the Italian author actively participated from the 1970s onwards. This

³ "Definitions of Territories: Fantasy." *The Uses of Literature. Essays*. Transl. by Patrick Creagh. New York: Harcourt Brace Jovanovich, 1986. 71-73, p. 73.

group of experimental writers, poets, and mathematicians, founded in 1960 by Raymond Queneau and François Le Lyonnais, aimed at formal experimentation even with prose texts at a time when semiotics and combinatorics were also *en vogue* in literary criticism. Convinced that no writer can abandon himself deliberately to his imagination but is forced to adhere for instance to grammatical or metric constraints, the Oulipians decided they might as well exploit rules as a structural locus for creativity and play. Moreover, those rigid constraints (sometimes deriving from the sheer whim of creating a text while leaving out a particular letter of the alphabet) and forms which Oulipian writers embraced willingly and bent to their purposes appeared to them to be more concrete, definable and stable than the results of some vague and inexplicable inspiration or genius. Recuperating old constraining forms (such as the sonnet) as well as elaborating new ones, OuLiPo further favored literary works that did not assume a definite finite shape but remained in a potential state - an ambition well illustrated by Queneau's *Cent mille milliards de poèmes*. Literature, in this view, is similar to mathematics in that it represents a combinatorial system.

Order, in the Oulipian aesthetic, is engendered by arbitrarily fixed rules, rigid codes and systematic grids (in addition to the rules of grammar and syntax). However, the introduction of a rigid code also entails the temptation of play and transgression, and so disorder may intervene in the shape of unrealized possibilities, asymmetric elements and errors. When Calvino envisions the possibility of a cybernetic literature machine which might produce literary texts by playing upon a finite set of rules and elements, he affirms the crucial importance of

the aleatory in the shape of the Lucretian clinamen in order to subvert the machine's determinism:

This clearly demonstrates, we believe, that the aid of a computer, far from replacing the creative act of the artist, permits the latter rather to liberate himself from the slavery of a combinatory search, allowing him also the best chance of concentrating on this 'clinamen' which, alone, can make of the text a true work of art.⁴

The computer thus serves as a way of conceptualizing human beings and society as well as the creative process because it draws attention to unexpected feedback mechanisms. In his preface to Emilio Cecchi's book on Navajo Indians, Calvino again confirms this poetics of open systems according to which a stable texture is undone by an open space, a void within:

Quando una donna Navajo sta per finire uno di questi tessuti, essa lascia nella trama e nel disegno una piccola frattura, una menda: affinché l'anima non le resti prigioniera dentro al lavoro.' Questa mi sembra una profonda lezione d'arte: vietarsi deliberamente, una perfezione troppo aritmetica e bloccata. Perché le linee dell'opera, saldandosi invisibilmente sopra se stesse, costituirebbero un labirinto senza via di uscita; una cifra, un enigma di cui s'è persa la chiave. Per primo, s'irretirebbe nell'inganno lo spirito che ha creato l'inganno.⁵

This indissociability of system and error, of determinism and the aleatory, order and chaos may be considered a common thread in Calvino's fictional writings, which at least one critic has traced back to the short story, "L'avventura di uno sciatore", written in 1959⁶. Calvino's subsequent works are frequently constructed as frame narratives, where framing structures provide concordance. They

⁴ "Prose and Anticombinatorics." *Oulipo. A Primer of Potential Literature*. Ed. Warren F. Motte. 1986. 143-152, p.152.

⁵ "Prefazione". *Messico*. E. Cecchi. Milano: Adelphi, 1985, p.XI-XVI.

⁶ See Lisa Guj, "The Shapeless and the Well-Designed: An Unresolved Dichotomy in Calvino's Narrative?" *Modern Language Studies* XXIV.3 (July 1988): 206-217.

function like a complex organizing principle in that they embed multiple combinatory possibilities in a larger unifying design. A combinatory design encloses, for instance, *Le città invisibili* (1972), where a frame overlays the multiple heterogeneous stories with a synthesizing plot. The narrative falls into nine larger parts, which are again subdivided into seven and ten episodes respectively, and comprises imaginary conversations which result in a complex game between the thirteenth century explorer Marco Polo and the emperor Kubla Khan. The metaphor of chess, a game with infinite forking possibilities, describes this narrative practice which carries within it the threads of many nonwritten texts. Polo describes fifty-five different cities within the emperor's kingdom, which are ordered in complex structural patterns. Trying to find an order in or a map for his labyrinthine empire (a metaphor for the entire cosmos), the Khan resorts to the chess board as a structural model that generates all possible cities. Calvino's narrative presents two contrasting intellectual tendencies while elaborating on the author's most cherished symbol, that of the city expressing "the tension between geometric rationality and the entanglements of human lives"⁷. Longing to know the cities' invisible law, the secret of their design, Kubla Khan, on the one hand, firmly believes in the use of models; he represents logic, order, a classifying rationality. Marco Polo, by contrast, is aware of the randomness, exceptions, exclusions and contradictions inherent in the cities he describes. His descriptions do not reduce them to an orderly structure, but try to maintain their inexhaustible multiplicity.

⁷ Italo Calvino. *Six Memos for the Next Millenium*, p. 71.

While Calvino's narrative machine is fueled by means of numbers in *Invisible Cities*, it is generated by tarot cards in *Il castello dei destini incrociati* (1968/73), which recalls the tradition of the *Decamerone* and *The Canterbury Tales* in its narrative structure. This text comprises two sets of tales recounted in the castle and the tavern respectively. A group of deaf and dumb travellers, who have taken refuge in a castle, devise numerous stories in order to while away time. Each guest uses the tarot cards to unfold his or her tale, arranges and connects the cards anew such that their positioning gives structure and meaning to the stories and reveals the destiny of the deaf and dumb guests. Although card games usually involve an element of divination, randomness, and unpredictability (as well as a superstitious belief in the significance of their chance connections), Calvino leaves nothing to chance in *Il castello*. He rigorously calculates the distribution of cards and consciously arranges their sequence.⁸ However, despite the strict order imposed on the narrative's first part, the second set of stories produced by the reshuffling of cards, "The Tavern", follows no rules or patterns.

Se una notte d'inverno un viaggiatore (1979), too, presents the interplay of chaos and chance, on the one hand, and intentional design, on the other. Comprising the incipits of ten novels, the text may be the result of a series of bookbinding accidents. The male reader is

⁸ See Calvino's 1982 interview with William Weaver: "My Tarot book is the most calculated of all I have written. Nothing in it is left to chance. I don't believe chance can play a role in my literature." ("Calvino: An interview and its story." *Calvino Revisited*. Ed. Franco Ricci. Ottawa: Dovehouse Press, 1989. 17-31, p.31) Nevertheless, Calvino's use of games well illustrates his double preoccupation with order and disorder, since games, on the one hand, follow a fixed set of rules, though on the other hand they can develop a dynamics so that the player can no longer control the game, but is in turn dominated by it.

persistently searching for a pattern and an elusive "authentic" ur-text, and this desire fuels the narrative. It is interspersed with the aleatory and random in the figure Marana, the translator, who constantly provides confusion among books, titles, chapters, and authors. The ten fragments of this novel are no longer held together by a closed narrative frame, since this framing design is itself a patchwork of different styles, genres and periods of fiction, which remains open-ended. Yet Calvino's novel also embraces a pattern, as the author himself revealed in *Comment j'ai écrit un de mes livres* (1983). One of the constraints underlying his narrative derives from Greimas' semiotic square, which inspired the work's serial structure.

Calvino's constant preoccupation with rigorous (though arbitrary) rules, narrative order, and the framing of diversity within certain patterns is also at the center of his critical writings, in which the Italian writer has repeatedly proclaimed his taste for geometrical composition and precision. Well aware that "[t]he process going on today is the triumph of discontinuity, divisibility, and combination over all that is flux",⁹ Calvino welcomed the act of writing as a way of molding the shapeless, of structuring the incoherent. This predilection with diverse forms of narrative order, with patterns, plans, and symmetries seems to become even more urgent in Calvino's later work, as *Collezione di sabbia* and *Six Memos for the Next Millenium* confirm. In the so-called Norton lectures, which the author was to give at Harvard University in the year of his death, Calvino elaborates on various values which he recommends for the next millenium. He again proclaims his "predilection with geometrical forms, with symmetries, with series,

⁹ "Cybernetics and Ghosts." *The Uses of Literature*. 3-27, p. 9.

with combinatorics, with numeric proportions"¹⁰ by which he tries to counterwork the loss of form he diagnoses in contemporary life:

Maybe this lack of substance is not to be found in images or in language alone, but in the world itself. This plague strikes also at the lives of people and the history of nations. It makes all histories formless, random, confused, with neither beginning nor end. My discomfort arises from the loss of form that I notice in life, which I try to oppose with the only weapon I can think of - an idea of literature.¹¹

Parallel to Calvino's ambition to impose form or a specific design on his narrative, one can note the author's interest in mathematical formulas, logics and geometrical symmetries. Questions of order and disorder are, in other words, frequently linked to the influence of science. Given the author's biography and family background, his interest in science as well as his fascination with phenomena of mathematics and cosmology need not come as a surprise. Calvino's father was an agronomist, who temporarily directed an experimental agricultural school in Mexico. His mother was as a geneticist and botanist, while several of his aunts and uncles were chemists. From an early age on, Calvino was thus exposed to precise botanical terminology and taxonomy as well as scientific accuracy. While living in Paris from 1967 to 1980, he intensified his relations with the scientific community¹². As a regular reader of the *Scientific American*, he followed scientific debates and witnessed the conceptual changes

¹⁰ *Six Memos*, p. 57.

¹¹ *Six Memos*, p. 57. "Ma forse l'inconsistenza non è nelle immagini o nel linguaggio soltanto: è nel mondo. La peste colpisce anche la vita delle persone e la storia delle nazioni, rende tutte le storie informi, casuali, confuse, senza principio né fine. Il mio disagio è per la perdita di forma che constato nella vita, e a cui cerco d'opporre l'unica difesa che riesco a concepire: un'idea della letteratura. (*Lezioni americane*, 67)

¹² See Albert Sbragia, "Italo Calvino's Ordering of Chaos". *Modern Fiction Studies* 39.2 (1993): 283-306, p. 286.

concerning science's attitude towards chaos. Furthermore, he often contributed to Congresses on the Philosophy of Science (such as the 1978 conference "Livelli di realtà" in Florence) and, in fact, favorably reviewed Prigogine's and Stenger's *La Nouvelle Alliance* soon after the original French version had appeared in the Italian daily *La Repubblica*.¹³ The Italian writer was, then, well familiar with the emerging studies of chaotic systems, and his Norton lecture on "esatezza", exactitude, clearly demonstrates to what extent his view of the cosmos has been influenced by contemporary science. Calvino explicitly refers to the order-disorder dichotomy and highlights shifts in the scientific community concerning concepts of order and disorder (i.e. science's revaluation of chaos as preceding or giving rise to orderly structures). Echoing the vocabulary of Prigogine and Stengers, Calvino points out the emergence of areas of order from entropic disorder. Drawing an analogy with the larger cultural realm, he defines literature as a stable orderly island within a sea of disorder and confusion. However, Calvino eventually emphasizes the essential and dominant experience of entropy rather than sharing science's welcoming attitude towards chaos:

I think that [the] bond between the formal choices of literary composition and the need for a cosmological model (or else for a general mythological framework) is present even in those authors who do not explicitly declare it. This taste for geometrical composition, of which we could trace a history in world literature starting with Mallarmé, is based on the contrast of order and disorder fundamental to contemporary science. The universe disintegrates into a cloud of heat, it falls inevitably into a vortex of entropy, but within this irreversible process there may be areas of order, portions of the existent that tend toward a form, privileged points in which

¹³ "No, non saremo solo." *La Repubblica* 3 May 1980.

we seem to discern a design or perspective. A work of literature is one of these minimal portions in which the existent crystallizes into a form, acquires a meaning - not fixed, not definitive, not hardened into a mineral immobility, but alive as an organism. Poetry is the great enemy of chance, in spite of also being a daughter of chance and knowing that, in the last resort, chance will win the battle.¹⁴

Calvino, then, views the fictional work as a privileged space of order that may suggest a fresh perspective on the overwhelming chaos of the world. His musings on chance recall the early essay on "Cybernetics and Ghosts". Elaborating on the art historian Gombrich, Calvino in 1967 described the process of art as analogous to word games, where a childish pleasure at combinatory games can - accidentally - produce meaningful and unpredictable effects which could not have been achieved consciously. A meaning on a different level can thus slip in involuntarily and may prove to be of crucial importance.

The stories in *Cosmicomics* (1965) and *Ti con zero* (1967) demonstrate most vividly Calvino's interest in and his incorporation of science into literature. However, Calvino does not study science to provide scientific explanations. Rather, he is interested in comprehending, in a humorous way, what it feels like to be an atom. The protagonist of *Le Cosmicomiche*, a protean being with the

¹⁴ *Six Memos* p. 69-70. "Questo legame tra le scelte formali della composizione letteraria e il bisogno di un modello cosmologico (ossia d'un quadro mitologico generale) credo sia presente anche negli autori che non lo dichiarano in modo esplicito. Il gusto della composizione geometrizzante, di cui potremmo tracciare una storia nella letteratura mondiale a partire da Mallarmé, ha sullo sfondo l'opposizione ordine-disordine, fondamentale nella scienza contemporanea. L'universo si disfa in una nube di calore, precipita senza scampo in un vortice d'entropia, ma all'interno di questo processo irreversibile possono darsi zone d'ordine, porzioni d'esistente che tendono verso una forma, punti privilegiati da cui sembra di scorgere un disegno, una prospettiva. L'opera letteraria è una di queste minime porzioni in cui l'esistente si cristallizza in una forma, acquista un senso, non fisso, non definitivo, non irrigidito in una immobilità minerale, ma vivente come un organismo. La poesia è la grande nemica del caso, pur essendo anch'essa figlia del caso e sapendo che il caso in ultima istanza avrà partita vinta. 'Un coup de dés jamais n'abolira le hasard'. (LA 78)

unpronounceable name Qwfwq, thus imaginatively recapitulates the whole history of the universe from the big bang onwards. He represents, in Calvino's own words, "a kind of anthropomorphization of science"¹⁵, since he variously exists as an atomic particle, a mollusk and a dinosaur; scientific statements, which precede each tale as epigraphs, trigger off Qwfwq's utterances, while other characters resemble mathematical formulas. Calvino thus fictionalizes theories about the origins of the universe and evolution. He illustrates and personifies scientific arguments and foregrounds the gap between science's dry theoretical discourse and the concrete sensual experiences of a single subject: "Science has become more and more removed from the world of images, more and more abstract, so that to enter into it we have to populate it with concrete and visible images."¹⁶ Calvino undertakes a similar project of populating or animating science in *Ti con zero*, a collection of three tales constructed around topics from genetics, cosmology, cybernetics and time. These stories present ambiguous attitudes towards chance and disorder. While "Meiosis", for instance highlights the tension between continuity and discontinuity, Calvino attributes a positive role to chance since he acknowledges that accidental recombinations of genes and discontinuity in the evolutionary process can generate new organisms and thus enable change. At the same time, "I cristalli" depicts chaos as the result of evolution, for the infinite potential of combinations results in complete disorder.

¹⁵ Alexander Stille. "An interview with Italo Calvino." *Saturday Review* 11.2 (1985): 37-39, p. 39.

¹⁶ Stille, p. 39.

*A conte philosophique*¹⁷ of the twentieth century, *Palomar* comprises reflections on nature, culture, and the universe, which are presented in 27 rather discrete chapters, whose only common link appears to be their protagonist, Mr. Palomar. A quiet, solitary observer, Calvino's protagonist scrupulously enquires into the universe, hoping to unlock its secret mechanisms and master the world's complexity. Told in the present tense by a third person narrator (who, nevertheless often adopts the protagonist's perspective or ironically comments on his ambitions), Mr Palomar's observations are presented in series of triads without immediate chronological or logical connections. Moreover, Calvino's protagonist appears as a parabolical figure rather than a realistic character with psychological "depth" and a clearly sketched social background. Palomar merely incarnates a certain function or consciousness: "È semplicemente il soggetto di un tipo di esperienza che esclude il più possibile il commento culturale così come gli aspetti psicologici".¹⁸

Mr Palomar's adventures go back to a series of newspaper articles Calvino wrote for the *Corriere della sera* and *La Repubblica* between 1975 and 1983 under different titles such as "L'osservatorio del signor Palomar", "Il taccuino del signor Palomar", "Le impressioni del signor Palomar". Although some of Palomar's episodes were written before 1979 and then re-arranged, the majority of texts was composed

¹⁷ Calvino seems to be fascinated by this form, as various references in his essays indicate. He defines the term in "Philosophy and Literature" as "lighthearted acts of revenge against philosophy executed by means of the literary imagination" (*Uses* 46) and, in his discussion of *Cyrano de Bergerac*, as "not a 'story' with a thesis to demonstrate but one in which ideas appear and disappear and tease one another in turn" (*Uses* 336)

¹⁸ Calvino in Lietta Tornabuoni, "Intervista con lo scrittore sul nuovo libro 'Palomar': Calvino, l'occhio e il silenzio." *La Stampa* 25 nov. 1983, p.3.

specifically for the publication of the book *Palomar* in 1983.¹⁹ The fact that Calvino consciously chose particular extracts from his numerous articles while leaving out others suggests an inner necessity in his final text despite its serial and combinatory nature. His work seems to represent not a random combination of texts, but rather a carefully planned organization in which the importance of vision, observation, and description might provide a sense of coherence and continuity. Even though there is no recognizable plot, and although the episodes rarely seem to be linked temporally, the various segments seem to have been selected and hierarchically combined. As Calvino explains in an additional short note at the end of *Palomar* (which resembles a belated *mode d'emploi*), he has indeed ordered his work according to a numerological framework and divided it into three different thematic areas corresponding to three different ways of narrating. Number one of these parts, sections, and episodes describes visual experiences of nature, while the second element in each triad presents larger cultural aspects, involving language and symbols, in the form of a story. Number three finally refers to speculative meditations on the cosmos, time, infinity, the individual's relation to the world. In *Palomar*, these three thematic and narrative categories thus intersect horizontally and vertically. Yet only the titles and subtitles of sections and episodes appear within in text, while the individual stories are classified by a progressive numbering from 1.1.1 to 3.3.3 in the comprehensive table of contents at the end of the book.

¹⁹ See Francesca Serra, *Calvino e il pulviscolo di Palomar*, Firenze: Le Lettere, 1996 for a comprehensive table of the newspaper articles which were later turned into sections of *Palomar* (p. 72/73).

Obviously, however, only three episodes truly fit the three categories Calvino devised for his narrative: only episodes 1.1.1., 2.2.2. and 3.3.3 are of course purely and exclusively concerned with visual experiences, cultural aspects, and cosmic speculations respectively. The remaining 24 tales blend those thematic components and offer a combination of various narrative techniques; representing number 1.2.3. in the structure of *Palomar*, "Il prato infinito", for example, assembles all of the following elements: the visual experience of the lawn, a reflection on the cultural significance of the lawn, as well as a meditation on its infinity. It sets out with a description of a patch of lawn, yet also recounts the passing of time while Mr Palomar is pulling up weeds and ends by far-reaching reflections on the cosmos at large. Order and systematic organization, in other words, are the exception; the huge majority of episodes presents a contamination of categories and reveals the fluidity of classifications. The author is, in fact, very well aware of the failure of his attempt to impose a rigorous grill. In an interview, Calvino himself admitted that his final index or "schema razionale" no longer has any organizing power:

Questa nota classificatoria con i numeri potrebbe essere anche superflua. Non c'era nessun bisogno di metterla. Però c'è un aspetto di me stesso che si va accentuando con l'età, il bisogno di fare delle cose sistematiche. È una mia mania e quindi prendetela come tale. Se ad un certo punto non mi faccio uno schema che in qualche modo mi da l'illusione di aver fatto una macchina perfettamente razionale, non sono contento.²⁰

Knowledge of the rules according to which Calvino has organized his text and according to which he plays a game with readers, then, does

²⁰ Harth, Helene, Burkhard Kroeber, and Ulrich Wyss. "Die Welt ist nicht lesbar, aber wir müssen gleichwohl versuchen, sie zu entziffern. Ein Gespräch mit Italo Calvino." *Zibaldone* 1 (1986): 179-186.

not resolve problems of understanding his work. Its secret lies rather in the interactions between the 27 fragments.

Still, even though this quasi-scientific numerological framework with its orderly separations may break down, there is a certain order, i.e. a direction, coherence and progression, in *Palomar*. For while Palomar in the very first episode strongly rejects the idea of contemplation, he increasingly abandons his scientific aspirations and explicitly contemplates, for example, the stars. Although he initially concentrates on the objective aspects of things and tries to keep his sensations under control, his cold attention (when for instance watching the loves of the tortoises) soon gives way to erotic and other fantasies when contemplating a jar of goose-fat. As the scope of observation becomes increasingly narrow and focused, Palomar's reflections become more and more abstract and far-flung. The more his imagination drifts off, the more maladjusted and uneasy he becomes. As his intellectual quest gains in generality, Calvino's figure is increasingly incapable of resolving contradictory views. *Palomar* therefore does not represent a simple concatenation of episodes (as for example the collection of essays *Collezione di sabbia*) but a hierarchical unity, where the whole is different from rather than equivalent to the sum of its parts. The seriality with its strict pattern of predictable repetitions appears to give rise to an unfolding structure.

Mr Palomar's experiences are related in very sober, matter-of-fact language, comprising precise terms which often ring a scientific note ("visual operation", "field of observation", "observation point", "intersections of fields of force, vectorial diagrams", "collections", "intersections of two subcollections" (28)). Calvino's protagonist thus

formulates his problems in clear, rigorous terms. He uses scientific jargon and draws analogies with machines in his effort to detect the world's patterns and mechanisms: "The giraffe seems a mechanism constructed by putting together pieces from heterogeneous machines, though it functions perfectly all the same" (71). As this example suggests, however, Palomar frequently exaggerates his scientific aspirations to the point where his statements seem comical and absurd: "Butchering wisdom and culinary learning belong to the exact sciences, which can be checked through experimentation, bearing in mind the habits and techniques that vary from one country to another" (68). "It must be said that the man - beef symbiosis has, over the centuries, achieved an equilibrium [...] human civilization [...] at least in part should be called human-bovine" (69). Keen to apply his scientific rigor to every subject, Calvino's character even rationalizes the thought of death and describes it in exclusively mathematical terms, as the subtraction of his presence from the world: "Before, by 'world' he meant the world plus himself; now it is a question of himself plus the world minus him" (109). Palomar's ludicrous (because exaggerated) scientific aspirations, then, reveal his confusion of what we consider different realms of knowledge, scientific and non-scientific. His projects cause bewilderment and laughter since they are incongruent with our conventional understanding of science. Calvino's protagonist, in fact, is a literary or philosophical character gone scientific; a would-be scientist, whose philosophical and even mystical attitudes increasingly prevail. Whereas Calvino almost bluntly incorporated scientific discourses in his earlier texts, he ironically dramatizes numerous subtle conflicts between scientific and non-scientific rationalities in *Palomar*.

Mr Palomar's Scientology

Why, then, do Mr Palomar's endeavors appear so absurd and charmingly exotic to us? Palomar's approach to the universe in fact confuses physics and metaphysics and illustrates the mysticism of science which Atlan has so strongly criticized²¹. It ignores different objects, interests, and limits as well as a different use of reason in order to "explain" reality in the realm of science and non-science. Calvino thus brings various kinds of knowledge and the distinct rationalities they entail into play; he unifies them simply on the basis of numbers and, by taking them to their excessive limits, points out their incompatibilities. It could of course be argued that his protagonist stages numerous changes in scientific attitudes and methods which appear to echo contemporary science in general and the study of non-linear systems in particular.²² In the course of his experiments, Mr Palomar indeed has to abandon all hopes for a key to mastering the universe and accept the partial, provisional character of scientific knowledge. He further engages in a range of concrete local practices, is drawn to singular, fluid and unstable phenomena and observes the self-organization of complex dynamic systems (such as "The Order of Scaly Creatures"). When looking at a wave or the patch of lawn, Calvino's protagonist, moreover, questions the Cartesian dualism and stresses the

²¹ Henri Atlan. *A tort et à raison. Intercritique de la science et du mythe*. Paris: Seuil, 1986. [*Enlightenment to Enlightenment. Intercritique of Science and Myth*. Albany: State U of New York Press, 1993.]

²² Bresciani, Sbragia and Testa concentrate on the links between *Palomar* and the "new" epistemology of recent physics. See M.C. Bresciani. "Italo Calvino e la strategia conoscitiva: Palomar ovvero la sfida alla complessità, I & II." *Il Ponte* (Febr. & March 1990) 46.2 & 3: 84-102 & 80-96. Enrico Testa. "'No se sabe lo quiere decir': la ricerca della saggezza di Palomar." *Nuova Corente* 100 (1987): 199-212.

impossibility of extrapolating from the complex system by examining isolated mechanisms or elements; instead, initial changes may be rapidly amplified due to feedback mechanisms. Such a reading of Calvino's work, however, ignores the protagonist's development from his initial concentration on visual experience rendered in the form of descriptions to his speculations and meditations and, above all, his final death. Moreover, this approach overlooks the comic aspects, the absurdity of Mr Palomar's projects and their ironic depiction.

Calvino's protagonist is fundamentally anti-scientific, the very caricature of a scientist. Although his language is very matter-of-fact and precise, he, significantly, hardly ever actually sets up any experiments, but mainly reflects on the objects he encounters - by accident - in the course of his daily habits. Mr Palomar most often has no intention of observing a specific phenomenon, but appears to be drawn randomly to his various objects. His terrace just happens to be a good observation point for watching the migration of starlings, and when spending his holidays at the sea, he naturally observes the waves or the setting sun. Subject-object relations are clearly reversed, since these *objets trouvés* befall him in an almost surrealist manner, beg for his attention and capture him so that he cannot detach himself from them but needs to describe them out of a sense of empathy. Such random accidents determine the sequence of his itinerary. Mr Palomar does not know where he is going, what he is seeking. Even though his inquiries follow a paradigmatic structure -- he encounters a precise phenomenon, describes it minutely, and ends on a frustrated note of epistemological aporia -- the choice of his objects of observation is

never clearly motivated so that his narrative parcours leaves readers with a similar sense of disorientation.

Far from being a sober, reliable observer, Mr Palomar, a forgetful character who easily feels dizzy and loses patience when his experiments fail, cannot trust his mind. Never quite sure whether he really saw the gecko's tongue or not, Palomar cannot rely on his senses: "illusion of the senses and of the mind holds us all prisoners always" (12). When, for instance, looking at the planets, he erroneously comes to believe that the planet and its ring are swaying: "In reality it is Mr Palomar's head that is swaying, as he is forced to twist his neck to fit his gaze into the eyepiece of the telescope" (36). Governed by a sense of quasi-religious wonder, Palomar easily gives in to his sensations and behaves as if under a spell. The observation of jars in a Paris charcuterie triggers splendid visions of "pantagruelian glory" (63) as well as a "sacred enthusiasm" (63). Mr Palomar is thus given to suprasensory perceptions, "waiting to hear the vibrations of an orchestra of flavors." (63) In his mystic delirium, Mr Palomar - the narrator ironically remarks - becomes himself an object of curiosity: while he is contemplating the stars, a crowd accumulates and watches his movements "like the convulsions of a madman" (43).

Calvino's protagonist may follow popular science and his friends may be astronomers, but Palomar himself is an amateur whose telescope is not appropriate for scientific research:

Of the mythical knowledge of the stars he picks up only a weary glimmering; of the scientific knowledge, the echoes popularized by the newspaper. He distrusts what he knows; what he does not know keeps his spirit in a suspended state. (42/43)

His hilarious projects, such as looking at the moon in the afternoon or overlooking the city while imagining himself a bird, do not conform to any sense of scientific experimentation and indicate his ambition not to obtain precise facts and knowledge, but rather to achieve some kind of cosmic wisdom. In his experiments with visual perception, he tries to transcend human limits and for instance "conceive the world as it is seen by birds" (49). Mr Palomar does not even adhere to a precise method, but goes about most clumsily in his expeditions. Unskilled and inexperienced, Calvino's figure is a complicated character who hardly manages to look at the stars since he is more absorbed by turning the flashlight on and off, unfolding and folding various charts, lowering and pushing up his eyeglasses. In order to obtain total vision, Mr Palomar even makes the laborious effort of seeing things from different and unusual perspectives: he watches the gecko from below; he switches from the macro- to the micro-level and exchanges background (such as the giraffes' "black coat") against foreground (their pale veins) in order to defamiliarize his observations, alienate his expectations, and obtain a pure state of mind. Again, the amount of scientific ardor is absurdly disproportionate to the results Palomar achieves. Not surprisingly, Calvino's figure is a maladjusted, nervous character who suffers from gastric ulcers and insomnia and is ill at ease with his environment.

Science, of course, has to endorse a practical reductionism if it wants to be efficient, since it is impossible to simultaneously observe all levels of organization with the same precision. Yet Calvino's protagonist is far from adhering to any such scientific pragmatism. He cannot accept the inevitable mediation of vision, but constantly

questions his visual operations and is scrupulous to the point where he loses the general picture and gets lost in subtle peculiarities. Ironically, Mr Palomar is short-sighted, which complicates his ideal of pure vision from the beginning: "Naked eye for him, who is nearsighted, means eyeglasses" (40). Glasses limit his scope, focus his vision, and thus distance him even more from the objects he intends to observe. Other visual aids such as lenses and telescopes do not necessarily sharpen his picture of the world, for the more Mr Palomar focuses his telescope, the more things escape his eye as if to mock his scientific aspirations. When undertaking the hilarious project of observing one single wave - the sea being barely wrinkled in the first place - Mr Palomar meticulously distinguishes its complex features such as speed, shape, force, and direction and scientifically describes the influence of the wind and the beach in terms of "interaction" as well as "feedback mechanisms". Due to his infinite questioning and perfectionism, however, Mr Palomar is predestined to fail in his undertakings: "at each moment he thinks he has managed to see everything to be seen from his observation-point, but then something always crops up that he had not borne in mind." (5) He slows down his process of observation by giving more and more attention to apparently minor details and smaller sample units, which nevertheless prove to be of infinite density and complexity. He is overwhelmed both by the details of details as well as by "the dust-cloud of the great numbers which contains virtually limitless possibilities of new symmetries, combinations, pairings" (91).

On the one hand, Palomar's imagination obviously shapes and colors the accounts we read. His vision turns the tortoises' love-making into a vivid theater-play. On the other hand, Calvino's character

describes their erotic mating as if it could be reduced to a mechanical program of neural impulses. Oscillating between the highly subjective and the excessively objective, Mr Palomar illustrates an abstruse approach to reading the universe. In accordance with his phenomenological ambition, he strives to dispose of his subjectivity, while ignoring that, even though, scientifically, the role of observation in the constitution of objects cannot be ignored, scientific practice has to accept the subject-object division as a necessary postulate in order to predict and manipulate experiments. A meticulous and overly ardent character, Palomar aims at obtaining a pure state of mind and at describing objects with an innocent eye, with "impartial uniformity" (9). However, his desire, past memories, and the weight of traditions are impossible to cancel out; they always intrude and disturb his experiments in the most ridiculous manner. Palomar's metaphorical imagination interferes for instance even in the very phrasing of his determination to

let the imagination strip away borrowed garments and renounce its show of bookish learning. While it is right for the imagination to come to support weakness of vision, it must be immediate and direct like the gaze that kindles it (37).

Mr Palomar eventually comes to realize that he is, for his part, an object of media and mass civilization rather than an independent, detached subject. While trying to memorize the different kind of cheeses he encounters in a store, Palomar is so absorbed in jotting down their names and sketching their shapes that he misses his turn and ends up buying the most banal and most advertised cheese, "as if the automatons of mass civilization were waiting only for this moment of

uncertainty on his part in order to seize him again and have him at their mercy" (67).

The impossibility of cancelling out one's self, transcending one's position and observing things as from the outside, is particularly evident in the numerous instances in which Mr Palomar anthropomorphizes animals and abstract physical objects. For Calvino's protagonist, it is less important to see things than to think them (29); he wishes to slip into the gecko's skin and understand his actions, choices and intentions, "what is sleep like for someone who has eyes without eyelids?" (55). From the first episode onwards, Calvino's character draws parallels between human beings and waves, blackbirds or gorillas. He describes the waves' "stubbornness" (3) in terms of human relationships ("the wave immediately following it [...] seems to push it and at times overtakes it and sweeps it away; [...] the wave that precedes it and seems to drag it towards the shore, unless it turns against its follower as if to arrest it." (3)) and considers the blackbirds' whistling and silence equal to human communication. Contrary to the tendency of dispersing objects into their minute details, one can here note Palomar's holistic inclination of inserting everything into a complex, coherent unity. Not only does Calvino's protagonist integrate animals into the human realm (when for example comparing the gecko's claws to "actual hands with soft fingers", "delicate and strong" (53)). Mr Palomar also inserts himself into the flock of starlings he observes in the sky, feeling "as if he also were part of this moving body composed of hundreds and hundreds of bodies..." (58). He detects links, correspondences, and analogies everywhere in nature, and even suspects intention and will behind the sun's reflection in the sea

("This is a special homage the sun pays to me personally,' Mr Palomar is tempted to think" (11)) as well as the migrating starlings ("What meaning do these immense evening assemblies have for them, this aerial pageant like a parade of the great annual manoeuvres?" (56)). Palomar's constant anthropomorphization of natural phenomena, both animate and inanimate, thus indicates a vision of universal interconnectedness.

Desperate for correspondences, order, intention in a universe that is more and more degenerating and disintegrating, Palomar assumes interactions between micro- and macro-levels to the point where his reflections become hilariously irrational: "Oppressed, insecure, he becomes nervous over the celestial charts as over the railroad timetables when he flips through them in search of a connection." (43) Longing to escape the uncoordinated movements of his mind and taking refuge among the galaxies, Palomar even tries to establish a relationship with Mars, who, he thinks, is speaking to him "in a stammered, coughing speech" (35). Given Rome's barbarian invasion and corrosion by pigeons, "lumpen-fowl" (47), other birds appear to him as "messengers of friendly deities" (49). Similarly, when observing the gecko gulping gnats, he meditates on eternal cycles of living and dying and imagines "a god of the nether world situated in the center of the earth with his eye that can pierce granite" (54). Calvino's figure thus conceives of the universe in terms of cosmic consciousness, will and interior life. Again, he aims at a comprehensive cosmological model, at the unity of matter and consciousness, of body and mind, of the concrete and the abstract. In an attempt to reconcile scientific generalizations and the singular, unrepeatable features of natural

phenomena, the macro- and the micro-level, infinity and the infinitesimal, Palomar jumps to hilarious conclusions:

he tries to make his thoughts retain simultaneously the nearest things and the farthest: when he lights his pipe he is intent on the flame of the match [...]; but this attention must not make him forget even for a moment the explosion of a supernova taking place in the great Magellanic Cloud at this same instant, that is to say a few million years ago. The idea that everything in the universe is connected and corresponds never leaves him: a variation in the luminosity in the Nebula of Cancer or the condensation of a globular mass in Andromeda cannot help but have some influence on the functioning of his record-player or on the freshness of the watercress leaves in his bowl of salad. (105)²³

This caricatured version of the proverbial butterfly effect indicates how Mr Palomar never pays attention to the level of organization he is describing, but hastily jumps over an entire series of intermediate levels in his totalizing efforts. He is so irritated by seemingly unbridgeable gaps (between humans and animals, models and reality, himself and society) that he ignores epistemological boundaries. Paradoxically therefore, although his "cultural studies" are concerned with singular phenomena, Mr Palomar cannot keep himself from relating the part to the whole and himself to humanity. Although he dissects reality into separate domains, he is not satisfied at all with partial truths, but aims at some knowledge of the Ultimate Reality, a

²³ "Poi cerca di fare in modo che i suoi pensieri tengano presenti contemporaneamente le cose più vicine e le più lontane: quando accende la pipa l'attenzione per la fiamma dello zolfanello che alla prossima tirata dovrebbe lasciarsi aspirare fino in fondo al fornello dando inizio alla lenta trasformazione in brace dei fili di tabacco, non deve fargli dimenticare nemmeno per un attimo l'esplosione d'una supernova che si sta producendo nella Grande Nube di Magellano in questo stesso istante, cioè qualche milione d'anni fa. L'idea che tutto nell'universo si collega e si risponde non l'abbandona mai: una variazione di luminosità nella Nebulosa del Granchio o l'addensarsi d'un ammasso globulare in Andromeda non possono non avere una qualche influenza sul funzionamento del suo giradischi o sulla freschezza delle foglie di crescione nel suo piatto d'insalata." (116)

comprehensive and definite vision of the universe at large. Palomar systematically tries to abstract from the decoding of a specific phenomenon to a reading of the entire "book of nature". His aim is "to reach a complete and definitive conclusion of his visual operation" (6), "mastering the world's complexity by reducing it to the simplest mechanism" (6). Twentieth century scientific practice, however, has increasingly renounced completeness and is rather an "empirico-logical praxis of constructing reality", as Atlan emphasizes²⁴. Only local explanations directly plugged into experimentation can be considered scientific. As Atlan, again, has pointed out, "The main thrust of *science* is to pose *questions*. The main thrust of *mystical traditions* is to provide answers." (7) In his desperate need for stability, Palomar looks to science for answers to questions evoked by myth ("Where do [the starlings] go the next day? What function does this prolonged stop-over in one city have in the strategy of their migration?" (56)), and he is disappointed that "even science, which should confirm or deny [rumors], is apparently uncertain, approximate." (56) He continually translates one language (of science) into the other (of mysticism), thus unwillingly and ironically highlighting their different rationalities and ways of using words, paradoxes, contradictions. Calvino's protagonist is incapable of situating different explanatory schemes in their respective contexts of reference and of considering their explanatory power from different points of view. He is trapped in the mystic belief of an Ultimate Reality, a single model. His scientific rationality, then, functions as a myth since it wishes to fuse all explanations and models into a single amalgam. This attitude, however, leads to epistemological

²⁴ Henri Atlan, *Enlightenment to Enlightenment*, p.193.

closure, and not surprisingly, Calvino's figure increasingly experiences silences and aporias.

Palomar departs from the postulate of science that reality is rational, yet he comes to affirm the mystic idea that the universe is essentially contradictory. His language therefore abounds in oxymorous expressions: Regularity, most frequently, is a "treacherous" illusion (57) and harmony is at best complicated. Saturn, for instance, "achieves the maximum strangeness with the maximum simplicity and regularity and harmony" (35). Although the singing birds enfold Mr Palomar in an "acoustic space that is irregular, discontinuous, jagged", there is an equilibrium among the various sounds so that "all is woven into a homogeneous texture held together not by harmony but by lightness and transparency" (20). Calvino's protagonist further describes the giraffes' skin as "irregular, but homogeneous patterns" (72) and finds an "inner proportion that links the most glaring anatomical disproportions, a natural grace that emerges from those ungraceful movements" (72), while the rocks in Kyoto's Zen garden create an "indefinable harmony" (83). These contradictory expressions reveal the collapse of binary oppositions and reflect the paradoxes Palomar encounters due to his confusion of science and myth; his lawn is "an artificial object composed from natural objects", "a nature in itself natural but artificial for this area" (26); to be uniform green is "an unnatural result that lawns created by nature achieve naturally" (27). Overwhelmed by cosmic disorder, incongruency and multiplicity, Calvino's character becomes suspicious on the rare occasions when he encounters order and harmony. He thus perceives the planet Saturn as "too beautiful to be true, too gratifying to my imaginary universe to

belong to the real world" (36). Incapable of accepting that scientific thought has to impose the structure of logical non-contradiction in order to be efficient and fertile, Mr Palomar increasingly confronts cognitive aporias that resemble mystic attitudes.

In the end, then, Mr Palomar's pseudo-scientific quest has all the characteristics of a mystic journey. A solitary, reflective figure, who feels alienated in late twentieth century society and disenchanted by its materialistic values, Calvino's protagonist searches for a hidden wisdom and seeks to re-establish the harmony between himself and the cosmos. This quest for equilibrium in a world of chaos and disintegration initially consists in shutting out all distracting influences, blotting out all cultural and interpretive attitudes when observing specific phenomena from the outside. Increasingly, however, Mr Palomar turns his gaze inwards and points the telescope at himself. Instead of moving from experiments to language and discourse, Calvino's protagonist moves from language to inner experience and silence. By means of contemplation, abstraction, and meditation he seeks to experience a union with the ultimate beyond words, concepts or images. Calvino's protagonist indeed seems to feel this oneness with nature, repeatedly confirms a kind of cosmic consciousness and experiences interaction and correspondences between different levels of reality. However, his quasi-mystical sensations of the essence of things, his glimpse of the ultimate reality is incompatible with scientific rationality and can no longer be expressed in scientific terminology. In his effort to speak the unspeakable, to refer to something beyond language and to mark absences, Mr Palomar thus depends on the poetic

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Yet, not only his scientific, but also his mystical quest fails lamentably. Mr Palomar never experiences a moment of illumination or calm, let alone a glimpse of some ultimate reality or knowledge of the Absolute. Instead, Calvino ridicules the ambitions of his protagonist who strives for harmony with nature, yet who is ill at ease in human society. Although he may feel dizzy and intoxicated, his encounters with the infinite are rather caricatured versions of mystical ecstasy. Mr Palomar's quasi-religious impulses, when contemplating the chart of a bull in a butcher's shop, indicate this ironic reversal of access to the transcendental realm: "though he recognizes in the strung-up carcass of the beef the person of a disemboweled brother, and in the

while drifting towards a mystical view. His final end-time vision before learning to be dead is that of

streets full of people, hurrying, elbowing their way ahead, without looking one another in the face, among high walls, sharp and peeling. In the background, the starry sky scatters intermittent flashes like a stalled mechanism, which jerks and creaks in all its unoiled joints, outposts of an endangered universe, twisted, restless as he is. (107)²⁵

In its pathetic and eventually unsuccessful pursuit of knowledge, Calvino's *Palomar* both resembles and historically diverges from Flaubert's *Bouvard et Pécuchet* (1881), a novel whose protagonists are also pseudo-scientists, curious, learned and cultivated, yet without any scientific formation. Profoundly marked by the nineteenth century positivist and utilitarian ideology, Flaubert's characters easily acquire and accumulate knowledge by copying extracts from study books, encyclopedias and other manuals, thus creating inventories, assembling and classifying material. By establishing a "grand répertoire de la bêtise humaine" they ridicule the compartmentalization of knowledge typical for nineteenth century positivism.²⁶ It is hardly by accident that Flaubert's characters are copyists and return to this profession after their series of experiments in agriculture, chemistry, medicine, geology, and history has failed. For, as Alain Buisine has argued, several historical needs compelled the nineteenth century to favor descriptions, "a symptomatic manifestation of the preponderance

²⁵ "vie piene di gente che ha fretta e si fa largo a gomitate, senza guardarsi in faccia, tra alte mura spigolose e scrostate. In fondo, il cielo stellato spizza bagliori intermittenti come un meccanismo inceppato, che sussulta e cigola in tutte le sue giunture non oliate, avamposti d'un universo pericolante, contorto, senza requie come lui." (118/119)

²⁶ Flaubert, in fact, understood his work as a conjunction of comic literature and encyclopedic science, as an "encyclopédie critique en farce", a "comique d'idées". The subtitle he proposed for his novel in 1879 was "Du défaut de méthode dans les sciences".

of the 'visible' at that time, of a fascination with the scopic".²⁷ While both Flaubert's and Calvino's texts challenge the grammar of inventories, their system of organization, *Palomar* does not favor an encyclopedic approach to knowledge. In Calvino's work, subject areas are no longer separate, and knowledge is not perceived as a closed system, totalized and exhausted. *Palomar* eventually questions the formula according to which to see is at the same time to know. For Calvino's protagonist is increasingly fascinated with some esoteric knowledge behind the surface of things, and his goal, as has been shown, is to find a cosmic unity. The failure of Mr Palomar's scientific quest and his turn towards a quasi-mystic conception of the universe is, therefore, well mirrored by the excessive use of descriptions that eventually give way to meditation and silence. For Palomar's descriptions have nothing of the disciplined, organized efficiency they have in science. These digressive practices, including the final lingering meditations, indicate different degrees of connectedness, unity and coherence; they clog the narrative and trouble the linear order which Palomar's itinerary suggests.²⁸

Descriptions, Meditations, and the Etcetera Principle²⁹

²⁷ Alain Buisine, "The First Eye", *Yale French Studies* 61 (1981): 261-275, p. 263.

²⁸ I am well aware that the opposition between narrative and description or narrative and meditation is only a construct. Both modes often cohabit or interact in the same piece of text, and shifts between them are often a matter of interpretation. Yet these categories prove heuristically interesting in my analysis, not only because Calvino himself stressed their importance for his final work.

²⁹ I borrow the term "etcetera principle" from Ross Chambers, upon whose essays I greatly rely in the following. See "The Etcetera Principle: Narrative and the Paradigmatic." *FLS* XXI (1994): 1-24. "Meditation and the Escalator Principle (On Nicholson Baker's *The Mezzanine*)." *Modern Fiction Studies* 40.4 (1994): 765-806.

As Calvino himself pointed out in an interview, one of his reasons for writing *Palomar* was the wish to recover a genre that had fallen into disuse: the description.

Mon livre fournit des échantillons de ce récit-description que Monsieur Palomar n'arrive pas à faire, il peut être vu comme un de mes "cahiers d'exercice", celui dédié à la description, un genre littéraire tombé en désuétude.³⁰

The predominance of descriptions in Calvino's text, of course, corresponds to the importance of visual experience, which is well announced in the author's final note. Accordingly, metaphors of looking abound in *Palomar*, ranging from instruments such as glasses, lenses, and telescopes to the very name of Calvino's figure, which refers to a famous observatory with a powerful telescope in Southern California, Mount Palomar.³¹ Several subtitles such as "Palomar looks at the sky", "The eye and the planets", "The contemplation of the stars", "The world looks at the world" as well as the paratactic form of enumerations, catalogues and inventories, which proliferate in Calvino's text, further suggest the importance of visual perception and mark the text's descriptive dimension.³² Shop windows, display cases, yards, and cages in the zoo also serve as introductory signals for the numerous descriptive passages in *Palomar* as does the narrator's use of the present tense.

³⁰ Paul Fournel. "Italo Calvino: cahiers d'exercice (propos recueillis par P. Fournel)." *Magazine littéraire* 220 (juin 1985): 84-89, p. 85.

³¹ According to A.H. Carter, Palomar is also the Spanish name for a "dove cote", a structure built with horizontals and verticals where doves roost: "Palomar may be said to pigeonhole aspects of reality into the rectilinear [...] categories of his mind" (*Italo Calvino. Metamorphoses of Fantasy*. Ann Arbor: UMI Research Press, 1987, p. 141). In the interview with Tornabuoni quoted above, Calvino himself pointed out that his first association of the name "Palomar" is a diver: "il personaggio è come un palombaro che s'immerge nella superficie." (3)

³² *Du descriptif*. Paris: Hachette, 1993.

Descriptions, in *Palomar*, serve a double dis-ordering function. First, as conceptual or epistemological constructs, they participate in the discourses of cognition and illustrate Mr Palomar's scientific attempts at reading as well as re-ordering the world. Historically, Foucault has illustrated how descriptions began to take an important place in the constitution of knowledge from the eighteenth century onwards.³³ Descriptions therefore reveal the ordering modes of a cultural system, which, however, are no longer valid for Mr Palomar's "new science". Second, because they are always open to a supplement, they harbor heterogeneity, defer the sense of an ending, and open narrative order up to new directions: "a disordering, paradigmatic or listing principle [...] *changes the context* and turns narrative discourse into a limitlessly openable encyclopedia or inventory, a description of the endless diversity of the world."³⁴ As Philip Hamon, too, has pointed out, the dominance of the Aristotelian concept of action led to a rejection of the descriptive mode, considered as secondary, even detachable, because of the excess of erudition and the esthetic heterogeneity it implied. It was particularly the description's inherently aleatory nature which seemed suspect and threatening. Since they accumulate details which need not be ordered according to any inherent necessity but can be switched around and even proliferate endlessly, descriptions are intrinsically based on randomness; even extrinsically, the aleatory intervenes in that any catalogue - perhaps the emblem of the description - may occur unpredictably at any moment in the text. Consequently, when encountering descriptions devoid of suspense, readers may no longer

³³ *Les mots et les choses*. Paris, 1966, ch. V "Classer", p. 137-176.

³⁴ Chambers, p.4.

feel the necessity to follow this digression "hors d'oeuvre" and are likely to skim descriptive passages; they can thus no longer be controlled or guided in their reading activity. Despite its organizing function, then, the description stands out for its unruly character. Subordinated to the finality of narrative and its characters, descriptions have traditionally assumed at best a decorative or accessory function, even though they provide the "effet de réel" characteristic of realism.

In *Palomar*, however, both mathesis and mimesis - classically inscribed into the text by means of descriptions - collapse, for Calvino subverts the traditional description in numerous ways. While, conventionally, descriptive texts had to introduce new characters or situations and fill possible gaps that jeopardized a narrative's readability (such as the occurrence of proper names, neologisms, archaisms or technical terms), descriptions in *Palomar* lead to the opposite effect. For Mr Palomar chooses the most banal everyday objects and alienates them to such an extent that readers are left with a catalogue of questions, incongruous comparisons, and subjective anthropomorphizations. The simple reflection of sunrays on water, for instance, takes on such a metaphysical dimension and is so full of tensions, worries, apprehensions that it contrasts sharply with the conventional depiction of sunsets. Similarly, the migration of the starlings, a most ordinary phenomenon recurring every year, conjures up thoughts of impending catastrophe, just as the generally distracting or entertaining visit to the zoo causes hours of insomnia and anguish for Mr Palomar. Far from filling voids, the descriptive attempts of Calvino's protagonist demand further narrative, thus moving both readers and Mr Palomar forward.

As Hamon argues, descriptions in classical referential texts are usually given once and for all. Palomar, by contrast, always questions his approach and multiplies descriptions of the same object by choosing numerous perspectives and approaches: Expressions such as "In other words [...]" (35) indicate that he never succeeds in fixing an object, but always rephrases his initial project, refocalizes and takes a different direction when the slightest complication occurs. Accordingly, he rarely uses paraphrases or synonyms, which would mark the redundancy or tautology of his vision. Instead, as has been shown, oxymora abound to mark the heterogeneous and ill-assorted.

Syntax, above all, reveals Mr Palomar's impossibility of fitting objects into categories and classifying them according to an underlying order. Lists and enumerations, on the one hand, express his attempt to catalog and fix his impressions and thereby to gain knowledge. Accordingly, in the butcher's shop, he sorts meats and cuts according to color and shape (68/69) and classifies the birds' voices into categories of increasing complexity:

punctiform chirps; two-note trills (one note long, one short); brief vibrato whistling; gurgles, little cascades of notes that pour down, spin out, then stop; twirls of modulation that twist upon themselves, and so on, to extended warbling (21).

On the other hand, although they suggest a sense of plenty and "Pantagruelian glory", lists and catalogues eventually do not help Mr Palomar master the infinite heterogeneity and multiplicity of detail. In his absurd search for objectivity, Calvino's protagonist wants to grasp everything and thus simply lumps all objects he sees into a list while avoiding establishing causal relationships. Returning from his stroll along the lonely beach and passing again the naked bosom, Mr Palomar

keeps his eyes fixed straight ahead so that his gaze touches with impartial uniformity the foam of the retreating waves, the boats pulled up on shore, the great bath-towel spread out on the sand, the swelling moon of lighter skin with the dark halo of the nipple, the outline of the coast in the haze, gray against the sky. (9)

Trying to dissolve the gap between nature and culture by inserting the naked breast into a description of the beach, Palomar's enumeration only enhances the incompatibility of objects. It stresses rather than neutralizes the intrusion of the aleatory and the random dispersion of objects. The context normally attached to the individual items changes so radically from factual to erotic that the list loses its systematicity. As Patti White has observed, "The list, which initially seems the very embodiment of order, a *visible* system, has a natural tendency to tip towards a subversion of the systematic."³⁵ Excessive lists ultimately mirror the "impossibility of an accurate and complete naming of parts", thus calling into question the structure's foundation, which enables comprehensive knowledge. Such "chaotic enumerations", in the words of Leo Spitzer³⁶, do not conform to any conventional categories or hierarchies, but rather express Mr Palomar's extremely holistic vision of the world, his gratitude for its infinite plenitude, but also his simultaneous apocalyptic fear of universal dissolution. Palomar's systematic reflection on the radiant "Sword of the Sun", for example, is interrupted by a note on the chaotic accumulation of garbage lining the shore and conjures up end-time visions: "the withdrawal of the water now reveals a margin of beach dotted with cans, peanuts, condoms,

³⁵ Patti White. *Gatsby's Party. The System and the List in Contemporary Narrative*. Purdue: West Lafayette UP, 1992, p. 72.

³⁶ Spitzer, however, limits himself to an exclusively stylistic analysis and coins the term when discussing the poetry of Walt Whitman. See his *Essays on English and American Literature*. Ed Anna Hatcher. Princeton: Princeton UP, 1962.

dead fish, plastic bottles, broken clogs, syringes, twigs black with oil" (15). Calvino's protagonist tries to collect items in groups, yet more often than not these lists do not convey a sense of harmony, homogeneity or oneness. Since enumerations are both conjunctive and disjunctive, everything is possible within the catalogue, as Cannon has remarked³⁷, both a sense of plenty as well as a sense of overabundance and disorder. Lists can assemble what is contiguous, yet this spatial contiguity may throw a new light on their conceptual relation. Resembling Georges Perec's obsessive categorizations, Mr Palomar's series do not exhibit an inner necessity, but indicate the great number of other potential orders and the desire to explore these possibilities. Classifications in *Palomar* thus reveal the systematizing activity necessary to achieve knowledge. They expose the process of ordering infinitely small as well as infinitely large items into a potential configuration, which theoretically always requires a supplement. Each episode, even each description and list thus follows its own trajectory and "explodes" into a multitude of possible directions.

Calvino's figure is incapable of controlling the description's proliferation and open-endedness as his vision either explodes into far-reaching associations or vanishes into nebulas of microscopic details. Observing the infinite lawn, he muses,

Then there are the fractions of blades of grass, cut in half, or shorn to the ground, or split along the nervation, the little leaves that have lost one lobe ... The minute grassy devastation, in part still alive, in part already pulp, food for others plants, humus ... (28)

³⁷JoAnn Cannon. "Calvino's Latest Challenge to the Labyrinth: A Reading of *Palomar*." *Italica* 62.3 (1985): 189-200, p. 195.

As the large number of elliptical sentences indicates, speculations remain vague and no definite knowledge is obtained. Unlike Descartes, Palomar does not disassemble things to put them together again methodologically. For him, systems and frameworks have collapsed into one holistic vision so that all conventional strings come unstrung: "the construction process subverts the ordering intention and redirects the gaze toward the process itself, leaving content in an unstable and untenable position." (White 105) Pondering the world before his birth and after his death, Palomar, for example, wonders at the end of "The sword of the sun":

What happens (happened, will happen) in that world? Promptly an arrow of light sets out from the sun, is reflected in the calm sea, sparkles in the tremolo of the water; and then matter becomes receptive to light, is differentiated into living tissues, and all of a sudden an eye, a multitude of eyes, burgeons or reburgeons... (15)

The punctual ellipsis indicates something that cannot be named or found, namely the end and unity of the series. Unfinished sentences thus subvert the deterministic logic of succession, reflect the lack of direction and continually defer exactitude. Mr Palomar is overwhelmed by options and alternatives and cannot grasp the proliferation of possible connections. His open-ended sentences correspond to an "etcetera" that indicates the vagueness of his musings and suggest a connectedness beyond human intelligibility:

The poverty of [the tortoises'] sensorial stimuli perhaps drives them to a concentrated, intense mental life, leads them to a crystalline awareness ... Perhaps the eros of tortoises obeys absolute spiritual laws, while we are prisoners of a machinery whose functioning remains unknown to us, prone to clogging up, stalling, exploding in uncontrolled automatisms...(18/19)

Confronting dispersal and proliferation, Mr Palomar tries to resolve the mystical paradox of unity in diversity, yet he cannot reconcile the finite with the boundless. As a consequence, his own speculations proliferate. Calvino's protagonist constantly re-examines his observations and ponders opposite theories. Similar to the tribal storyteller who Calvino evokes in his essay on "Cybernetics and Ghosts", Mr Palomar puts forth words "to test the extent to which words could fit with one another, could give birth to one another, in order to extract an explanation of the world from the thread of every possible spoken narrative".³⁸ Listening to the blackbirds' whistles and drawing parallels with human communication, Palomar muses

[...] then the first step would be taken towards bridging the gap between ... between what and what? Nature and culture? Silence and speech? Mr Palomar hopes always that silence contains something more than what language can say. But what if language were really the goal towards which everything in language tends? Or what if everything that exists were language, and has been since the beginning of time? (24)

Re-examining his attitudes and pondering opposite theories, Calvino's scrupulous protagonist repeatedly changes his presuppositions in order to check his hypotheses. Series of questions mirror the zigzagging movement of Mr Palomar's mind. They keep both Calvino's protagonist and readers of *Palomar* moving forward in the hope of finding possible answers and harmonies and denote that seeing becomes an action, an active questioning of the data yielded by the senses. Similar to questions, which always lead to further problems and open up a whole field of new reflections, parentheses, too, open the text

³⁸ "Cybernetics and Ghosts". *The Uses of Literature. Essays*. Transl. by Patrick Creagh. New York: Harcourt Brace Jovanovich, 1986. 3-27, p.4.

up in that they suggest alternative interpretations. Resembling annotations or footnotes, parenthetical statements may correct previous claims, relativize them or add further explanations.

It must be said that the man-beef-symbiosis has, over the centuries, achieved an equilibrium (allowing the two species to continue multiplying) though it is asymmetric (it is true that man takes care of feeding cattle, but he is not required to give them himself to feed on), and has guaranteed the flourishing of what is called human civilization, which at least in part should be called human-bovine (coinciding in part with the human-ovine and in smaller part with the human-porcine, depending on the alternatives of a complicated geography of religious prohibitions). (69)

What Chambers has observed in Baker's *The Mezzanine* equally applies to *Palomar*:

The writing mimes not narration as argumentative selectivity, with its teleologically oriented principle of 'strict' relevance that aims at comprehension - but something like a potentially limitless, descriptive comprehensiveness. (798)

Significantly, almost all objects observed by Mr Palomar are surfacing, emerging, taking shape: the sunset, the changing constellation of planets and stars, the emerging moon in the afternoon, the moving crowd of starlings. Far from representing an "objet-savoir", Mr Palomar's descriptions treat objects in their transformation, temporal change and fluidity. In contrast to "classical" descriptions which, as Hamon argues (93), concern states and represent a first step before any hermeneutic or explanatory activity can begin, Palomar's descriptions account for changes. Again, there is theoretically no endpoint to transformation, but phenomena might be described endlessly.

Indeed, it seems descriptions serve less to transmit any information or knowledge than to sort out Mr Palomar's ideas,

disentangle his views, and articulate his experiences. Palomar's descriptions do not convey any sense of authority, proof or truth; they are more auto-didactic than didactic. Since models, charts, and other organizing modes prove dubious to the skeptical Mr Palomar, he does not re-write them as if going through an already established checklist. The chain of his associations seems hard to follow since it does not coincide with any conventional lexical fields or codified stocks of knowledge. Clearly, his descriptions cannot be consulted or even memorized, but need to be read, i.e. considered in their temporal and spatial movement. For the contours of objects are uncertain; surfaces seem to be hiding something, so that descriptions spread into various directions and encode the disorientation that Mr Palomar experiences. Calvino's text is, then, a quest for knowledge, not the de-scriptive re-writing of an already established inventory of knowledge. Instead of representing a digression or an extension from narrative, descriptions in Calvino's final work represent an end in themselves. They reveal precisely the absence of an underlying order and, because of their failure in achieving the classical "lisibilité", introduce multiple dynamics that enable the scattered 27 episodes to move forward. As each episode creates a crisis or dilemma of descriptive discourse and leaves it unresolved, readers, thus made curious, hope for some revelation or resolution and advance with Mr Palomar on their quest for harmony. As every descriptive attempt provokes dangerous silences and increasingly points to Palomar's crisis, descriptions themselves become the motor of narrative that carry the text, and Mr Palomar, to their end.

As the metaphorical drifts of most of his accounts indicate, Palomar always ventures into fields beyond appearances. While Zola's 'textes-magasins' may have confirmed established stocks of knowledge³⁹, Mr Palomar's visit to the cheese shop ends in an alienating experience. A "museum", this shop "seems meant to document every conceivable form of dairy product" (64). And yet, Mr Palomar can no longer establish a relationship to his objects via the transparent instrument of language. Even though he reiterates the original French names of cheeses and is able to classify them according to their forms, consistency, and alien materials involved in the crust, this knowledge does not "bring him a step closer to true knowledge, which lies in the experience of the flavors, composed of memory and imagination at once." (66) Nomenclature, another list-making activity, remains inadequate since the knowledge of words differs from the knowledge of things.

Mars [...] advances imperiously with its stubborn radiance, its thick, concentrated yellow, so different from all the other yellows of the firmament that it has finally been agreed to call it red, and in moments of inspiration really to see it as red. (34)

Mr Palomar, in fact, increasingly abandons faith in the capacity of words to access objects of the external world. His anthropomorphic descriptions stress precisely the incongruity between referents and language. While, before, too many words in his excessive lists tried to exhaust all possibilities, it is now silence, the absence of words, which is

³⁹ A recurrent metaphor in the descriptive texts of Balzac and Zola, the shop or "magasin" not only denotes a place where articles are arranged and sold. On a metaphorical level, it also hints at Zola's conception of the literary text as a neatly ordered "magasin", which is to reproduce, through the transparent window of language, the proliferation of material reality. And, according to Hamon, it is certainly not by accident that the new type of publication which arose in the nineteenth century, descriptive, encyclopedic and didactic in nature, was referred to as magazine.

to contain the sense of replenishment. "No se sabe lo quiere decir" (87): the refusal to comprehend more than the physical materiality of things appears to Mr Palomar as "perhaps the only way to evince respect for their secret ... that true, lost meaning." (88) Since language can never reach the final meaning, a symbolic wordless speech becomes the only alternative. Mr Palomar hopes that "silence contains something more than what language can say" (24). Calvino's protagonist seeks something beyond words and consequently visits the Japanese Zen garden hoping to contemplate the absolute "without recourse to concepts capable of verbal expression" (83). He spends whole months in silence and bites his tongue three times before speaking. Lamenting that he lives "[i]n a time and a country where everyone goes out of his way to announce opinions or hand down judgments" (93), Mr Palomar more often than not refrains from voicing his ideas. Counteracting the avalanche of words by others, he considers silence "a kind of speech, since it is a rejection of the use to which others put words [...] a silence can serve to dismiss certain words or else to hold them in reserve for use on a better occasion" (94).

His final reflections, appropriately, mainly deal with travels, the equivalent to his mental wanderings. These take the shape of meditations, where the mind trespasses disciplinary boundaries as well as the perceptual limits of the described and reaches beyond the awareness of everyday life. Meditations relax the tight chronological order of narrative, for they, too, are subject to the etcetera principle. They can and in fact should always be supplemented, lead to another thing rather than to an end. Not surprisingly, Mr Palomar is increasingly fascinated with the play of interpretations or translations,

the need to “move from one language to another, from concrete figures to abstract works, to weave and re-weave a network of analogies.” (88/89) Proceeding by chance rather than by method, meditations remain aimless and unpredictable, and their itinerary (in the manner of free associations) obscures connections between ideas and sentences. The narrative, again, could move in a variety of directions, none of them being inherently necessary. Meditations thus make the text progress even more haltingly so that it eventually reaches a state of timelessness and paralysis equivalent to the meditator’s mute contemplation.

In a final scene, Mr Palomar speaks of himself as if he were already dead. He views his life from a point where the series is apparently complete so that no more items, episodes may be added to change it. Looking back at his life as if from an outside point of view, he considers the past as if it were a perfected pattern. Once again, he longs for an end of the series in order to find some meaningful pattern. And once again, he simultaneously wishes to keep the series proliferating and to postpone the ending. After having tried to transcend the subject-object duality and after having attempted to resolve the opposition between unity and diversity, Mr Palomar eventually tries to breach the barrier of time and catch time by the trail:

'If time has to end, it can be described, instant by instant,' Palomar thinks, 'and each instant, when described, expands so that its end can no longer be seen.' He decides that he will set himself to describing every instant of his life, and until he has described them all he will no longer think of being dead. (112/13).⁴⁰

⁴⁰ 'Se il tempo deve finire, lo si può descrivere, istante per istante, - pensa Palomar, - e ogni istante, a descriverlo, si dilata tanto che non se ne vede più la fine'. Decide che si

Yet, before his descriptions can expand into eternity and transmit infinity, Calvino's protagonist experiences yet another encounter with the unexpected. Death, the ultimate unforeseeable hazard takes him in, thus mocking Mr Palomar's entire project of extending not only his life, but also of expanding the nature of Western rationality. "At that moment he dies" (113) is the laconic sentence of Calvino's work. Despite Mr Palomar's apocalyptic apprehensions, time will not end (and therefore cannot be described), but Mr Palomar's life is finite. He remains clearly connected to the time-bound world of mortals in his very attempt to transcend it.

In its final death and lack of salvation, *Palomar* diverges most clearly from Dante's *Divine Comedy*, from which, however, it borrows its numerological structure. Yet, unlike Dante's protagonist, Mr Palomar is clearly drawn to concrete material objects or phenomena of his daily life such as a beach, a garden, or different cities and is only concerned with the here and now, with immediate present issues and problems. Calvino's protagonist strongly distrusts a perfectly ordered universe and is highly suspicious of any metaphysical presence in it. He fundamentally doubts the idea of a God having organized everything in perfect harmony. The triad framework of Calvino's final work, then, does not derive from cosmic fullness experienced by Palomar; instead, it reflects the author's ironic reversal of the Christian view of the cosmos. And yet, there is also a parallel between the two works. As the Renaissance episteme accepted magic and erudition on a par with what we recognize as scientific rationality - the alchemist's practice, for

metterà a descrivere ogni istante della sua vita, e finché non li avrà descritti tutti non penserà più d'essere morto. (126)

instance, was both physical and spiritual - so Calvino's work highlights a contemporary return to a pre-modern science where mystical and scientific rationalities might again be compatible.

Menage à trois

I want [...] to say something that hasn't already been said and to say it in a way that cannot be said except through literature. I believe more and more in literature as a language that says things that the other languages can't say, that literature has full status as a form of knowledge. (Stille 39)

Although inspired by the latest conceptual changes in science (and philosophy), Calvino, then, demystifies scientific knowledge in his fiction and stresses the cognitive role of literature. In the case of *Palomar*, specifically, as has been shown, Calvino stresses the risks implied by the contemporary enthusiasm for order and the optimistic view of chaos as preceding or containing orderly regularity; he points out the danger of confusing different realms of knowledge, distinct rationalities and a different use of language in explaining reality. Calvino is highly sceptical of contemporary tendencies towards holism and universal connectedness. He challenges the popular view according to which unified wholes are endowed with positive value, while individual, seemingly disconnected parts are of a secondary and inferior nature. To a confused chaotic mingling he opposes differentiation and potentially infinite separation into parts, which, paradoxically, results in yet another indifferent mingling. Yet, by eventually making finite and imposing an end, he rejects a timeless mythic synthesis.

Science is faced with problems not too dissimilar from those of literature. It makes patterns of the world that are immediately called

into question, it swings between the inductive and deductive methods, and it must always be on its guard lest it mistake its own linguistic conventions for objective laws. We will not have a cultural equal to the challenge until we compare against one another the basic problematics of science, philosophy and literature, in order to call them into question. While waiting for this time to come, we have no choice but to dwell on the available examples of a literature that breathes the air of philosophy and science but at the same time keeps its distance, while with a gentle puff it blows away both theoretical abstractions and the apparent concreteness of reality.⁴¹

Both science and literature are culturally conditioned forms of knowledge; yet literature represents a unique mode of comprehension in that it can act as a realm in which diverse discourse can meet and enter into conflict or ironic tension. Its knowledge is neither opposed nor complementary to that of science but of a different order altogether. As is well demonstrated by the encyclopedic novels of Musil, Queneau, Gadda, and Perec (to which Calvino devotes his Harvard lecture on "Multiplicity"), literature can articulate even those discourses at the margins of institutionalized disciplines. By trying to represent a multiplicity of knowledges and relationships, "both in effect and in potentiality" (*Six Memos* 112), it can function as an epistemological instrument and explore the boundaries of different modes of understanding. Calvino, in other words, is not so much interested in the cognitive value of science; rather, his ambition is to translate the epistemological findings of science into literature in order to reveal their ontological implications. What Calvino pointed out in a paper dating from 1976 on "Right and Wrong Uses of Literature" might then be extended to the relationship between literature and science: literature's value lies in the fact that it "can hear things beyond the

⁴¹ "Philosophy and Literature". *The Uses of Literature*, p. 45/46.

understanding of the language of politics" and "can see beyond the color spectrum perceived by politics" (*Uses* 98).

Even in a world of crisis, where the very existence of literature is more and more threatened by the predominance of other media, Calvino remains convinced that literature, with its specific modes of expression, cannot be replaced. Since it can function precisely as a critique of accepted systems of thought, work against the danger of reduction and uniformity, and focus on differences rather than similarities between various cultural realms, literature will not die out. Elaborating on quickness, "rapidità", another value for the next millenium, Calvino explains

In an age when other fantastically speedy, widespread media are triumphing, and running the risk of flattening all communication onto a single homogeneous surface, the function of literature is communication between things that are different simply because they are different, not blunting but even sharpening the differences between them, following the true bent of written language. (*Six Memos* 45)⁴²

This confidence in the future of literature - "one of society's instruments of self-awareness" (*Uses* 97) - in a so-called post-industrial era is, therefore, not unconditional:

Only if poets and writers set themselves tasks that no one else dares imagine will literature continue to have a function. Since science has begun to distrust general explanations and solutions that are not sectorial and specialized, the grand challenge for literature is to be capable of weaving together the various branches of knowledge, the

⁴² In un'epoca in cui altri *media* velocissimi e di estedissimo raggio trionfano, e rischiano d'appiattare ogni comunicazione in una crosta uniforme e omogenea, la funzione della letteratura è la comunicazione tra ciò che è diverso in quanto è diverso, non ottundendone bensì esaltandone la differenza, secondo la vocazione propria del linguaggio scritto. (LA 52)

various 'codes', into a manifold and multifaceted vision of the world (*Six Memos* 112)⁴³

With the arrival of extremely holistic tendencies in the natural sciences, however, literature's task may also be translated as having to counteract this universalizing and unifying force by insisting on singular facts, unrelatable, exceptional parts, and never-ending differentiations. The ideal relationship between science, philosophy and literature, according to Calvino, would be a *menage à trois*, where the three forms of knowledge mutually challenge each other. Even if, as Calvino well knows, the very fact of writing already implies an order (particularly when it is pressed into a strict structural framework), literature may constitute a turbulent swirl where various ordering modes of knowledge can enter into - a ludicrous - conflict and displace one another while alienating our culturally conditioned forms of representation. Narrative, not science, thus emerges as a way of making order, providing orientation in a climate of irrationality and chaos. This narrative order, however, can no longer be conceived of in terms of a traditional plot developing from a beginning via a middle to a concordant end. As has been shown, *Palomar* favors disordering parataxis, limitless descriptions, and indeterminate meditations, which spread out into infinite directions and eventually entangle Mr Palomar in a network of relationships. Ordering tables are evoked and simultaneously unmade, just as an apocalyptic ending is both anticipated and deferred. For Calvino, discordant narrative practices

⁴³ Solo se poeti e scrittori si proporranno imprese che nessun altro osa immaginare la letteratura continuerà ad avere una funzione. Da quando la scienza diffida dalle spiegazioni generali e dalle soluzioni che non siano settoriali e specialistiche, la grande sfida per la letteratura è il saper tessere insieme i diversi saperi e i diversi codici in una visione plurima, sfaccettata del mondo. (LA 123)

which refuse to unify and establish connections may well be necessary to do justice to a plurality of interpretative approaches and to problematize exaggerated visions of wholeness.

III. Or is there some connection? Accidents and Regularities in Julian Barnes's *History of the World in 10 1/2 Chapters*

In a work from 1989, the British author Julian Barnes promises us *A History of the World in 10 1/2 Chapters*¹. Yet this text differs as much from one found in a history book as Borges's taxonomy cited in the preface to Foucault's *Les Mots et les choses*² diverges from a conventional classification in a biology manual. Foucault quotes Borges's division of animals in a fictional Chinese encyclopedia, which enumerates in alphabetical order seemingly absurd rubrics of animals, fabulous as well as real. By bringing into line such disparate and, it seems, incompatible groups, the Argentinian writer transgresses the boundaries of our imagination and calls into question on what bases we establish divisions. Similarly, compared to customary historical writings, which divide the past on temporal or topical lines and follow the conventions of documentation, Barnes's *History* seems strange (charmingly exotic as Foucault would say) because it juxtaposes what to us appears incongruous and without a connection. It suggests unusual categories and de-familiarizes our traditional orders of thinking and conceptualizing historical processes. Barnes consequently troubles and questions what underlying order we assume history has. By emphasizing its chaotic, catastrophic moments, he depicts history as an inscrutable process governed by power and chance.

¹ New York: Vintage, 1989. All page numbers refer to the Vintage edition.

² Michel Foucault, *Les Mots et les choses*. Paris: Gallimard, 1966: p. 7.

Barnes's work is spaced out into ten chapters and a parenthetical half-chapter, which is inserted after chapter eight. It incorporates heterogeneous material covering a number of genres: a playful parody of the Old Testament tale of Noah and the ark (ch.1); a critical reevaluation of the parable of Jonah in the whale (ch. 7b); the translated archival material of an animal trial in sixteenth-century France (ch. 3); autobiographical notes of a Chernobyl survivor (ch. 4), of an eighteen-year-old tutor at a crammer (ch. 7a) and of a dreamer (ch. 10); letters and telegrams from an actor in the rain forest to his wife in England (ch. 8); impersonal accounts of a Mediterranean cruise hijacked by Arab terrorists (ch. 2), the pilgrimage of two Victorian spinsters to "Noah's" Mount Ararat (ch. 6) as well as of an astronaut's search for the ark (ch. 9); a learned art-historical disquisition of Géricault's canvas *The Raft of the Medusa* (ch. 5); meditations on love and the history of the world (the half-chapter) and two sober historical accounts, one of sailors on board the *Medusa* in 1816, the other of the unsuccessful exodus of Jews in Germany in 1939 (ch.5 and 7c). These episodes obviously belong to what we traditionally classify as different genres or orders of discourse. *A History of the World* even comprises a reproduction of Géricault's painting within chapter five and thus incorporates a medium other than language, too.

Despite the multiplication of genres within Barnes's novel, the individual chapters of *A History of the World* seem orderly on the level of both syntax and semantics. Narrators do not experiment with language or sentence structures and more often than not also adhere to literary conventions in order not to produce anachronisms; that is to say, events that happened in the last century (such as Miss Fergusson's

pilgrimage) are told in Victorian manner (ch. 6) while, according to the author's note at the end, the Medusa's shipwreck draws its language from the 1818 London translation of Savigny's and Corréard's *Narrative of a Voyage to Senegal*. Moreover, each episode develops one string of action and produces a coherent plot; the individual story is therefore fully comprehensible if read on its own and could be detached from Barnes's novel.

However, all stories are told by different narrative voices (impersonal as well as personal) and in different styles, some in an ironic, mocking tone while others appear more matter-of-fact. Moreover, interviews and acknowledgements of sources (in the author's note at the end as well as at the beginning of chapter three (61)) denote objective documentation and reveal that Barnes thoroughly researched archival material; he studied court prosecutions against animals, which actually took place in France in the Middle Ages, and consulted historical sources that document the voyage of the St Louis as well as first-hand accounts of the survivors of the Medusa and of James Bartley. Yet, the fact that a woodworm narrates the events on Noah's ark suggests imaginative fictional elements. Similarly, the events depicted in the final chapter, "The Dream", are entirely imagined and hence cannot be judged according to criteria of informational or truth value. The clash between factual and fantastic components in *A History of the World* thus inverts the conventional concept that historiography has to depict real rather than fictional events. The notion of "fabulation", which recurs several times in the novel, may well be seen as its program: "You keep a few true facts and spin a new story round them." (109)

Barnes's *History* as a whole appears random and chaotic, since the sequence of chapters and stories resists any chronological order, let alone a plausible sequence of cause and effect. The Old Testament story of the deluge, for instance, is followed by an account of a twentieth-century cruise, while the following chapter, "The Wars of Religion", jolts us back into sixteenth-century France. Chapter four refers to the nuclear disaster in Chernobyl in 1984, while chapter five leads us back to the shipwreck of the Medusa in 1816. The following chapter presents a pilgrimage to Mount Ararat in 1837, and the first and third simple stories of chapter seven are situated in the twentieth century, whereas the second story relates the biblical tale of Jonah in the whale. Neither time nor place are continuous, for we are introduced to events in the Mediterranean, France, Australia, England, Germany, South America and the United States in consecutive chapters. What is more, each story has its specific characters who only rarely recur in other chapters. No single subject therefore exists which could serve as a central organizing principle.

Most conspicuously, *A History of the World* lacks causality and logical links, for none of the events can be explained in terms of a preceding chapter nor does it in any way account for subsequent stories. Events do not evolve or develop in time, but are simply accumulated and juxtaposed. The simple logic of before-and-after, cause-and-effect appears to be out of order. Because of the novel's incoherence, readers can never predict what will happen next and where events might lead. The various episodes seem to have been selected and ordered at random and one might well wonder how these dispersed, fragmented

pieces of narrative can add up to an integrated whole, *A History of the World*.

The author has enumerated stories and thus imposed an order upon them, but since the accounts presented in *A History of the World* are so heterogeneous, their enumeration enhances their disjunctions and additive combination. The title of Barnes's novel equally reflects this play with numeric orders, their inscription and simultaneous subversion. The author divides his history into ten chapters and thus conforms to our system of counting, where ten denotes a certain totality and completeness. Yet Barnes simultaneously undermines this unifying order by inserting the fragmented half-chapter "Parenthesis" after chapter eight. He thus subverts culturally encoded number systems and alludes to the incomplete nature of his supposedly universal history even in his title³. As becomes evident throughout the novel, narrative voices in *History* mock our "quaint obsession with multiples of seven" (5), "mimick [... our] sacred number" (11) and playfully twist numeric orders around. *A History of the World* further rejects historiography according to dates and mocks the chronicle form of recording history, where successive years always already imply a certain progression: "They want to make us think we're always progressing, always going forward." (239) Dates fix and delimit, unify and totalize events, ignoring their consequences: "We get scared by history; we allow ourselves to be bullied by dates. [...] But what happened after 1492?" (239)

³ Moreover, Barnes's *History* might ironically allude to the historical work of the French historian de Condorcet (1743-1794), who divided his history of the world into ten epochs in order to show the perfection and progress of humanity.

Furthermore, *A History of the World* does not conclude but simply terminates. The novel's final chapter presents neither a judgment on the dreamer nor a conclusion for the novel itself. It does not provide a synthesis which would eliminate the chaos at the end, but suspends a final meaning or resolution. This lack of closure forces readers to reflect retrospectively on connections and patterns. As they have to draw links themselves, they might well wonder whether the novel's structure is only a random series of stories.

Upon closer examination, one might, however, perceive connections and detect certain links between the various chapters and stories in the textual chaos of *A History of the World*. First of all, certain plots are linked when, for example, the Victorian Miss Fergusson (of chapter six), who has visited the Géricault canvas of the wreck of the *Medusa* (discussed in chapter five), sets out in search of Noah's ark on Mount Ararat (introduced in chapter one) - an expedition which is echoed in "Project Ararat" (chapter nine) in which an American astronaut goes on a similar pilgrimage only to find the bones of Amanda Fergusson. Seemingly discrete events are thus connected by strange loops.

Apart from these plot links, verbal repetitions are provided throughout the novel and point to larger thematic concerns in *A History of the World*. References to woodworms, first of all, constitute the most banal device to establish links between chapters. A stowaway on Noah's ark, a woodworm is the narrator of chapter one, who presents a parodic version of the biblical deluge. In chapter three, his species is accused of having destroyed the leg of the bishop's throne in Besançon in 1520. Although the woodworms try to defend themselves

by arguing that they were on board the ark, i.e. chosen by God, they are found guilty. Ironically, however, insects (and possibly woodworms) destroyed parts of the very manuscript which recorded their trial. Various narrators further assure us that woodworms could no doubt be found in the frame of Géricault's painting (139) and in the Beesleys' furniture (171). Moreover, a line in "Parenthesis" casually recalls the woodworms' activities in "The Wars of Religion" ("love will make you unhappy later when the bishop's throne almost collapses" (243)), while a reference to Noah's ark in "Project Ararat" reminds us of the insect's extraordinary capacity to survive. The ark, it is claimed, was made of gopher-wood and should therefore be extremely resistant to both rot and termites (266). (Ironically, however, chapter one "proves" that woodworms did gnaw in the ark's gopher wood.)

Secondly, the expression "to separate the clean from the unclean" (184) is echoed throughout the novel and underlines the theme of selection or the survival of the fittest. Introduced in "The Visitors", the phrase designates the classification of the cruise tourists by the Arab terrorists. It indirectly refers back to chapter one where Noah or Noah's God divides animals into two classes, the clean ones which could be eaten and those with cloven feet. On the Medusa's raft only those who are physically strongest can survive the storm: the "healthy were separated from the unhealthy like the clean from the unclean" (121) The problem of natural, divine or human selection reappears, when 250 Jewish passengers on board the St Louis seem to have the possibility to leave the boat in Havanna: "how would you choose the 250 who were to be allowed off the Ark? Who would

separate the clean from the unclean? Was it to be done by casting lots?" (184)

Moreover, phrases like "The animals came in two by two" (33) and "the bodies were flung over the rail in pairs" (58) connect chapter two, the Mediterranean cruise, to the woodworm's story of Noah's ark. The cruise passengers are thus compared to animals on Noah's boat where the animals also had to board in pairs and were cruelly slaughtered. Allusions to the happy couples on board the ark recur (for instance p. 83), while the opening rhyme of "The Survivor" ("In fourteen hundred and ninety-two Columbus sailed the ocean blue." (83)) is echoed in "Parenthesis" (239). Such verbal repetitions reverberate throughout the novel, establish a guideline for the reader and underline important thematic issues in Barnes's *History*.

Last but not least, all ten chapters are linked thematically to the first, the tale of Noah's ark and the deluge, in various, sometimes obscure ways. The ark provides a mythical link in that its passengers (couples of animals, Noah, woodworms) or its location (the sea, Mount Ararat) recur throughout all other chapters in Barnes's novel. Almost all stories in fact recite disastrous voyages on sea⁴ and share a catastrophic, apocalyptic and chaotic component. Barnes's *History* therefore not only performs or stages a chaos in its very structure, but also constructs its content around the theme of chaos and catastrophe. Water and floods have mythically been associated with chaos, i.e. in religious or mythical symbolism, floods share the double potency which is typically attributed to chaos.⁵ Floods allude to the apocalypse,

⁴ Chapter three does not deal with a literal voyage on sea, but the church can figuratively be seen as a boat, which is threatened by woodworms.

⁵ See the entry on "flood" and "Noah" in the *Encyclopedia of Religion*. Ed. Mircea Eliade. New York: Macmillan, 1987.

the last judgment when the world will disappear and when water will reduce everything to an initial state of total solvency; yet, as in the case of Noah in Genesis, floods may also precede the creation of a new universe and thus signify purification and rebirth. They have been perceived as cathartic in nature in that they eliminate imperfect elements so that the future world becomes possible. Barnes's *History* explicitly alludes to these religious or mythical components: "Sin must be purged with water. The sin of the world was purged by the waters of the flood." (160) Similar to chaos, floods can thus be both turbulent and vital, both devastating and creative.⁶

Modelling his first chapter on the biblical story of the deluge, Barnes no doubt refers to the theme of the origins of civilization, which are implied in Genesis. In several cosmogonies, the deluge marks a decisive rupture between an antediluvian and a postdeluvian world, introducing a new creation, the rebirth of a purified humanity. In Judeo-Christian belief systems, Noah is, more explicitly, linked to Adam, since he symbolizes the hope that the divine curses against humankind (set in motion by Adam) will end. One of the most important typological figures, Noah also prefigures Christ, since he has faith in a sinful world, obeys God, and defeats death. Moreover, he announces judgment and saves humanity from death and destruction as Jesus did. While Noah's ark symbolizes the church, the dove can be seen as a divine sign of peace and reconciliation. Whereas God had the just and righteous Noah survive, he eliminated all other humans by

⁶ Interestingly, according to the French scientist de Cuvier (1764-1832), who developed a catastrophe or cataclysm theory, the last catastrophe was precisely the biblical deluge 5000 or 6000 years ago. Cuvier's theory holds that plants and the animal world were destroyed after the course of geological periods and that the world was then newly created and remained unchanged until the next catastrophe impended. Noah's ark would then represent the origin of our present civilization.

means of a flood. The deluge therefore comprises both an element of creation or fresh start as well as of the Last Judgment.

Returns to the origins of civilization in fact occur in several chapters of Barnes's *History*, while the concluding chapter shows clear parallels with the Last Judgment and heaven. Franklin Hughes, guide on the Santa Euphemia, for instance, lectures on Minoan civilization in Knossos on Crete when he is interrupted by Arab terrorists (40). In "The Survivor", Kath idealizes primitive people, thinking that they are closer to some older cycle and that they "have the key to living with nature" (93). She pledges for a return to nature and sees her decision to take the boat and leave the world behind as a step in that direction: "We all crawled out of the sea once, didn't we? Maybe that was a mistake. Now we're going back to it." (94). "The Mountain", the legendary Mount Ararat that is the destination of Amanda Fergusson's pilgrimage, stands for "the birthplace of mankind" (155). Here an ancient vine stock and a willow tree, which supposedly sprung from one of the planks of Noah's Ark, still flourish (150). Chapter eight goes back to the times of Jesuit missions in Latin America, while the final chapter pictures a dream of the last judgment. The replica ark, a worship center, which Spike Tiggler passes in North Carolina, provides a further thematic link to Noah and the deluge. It is directed at a place where man first took to the air in order to remind bypassers of the even more significant moment when human beings first embarked on water (248).

Furthermore, all chapters (except "The Dream") are thematically connected in that they display an element of chance or randomness in their very content. Every story introduces a catastrophe: shipwrecks, a

hijacking, a nuclear disaster or an earthquake - all of which happen out of the blue, without any clear hint at the motivations lying behind them. The various episodes of *A History of the World* deal with unpredictable occurrences, senseless destruction and violence, random killings, the indeterminacy of ships on stormy seas.

Given these recurring themes, motifs and verbal echoes, is everything in the *History of the World* (and history) mysteriously interconnected, as the Australian woman on a raft, "The Survivor", assumes, "even the parts we don't like, especially the parts we don't like" (84)? Yet Kath is suffering from nightmares, hallucinations and other mental disorders, as the continual change of perspective from first person to third person in her narrative reflects, and we may doubt her reliability. Until the end it remains unclear whether Kath is only fabulating or really undertaking her voyage. Is chance not only an explicit topic in Barnes's *History*, but also its structural "principle"? Are the novel's repetitions (of numbers, phrases, characters, events) just independent causal series of events, random recurrences? Or do they point to some underlying historical law? Is our sense of chaos only due to an incomplete knowledge or understanding of *History's*, and by implication the universe's, structure? Reflecting on the death of his companion Matt, who was killed by Indians while filming a Jesuit mission, Charlie also wonders whether this death was "a chance coincidence? Or is there some connection?" (216) And is it nothing but a coincidence that the Jewish passengers' voyage on board the *St Louis* lasts exactly 40 days, or are these wanderings mysteriously connected to Noah's voyage during the deluge? And if everything is connected, who plots or schemes history? Does history follow a pattern or is it chaotic?

Since one of the novel's characters, Amanda Fergusson, also argues that "there [are] too many happy accidents in the world for them to be accidental" (148), we might well wonder whether there is a larger organizing principle about movement or direction in history, which could relate the different events and tales. Precisely because an element of chance is incorporated on the level of both action and formal structure, readers are stimulated to reflect on the cause and agency of chance coincidences, on a higher order, on history's deep structure, its underlying meaning. After all, the title promises us *A History of the World* and thus alludes to the concept of Universal History which is, in fact, based upon the assumption that history displays one single plot.

Universal History

Although the idea of a Universal History can be traced back at least to Augustine's *City of God* (in which its author included Greek pagan beliefs into his universal Christian history guided by divine providence), it received wide popularity and currency only in the last decades of the eighteenth century, when thinkers like Kant and Schiller reflected on the notion of "Weltgeschichte", world history.⁷

Kant, in 1784, considered the "Idee zu einer allgemeinen Geschichte in weltbürgerlicher Absicht"⁸[Idea for a Universal History on a Cosmopolitan Plan]. Rejecting empirical accounts of history, Kant asks for a philosophical guiding idea, the Leitfaden, according to which

⁷ As Reinhard Koselleck has pointed out, the transcendental concept of History in the singular, "history pure and simple", only emerged with the modern notion of progress in the Enlightenment. World history was seen as a system, and its domain of action became the entire globe. (see "History, Histories and Formal Structures of Time" in his *Futures Past: The Semantics of Past Times*)

⁸Kants Werke, Band 8. "Abhandlungen nach 1781." Berlin & Leipzig: de Gruyter & Co, 1923.

the history of humanity could be written. He sees a systematic regularity in History at large, even if the actions and events of individual subjects (such as deaths and marriages) appear random, contradictory and irregular. Displaying an immense belief in the general and universal laws of nature and their teleological determination, he maintains that the goal or culmination of history, and hence nature, is universal civil identity in a just and rational state, which goes beyond the specificities and particulars of time, place, and culture. However, Kant is well aware that his method is essentially heuristic, that the thread he finds in history, the hidden intention of nature, is a priori, presupposed by him.

Schiller, in his inaugural lecture at Jena five years later and only months before the outbreak of the French Revolution, also treated the question "Was heißt und zu welchem Ende studiert man Universalgeschichte?"⁹ Schiller, in this text, bases the necessity of a universal history on recent European overseas explorations, on the discoveries of regressive savage peoples, who shamefully remind the world citizen of the late eighteenth century of how "we" used to be. As a result, world or universal history according to Schiller is to examine the various progressive stages and constitutions man went through, "vom ungeselligen Höhlenbewohner - zum geistreichen Denker, zum gebildeten Weltmann" (367). Furthermore, the historian should trace those phases from the latest situation back to the origin of things and link those elements he detects in order to form a system, a rationally coherent unit; the historian has to introduce a rational intent and impose a teleological principle on historical incidents.

⁹ *Schillers Werke*. Nationalausgabe, Band 17. (Historische Schriften, 1. Teil) Weimar, 1970, p. 359-76. ["What is universal history and why do we study it?" (my translation)]

Several features of Universal History thus emerge from these and other influential historians of world history¹⁰. First, the idea of Universal History claims that all human events unfold in a single story with a single central subject or theme; it further implies that individual events can only become intelligible when ensconced within the single movement of History at large. Most important, the idea of Universal History is based on the principle of uniform human nature: although it admits the diversity of human individuals and events, it considers this variety essentially as "the permutations of a single and unchanging set of human capacities and possibilities, differentiated only by the effects of geography, climate, race, and other natural contingencies." (Mink 138) Instead of stressing individuality, uniqueness and local changes, the notion of Universal History privileges general regularities and global schemas, "the grid on which any [route of events] might be traced"(138). Given these features of Universal History, can the ten tales of Barnes's *History* with their common connections to Noah's ark be combined under such a rubric? Can they be deciphered as part of a larger pattern, as conforming to the teleologically unified happening of a people?

I will recapitulate the events in Barnes's *History* and examine whether they confirm a single movement or plot in history. *A History of the World*, in fact, offers us various historical patterns (master narratives¹¹ of history) that developed in different communities as well

¹⁰ I owe the following features of the idea of Universal History to Louis O. Mink's essay, "Narrative Form as a Cognitive Instrument." (*The Writing of History. Literary Form and Historical Understanding*. Ed Robert H. Canary and Henry Kozicki. Madison: U of Wisconsin Press, 1978, 129-149.)

¹¹ I borrow this term and concept from Jean-François Lyotard, who defines it as an all-encompassing model, which legitimates social and political institutions, legislations, ethics, ways of thinking. (See *La condition postmoderne: rapport sur le savoir*. Paris: Editions de Minuit, 1979.)

as different historical epochs in order to account for changes and catastrophes in history. Ironically, by their very juxtaposition, these global order/ings of history already destabilize the idea of a Universal History, a single all-encompassing plot in history. I will argue that *A History of the World in 10 1/2 Chapters*, although frequently echoing the concept of Universal History where everything is interconnected, also undermines this notion. Instead of revealing patterns in history, Barnes's novel highlights its chaotic, ironic, ruseful moments, where historical processes escape any one single pattern or order.

Eschatology or World History as Hidden Salvation

A History of the World first of all proposes the Judeo-Christian version of history as divine providence, i.e. the eschatological model, which orders history in consideration of its end. More specifically, this grand explanatory scheme of history presupposes salvation by a promised deliverer, the resurrection of the dead and the Last Judgment where all the wicked throughout history will be judged and doomed, while all the righteous will be transported into a new world. History is seen as progressing linearly towards this final goal, the ultimate triumph of the divine purpose. The establishment of divine sovereignty, then, provides a direction for human hope and change. Moreover, time is irreversible according to this view of history in that the mythical paradisiac state cannot be conjured up by repentance or forgiving.

Although eschatological motives can be found in numerous religions throughout the world, they are of fundamental importance for the understanding of the Old Testament. Old Testament eschatology

specifically holds that the catastrophes threatening the people of Israel result from the Jews' disobedience to God. However, since they are God's chosen instrument and uniquely related to the divine, the Jewish people can obtain spiritual and material renewal and be redeemed from exile in Egypt, if they carry out the divine purpose and fulfill God's promises. Judaism envisions God as actively intervening in the historical (as well as the natural) realm, as scheming all events and revealing his will through them. Events may not make sense in the course of history, but will be intelligible once history has reached its end in the Last Judgment. What seems chaotic and impenetrable to the individual is in fact steady, progressive and entirely intelligible from God's point of view. In sum, history is providential, and contingent events, accidents or coincidences are in the end nothing but expressions of God's will.

The eschatological view of history seems to be echoed, first of all, in Barnes's chapter one, where Noah's God punishes humanity's disobedience by the deluge; he actively intervenes in history, sends the deluge and finally his messenger, the dove, as a sign of his reconciliation with humankind. In Jonah's story, likewise, God appears to guide the course of events and stage Jonah's life as a "little piece of street theatre" (176). God is omniscient and omnipotent, having "operative control over the winds and waters of the Eastern Mediterranean" (175). He organizes the storm, directs the whale, orders the fish to vomit up the penitent and makes the gourd spring up. Jonah's shipwreck, consequently, is no accident, since God manipulates and guides all events. Significantly, the sailors on Jonah's ship cast lots during the storm "to determine which of those on board was the cause

of evil, and the short straw, broken domino or queen of spades was drawn by Jonah." (176) God, in other words, even interferes in games and leaves nothing to chance.

This view, then, attributes little or no agency to human beings; "tireless to prove himself top dog" (176), God is the master puppeteer and human beings are his marionets. "God finger-flips the blubbery jail hither and thither like a war game admiral nudging his fleet across maps of the sea." (177) The biblical tale presents Jonah (and Noah) as not being able to control events, as being completely subject to God's idiosyncracies. The narrator himself remarks the

crippling lack of free will around - or even the illusion of free will. God holds all the cards and wins all the tricks. The only uncertainty is how the Lord is going to play it this time: start with the two of trumps and lead up to the ace, start with the ace and run down to the two, or mix them around. (176)

The events in sixteenth century Besançon, where woodworms destroy the bishop's throne and, by implication, God's glory, follow the same logic. The inhabitants of the French city cannot conclude otherwise but that the infestation must have been, if not divinely ordered, at least divinely permitted (76/77) for "God does nothing without a purpose." (68) "The Lord's ways are frequently hidden from us." (76) Crucial to the woodworms' defense is therefore that their species was represented on the ark. Only if they are chosen by God do the insects have a right to exist. Similarly, sailors on the Medusa's raft see history determined by the Almighty. They pray to God during the storm and offer thanks to the Lord when a ship appears on the horizon that promises to rescue them (122). Savigny and Corréard expressly highlight divine intervention when stating in their account of the shipwreck that the "manner in which they were saved was truly

miraculous, and that the finger of Heaven was conspicuous in the event" (123).

Furthermore, Amanda Fergusson firmly believes in the literal reality of the Holy Scriptures and hence in God's "eternal design, and its essential goodness [...] The proof of this plan and of this benevolence lay manifest in Nature" (147). She discovers in the world "divine intent, benevolent order and rigorous justice" (148) where her father can only perceive of "chaos, hazard and malice." (148) Compulsively interpreting everything in terms of her religious faith, Miss Fergusson sees divine hints present even in banal details; when, for example, referring to Dr. Friedrich Parrot, the first man to reach the top of Mount Ararat, she interprets the scholar's name as appropriately and justly the name of an animal: "No doubt part of the Lord's great design for us all." (151) She even compares a pair of small caves to the pressing of God's thumb into the mountainside. More important, believing in divine justice, Amanda attributes the earthquake on Mount Ararat, which she and her companion barely escape and which destroys a whole village and its monastery church, to God's will:

'It was a punishment they should have foreseen. [...] For disobedience. For fermenting the fruit of Noah's vine. For building a church and then blaspheming with it... A small sin is a great sin in this place.'
(163)

Catastrophes, in her Christian view, are expressions of God's vengeance and punishment of the sinful, while the righteous will survive.

Spike Tiggler also hears God's voice speaking to him, urging him to find Noah's Ark (254). Undergoing a Paul-like conversion, the astronaut feels like an instrument in God's hand, realizing divine

intentions. Similar to Amanda Fergusson, he sees God's will embodied in nature as well as history. Tiggler ignores scientific explanations and blames the Lord for making the water on Mount Ararat flow uphill: "The Lord has everything in mind," said Spike Tiggler. "All the time." (270) When his companion Jimmy points out the inconsistency of God destroying Noah's settlement by an earthquake, Spike blindly ignores his objection and can only reply: "Musta had a reason. Always does." (275) God, in this view, must have had good reason for scheming events, though we may not be able to understand his logic.

However, if several stories or chapters seem to confirm an underlying or hidden eschatological order in history, the hilarious parody of Noah's story, the ironical portrait of woodworms sapping the pillars of the church already indicate an ironic distance to the Judeo-Christian version of history. What is more, other episodes such as the third simple story in chapter seven challenge and undo this pattern. The story of Jewish passengers on board the *St Louis*, who are dispossessed, impoverished, despised and humiliated, clearly does not fit in with a Judeo-Christian providential view of history. For if the course of world history is guided by divine providence, then why did God not arrange for the Jewish passengers on board to be rescued? If, according to the Old Testament, the Jews stand in a unique relationship to their creator, who is directly involved with the world, then why does God not redeem the Jews from their exile, as he has promised? The organized destruction of six million Jews during the Nazi period cannot possibly testify to God's mercy and compassion, his essential kindness and divine justice. After the Holocaust, God or any other transcendental principle, which would confer meaning on existence,

can no longer be a legitimating or legitimate authority upon which the course of history can be based. The Holocaust strongly disturbs the notion of historical patterns or regularities and a direction, let alone benevolent divine guidance, in history.¹²

In order to further foreground the absence of a direction or a goal in the *History of the World*, Barnes's narrative significantly ends with a parody of the last judgment: the narrator of the last chapter, "The Dream", is neither condemned nor saved in his dream of heaven: "You're OK" (292) is the only judgment the friendly old uncle utters when considering the narrator's case. Despite recurring confirmations of a divine plot in history, "The Dream" invalidates all visions of God's interventions in history by depicting God as a phantom created by human beings, its existence depending entirely on our imagination and will. The secularized commercial heaven of Barnes's final chapter destroys all hopes for justice and redemption, ridiculing them as 'necessary propaganda':

there's something we *call* Hell. But it's more like a theme park. [...] Just to give you a good scare. (299)
that's the principle of Heaven, that you get what you want, what you expect. I know some people imagine it's different, that you get what you deserve, but that's never been the case. We have to disabuse them. (301)

¹² The Jewish philosopher Hans Jonas has tackled this grave challenge to Jewish faith and has pondered "The Concept of God after Auschwitz". In this central essay, Jonas refuses to rationalize the monstrous evils of the holocaust as the result of God's inscrutable will and supposed benevolence. Instead, he rejects divine omnipotence and maintains that God *could* not intervene in the Holocaust, because God chose to withdraw from the physical course of things after the moment of Creation and to let the cosmos unfold according to its own possibilities. He therefore cannot prevent evil from occurring so that it is up to human beings to safeguard and responsibly direct the adventure of nature. (see his *Mortality and Morality. A Search for a God after Auschwitz*. Evanston: Northwestern UP, 1996, esp. p. 131-143.)

In the heaven depicted in "The Dream", individuals are no longer predetermined or manipulated by God's will, but are free agents of their own lives. As Margaret tells the dreamer,

'it's democratic nowadays. If you want to die off, you do. You just have to want to for long enough and that's it, it happens. Death isn't a matter of hazard or gloomy inevitability, the way it is the first time round. We've got free will sorted out here, as you may have noticed.'
(302)

Heaven is depicted in "The Dream" as a world without evil, pain, mistakes or catastrophes, where everything can be planned and organized, and where everything is predictable. Yet its visitors decide to die sooner or later and eventually opt for the unpredictable and contingent. "After a while, getting what you want all the time is very close to not getting what you want all the time." (307) Although it invalidates an eschatological view of history, Barnes's novel does admit that our dream of heaven is necessary as a utopian vision, as an idea that will never come true.

At the same time that Barnes's novel advances beliefs in God's providential guidance and order in history, it subverts religious assumptions and unmask them as human projections. Both Amanda Fergusson and Spike Tiggler, in fact, tend to become a caricature of their excessive belief in divine design. Their extreme religious faith is mocked since it tends to turn into superstition. It is, for instance, highly ironic that the God-fearing Miss Fergusson should manipulate her own fall and subsequent death on Mount Ararat, thus not leaving her burial place to God's providence. This is, at least, Miss Logan's suspicion, given that the descent where Amanda slipped was tiring rather than dangerous and given her smile and strange nonchalance after her slip:

The question she was avoiding was whether Miss Fergusson might not have been the instrument of her own precipitation, in order to achieve or confirm whatever it was she wanted to achieve or confirm. (167)

Even more paradoxical is the fact that, even though Amanda's religious faith borders on superstition, the Victorian spinster feels repulsed by popular superstitious beliefs in Turkey. She is scandalized when a native peasant woman puts a tooth as a votive offering into a crevice and when an Armenian priest tries to sell her an amulet. "It was monstrous. They should be punished for it. No doubt they would be." (155/56). Ironically, again, she herself believes in beetles being the harbingers of death: "Everyone knew that its sound portended the death of someone in the house within a year. It was the wisdom of ages." (144)

Besides, despite their religious faith and avowed confidence in God, Spike and Jimmy not only take a Bible, but also travellers' checks and a lucky horseshoe with them on the Lord's mountain (270). Spike's belief in God is, further, ridiculed, when the ex-astronaut finds the skeleton on Mount Ararat, which - ignoring any scientific explanations - he mistakes for Noah's, and interprets the slow decay of Noah's, i.e. Amanda's, bones as yet another of God's signs. Even Noah, who is chosen by God and who confides himself to God's providence and kindness, shows symptoms of superstition about illness. His trust in God is relativized when we get to know that the hospital ship had to sail at a safe distance behind the boats of Noah's sons (5). Given these contradictions and paradoxes, God can no longer serve as a principle of order. If God schemes the plot of hi-story, he is a bad author of that story, the commentator of Jonah's story drastically concludes.

If we examine God not as protagonist and moral bully, but as author of this story, we have to mark him down for plot, motivation, suspense and characterization, Yet... one stroke of melodrama - the business with the whale. ... its providential appearance smacks far too heavily of a *deus ex machina*, and the great fish is casually dismissed from the story the moment its narrative function has been fulfilled. (177)

Secular Teleology and Evolution: Hegel, Marx, Darwin

In Barnes's *History of the World*, the eschatological model of history is further invalidated because it competes with a second all-encompassing vision of historical processes, namely Hegelian teleology and, connected to it, Marx's historical materialism as well as Darwinian evolution. Although the idea of linear progress in history originated in Christianity, as has been expounded above, the Enlightenment saw the secularization of teleology. Hegel constructed his world history by replacing God with the objective and absolute or World Spirit and faith with Reason. World history, in his view, is the rational development of the spirit in time, a linear, orderly, systematic and necessary process during which the world spirit will fulfil itself. "World history is the progress of the consciousness of freedom - a progress whose necessity it is our business to comprehend"¹³ However, the absolute spirit, the principle of reason, makes use of the personal interests and passions of 'world-historical' figures such as Caesar or Napoleon. Positing the "cunning of reason", Hegel explains that selfish passions of individuals eventually promote an end which was not part of their intention. Heroic individuals can thus bring about new epochs that embody a higher stage of the absolute spirit, of self-consciousness.

¹³ G.W.F. Hegel. *Lectures on the Philosophy of World History. Introduction: Reason in History*. Cambridge: CUP, 1975, p. 54.

Hegel developed a general dialectical model that stressed the progress of ideas, the passage from thesis and antithesis to the culmination in a higher, transcending synthesis. Marx, in the following, adopted the Hegelian schema, but transferred it to the realm of material conditions, economic systems and class societies and eliminated history's transcendental meaning. Still, he contended that events possess a coherent structure and are not arbitrary accidents. He expressed the conviction that the antagonism between basis and superstructure will dissolve in a classless communist society. This utopian vision, including the conviction that history is rational and intelligible, provides a second metaphysical principle or mode of ordering history proposed by *A History of the World*. In opposition to the eschatological or apocalyptic vision of history, which attributes full explanatory power to the last event in a series, Marx's deterministic view sees the original event, the class struggle, as the decisive factor in history.

"Just as Darwin discovered the law of development of organic nature, so Marx discovered the law of development of human history", Friedrich Engels stated after Marx's death¹⁴, thus allying Marx with the British biologist Charles Darwin, who explored questions of evolution in the realm of nature. He developed a specific theory of evolutionary mechanisms in order to explain organic change. Whether Engel's analogy is justified or not, Darwin's theory, similar to Hegelian teleology, constitutes a secular version of nature and history as

¹⁴ See "Speech at Marx's Graveside", *Der Sozialdemokrat* 22 March 1883. Engels repeated this comparison a few years later in his preface to the 1888 English edition of the *Communist Manifesto*. He himself interpreted human history according to Darwinian concepts in *The Part Played by Labour in the Transition from Ape to Man* (1895).

continuity and progress; not God, but nature itself provides the mechanisms for its evolution.

Most notable is the principle of natural selection (1837), which stated that since the number of a given group of creatures tends to remain constant, there has to be a competition for survival. Some individuals who can cope well with their environment and are most fitted to their external conditions will survive, whereas less adapted creatures will perish. The term "natural selection", however, is an oxymoron, expressing a paradox in its very name; although it describes nature as possessing its own mechanisms of development, the term "selected" implies human agency, a designer who selects variations for particular purposes. This dilemma reveals the precarity of Darwin's thought. Insisting on regular, gradual and lawful change, the British scientist did not yet attribute variations within species or laps within evolution to the agency of chance. However, his theory implicitly introduced the random into scientific explanation and thus implied a break with natural theology.

Darwin's evolutionary view of descent with modification from ancestral species (as put forward in his *Origin of Species*, published in 1859) profoundly troubled general assumptions about the stability of life, the fixity and immutability of species and the supremacy of human beings in the natural world. Most importantly, it enraged religious dogmatists, who believed in the literal truth of the Bible's account of the Creation in Genesis. For if evolution proceeds by natural selection, there is no room for divine intelligence and design in the realm of plants, animals, and eventually human beings on earth; man, by extension, is not a unique and special creation, but derives from lower

animals. As is well known, Darwin's principle of natural selection was later taken out of its proper biological context and transferred to the realm of society so that social darwinists argued for the survival of the fittest human race or the superior social group.

The Darwinian concept of the "survival of the fittest" obviously includes concepts of selection, the separation of "the clean and the unclean" - a phrase which reverberates throughout the novel. Confirming the survival of the fittest, only the robust species can survive on Noah's ark, while sick animals and crossbreeds die out. The cruelties on the raft of the Medusa in chapter five also substantiate the concept of natural survival, not of the righteous, but of those who are physically strongest:

The sketches of the Mutiny [the scene that Géricault most nearly painted] that survive are held to resemble traditional versions of the Last Judgment, with its separation of the innocent from the guilty, and with the fall of the mutinous into damnation. Such an allusion would have been misleading. On the raft, it was not virtue that triumphed, but strength; and there was little mercy to be had. (128)

In the rain forest, too, where the average life expectancy of the Indians is about 35 years, "it's only the fantastically healthy ones who can get by at all" (205), as Charlie reports. His statement testifies to Darwin's notion that only those who are physically strongest will survive.

The clash between an eschatological, Christian view of history and an evolutionary one is most evident in "The Mountain". A typical proponent of nineteenth century notions of free will, rationality and the progress of industrialization, Colonel Fergusson believes in the "world's ability to progress in man's ascent, in the defeat of superstition." (143) While his daughter sees divine providence at work in both history and nature, he favors rational scientific explanations

and designates the story of Noah's ark as "the Myth of the Deluge" (148). Whereas Colonel Fergusson, even on his deathbed, explains the natural mechanism of a beetle ticking at the ceiling in a rational manner, his daughter interprets the animal as a harbinger of death. While her father would no doubt attribute nature's shape to evolutionary mechanisms and processes of adaptation, Miss Fergusson sees nature as a divine intention, as perfectly shaped by God for man's enjoyment:

For instance, trees bearing edible fruits were made easy to climb, being much lower than forest trees. Fruits which were soft when ripe [...] presented themselves at a small distance from the ground; whereas hard fruit, which ran no risk of sustaining an injury by a fall, [...] presented themselves at a considerable height. (147)

The woodworm on Noah's ark, however, challenges Darwin's theory by revealing how "unnatural" the survival of certain animals during the deluge was, and how little it was related to adaptation or fitness, but rather to Noah's moody temper (13). The extinction of animals was, in fact, calculated by Noah, who neglected, tortured and ate several species. The ark's stowaway, hints at a "mysterious outbreak of food poisoning" (8) and suggests that the death of both Simians, who were killed by a falling spar, was most probably not a coincidence. The stowaway accuses Noah of evil machinations and rejects Darwin's scientific explanation of the survival of the fittest:

A lot of beasts looking more or less the same, and then a gap and another lot of beasts looking more or less the same? I know you've got some theory to make sense of it all - something about relationship to the environment and inherited skills or whatever - but there's a much simpler explanation for the puzzling leaps in the spectrum of creation. One fifth of the earth's species went down with Varadi; and as for the rest that are missing, Noah's crowd ate them. They did.(13)

The woodworm, moreover, turns Darwin's notion of evolution upside down when arguing that "men are a very unevolved species compared to animals" (28).

Kath, the Chernobyl survivor, also reflects on the survival of the fittest, but concludes that in contrast to Greg with his bodily strength and practical mindedness, "I'm the one that's going to survive, or have the chance to anyway. The Survival of the Worriers - is that what it means?"(97) She furthermore tries to correct Darwin's principle: "People like Greg will die out like dinosaurs. Only those who can see what's happening will survive, that must be the rule." (97) Moreover, Kath reveals the underside of technological developments and thus questions notions of advance and progress in history: "Nowadays you can drift in the ocean for weeks, and a supertanker finally comes along. [...] We've given up having lookouts." (95)

Lawrence Beesley's fate (presented in the first simple story of chapter seven) equally contradicts Darwin's theory. Although the 18-year-old narrator first repeats Darwin's phrase when referring to Beesley's survival of the Titanic's shipwreck, he then reverses the concept when wondering,

did not the Beesley hypothesis prove that the 'fittest' were merely the most cunning? The heroes, the solid men of yeoman virtue, the good breeding stock, even the captain, (especially the captain!) - they all went down nobly with the ship; whereas the cowards, the panickers, the deceivers found reasons for skulking in a lifeboat. Was this not deft proof that the human gene-pool was constantly deteriorating, how bad blood drove out good? (174)

The problem of natural, divine or human selection reappears, when, in the third simple story, 250 Jewish passengers on board the St Louis seem to have the possibility of leaving the boat in Havanna:

"how would you choose the 250 who were to be allowed off the Ark? Who would separate the clean from the unclean? Was it to be done by casting lots?" (184) In this case, however, the repeated phrase of the clean being separated from the unclean bitterly calls to mind the Holocaust "tragedy", the Nazi project of purifying the German race, eliminating its "imperfect" (Jewish) elements. However, the survival of the Aryan and the extinction of the Jewish race was anything but natural, but of course cruelly organized by the Nazis. Darwin's theory of the survival of the fittest, therefore, cannot be a model for the course of human history. The narrator of "Parenthesis", commenting on historical processes at large and summing up the chapters of *A History of the World* also wonders:

Is it a useful mutation that helps the world survive? I can't see it. Was love implanted, for instance, so that warriors would fight harder for their lives? ... Hardly: the history of the world teaches us that it is the new form of arrowhead, the canny general, the full stomach and the prospect of plunder that are the decisive factors in war (233).

If Darwin's theory cannot be maintained, is Marx, then, correct that historians (and readers of Barnes's *History*) can find significance of events and individuals by discovering a pattern of tragedy and farce in history? Another nineteenth-century deterministic view of history, Marx' elaboration of Hegel characterizes history as a sequence of tragedy and farce. Repetition (of events, individuals, expressions) is thus not only incorporated into Barnes's *History* as a structural device, but its role in history is expressly reflected upon, as a repeated allusion to Marx's conception in the metahistorical chapter "Parenthesis" (239) indicates. Marx realizes a regularity in these repetitions and deduces a law from them.

"Hegel remarks somewhere that all facts and personages of great importance in world history occur, as it were, twice. He forgot to add: the first time as tragedy, the second as farce."¹⁵ Thus begins Marx's *The Eighteenth Brumaire of Napoleon Bonaparte*, in which the author analyses the events in France from the failures of 1848 to the coup d'état of Louis Bonaparte in 1851. Although Marx, in his foreword, dismisses historical analogies in ancient Rome and in modern societies as ridiculous¹⁶, he himself establishes analogies between Napoleon and Louis Bonaparte, the nephew and, according to Marx, caricature of Napoleon I. Marx, in this work, reflects upon the repetition of historical events and, in contrast to Hegel, introduces the notion of repetition with difference, of farce following tragedy.

However, history for Marx is not preordained. Marx sees in historical events neither the act of a single individual nor the result of antecedent historical developments (which would become an apologia for later events). Rather, he attributes limited agency to human beings:

Men make their own history, but they do not make it just as they please; they do not make it under circumstances chosen by themselves, but under circumstances directly encountered, given and transmitted from the past. (15)

In the drama that is history, the individual can thus act a part under various circumstances.

Several episodes in Barnes's novel in fact appear to confirm Marx's vision of evolution. The three simple stories, in particular,

¹⁵ Karl Marx, *The Eighteenth Brumaire of Louis Bonaparte*. New York: International Publishers, 1963. This translation is based on the second edition which was corrected by Marx in 1869; the first edition stems from 1852.

¹⁶ "With so complete a difference between the material, economic conditions of the ancient and the modern class struggles, the political figures produced by them can likewise have no more in common with one another than the Archbishop of Canterbury has with the High Priest Samuel." (Karl Marx, *The Eighteenth Brumaire*, p.9.)

foreground repetitions that testify to Marx's pattern. James Beesley's biography, first of all, presents a first tragic escape in a lifeboat from the Titanic's maiden voyage in 1912 as well as a highly farcical repetition of his experiences when Beesley is a consultant on the film "A Night to Remember". Although he was not supposed to play a part, Beesley secretly sneaked onto the facsimile Titanic, but was spotted at the last minute and had to leave the ship just before it was due to sink. The second simple story of chapter seven also confirms Marx's theory of a heroic origin (the biblical Jonah surviving inside the whale) and a farcical repetition (James Bartley being swallowed by a sperm whale in 1891, bleached but still alive). Besides, Spike Tiggler's twentieth-century expedition to Mount Ararat might be considered a farcical repetition of Amanda Fergusson's pilgrimage more than a century earlier.

Yet the majority of stories in *A History of the World* invalidate Marx's pattern of history and turn it upside down by presenting tragic successors to tragic first times. If one considers the ark's voyage as the original first event, then recurring shipwrecks or catastrophes on sea in the ensuing chapters two to ten are clearly not farcical, but rather tragic, devastating repetitions. The situation on board the hijacked cruiser in the Mediterranean, for instance, seems to be gloomy and hopeless in that tourists are entirely at the mercy of the Arab terrorists, who eventually shoot most of them. Similarly, the imminent threat of death on the raft is oppressing both for Kath Ferris and for the sailors on the Medusa's raft.

The events in the rain forest as represented in Charlie's letters to his girlfriend further portray the reversal of Marx's vision of history in a prominent way, for the repetition of the Jesuit mission 200 years ago

ends in an even more tragic manner than did the original event. While the missionaries in the eighteenth century survived, when their raft capsized, the Indians 200 years later cause the actual death of one of the actors when re-enacting their ceremony. Most conspicuously, the attempted exodus of Jews on the St Louis is *not* a farcical recurrence of the Jews' exodus in the Old Testament. Although their journeys may have lasted approximately the same number of days, the Jews who try to escape Nazi Germany are shamefully not saved and will not survive the Holocaust.

Contrary to Hegel's assumption, history does not unfold rationally, as the numerous arbitrary accidents portrayed in *A History of the World* reveal. No principle of causality, no coherent agency can account for the terror of history, for events as contingent as killings, suffering, pain and death. The aleatory element inherent in catastrophes works against their rational interpretation. In chapter two, for instance, the course of events appears outrageously arbitrary; the killing of tourists lacks any rationality and clear agency. Diffuse political powers and economic forces appear to be at the hub of the whole affair, yet their blind game cannot be pierced. Surprisingly, the highly manipulative TV reporter Franklin Hughes survives the hijacking and killing because he happens to have an Irish passport and is thus vaguely associated with the I.R.A. The irony of history, however, lies in the fact that Hughes got himself a non-British passport precisely not to be taken for a spy (37/38). Just as the terrorists' attack ends up being fatal for the majority of tourists, Hughes is lucky to escape unharmed. That "[t]hose in the middle got killed, governments and terrorists survived" (47) seems like an all too cruel logic. Likewise, the terrorists'

philosophy that "The world is only advanced [by killing people]" (50) is highly cynical and cannot possibly constitute a rational model for the course of history. Since Barnes problematizes the "historical inevitability" of the incident, he challenges the view that catastrophic accidents are in any way "necessary" for history to unfold itself. While, traditionally, coincidences and accidents have been rationalized in historical writings, and thus been eliminated from historiography¹⁷, *A History of the World* multiplies and highlights chance occurrences. He thus leaves it up to readers to speculate on rational causes. By refusing to rationalize disastrous accidents and making them appear consistent, Barnes signals the singularity and incommensurability of catastrophes and thus opens up history to ethical issues.

Mythical Circularity or The Eternal Return of the Same

A cyclic or circular view, often associated with, yet by no means limited to cultures outside the Judeo-Christian realm, represents yet another perspective on historical processes. Seeing human nature as immutable, archaic ritualistic societies believe in the eternal recurrence of the same and periodically re-enact great primordial acts or events of cosmogonic significance¹⁸. Far from transforming time into history, i.e. into concrete, irreversible, autonomous time as Western societies conceive of it, so-called primitive societies, according to Eliade, return to the mythical time of their origins, since the periodic repetition of an archetypal model for them coincides in time with the mythical

¹⁷ Analyzing the historical writings of Archenholtz, Reinhard Koselleck has illustrated how chance was increasingly repressed from the eighteenth century onwards. ("Chance as Motivational Trace in Historical Writing." *Futures Past: On the Semantics of Historical Time*. Cambridge: MIT Press, 1985. 116-129.)

¹⁸ See Mircea Eliade, *Le mythe de l'éternel retour: archétypes et répétition*. Paris: Gallimard, 1969.

moment. Accordingly, historical and personal particularities are wiped out; individual events are treated in terms of categories, and historical figures are subsumed under mythical archetypes. Moreover, no transformation of events is definitive, but every event can be reversed. Traditional societies further give a meaning to pain and suffering due to their cyclical conception of time. They conceive of catastrophes as cosmic combustions or dissolutions, which periodically have to put an end to the universe in order to permit its regeneration. The figure of the trickster represents a peculiar agent of an orderly disorder in tribal mythologies for he mediates between polarities and integrates both the comic and the tragic. Mischievous and ruthless in getting rid of rivals, he is also considered a hero for his ingenious methods of establishing his own authority. His purpose is disruption, the transgression of received orders; yet his disorderly nature simultaneously helps the community and the culture recharge itself.

Story-telling, interestingly, originated in mythical archaic communities, while its relics survive in today's religious, liturgical practices. In these societies, story-telling created a communal experience for the story-teller and his listeners, who were simultaneously future narrators. The same mythical stories were told and re-told, not because they possessed any informational value, but to guarantee the continuity of a collective community, to commemorate collective history and to create a social or ethnic identity. Important topics therefore concerned the origins of the cosmos (cosmogonic myths) or the end of the world (eschatological myths). The continual recurrence of the same created a peculiar relationship to time, so that mythical events are set in a time different from progressive linear time; more

specifically, they often take place at the beginning of creation or an early stage of prehistory. Considered a repository of truth, knowledge and experience, myths are meant to help control the universe and explain how death and evil were introduced into life.

A History of the World in 10 1/2 Chapters briefly hints at the important link between mythical story-telling and historical consciousness in its second chapter, when the tourists "were offering themselves to the story-teller [Franklin Hughes] in the manner of audiences down the ages, wanting to see how things turned out, wanting to have the world explained to them" (55). Among the Indians in the rain forest, history is also transmitted orally:

It's the sort of thing that gets handed down as the women are pounding the manioc root or whatever. Those Jesuits were probably quite big in the Indians' history. Think of that story getting passed down the generations, each time they handed it on it became more colourful and exaggerated. (216/17)

Barnes's *History* moreover implicitly alludes to traditional forms of story-telling by inserting two tales from the Old Testament, stories that are annually re-told in religious communities. However, Barnes breaks with this tradition by parodying their biblical content and thus questioning their religious bases. Having the story of Noah and his ark told by a woodworm, who even assumes a twentieth century perspective, Barnes hints at the gaps between plausibility and ritualized, highly stylized narrative forms.

The author further indicates that myths cannot be judged on account of their closeness to reality or verifiability, but have to be understood symbolically. In a different episode, he rejects the evaluation of myths according to criteria of truth, while the episode on

Jonah's and James Bartley's survival inside the whale critically examines the relation between myth and reality. Even though tales such as Bartley's seem implausible, they cannot be assessed according to their credibility: "You may not credit [the myth of Bartley], but what has happened is that the story has been retold, adjusted, updated; it has shuffled nearer. For Jonah now read Bartley." (180) Myths, by their very nature, are constantly re-shaped and adjusted so that their archetypes fit the respective situation.

For the point is this: not that myth refers us back to some original event which has been fancifully transcribed as it passed through the collective memory; but that it refers us forward to something that will happen, that must happen. Myth will become reality, however sceptical we might be. (181)

Kath Ferris, the Chernobyl survivor of chapter four, puts forward a firm confidence in nature and views its cycles as forming the basis for historical processes. She is convinced that "Everything is connected". The nuclear disaster in the Ukraine corroborates her holistic belief, since the poisonous radioactive clouds contaminate all biological chains and poison everything from rain and the winds to milk and reindeer meat. Chernobyl and a newspaper story she read about today's supertankers whose radar will not pick up the shipwrecked have taught her that we can no longer rely on modern technology. These two incidents have made her aware of "accidents" in nature and history, which escape human control and cannot be mastered. Technology, to Kath's mind, is a hostile, even destructive force, since it disrupts nature's cycles and destroys the authentic link between human beings and nature. The nuclear disaster at Chernobyl, for example, produced a strange heat and reduced the four seasons to summer and winter.

The Australian survivor further firmly criticizes typical historical accounts, where chronological ordering always already implies causal connections ("post hoc ergo propter hoc"): "This happened, they say, and as a consequence that happened. There was a battle here, a war there ... - always famous men, I'm sick of famous men - made events happen." (97). Rejecting the view that human beings create their proper history and fashion themselves in historical processes, Kath emphasizes those unpredictable chance incidents that escape human planning and agency. The Australian woman rejects "the old sort of thinking" which calculates the future and measures things in days. By claiming a new non-linear temporality, Kath, in other words, reevaluates myth as the perfect antidote to rational positivistic thinking. She attempts to go back to the origins, to nature's cyclic temporal orders: "We'll have to go back to some older cycle, sunrise to sunset for a start, and the moon will come into it, and the seasons, and the weather" (93) and advocates a circular view of historical processes: "People say you couldn't turn the clock back, but you could. The future was in the past." (104) Similarly, when her boat is going round in circles, she identifies this movement as being characteristic of the world's processes at large: "That's what the world does." (109) Women, in Kath's view, have a particular status since they are "more closely connected to all the cycles of nature and birth and rebirth on the planet than men" (89). Kath, consequently, submits entirely to nature and lets the winds govern her boat's direction. When she steers towards an island but runs out of fuel and is blown away by the wind, she does not regret seeing the island recede:

In any case, she thought, it would have been cheating to find the new land with the help of a diesel engine. The old way of doing things had to be rediscovered: the future lay in the past. She would allow the winds to guide and guard her (96)

The past, in other words, promises a new beginning, rebirth and regeneration to Kath. A pregnancy would therefore promise a solution to her existential problems, since she sees the history of the world coming to an end: "How didn't I see that was the answer?" (96) "We're going to give ourselves back to nature now." (97) A new birth would open up a fresh cycle of nature and provide the possibility for regeneration, when a catastrophe has destroyed the old world. That Kath's cat Linda finally gives birth to five kittens is the hopeful announcement of such a new start: "She felt such happiness! Such hope!" (111)

Similarly, Charlie, in "Upstream!", nostalgically longs for authenticity, which he sees embodied in the Indian tribes of the rain forest:

They're so open, so direct. There they are, not a stitch on them, they say what they mean, do what they want, eat when they're hungry, make love as if it's the most natural thing in the world, and lie down to die when they reach the end of their lives. It's really something. (199)

Charlie admires their sense of community and their modest way of life as well as their rejection of capitalist multinational companies (204). He mystifies the Indians' maturity and, by describing them as both as authentic and as advanced, advocates a return to the origins: "All the crew here think the Indians are fantastically primitive just because they don't have radios. I think they're fantastically advanced and mature because they don't have radios." (200). He further renders a vivid description of the circular view of history assumed in so-called

"primitive" tribal societies, for the Indians truly play their ancestors when the crew films the eighteenth-century Jesuit mission. "They actually think that when Matt and I are dressed up as Jesuits we actually are Jesuits!" (202) Charlie notes even before the fatal accident happens. The Indians refuse to act as the film director tells them and always perform in their natural way. During the crucial scene, they do not stop the missionaries' raft with their poles, but head it into a pile of rocks. Since they had removed Matt's safety rope before, the actor dies, while the Indians manage to leave the camp unnoticed. According to Charlie's interpretation of this incident, "they (i.e.us) have come back to re-enact the ceremony for some reason that's tremendously important to their tribe. Perhaps the Indians thought it was a religious thing" (217). The Indians, in other words, do not conceive of history as such. They do not distinguish between past and present but ceremoniously repeat an event, which signifies a decisive caesura for their community and which has been transmitted orally over two centuries. The film crew, ironically, confirms this ritualistic imitation of an original act, since all the actors wear historical dresses, re-enact the same actions and even the same ending. Fulfilling the function of trickster, the Indians' ruthless and sly strategy mediates between past and present; they transgress and eliminate the undesirables so as to restore the former cosmic order.

Does the *History of the World* then propound a cyclic view of history and the eternal return of the same events? If Marx's vision of repetitions in history as the succession of tragedy by farce cannot be maintained, then maybe Barnes's *History* stages an "eternal" return of the myth of Noah's ark and the deluge?

Yet, although chapters two to ten are all linked to the biblical story of Noah's ark, they also undermine the idea that history can be reduced to an eternal recurrence of a mythical origin. Barnes's *History* stages numerous repetitions of the deluge with crucial variations, which invalidate historical circularity and instead focus on the specificity and singularity of events. If one takes a closer look at repetitions of actions and events, one cannot fail to notice the differences and disparities between them. The allusion to a Mediterranean cruise in "The Stowaway" (3), for example, clearly marks distinctions and incommensurabilities and highlights that life on the ark was not pleasant and comfortable as on the Santa Euphemia in chapter two. Furthermore, Kath in chapter four leaves the rotten world behind as Noah did; however, she does not hope for a paradisiac island and is not promised rescue (92). She also takes a couple of cats with her, but unlike Noah, she does not select them, but spontaneously takes the stray cat with her on the boat. In sharp contrast to Noah's slaughter and exploitation of animals, Kath further feeds her cats instead of eating fish herself.

Besides, the sailors on the Medusa's raft in "Shipwreck" resemble Noah and his family on the ark in that both hope for rescue and fear drowning. Yet the sailors are denied help, and significantly no pigeon appears to announce divine compassion or reconciliation. When the sailors later mistake a white butterfly for a divine instrument (121), this episode, again, foregrounds differences rather than similarities in comparison to Noah's story and demonstrates the absence of God's intervention in history. Furthermore, if one compares the Jews, God's chosen people, in chapter seven to Noah's family, also

selected by God, the divergences and incommensurable differences between the supposedly original mythical event and its repetition are flagrant. For while Noah's family, according to the woodworm's account, takes all advantages from being chosen by God and having the privilege of living on the ark, the Jews who try to flee Nazi Germany are discriminated, humiliated and will not survive their unsuccessful exodus. In sum, even if people seem to stumble across Noah's footsteps, they clearly do not imitate this mythical figure.

Although Barnes's novel flirts with the myth of the eternal return of archetypal events - a pattern which reduces history to a cycle - *A History of the World* also problematizes a naive return to nature and suggests that we cannot turn the clock back. For Charlie does not fail to remark that the Indians are not that fantastically healthy after all and rarely get older than 35 (205); they do not have insect repellent against the mosquitoes and the women may be "riddled with diseases". Finally, the fact that the Indians do not mourn dead members of their community and that they most likely planned and caused Matt's death strongly disillusion Charlie and destroys his sentimental vision of their archaic, yet mature culture.

In conclusion, the recurring shipwrecks in chapters two to ten in Barnes's *History* clearly do not result in a continuum. Even if similarities between several episodes exist, each catastrophe constitutes a specific and singular event that escapes comparison because it does not match with any other disaster. The situation of sailors of the Medusa's raft is simply incomparable to that of the Jewish passengers traing to escape Nazi Germany or to that of the tourists hijacked on a cruise in the Mediterranean. The chaotic incidents presented in *A*

History of the World do not converge or follow any grand principle nor can they be enmeshed by a grid. Rather, they are discontinuous, heterogeneous and irreducible small narratives.

Barnes, consequently, does not aim at replacing one sort of master narrative or all-englobing historical plot with yet another totalizing global order. For him, linearity and circularity have curved and lost direction. *A History of the World* exposes the impossibility of tracing a straight line from Fall to final redemption and of discovering progress towards a classless society where all human potentialities can be realized. Barnes's novel appears as chaotic rather than linear or circular. The author does not rely on continuities in histories, but focuses on subtle contradictions and inconsistencies in existing grand narratives. Instead of assuming that events obey regularities, the author highlights ruptures, differences and conflicts. He thus vehemently rejects the metaphysical concept of history as the history of meaning, which unfolds and fulfils itself. Historical processes in his *History of the World* do precisely not reach their culmination in a final goal. Instead, chance coincidences and farcical as well as tragic ironies triumph over necessity and rationality.

A History of the World in 10 1/2 Chapters parodies the notion of Universal History, the belief that the multitude of human events unfolds in a single plot. Neither an eschatological nor an evolutionary nor a mythical circular view of history emerges out of Barnes's novel. If the author uses leitmotifs such as the woodworm, Noah's ark or other narrative devices to establish links between chapters, these connections are only constructed by Barnes and do not provide access to a deep structure in history. For *A History of the World* does not follow

a structuring principle which would allow readers to find out its secret order. The accidents and chance coincidences depicted appeal to the reader's hermeneutic impulse in order to reconstitute a meaning, necessity or a destination in *History*. Not only Amanda Fergusson's and Spike Tiggler's compulsion to interpret everythings as a divine sign is ridiculed; Barnes's *History* also mocks its readers' search for an order and their tendency to detect links and draw connections. Significantly, the woodworm repeatedly ridicules the human obsession with multiples of seven and thus reveals the absurdity of believing that meaning is inherent in numbers (such as three, seven, forty) or that numbers can be sacred. If the view that history follows a pattern is carried to its logical conclusion, it must call into question the existence of chance and attribute everything to the agency of some supernatural power. Consequently, excessive interpretation, the compulsion to think that "it was not by accident that ..." is reduced to absurdity, and narrative links - seemingly historical invariants in the novel - can finally only appear outlandish and ludicrous. The chance coincidences that occur in *A History of the World* (such as Spike Tiggler stumbling across Miss Fergusson's skeleton and mistaking it for Noah's) are in the end just that, coincidences without any deeper significance - although Barnes prefers to interpret them as ironies, as he revealed in his most successful previous novel, *Flaubert's Parrot* (1984).

I don't much care for coincidences. There's something spooky about them: you sense momentarily what it must be like to live in an ordered, God-run universe, with Himself looking over your shoulder and helpfully dropping coarse hints about a cosmic plan. I prefer to feel that things are chaotic, free-wheeling, premanently as well as temporarily crazy - to feel the certainty of human ignorance, brutality and folly.

the narrator of chapter five, "Snaps", of *Flaubert's Parrot*, explains.¹⁹

As for coincidences in books - there's something cheap and sentimental about the device; it can't help always seeming aesthetically gimerack. [...] I'd ban coincidences, if I were a dictator of fiction. [...] One way of legitimising coincidences, of course, is to call them ironies. That's what smart people do. Irony is, after all, the modern mode, a drinking companion for resonance and wit. (67)

Barnes's *History* recuperates several of such ironies, "a condition of affairs or events of a character opposite to what was or might be expected; a contradictory outcome of events as if in mockery of the promise and fitness of things" (OED). It stages bizarre coincidences that seem to mock any effort of finding a larger pattern in history. These ironies in history leave us suspended between interpreting them as chance or fate, as meaningful or coincidental. Tragical as well as farcical ironies in *A History of the World*, in fact, reveal the ruse of history and escape the grid that we typically try to impose upon history.

However, history, thanks to its ironies, uncovers what we try to cover up.

There's one thing I'll say for history. It's very good at finding things. We try to cover them up, but history doesn't let go. It's got time on its side, time and science. However ferociously we ink over our first thoughts, history finds a way of reading them. We bury our victims in secrecy (strangled princelings, irradiated reindeer), but history discovers what we did to them. (240)

That history reveals hidden intentions as well as secret first thoughts is apparent in several chapters of Barnes's novel. The hijacking of Franklin Hugh's cruiser, for example, unveils the journalist's wish not to be taken for a British citizen. Similarly, Charlie's supposedly changed state of mind is called into question by his last telegrams to Pippa.

¹⁹ *Flaubert's Parrot*. New York: Vintage, 1984, p.66.

Influenced by the Indians' authenticity and sincerity, the actor in the Amazon had previously declared his fidelity. Later, however, when Pippa finds out that Linda was working in the rain forest, too, Charlie tries to cover up his affair:

it was a complete coincidence. [...] And I can't control where the woman works, can I? Yes I did know she was going to be in Caracas and No I didn't tell you and Yes that was wrong but would it have been better if I'd told you? (218)

Given that his letter fifteen with its aggressive, offensive tone is written from St Lucia, Charlie must have joined Linda on the West Indies. These final revelations call into question his affirmation that "it was a complete coincidence" and uncover Charlie's secret machinations.

In the metahistorical half-chapter "Parenthesis", the narrator openly inquires into the possibility of finding a pattern in history and explicitly rejects Marx's schema, "that's too grand, too considered a process." Instead, he drastically maintains that "History just burps, and we taste again that raw-onion sandwich it swallowed centuries ago." (239) As Marx repeats Hegel with a difference, so Barnes echoes Marx while simultaneously revising his deterministic vision of history. Although tragic events and their farcical repetition recur in Barnes's *History*, this pattern does not provide a code for the novel, nor do the historical occurrences represented in the novel fit the pattern of eschatology, divine providence or mythical returns of an archetypal event. As multiple perspectives on history are not linked or unified in dialectical fashion. *A History of the World* thus emphasizes a practice of negotiation, of coming to terms with different ordering positions of history while advocating neither:

History isn't what happened. History is just what historians tell us. There was a pattern, a plan, a movement, expansion, the march of democracy; it is a tapestry, a flow of events, a complex narrative, connected, explicable. One good story leads to another. First it was kings and archbishops with some offstage divine tinkering, then it was the march of ideas and the movement of the masses, then little local events which mean something bigger, but all the time it's connections, progress, meaning, this led to this, this happened because of this. And we, the readers of history, we scan the pattern for hopeful conclusions, for the way ahead. And we cling to history as a series of salon pictures, conversation pieces whose participants we can easily reimagine back into life, when all the time it's more like a multi-media collage, with paint applied by decorator's roller rather than camel-hair brush. (240)

Barnes turns the totalized version of history back into a multiplicity of small narratives, heterogeneous, seemingly trivial stories.

The history of the world? Just voices echoing in the dark; images that burn for a few centuries and then fade; stories, old stories that sometimes seem to overlap; strange links, impertinent connections. (240)

He reevaluates the individual and keeps the singular event from being bulldozed into the authoritative version of history. Similar to the half house on 2041 1/2 Yonge Street, the half-chapter "Parenthesis" in Barnes's *History* functions like a barrier or a stumbleblock, which tries to make us re-think our notion of history. Barnes not only rejects linear and circular models of history, but also refutes the view that history is mimetic, merely reflecting the past without mediating it. Instead, the author aligns history with fabulation and emphasizes the crucial significance of narrativity in every representation of the past. He therefore shares concerns of recent historiographical studies, which have exposed the rhetoric and narrative components in historical representations.

The Writing of History

The peculiar and even paradoxical status of history is already evident in its semantics. For history in the singular - a term which only became current from the eighteenth century onwards²⁰ - designates not only the aggregate of past events in general, but also their representation. The process of events and historical experience are inevitably linked with the knowledge or consciousness of such an experience. The study of history, therefore, fundamentally deals with narratives, even if modern historians have claimed a scientific status for their work.

The long-standing denigration of history and superiority of literature was first established in the *Poetics*, in which Aristotle opposed fictional and historical writings as two contrasting narrative practices. While both fictional narratives and historical writings can be written in verse, the poet presents events differently from the historian. He shows events as they might possibly occur, presents them in terms of their probability and necessity. His essential task is to construct plots out of particular incidents, to bind and unify them. The historian, by contrast, focuses on events that have actually happened; he records single particular actions and depicts the pure succession of events. His account therefore often lacks connections, unity, systemacy and control and can be associated with the contingent and accidental. Poetry, therefore, is ontologically superior to history:

It is a further clear implication of what has been said that the poet's task is to speak not of events which have occurred, but of the kind of

²⁰ Koselleck, in his *Futures Past*, has drawn attention to the history of the term "history", especially the contamination of history as action with the meaning of history as consciousness. Only around 1780 was history conceived as a singular and general history, and no longer as a plurality of specific histories. And only since the late eighteenth century was history seen as makeable; humanity, not God, was then considered to set history in motion, to plan and execute actions and manipulate its fate.

events which *could* occur, and are possible by the standards of probability or necessity. For it is not the use or absence of metre which distinguishes poet and historian (one could put Herodotus' work into verse, but it would be no less a sort of history with it than without it): the difference lies in the fact that the one speaks of events which have occurred, the other of the sort of events which could occur. It is for this reason that poetry is both more philosophical and more serious than history, since poetry speaks more of universals, history of particulars.²¹

Only in the late eighteenth century did a genuine philosophical awareness about history emerge; history, the representation of *res factae*, was then viewed as progressing continuously and as being superior to literature, which merely dealt with *res fictae*. Challenging this long-standing separation between history and literature, critics such as Hayden White, Louis Mink, Paul Veyne, Paul Ricoeur, and Reinhard Koselleck have recently focused on history's proximity to literature. Contesting that history is a science, which could be reduced to a method, rules, definitions or laws and following the "linguistic turn" of twentieth-century thought, they instead examine how tropes, plots and narrative voices intervene in the writing of history.²²

"Par essence, l'histoire est connaissance par documents", Veyne has argued²³, thus stressing that the past is forever gone unless its events left concrete material traces, such as documents, maps, photographs etc. The oral aspects of history are, then, already effaced when we encounter the textual remains of the past. However, these sources cannot transport us back into former times; the past is not

²¹ Aristotle. *The Poetics of Aristotle*. Translation and commentary by Stephen Halliwell. Chapel Hill: U of North Carolina Press, 1987. Chapter IX, p. 40/41.

²² While a causal interpretation of history was long favored by historians - notably by Carl Hempel, who elaborated a covering law model - a narrativist vision was already formulated by Arthur Danto in his *Analytic Philosophy of History* (1965). In his wake, Gallie and Mink also insisted on the proximity of history and narrative and the specificity of historical understanding

²³ Paul Veyne, *Comment on écrit l'histoire* Paris: Seuil, 1971, p. 15.

directly intelligible or accessible to us by transparent discourses. Reference to past reality is always mediated by texts and the textual reality we encounter is itself always already interpreted by its writer and determined by fixed discursive rules: "[l'histoire] est *diegesis*, et non *mimesis*" (15), as Veyne reminds us. Moreover, only from our knowledge of what happened afterwards can we decide which events were important and significant. Different models of interpretation further influence how historians read documents of the past and how they transform them into works of historiography.

Barnes's novel frequently calls attention to processes of transmitting knowledge about the past, to the mediation of stories. The framing of narratives throughout *A History of the World* makes us question the reliability of documents and the factuality of events. The novel thus highlights possible imprecisions that might have occurred and foregrounds how different people in different situations and epochs interpreted sources differently. The woodworm on Noah's ark, for instance, often acknowledges his lack of knowledge and admits that events were told to him by birds, thus qualifying the reliability of his tale. That history is only available to us through its textual traces is equally reflected in chapter three, "The Wars of Religion", where the introductory notes on the sources and the state of the manuscript emphasize the materiality and timeliness of historical texts. Besides, the manuscript has not been penned by a clerk, but is the work of a third party (61) and has therefore undergone a further mediation. Moreover, framing notes which indicate that some testimonies of witnesses are missing reveal the text's gaps and absences.

Likewise, the fate of Lawrence Beesley is mediated by the eighteen-year-old tutor; we even assist a double mediation, since the anecdote of Beesley's behaviour on board the facsimile Titanic has been given to the narrator by Beesley's daughter. Beesley's events underwent multiple repetitions: they were fictionalized in *The Loss of the Titanic*, gave rise to family legends and were farcically repeated in the film "A Night to Remember". Interestingly, the narrator comments on these repetitions or representations in different media as "undergo[ing] in fiction an alternative version of history." (174). He thus overtly exposes that (historical or other) representations are never transparent but transforming. Similar to Géricault's painting of the Medusa's raft, representations of historical events imply an arrangement, an organization and are not just imitations of the past. The narrator, moreover, hints at inconsistencies and contradictions in Beesley's story (Does his blanket really stem from the rescuing ship? Did he escape as a transvestite?) and makes us question the reliability of Beesley's account.

The narrator of Jonah's story indicates his suspiciousness of the Old Testament parable right at the beginning when characterizing it as "a fishy story" (175). Similarly, when referring to paintings of Jonah in the whale, the narrator of the second simple story alerts us that these are, above all, mediations, and not transparent representations. History is always already interpreted and does not come to us in any immediate or authentic form. The second simple story further includes the first-person account of James Bartley, which is typographically set off from the rest of the text. This story, then, also focuses on the fact that we have to rely on (biased) documents in our search for the past. More

generally, strong oral elements such as the transcription of dialects in the individual chapters enhance the tension between orality and literariness, between lively story-telling and written documents that fix the past as a dead record.

Veyne has further challenged historical epistemology by returning to the subject of historical discourses. While we commonly expect the historiographer to disappear behind the events he or she recounts, Veyne has revealed that the practice of historiography implies a desire to know, a curiosity, which finds its expression in the representation of the past: "l'histoire est une activité intellectuelle qui, à travers des formes littéraires consacrées, sert à des fins de simple curiosité." (103) Since there is no impersonal, objective point of view from which history can be written, the historiographer's inevitable bias which leaves its mark on his or her writings has to be taken into account.

A History of the World does not pretend to provide impersonal, objective accounts of past events. On the contrary, the majority of chapters are clearly linked to a narrator who thus takes over the responsibility for story-telling. Even when an impersonal narrator interferes, points of view are for the most part restricted to one figure and focus on one character, for instance on Franklin Hughes in chapter two, on Miss Fergusson in "The Mountain" and on Spike Tiggler in "Project Ararat". In other chapters, such as "The Wars of Religion", several levels of narration create an impression of antagonism; multiple narrative voices interfere and their alternating points of view relativize each other. Narrators such as the woodworm or Kath Ferris do not hide their bias and lack of objectivity. Far from claiming a God-

like omniscience, distance and superiority, they clearly announce their position as observers of or as agents in the events happening. They reveal their personal, subjective opinions and distortions while simultaneously questioning the notion of objectivity as such.

The parenthetical half-chapter even reflects on the position of narrators and calls explicit attention to the process of story-telling. "Parenthesis" comprises meditations on love and the history of the world by an "I", which breaks the fictional frame and addresses readers directly, justifying his intrusion and confirming the truth of his statements: "Still it's natural for the novelist sometimes to fret at the obliquities of fiction." (225) "(I'm not inventing them)" (233) In parentheses, which resemble footnotes to his main narrative, the narrator digresses in order to foreground his subjectivity and to problematize his point of view. The first-person narrator even plays with readers, challenging commonplace notions about reference:

(when I say 'I' you will want to know within a paragraph or two whether I mean Julian Barnes or someone invented; a poet can shimmy between the two, getting credit for both feeling deep feeling and objectivity.) (225).

Continuous digressions clearly link the story to a first person's narrative voice and indicate how artificially constructed the sequence of events, the episode's plot, is. By foregrounding the activity of a writing subject, Barnes illuminates the process of writing history.

Hayden White, maybe the foremost theorist of recent historiographical studies, has further narrowed the gap between history and narrative fiction by emphasizing the literary qualities of historiography:

[..] we must look to the specifically literary aspects of their [the historians'] work as crucial, and not merely subsidiary, elements in their historiographical technique. [...] If there is an element of the historical in all poetry, there is an element of poetry in every historical account. This is because in our account of the historical world we are dependent, in ways perhaps that we are not in the natural sciences, on the techniques of figurative language both for our characterization of the objects of our narrative representations and for the strategies by which to constitute narrative accounts of the transformation of those objects in time.²⁴

White aligns history and literature, since both make sense of events in the world by means of narrative. Narrative, in other words, is a cognitive instrument, a form of knowledge for both history and literature and its absence would entail an absence of meaning. White's approach thus consists in reading historical narratives as

verbal fictions, the contents of which are as much invented as found and the forms of which have more in common with their counterparts in literature than they have with those in the sciences. (42)

In a similar vein, Paul Veyne has provocatively called history "un roman vrai" (10), thus pointing out not only its narrative, but also its literary qualities:

L'histoire est récit d'événements: tout le reste en découle. Puisqu'elle est d'emblée un récit, elle ne fait pas revivre, non plus que le roman; le vécu tel qu'il ressort des mains de l'historien n'est pas celui des acteurs; c'est une narration, ce qui permet d'éliminer certains faux problèmes. Comme le roman, l'histoire trie, simplifie, organise, fait tenir un siècle en une page (14)

History, he reveals, does not have any natural stages or phases, but can be shaped according to the historian's will. In fact, all those lines along which we typically divide the past (be it kings, centuries, mentalities) are simply constructed categories and not inherent in history.

²⁴ "The Historical Text as Literary Artifact." *The Writing of History. Literary Form and Historical Understanding*. Eds. Robert H. Canary and Henry Kozicki. Madison: U of Wisconsin Press, 1978. 41-62, p. 59/ 60.

Moreover, what we call "facts" are not empirically given pieces of information. Rather, they derive from the kind of questions historians ask, the aspects they look at. Facts are pre-given categories and therefore always already ideologically informed and interpreted. Veyne stresses that facts have no intrinsic meaning or importance, but are value-neutral. A fact that is important for one historian may well be a minor detail for another. "Il est impossible de décider qu'un fait est historique et qu'un autre est une anecdote digne d'oubli, parce que tout fait entre dans une série et n'a d'importance relative que dans sa série." (34) , Veyne concludes.

Similarly, events are produced by the historian's inquiry and his subjective delimitation, for incidents such as wars have no "natural" limits and cannot be divided into minimal units. Historical events are not simply physical events, but they additionally need to be recounted. As Louis Mink has pointed out that, it only makes sense to refer to "events *under a description*"²⁵; however, there can be no standard, normative description of an event, since different historians evaluate its aspects, causes and consequences differently. Although being traditionally associated with the static realm of science, events imply a dynamic development, as they are inextricably linked to narrative. Different narratives, in fact, produce different events, different descriptions of events. As a result, events are the functions of a particular narrative:

'Events' [...] are not the raw material out of which narratives are constructed; rather an event is an abstraction from a narrative. An event may take five seconds or five months, but in either case

²⁵"Narrative Form as a Cognitive Instrument." *The Writing of History. Literary Form and Historical Understanding*. Ed Robert H. Canary and Henry Kozicki. Madison: U of Wisconsin Press, 1978. 129-149, p.145.

whether it is one event or many depends not on a definition of 'event' but on a particular narrative construction which generates the event's appropriate description. (147)

Both Veyne and Hayden White have strongly underscored the synthesizing power of plot, "un mélange très humain et très peu scientifique de causes matérielles, de fins, de hasards" (46) in Veyne's terms. White has even coined the term "emplotment" in order to reveal the explanatory power of plot structures as well as the historian's manipulating and ordering impact on facts and events:

historians, like writers of fiction, create what we consider 'facts' by selecting events, by endowing them with a certain meaning, by emphasizing particular scenes while compressing and omitting others, by shaping their account in accordance with a certain pattern ('emplotment').²⁶

He has correctly pointed out that "events come to us in the chaotic form of 'historical records'" (*Content*. 4). Even when enlisted as mere sequence or as a chronicle, the events do not provide a story in themselves, only potential elements of a story, which then have to be chosen, linked and transformed into narrative by the historian. Historical events do not speak for themselves; they do not have an imminent structure, a "natural" beginning, middle and ending, but can only be grasped in the construction of narrative form:

The events are made into a story by the suppression or subordination of certain of them and the highlighting of others, by characterization, motific repetition, variation of tone and point of view, alternative descriptive strategies, and the like - in short, all of the techniques that we would normally expect to find in the emplotment of a novel or play. ("Historical Text" 47)

²⁶*The Content of the Form. Narrative Discourse and Historical Representation.* Baltimore: John Hopkins UP, 1987, p. 44.

Events or situations do not naturally occur in the form of stories, but historians retrospectively impose a pattern upon them in order to make them meaningful and only then constitute them as "events" or "facts".

"Emplotment" thus emerges as White's fundamental concept, denoting the configuration of events as a certain class or type of story (for example a romance, a tragedy). It constitutes the basic mode of explanation of historical narratives; for we can only grasp and understand facts and events once they have been encoded in a certain plot structure, as a story of a particular kind. These plots, in turn, derive from our culturally transmitted story types and generic structures that have typically been used to endow unfamiliar events with meaning²⁷. Since events do not possess an inherent structure, their accumulation is meaningless in itself. Historical sequences can be emplotted in various ways, as different stories without disrupting either their chronology or their plausibility. Situations can be interpreted differently, i.e. reemplotted so that their meaning and significance changes and they appear in a different light. Seeing the first event in a series as possessing full explanatory power will, for example, lead to a deterministic structuring of the series. Considering the last event in a series as the decisive factor, by contrast, will create historical narratives

²⁷ White consequently stresses the metaphoric, symbolic value of historical narratives and designates them as extended metaphors or symbolic structures similar to other forms of culture: "Properly understood, histories ought never to be read as unambiguous signs of the events they report, but rather as symbolic structures, extended metaphors that 'liken' the events reported in them to some form with which we have already become familiar in our literary culture." (52) However, by inserting historiography into Northrop Frye's closed model of myth criticism and by emphasizing the similarities between history and fiction, White, in his initial work, neglects the socio-political context of historical events and avoids questions about the link between narrative and power.

of an eschatological or apocalyptic type. Referring specifically to Marx' statement in *The Eighteenth Brumaire*, White contends that

no historical event is intrinsically tragic; it can only be conceived as such from a particular point of view or from within the context of a structured set of events of which it is an element enjoying a privileged place. For in history what is tragic from one perspective is comic from another, just as in society what appears to be 'tragic' from the standpoint of one class may be, as Marx purported to show in the *Eighteenth Brumaire of Louis Bonaparte*, only a 'farce' from that of another class. Considered as potential elements of a story, historical events are value-neutral. Whether they find their place finally in a story that is tragic, comic, romantic or ironic - to use Frye's categories - depends upon the historian's decision to configure them according to the imperatives of one plot-structure or mythos rather than another. ("Historical Text" 47)

History's construction as an artefact is frequently highlighted in Barnes's *History*, for the novel presents events in episodic form and refuses to form a single unifying history of human civilization out of these stories. In contrast to Marx, Barnes does not shape his *History* according to any one single literary type, but stages various genres. Using several modes of emplotment, he consequently presents an equal number of systems of meaning production. He fashions multiple patterns of the events narrated and leaves us with numerous conflicting interpretations. Furthermore, whereas Marx valorized the (supposed) original at the expense of the second occurrence (thus considering the second event only as derivative of the first, but not in its own right), Barnes troubles this notion of historicity and clearly disrupts continuities by juxtaposing very different, almost absurd repetitions of the first time and consequently exposes the singularity and incommensurability of events. *A History of the World* challenges the notion of any original, authentic event by locating the first disaster on sea in myth, in the biblical story of Noah's ark and the deluge. Even

this story is already a repetition, and a repetition with a difference, since "The Stowaway" is told from the woodworm's eye and incompatible with the "official" version in Genesis; *History* further mocks the search for origins, i.e. for Noah, in "Project Ararat", where the astronaut does not find Noah's but Miss Fergusson's skeleton (277/278).

Barnes thus foregrounds that history as such is not an ordered, systematic process, but rather a gathering of chaotic moments, which have to be transformed into narrative in order to be meaningful. In *A History of the World*, the tension between the rich randomness of historical reality and the ordering categories of discourse highlights the fact that representation always implies a selection as well as an organization. The novel ridicules divisions according to monarchs or centuries, which typically order history. Instead of modeling his *History* on ideas of growth, development and change, Barnes bases his novel on returns and repetitions. Nevertheless, its network of repetitions cannot be deciphered according to a systematic code, for the return is disconnected from the original event and repetitions paradoxically produce the singularity of events. The narrator of "Parenthesis", again, expressly calls attention to processes of constructing stories, of plotting events and thus imposing meaning. He suggests fabulation, the process of fictionalizing events, as an equivalent of history. Similar to Kath Ferris, the Australian survivor, we have to fabulate in order to mend the holes of our knowledge of the past. We have to invent plausible explanations and fill the gaps of historical records by our imagination:

We make up a story to cover the facts we don't know or can't accept; we keep a few true facts and spin a new story round them. Our panic

and our pain are only eased by soothing fabulation; we call it history.
(240)

What appears to be a strange coincidence in Barnes's *History of the World*, is therefore not accidental at all, for presenting chance events or random occurrences in narrative always already effaces the aleatory; narrative, by its very definition, gives order and design to experience, and the effort to represent chance is always already recuperated by a sense of formal coherence and design. All those bizarre connections and random incidents staged in Barnes's novel are carefully planned and presented. The author plays with links and repetitions, for example occurrences of butterfly (121, 160). He constructs his narrative around them in order to make readers speculate upon a higher order or an underlying law in history. Eventually, Barnes fools readers by making them believe that those connections and recurrences are a hint by God, or, figuratively, a hint by the author on how to decode his novel. References to woodworms, in particular, appear so artificial that they even enhance the disjunctiveness of chapters. Yet, since the fragments of his novel are connected (if only by such ludicrous links such as woodworms), the author still acknowledges that we cannot do without patterns or models.

If there is no Universal History, there can obviously be diverse versions of the past competing with each other, and no single one of them can claim exclusive truth. Just as the past is not an objective untold story that can be discovered, but rather has to be constructed subjectively, so there can be indefinitely many historical narratives, selecting different events and ordering them differently. The same

event can in fact belong to different stories, as argues Mink, for there are no accepted standards or rules to examine historical records and to prove the truth of a narrative as that of a scientific theorem.

'[E]vidence' does not dictate which story is to be constructed [...] [historical narrative] is a product of imaginative reconstruction, which cannot defend its claim to truth by any accepted procedure of argument or authentication²⁸.

History, in other words, does not provide true knowledge. Its only possible progress, according to Veyne, is the multiplications of questions and categories under which history can be examined. In a similar vein, the narrator of "Parenthesis" argues,

We all know objective truth is not obtainable, that when some event occurs we shall have a multiplicity of subjective truths which we assess and then fabulate into history, into some God-eyed version of what 'really' happened. This God-eyed version is a fake - a charming, impossible fake, like those medieval paintings which show all the stages of Christ's passion happening simultaneously in different parts of the picture. (243)

Given these affinities between history and fiction, it is nevertheless crucial not to efface the border between the two, as Hayden White has been accused of doing. The difference between historical and literary discourses is not just that history can afford to be boring without losing value, as Veyne has provocatively maintained. This kind of relativism risks removing history from the constraints of scientific methods and of reducing it to a literary genre. Transferred to Nazism and the Holocaust, White's preoccupation with literary elements and his claim of the possible construction of any number of historical narratives encounters its epistemological and ethical limits. White has indeed been accused of denying the reality of the referent, of

²⁸ See "Narrative Form as a Cognitive Instrument", p. 145.

advocating a relativism that accepts the validity of any historical account as long as it is formally coherent.²⁹ However, the past, its terror and real human suffering did exist and must not be minimized by emphasizing only the textuality of the past. The constraints of history as narrative cannot only be found in literary genres, but rather in the truth claim history pursues. History has to work from evidence and possesses specific strategies of verifying. Michel de Certeau has attempted to correct formal approaches to historical texts by considering history both as discourse, a narrative construction or composition, *and* as the production of statements which claim a truth value as well as verifiability³⁰. He admits that history is a story, a narrative constructed according to certain rules, but emphasizes that it is a special story, since it aims at providing a true account. Far from being a subclass of rhetorics or tropology, history, unlike literature, aims at establishing a verifiable relation to its referent. Similarly, Koselleck maintains that "language and history depend on each other but never coincide"³¹. Although historical events and past experiences cannot be transmitted except through the medium of language, numerous extralinguistic factors enter history, and levels of experience may be impossible to render in language.

Barnes is also careful not to reject the notion of objectivity and truth in history, even if these are utopian concepts:

²⁹ In "Historical Emplotment and the Problem of Truth", White has corrected his previous views and admitted that not every form of emplotment can be used for the historical narration of every set of events. (*Probing the Limits of Representation. Nazism and the Final Solution*. Ed. Saul Friedlander. Cambridge: Harvard UP, 1992. 37-53.)

³⁰ See Michel de Certeau, *L'écriture de l'histoire* (Paris: Gallimard, 1975), especially the essay "L'opération historiographique".

³¹ *Futures Past*, p. 232.

But while we know [that objective truth is not obtainable], we must still believe that it is 99 per cent obtainable; or if we can't believe this, we must believe that 43 per cent objective truth is better than 41 per cent. We must do so because if we don't we're lost, we fall into beguiling relativity, we value one liar's version as much as another liar's, we throw up our hands at the puzzle of it all, we admit that the victor has the right not just to the spoils but also to the truth. (243/244)

Barnes does not advocate entropy, a state of increasing chaos and disorder, as a model for our universe, but insists on an effort to include love in the history of the world.

These historiographical analyses redirect our attention to the institutionalization of the discipline of history and historical knowledge. From the enlightenment onwards, Aristotle's rhetorical opposition became an epistemological challenge to historians, who increasingly strove to render plausible their history and derive from it a unified meaningful system and serve the knowledge of historical reality. According to Gossman³², only when the meaning and institution of literature began to change at the end of the eighteenth century was history considered distinct from literature. In antiquity, however, Greek and Roman historians like Herodotus and Thucydides were appreciated precisely for their style and composition, for imposing an interesting pattern on their selected events, and not for arguing, persuading or demonstrating any historical truth. By recapturing the spirit of what might have happened, ancient historians tried to achieve a sense of unity and consciously produced works of literary qualities. The Renaissance, too, treated historiography as a writing practice, "an art of representation rather than [as] a scientific inquiry, and its

³² Lionel Gossman, "History and Literature. Reproduction or Signification." *The Writing of History. Literary Form and Historical Understanding*. Eds Robert H. Canary and Henry Kozicki. Madison: U of Wisconsin Press, 1978. 3-39.

problems belonged therefore to rhetoric rather than to epistemology" (4). "Historians", before the Enlightenment, aimed at moralizing and teaching; they collected examples of notable figures and judged their actions and merits. White claims that

as long as history was subordinated to rhetoric, the historical field itself (that is, the past or the historical process) had to be viewed as a chaos that made no sense at all or one that could be made as many senses as wit and rhetorical talent could impose upon it (*Content* 65).

Modern scientific historiographical practices, which developed at the end of the sixteenth century, however, entailed the suppression of oral elements and fixed the past as a dead record. The past, in other words, was no longer a question of interpretation, but something ready-made, impersonal, already available, expunging the narrator's I. Inspired by the progress in the natural sciences, historiography took yet another fresh direction during the Enlightenment due to the divorce between historical and poetic writing. Literature from the eighteenth century onwards came to be seen as a product of art, not a craft or a product of labour. It became embodied in a selected corpus of texts and was a privilege of only a few gifted people. The new rationalistically oriented writing of history based the development of human society on general rules, laws and principles (such as the progress of human civilization), thus subordinating the particular to the general, creating a sense of unity of all of human history and boldly ignoring the specific features of past periods and societies. The Enlightenment, in short, mastered history by reducing it to order and theory. Yet, historiography in the eighteenth century was hardly ever connected with universities or specific institutions of learning - a situation that was to change radically in the nineteenth century when the institutionalization of

both historical and literary scholarship helped to widen the gap between history and literature.

History, in Foucault's words, was invented in the last century, i.e. it became a fundamental institutionalized mode of intelligibility. During the nineteenth century, both literature and history withdrew into the universities and passed into the hands of specialists. The idea of a "scientific" history developed and professional historians with academic appointments were now concerned with historical writing. Especially German historians outlined the new discipline of history and modern historical scholarship, emphasized the great value of the organized teaching of history, which was to promote national sentiments. Leopold von Ranke, above all, popularized the notion of an "objective" history and developed historical research methods, a philological textual criticism, in order to understand historical facts and events in their genesis, circumstances and effects; his aim was to avoid any imagination in historical writing, but to grasp "wie es eigentlich gewesen ist", how events actually happened³³. The German historical school attached great importance to scientific precision, exact scholarship, the exact determination of details and the scrupulous quotation of sources from the recently founded public archives³⁴. Our present conception of history dates precisely from this period, i.e., we have come to denote as history a specific discourse, a scientific practice or a particular narrative, as it has been institutionalized in schools,

³³ Ranke wrote a wide-ranging account of "world history" from the ancient Greeks to Europe in the fifteenth century. Despite his objective scientific claims, religious beliefs were Ranke's basic motivation since he believed that God revealed his presence in historical events.

³⁴ Nietzsche polemically rejected this concept of history in "Vom Nutzen und Nachteil der Historie", arguing that the historian thus conceived was simply a collector of antiques and history a collection of dead knowledge without any relation to life.

universities, libraries. A historical text typically deals with real instead of imaginary events; it divides the past on temporal or topical lines (dealing with periods or centuries or specific subjects such as "class", "nation") and is supposed to follow certain conventions (presenting accurate evidence, reconstructing a coherent verifiable narrative from those traces). Ironically, "just when, by its own account, historiography was transformed into an 'objective' discipline, it was the narrativity of the historical discourse that was celebrated as one of the signs of its maturation as a fully 'objective' discipline." (*Content* 24)

Barnes's *History* thus well illustrates that historical events do not 'naturally' obey regularities. They are not plotted by God or a Hegelian spirit, but by the specific historian who recounts them. Although *A History of the World* presents a series of variations on the shipwreck theme, these regularities and repetitions do not testify to any direction in history at large, but only point out incompatibilities and immeasurable changes of historical processes. Multiple links and connections between the various stories cannot be systematized and do not reveal a single underlying order or pattern. They do not constitute Ariadne's thread which could lead us out of the chaotic labyrinth that is *A History of the World*. In a review of Barnes's novel, Salman Rushdie has noted the links between chapter six and nine, yet he criticizes that "You get the point, but not the message." (242) I would argue that *that* precisely is the point. Rushdie has, moreover, regretted that "for me, the bits of *A History of the World in 10 1/2 Chapters* didn't quite add up"³⁵. With good reason so, I think, for the novel questions on what basis we identify repetitions, draw connections and

³⁵ Salman Rushdie. *Imaginary Homelands. Essays and Criticism 1981-1991*. New York: Viking, 1991, p. 243.

relate a part to the whole. Barnes's novel does not subordinate the particular to the general and does not locate the same in the different, for no two shipwrecks are comparable to one another. Instead, Barnes's novel favors pluralism and the unique value and vividness of individual persons, cultures and epochs. It presents local stories that do not fit into a single envisioned (Hi)story. By extension, we cannot identify the *History of the World* as containing a deep structure or as establishing a hierarchy of groupings, some stories being more "historical" or "rational" than others.

Julian Barnes's *History of the World in 10 1/2 Chapters* dramatizes the tension between the chaos of historical events and the order/ing of historical narrative. In doing so, it demonstrates the possibility of a different history which does not coincide with any traditional discipline and therefore makes us question our passive reliance on traditional disciplinary systems of order; the novel appears chaotic to us because it oscillates between different ordering patterns while confirming neither. At the same time, the chaos and disorganization of this novel are obviously not something to be regretted, for narrators playfully indulge in challenging conventional forms of history. *A History of the World* thus exposes the constructedness of laws or patterns that operate universally throughout all of history. It unmaskes that the orderly writing of history is highly conventional, that structure, order and continuity are not inherent in, but imposed upon history.

IV. The Rebirth of Chaos in the Age of Information Technologies: Don DeLillo's *White Noise*

The universe of Don DeLillo's *White Noise*¹ could hardly be more contemporary and familiar: Jack Gladney and his patchwork family inhabit a world where chaotic incidents are, paradoxically, the order of the day. Smoke alarms go off for no apparent reason. The grade school has to be evacuated because of some inscrutable toxic material. Babette suffers from inexplicable mental disorders such as memory lapses and *déjà vu*. Bee's plane barely escapes a crash landing. The insane asylum burns down and, most importantly, a black chemical cloud provokes the massive evacuation of Blacksmith's inhabitants and contaminates Jack Gladney with a disturbing dose of a toxic chemical. Uncannily enough, the publication of DeLillo's eighth novel coincided with the poisonous gas leakage at a pesticide plant in Bhopal, India, in the course of which thousands of people were killed and injured. In addition to these unpredictable "airborne" accidents, random noises of all kinds populate the air the Gladneys inhabit. Emanating from their lively offspring, from washing machines, dryers, gas meters and radiators as well as from the mass media, a constant background babble swams the Gladneys' house so that all sound distinctions are levelled. Significantly, then, what appears as a cipher for chaos in DeLillo's novel is not excessive or transitional aspects of the natural world - turbulent floods or dark abysses. In the ultramodern world of *White Noise*, it is the omnipresent technological murmur and sound - its visible version being the lethal black cloud - that suggests a return to

¹ Don DeLillo. *White Noise*. New York: Penguin, 1984. All page numbers refer to this edition.

solvency, indifference, and the complete absence of control and order. Noise, however, might not only be considered as random matter, but also as the fusion of all forms, a vitalizing source of inspiration. It may represent a field of possibility from which various shapes and meanings can emerge.

My reading of DeLillo's novel focuses precisely on the double nature of chaotic noise as random excess as well as secret meaning. As Jack Gladney, the first-person narrator tries to make some sense out of the bits of information emanating from the mass media, he needs to create links, form an intelligible whole, and plot the narrative of his interpretive quest. Yet, since connections are simultaneously highly ambivalent, Gladney's projection of an order borders the irrational and is in danger of sliding into paranoia. In its portrayal of a highly technologized secular world saturated with modern information networks, DeLillo's novel therefore ironically and humoristically portrays the undersides of that rational order. Precisely because of the immense spread of information, bizarre rituals, occult beliefs, and new forms of spiritism flourish. For in a state of uncertainty, where technology seems to follow its own logic that lies beyond the realm of human calculation, it is the proliferation of arbitrary accidents and random messages that suggests, yet never confirms, a regularity and thus an underlying secret order. DeLillo's novel presents the quest and paranoid yearning for order, control, and meaning in a culture dominated by uncertainty and unpredictability and depicts the impossibility of disenchantment in the midst of a highly secular and utilitarian society. Examining both technology and narrative plotting as signifying systems, *White Noise* reveals narrative as a unique sense-

making discourse in a world of information and communication technologies.

Noise, white noise

DeLillo's very title unmistakably announces one of the novel's crucial preoccupations and persistent metaphors², for the Gladneys inhabit a universe inundated with sounds and noise. There is, first of all, a constant babble among family members. The turbulent descendants of Jack and Baba are frequently talking to somebody on the phone. Wilder is crying, Steffie and Denise are arguing with Baba, Heinrich is reciting the latest scientific findings. Jack is listening to the powerful discourses of his colleagues at the College-on-the-Hill or to the cruel sounds uttered by his German teacher, whereas Baba is reading out aloud to the blind Mr Treadwell. While Jack, DeLillo's first person narrator, can decode the private sounds coming from his family, he cannot even locate the numerous sounds arising from the technological appliances surrounding him. The clothes dryer, the refrigerator, and the thermostat are all buzzing for unknown reasons, creating the invisible "waves and radiation", which provide the title for the novel's first part. The traffic on the motorway behind the Gladneys' house as well as numerous household gadgets produce a constant murmur so that silence rather than noise seems unusual and disquieting. Instead of signalling an alarm or a crisis, noise gives people a sense of security and indicates that machines are working correctly.

¹*Panasonic* was another working title for the novel, but according to Keesey (*Don DeLillo*. (Twayne's United States Authors Series). New York: Twayne, 1993, p.2), the Matsushita Corporation refused permission to adopt it as the official title. This name would have alluded more strongly to the predominance of multinational capitalist companies in the field of information technologies.

"Denise listened carefully, making sure the mangling din contained the correct sonic elements, which meant the machine was operating properly." (34) Sentences like "Blue jeans tumbled in the dryer." (8), "The gas meter made a particular noise." (222) or "The thermostat began to buzz." (302), which have slipped into the narrative and disrupt its flow, reflect that this side effect of technology has seeped into the very texture of the Gladneys' life in general and into Jack's unconscious in particular.

The mass media, above all, with their huge network of structures and channels provide the background music for their daily family life. Television commercials and news, messages, and weather reports on the radio form a kind of "moving wallpaper" in the Gladneys' house. Even though the set may not always be watched, it remains on as a constant soundtrack. The TV noise interrupts for instance Jack studying German: "The TV said: 'And other trends that could dramatically impact your portfolio.'" (61) Lying in bed and overhearing the television program of their children, Jack and Baba listen to a voice remarking: "A Californian think-tank says the next world war may be fought over salt." (226) The supermarket represents yet another space where a large number of sounds are floating and drifting aimlessly. Jack is not only bewildered by the enigmatic code by which its employees communicate ("A checkout girl said, 'Leon, parsley,' and [a heavysset man] answered as he approached the fallen woman, 'Seventy-nine.'" (19)); he also notices the sounds of foreign languages he cannot identify (40), the noise of automatic doors opening and closing, the sound of gliding feet, whispers and numb shuffles in every aisle as well as the noise of fruits or people falling, "The toneless systems, the jangle and

skid of carts, the loudspeaker and coffee-making machines, the cries of children." (230) These various sounds apparently spewed out randomly are simply juxtaposed; they accumulate, thus revealing the indistinguishable and ubiquitous nature of noise, its steady murmur and leveling of various kinds of sounds. Moreover, the incessant loudspeaker bombardments, usually composed of three brand names, frequently intersperse Jack's first person narrative, thus indicating to what extent the language of commercials has entered his acoustic unconscious. When walking the streets of Blacksmith and passing by shop windows, Gladney inevitably recalls "Dacron, Orlon, Lycra Spandex." (52); and a dialogue between Jack and Babette concerning their fear of death is interrupted by the trivial list of credit cards: "MasterCard, Visa, American Express." (100). Although forming well-ordered, almost poetic phrases, these triads of brand names are incorporated into the narrative without any seeming motivation.

Ironically, however, bombarded and almost oversaturated with information, Jack and Baba fail to note the import of all the data. They receive messages out of context, so that the different contents are leveled and only catchy and cryptic brand names persist in their memory. The countless disconnected messages, which are infinitely reproducible and convertible, actually never inform anyone. The proliferation of data, the dislocation and dispersal of messages transmitted everywhere and nowhere in particular fails to lead to clearer meaning. Attitudes and facts shift all the time so that uncertainty and confusion prevail.

Coined in analogy to the concept of white light (i.e. the superposition of all frequencies), white noise designates precisely

a sound containing a blend of all the audible frequencies distributed equally over the range of the frequency band, [which] was originally invented to soothe workers in a soundproof office buildings who might be disturbed by the silence.³

Screening out the more irritating sounds of the environment, white noise collapses all acoustic distinctions and submerges them into a uniform, supposedly distracting monotone. The sounds of jingles, advertisements, headlines and brand names, in other words, serve as an anesthetic, designed to cover over what might otherwise be a disquieting vacuity. In DeLillo's novel, however, noise becomes anything but a pleasant distraction. For although it emanates from material sources, these sources cannot always easily be located, since noise travels in the immaterial and invisible shape of waves and radiation; it is simply "in the air", capable of tricking the human senses and leaving them in utter confusion. As Heinrich explains to Jack:

Even sound can trick the mind. Just because you don't hear a sound doesn't mean it's not out there. Dogs can hear it. Other animals. And I'm sure there are sounds even dogs can't hear. But they exist in the air, in waves. Maybe they never stop. High, high, high-pitched. Coming from somewhere. (23)

Given that both data and toxic chemicals mysteriously travel through the air, it becomes tempting to assign all inexplicable phenomena to something in the air. Accordingly, Baba interprets her memory lapses as being "airborne", while Jack wonders whether the question of who will die first and Heinrich's premature loss of hair might be provoked by the air:

Have I raised him, unwittingly, in the vicinity of a chemical dump site, in the path of air currents that carry industrial wastes capable of producing scalp degeneration, glorious sunsets? [...] Man's guilt in

³ Douglas Keeseey, *Don DeLillo*, p. 146.

history and in the tides of his own blood has been complicated by technology, the daily seeping falsehearted death. (22)

The toxic spill in the novel's second part clearly illustrates that causal connections remain obscure and immeasurable as invisible rays and waves govern the course of things. Jack's precocious son even maintains that electromagnetic radiation surpasses the danger of the everyday spills on the news. To him,

[t]he real issue is the kind of radiation that surrounds us every day. Your radio, your TV, your microwave oven, your power lines just outside the door, your radar speed-trap on the highways. [...] It's the things right around you in your house that'll get you sooner or later. It's the electrical and magnetic fields. [...] Where do you think all the deformed babies are coming from? Radio and TV, that's where. (174, 175)

Noise, then, is mainly experienced as a toxic threat. As Jacques Attali, similarly, has pointed out in his examination of noise in various cultural contexts,

noise had always been experienced as destruction, disorder, dirt, pollution, an aggression against the code-structuring messages. In all cultures, it is associated with the idea of the weapon, blasphemy, plague.⁴

While it is always there, invisibly infiltrating the air, its density, significantly, appears to increase during the Airborne Toxic Event, thus coinciding with one of the novel's climaxes. When the lethal black cloud appears, sirens, helicopters, automobile horns and voices which give instructions through bullhorns all create an immense uproar, suggesting a "brute aggression" (118). Yet, as in the case of noise in the Gladneys' household, the various sounds are essentially levelled, literally producing a white noise which penetrates the thick snow and

⁴ Jacques Attali. *Noise: The Political Economy of Music*. (Theory and History of Literature, Vol. 16) Minneapolis: U of Minnesota Press, 1985, p. 27.

which, in this context, is naturally associated with danger and death. That "dying is a quality of the air" (151) is the tempting conclusion Murray Siskind draws from the Airborne Toxic Event, the urgent and visible version of the white noise all around. Murray similarly senses that "death is in the air" (151) and that during the catastrophic spill "the dead are closer to us than ever [They] inhabit the same air" (150). Likewise, Babette and Jack wonder, "'What if death is nothing but sound?' - 'Electrical noise. [...] Uniform, white.'" (198) Mysteriously, then, the intensity and duration of noise appears to be connected to the novel's second haunting obsession, death. Given the invisible agency behind the sounds all around, Jack suspects a sinister global web of threatening his life.

A climate of secrecy and conspiracy is, then, created by the actual producers of noise, above all by the vast information networks (controlled by banks, insurance companies, police agencies) to which the Gladneys are exposed. Yet, rather than carrying negative moral connotations, secrets in *White Noise* are a neutral, quotidian form of social interaction, much in the way Georg Simmel has described their functioning at the beginning of the century:

one of man's greatest achievements [...] the secret produces an immense enlargement of life: [it] offers [...] the possibility of a second world alongside the manifest world; and the latter is decisively influenced by the former.⁵

He explains that the sense of secrecy has changed in modern "objectified" culture, where the knowledge of personal elements is less and less necessary for confidence. That interaction functions

⁵ "The Secret and the Secret Society." *The Sociology of Georg Simmel*. Translated, edited, and with an introduction by Kurt H. Wolff. New York: Free Press, 1950. 307-376, p. 330.

increasingly on an impersonal basis, as communication with/via machines, is repeatedly illustrated in *White Noise*. Denise's friends, for instance, do not have addresses any longer, but "phone numbers only, a race of people with a seven-bit analog consciousness."(41) Similarly, a computer-generated voice has substituted a human voice in doing a marketing survey (48). However, the role of secrecy has simultaneously gained a new importance: in highly differentiated (as opposed to primitive) societies, the immensity of facts simply cannot be verified any more so that secrets can flourish. Although, according to Simmel, a certain degree of secrecy is always involved in human relations, the potential for secrecy grows in proportion to the number of contacts within a group. Accordingly, secrecy plays a fundamental role in today's "global village", where all informational systems - telecommunications, automatic teller machines, multinational business networks, the mass media and inscrutable computers circuits - seem to interlock and create a huge unfathomable web of schemes, codes and symbols. The possibility of connections is enormous, but so is the potential for secrecy and exclusion. In *White Noise*, the banking machine clearly suggests an atmosphere of invisible control and surveillance by technology, so that Jack feels "[w]aves of relief and gratitude" flowing over him when the machine's balance corresponds to his estimate. Everything from medical histories to the most uncontrollable natural processes is available on cable and can simply be tapped into: "CABLE HEALTH, CABLE WEATHER, CABLE NEWS, CABLE NATURE." (231) Likewise, chapter 37 ends on a note Jack receives from his bank; the message's text, incorporated unaltered into the narrative and apparently uttered by some supernatural agency,

reduces the self to a secret code and subjects it to a machine. "REMEMBER.[...] Know your code. reveal your code to no one. Only your code allows you to enter the system." (294/95) This network of power and control - what Fredric Jameson calls "the whole new decentered global network of the third stage of capital itself"⁶ - draws connecting lines among the most disparate data, yet ironically threatens rather than unites individuals. Computers store such a huge amount of information that measurable connections get lost and the underlying plot can no longer be discerned, but only be suspected. As Baba concludes, "It's all a corporate tie-in [...] The sunscreen, the marketing, the fear, the disease. You can't have one without the other." (264) The novel's final scene, in which the supermarket's shelves have been arranged differently without warning, thus causing irritation and confusion, leaves the strong aftertaste that electronic media possess some privileged knowledge which is hidden to terrorize human beings:

There is agitation and panic in the aisles, dismay in the face of older shoppers. They walk in a fragmented trance, stop and go, clusters of well-dressed people frozen in the aisles, trying to figure out the pattern, discern the underlying logic [...] They see no reason for it, find no sense in it. [...] There is a sense of wandering now, an aimless and haunted mood, sweet-tempered people taken to the edge. They scrutinize the small print on packages, wary of a second level of betrayal. [...] In the altered shelves, the ambient roar, in the plain and heartless fact of their decline, they try to work their way through confusion. But in the end it doesn't matter what they see or think they see. The terminals are equipped with holographic scanners, which decode the binary secret of every item, infallibly. (325/326)

Power in the late twentieth century no longer derives from archives, but represents a wholesale cultural infiltration issuing from computer technologies, which, due to their accumulation of information, are

⁶ See his *Postmodernism or, the cultural logic of late capitalism*. Durham: Duke UP, 1991, p. 38.

capable of systematically monitoring individuals. It is deeply ironic that Jack Gladney, an eminent authority in Hitler Studies, fails to realize that the Nazis, in fact, represent an early example of how technology introduced new forms of surveillance, how electronic media institutionalized state control:

Possessing the means of recording allows one to monitor noises, to maintain them, and to control their repetition within a determined code. In the final analysis, it allows one to impose one's own noise and to silence others: 'Without the loudspeaker, we would never have conquered Germany,' wrote Hitler in 1938 in the *Manual of German Radio*.⁷

Technology's mechanisms, indeed, follow their own logic, escape human control and calculation, and remain ultimately inexplicable, as numerous episodes in *White Noise* reveal. Even the most sophisticated information networks may, at best, yield statistics and names, but they fail to provide explanations and solutions. After the grade school evacuation, for instance, investigators are unable to determine what exactly caused the headaches and eye irritations: "it could be the ventilating system, the paint or varnish, the foam insulation, the electrical insulation, the cafeteria food [...]" (35) or a long list of other possible causes. Similarly, when the Treadwells are missing, a clerk tells Jack and Babette that "there was a disappearance every 11 seconds" (58); yet the official authorities are unable to locate the missing people until a psychic woman helps them out. Highly appropriately, the "Manual of Disasters" is of no avail to the stewardesses on Bee's plane, which suddenly loses power in all three engines and becomes a "silver gleaming death machine" (90). Nor does the pilots' training at the death simulation center in Denver prove

⁷ Quoted in Attali, *Noise*, p.87

helpful. Facing and escaping death simply cannot be practised or simulated, even if the Advanced Disaster Management, a private consulting firm, is built on the premise: "The more we rehearse disaster, the safer we'll be from the real thing." (205). Accidents and catastrophes, by their very nature, can never be programmed and foreseen; they challenge the mechanistic principle that everything is correctible. There is further no measurable connection between the Airborne Toxic Events and the postmodern sunsets, just as the cause for Heinrich's premature loss of hair (at the age of fourteen) and Babette's memory lapses (due to her chewing gum?) remain unclear. Rather than clarify cause-and-effect relations, computers paradoxically obscure them and contribute to an atmosphere of uncertainty and disorientation. When, during the evacuation, access to information becomes a decisive factor of survival, the failure of information networks is blatant since the few remarks that emerge are highly vague and ambiguous. The Glassboro radio station, for example, announces important news, but in fact merely asks people to stay indoors. "We were left to guess the meaning of this" (121). Little wonder, then, that "[t]rue, false and other kinds of news radiated through the dormitory. [...] Remarks existed in a state of permanent flotation." (129) The gap between officially released information and outlandish tabloid stories narrows increasingly as reports about microorganisms eating up the lethal cloud, decomposing the Nyodene D, appear just as stunning and unbelievable as the apocalyptic tabloid stories with their optimistic twist; the rashes of UFO sightings, the horrible reports about miscarriages and babies born prematurely. Nothing seems too farfetched and implausible. Given the disinformation by the various

information systems, unverified information flourishes, submerging all news into an undifferentiated chaotic noise.

Similarly, when Jack is subjected to numerous tests and checkups after having been contaminated with Nyodene D, the results of these tests are utterly vague and essentially nonsensical. The imaging block may make his body transparent, and other measures may register traces of Nyodene D; yet they are unable to establish a precise diagnosis. As Heinrich justifiably wonders during the evacuation, "What good is knowledge if it just floats in the air? It goes from computer to computer. [...] But nobody actually knows anything." (148) Instead of establishing unequivocal facts, information systems in fact multiply rumours or news only accessible to the initiated. Technology, reducing everything to computerized dots and data readable only to those 'in the know', thus remains highly esoteric and does not provide consolation to Jack, let alone the promise of immortality which he so longs for. "A network of symbols has been introduced, an entire awesome technology wrested from the gods. It makes you feel like a stranger in your own dying." (142) Ironically, the Mylex men may possess death-measuring instruments; yet technology proves unable to master or handle death, and it is barely able to transform the uncertainty or threat of death into a calculable risk. Rather than alleviating the fear of death, "[e]very advance in knowledge and technique is matched by a new kind of death." (150) "The greater the scientific advance, the more primitive the fear." (161) As one of the characters in DeLillo's *Running Dog* remarks,

When technology reaches a certain level, people begin to feel like criminals. Someone is after you, the computer maybe, the machine-police. [...] The facts about you and your whole existence have been

collected or are being collected. Banks, insurance companies, credit organizations, tax examiners, passport offices, reporting services, police agencies, intelligence gatherers. [...] the very fact, the superabundance of technology, that makes us feel we're committing crimes. [...] What complex programmes. And there's no one to explain it to us.⁸

Access to data, however, is a crucial issue in the novel and its impact is particularly striking when one examines relationships within the Gladneys' family. For the information society has clearly disrupted conventional power dynamics between children and adults. Family relations reflect on the micro-level how orders and hierarchies that were once thought to be existential and natural have been subverted, just as family discussions reproduce the strange logic and quiz show-like incoherence engendered by the media, skipping from topic to topic, thus multiplying confusion rather than answering questions. The Gladneys are far from representing a conventional closely-knit nuclear family, the typical symbol of society's order at large, where marriage and blood ties represent the essential bond. Instead, the various offspring and former partners of Jack and Baba are scattered all over the world. No child lives with both parents, and Jack and Babette have no children together. Relatives casually drop in and out of their house, and readers are just as casually informed about their diffuse relationships when a respective visit comes up. Natural bonds, then, appear entirely inconsequential: when Wilder gets lost in the supermarket, Baba and Jack find him in the cart of another woman, who has an Asian baby: "no one knew who Chun belonged to or where he or she had come from" (39). Similarly, Steffie is so detached from her mother Dana Breedlove that she worries she might not recognize

⁸ *Running Dog*. New York: Vintage, 1978, p. 93.

her (269). Meanwhile, the illusion of kinship, a sense of belonging and its aura of connectedness has been replaced by consumerism, as Ferraro has argued:

The matters of intercourse and procreation, of lineage and place, that for someone like Faulkner would be the founding, inexorable blood-knowledge of existence itself seem for Jack and the others to be pieces of trivia, the flotsam and jetsam of circumstance.⁹

What is more, the conventional wisdom of personal experience, in Walter Benjamin's terms, is no longer handed from parents to children, but has been replaced by simple information, i.e. by a product of the mass media. Children, who now own technological and medical information and represent a major resource for media networks, alert their parents to the social conditions they live in.¹⁰ Family hierarchies are "out of order", since the Gladneys' children certainly know better how to survive than their parents, are more intensely aware of possible dangers, and adapt more easily to a life pervaded with technology. The girls supervise Babette, discuss her diet, and mock her nutrition. The nine-year-old Steffie volunteers to be a victim in one of the simulated disasters, while the eleven-year-old Denise, a voracious reader of the *Physicians' Desk Reference* (36), is well informed about drugs and medicines and confides to Jack that Baba is secretly swallowing Dylar. Fittingly, Denise is the first to start packing when loudspeakers call for an evacuation, and Jack would have remained unaware of his contamination if she had not urged him to obtain information about

⁹ Thomas J. Ferraro, "Whole Families Shopping at Night." *New Essays on White Noise*. Ed. Frank Lentricchia. Cambridge: CUP, 1991. 15-38, p. 16.

¹⁰ In an interview with Caryn James, DeLillo has confirmed that children "are a form of magic. The adults are mystified by all the data that flows through their lives, but the children carry the data and absorb it most deeply. They give family life a buzz and hum; it's almost another form of white noise." ("I never set out to write an apocalyptic novel." *The New York Times Book Review*, 13 January 1985, p.31)

the consequences of having been exposed to the black cloud.

Heinrich, above all, challenges his father's conventional wisdom and reverses the traditional transmission of knowledge from the older generation to the younger. The son of Jack and Janet Savory, now Mother Devi, the fourteen-year-old boy appears as the scientific and technological head of the family, who has usurped the control and authority previously owned by fathers. Precocious, stealthy, constantly experimenting with radios and physics, he displays an almost encyclopedic knowledge, which intimidates Jack: "He seems to bring a danger to him. It collects in the air, follows him from room to room." (25) A sophist and hairsplitter, in Jack's view, Heinrich denies all commonsensical knowledge and systematically argues in favor of randomness and uncertainty. He distrusts the simple evidence of his sense and questions free human will, reducing it to a scientific question of molecules and chemical impulses.

Who knows what I want to do? Who knows what anyone wants to do? [...] Isn't it all a question of brain chemistry, signals going back and forth, electrical energy in the cortex? [...] Some minor little activity takes place somewhere in this unimportant place in one of the brain hemispheres [...] Maybe it's just an accidental flash in the medulla [...] I can't control what happens in my brain [...] It's all this activity in the brain and you don't know what's you as a person and what's some neuron that just happens to fire or just happens to misfire. (45/46)

The perfect exponent of life in the age of information technology, Heinrich views even the human body as a biochemical system functioning according to molecular impulses, neurons (mis-) firing. Constantly troubling the "natural order of things", he even challenges the incest taboo: "Animals commit incest all the time. So how unnatural can it be?" (34) Since the purpose of taboos is to separate the

sacred from the profane and to preserve the specialness and intensity of the sacred against the banality of ordinary life, Heinrich, who rejects all taboos, favors sameness and collapses all difference, insists on the radical secular nature of existence. Interestingly, his knowledgeable and wit nevertheless turn him into a prophet during the Airborne Toxic Event, when he is "speaking in his new-found voice" to a growing crowd:

People listened attentively to this adolescent boy in a field jacket and cap, with binoculars strapped around his neck and an Instamatic fastened to his belt. No doubt his listeners were influenced by his age. He would be truthful and earnest, serving no special interest; he would have an awareness of the environment; his knowledge of chemistry would be fresh and up-to-date.(130)

While natural family ties have vanished, the various family members are connected by secrets and plots. In *White Noise*, therefore, it is not only the vast public information networks which create a sense of betrayal and conspiracy; the second source of the constant babble, the private circle of the family, too, is dominated by various kinds of secrets and plots, political, amorous and narrative, involving almost all members. Secrecy and conspiracy, in other words, have become the dominant and "natural" mode of behavior in both private and public life. Babette's daughter Denise is spying on her mother and plotting with Jack to find out more about the Dylar tablets, an unofficial medication Baba is secretly taking. Jack's son Heinrich, for his part, is "plotting chess moves in a game he plays by mail with a convicted killer in the penitentiary." (25) Given his stealthy fugitive character, Jack always suspects him of hiding important information and of devising cunning schemes. Babette, supposedly lacking the "guile of conspiracies of the body" (5), betrays her husband with Willie Mink,

himself part of a clandestine group, who, according to Winnie Richards, is "operating in the deepest secrecy in an unmarked building just outside Iron City to prevent espionage by competitive giants" (299). Babette, then, is not that different from Jack's former wives, all of whom had ties to the intelligence community: Steffie's mother Dana is working "part-time" (!) as a spy for the CIA; Tweedy's family has a long tradition of spying and counter-spying, and appropriately, her husband is involved in a plot to topple Castro (86). Likewise, Heinrich's mother Janet Savory, now Mother Devi, did clandestine research for advanced theorists before her religious conversion (213). In *White Noise*, however, these plots of the Cold War are just evoked, while domestic plots within the family form the center of Jack's narrative. DeLillo, in other words, has replaced the global conspiracies and terrorism of his previous and later works with an entirely domestic setting, where he focuses on the secret plots of an individual, Jack Gladney. For Jack, too, participates in the cult of secrecy in that he camouflages his identity and inability to speak German at the College-on-the-Hill, where, moreover, an atmosphere of "bitterness, suspicion and intrigue" pervades the popular culture department (9). Ironically, Jack constantly stresses that he and Babette tell each other everything, yet he hesitates to tell her about the effect of the Airborne Toxic Event upon his body and hides the German gun his father-in-law gave him. He further sifts through the garbage in his search for the missing Dylar tablets, violating his family's privacy, feeling like a "household spy" (259). Most important, he veils the fact that he is going to murder Mink and, until the end, does not confess to anyone that Mink's injuries are not the result of an attempted suicide, i.e. that he tried to kill Babette's seducer.

Deus ex Media¹¹

Given the dispersal of agency engendered by technology, the anxious confusion arising from the random information with which the Gladneys are bombarded, the sudden eruption of accidents and catastrophes, the increasing disintegration of what used to be a natural order, Jack and other family members resort to various gestures of control or belief systems in order to master their chaotic environment. The proliferation of decontextualized messages, the noise of communication technologies initiates a process of interpretation as a means of getting a grip on what appears to be an underlying order. Paradoxically, living under the most highly developed technological conditions entails a return to quasi-religious rituals, occult beliefs, superstition, and paranoia. In an atmosphere where chance events multiply and technology's surveillance appears omnipotent, Jack can no longer trust in human freedom, but considers his life an unfortunate fate: what happens to him seems to have already been determined by a transcendent scheme. Consequently, Gladney is desperately longing for some clues that would suggest the pattern, the direction of his life and thus alleviate his fear of the unpredictable. The more events around him seem incomprehensible or at least deeply ambiguous, the more the cosmic order seems to disintegrate, the more urgent and intense his quest for an underlying order. After being contaminated with the toxic chemical, Jack, in his own words, is "ready to search anywhere for signs and hints, intimations of odd comfort." (154) Both he and Baba seize upon the most banal incidents and

¹¹ I borrow this expression from Samuel Weber's essay in his *Mass Mediauras: Form, Technics, Media*. Ed Alan Cholodenko. Stanford UP, 1996.

farfetched indications, anything that offers the least hint of a pattern in things. Desperate to exert some measure of power over situations which lie outside the realm of human agency, Baba has recourse to horoscopes, whereas Jack resorts to divination and attempts to reveal hidden information by interpreting numbers as supernatural signs. Waking at 3.51 in the morning and being grabbed by his fear of death, he wonders: "Always odd numbers at times like this. What does it mean? Is death odd-numbered? Are there life-enhancing numbers, other numbers charged with menace?" (47) Baba, having herself consulted other religions for help, later confirms his suspicions: "Death is odd-numbered. That's what the Sikh told me. The holy man in Iron City." (199) After the Airborne Toxic Event, she even comes to believe in extraterrestrial phenomena and their concentration "upstate". Jack, for his part, is convinced that the figure sitting in his backyard one night is an allegory of death that has "been inserted there for some purpose" (242). Seeing him as "Death in the flesh come to gather you in" (243), an "aphorist of last things" (243), Jack hides in the bathroom before confronting "Death", in reality his father-in-law, with a copy of Hitler. He is convinced that some "force or nonforce, the principle or power or chaos" (275) has been working out his ruin and is trying to do him in. In spite of wearing the German Zumwalt gun, Jack further develops fears of persecution. Walking on campus, he suspects being followed by a man who turns out to be his colleague Winnie Richards. He even tries to make sense of his anxiety by excessively processing facts into a coherence theory: "Does a gun draw violence to it, attract other guns to its surrounding field of force?" (298) His case is, then, clearly one of paranoia.

Traditionally considered a mental disorder, paranoia - paradoxically - represents a way of seeing plots or connections, i.e. excessive order, everywhere. However, this alleged delusional psychosis (according to Freud) proved an efficient strategy in totalitarian societies, where opponents were classified as such in order to exclude or persecute them; paranoia even became the widespread normal cultural reaction to the Cold War atmosphere. In fact, Hendrik Hertzberg and David McClelland in their general study of paranoia in its social and cultural aspects define it as a "recent cultural disorder", which

follows the adoption of rationalism as the quasi-official religion of Western man and the collapse of certain communitarian bonds (the extended family, belief in God, the harmony of the spheres) which once made sense of the universe in all its parts. Paranoia substitutes a rigorous (though false) order for chaos, and at the same time dispels the sense of individual insignificance by making the paranoid the focus of all he sees going on around him - a natural response to the confusion of modern life.¹²

The collapse of family bonds, the missing harmony of the spheres is clearly illustrated in *White Noise*, where characters are unable to derive meaning from the chaotic workings of the universe at large and where Jack, above all, compensates this loss by seeing connections and schemes everywhere: coincidences become intentional design; accidents are inserted into a pattern; excessive rationalism reverts to quasi-religious beliefs.

In a similar vein, critics have interpreted paranoia as part of today's cultural paradigm and as symptomatic of our society of information, where the plots and power relations of capital and informational exchange have metastasized into inscrutable sinister

¹² *Harper's Magazine* 248 (June 1974): 51-54. p.52

webs. Patrick O'Donnell has, for example, defined "manifestations of paranoia as means to transforming information into knowledge and to formulating identity as part of a paranoid community."¹³ The paranoid subject, disempowered by the plots that threaten to entangle her, is empowered when entering a circle of the initiated, capable of reading the transactions of dubious systems and getting at the underlying order of things. Bersani even radicalizes the non-pathological component of paranoia by seeing it as the "necessary product of all info systems":

Information control is the contemporary version of God's eternal knowledge of each individual's ultimate damnation or salvation, and both theology and computer technologies naturally produce paranoid fears about how we are hooked into the system, about the connections it has in store for us.¹⁴

The development of complex international networks of surveillance, which depend on the acquisition and circulation of vast quantities of new information, emerges as a form of terrorism which naturally motivates the paranoid to reveal hidden agencies and concealed plots. Thus, in Delillo (as in Pynchon) this paranoid structure of thought is far from being considered a mental illness; instead, it appears as an adaptive response to omniscient institutional surveillance. The logical desire to make order out of chaos, paranoia enables human beings to come to terms with their complex reality. Given the multiplication of random disaster as well as the experience of secret plots, Jack cannot help but assume connections and some sort of reasonable intention behind the events occurring around him. And significantly, there are no alternatives of rational, healthy thinking to the deranged abnormal

¹³ "Engendering Paranoia in Contemporary Narrative." *Boundary 2*, 19.1 (1992): 181-204, p. 183.

¹⁴ Leo Bersani. "Pynchon, Paranoia, and Literature." *Representations* 25 (1989): 99-118, p. 103.

thought of the paranoid. Since all characters in *White Noise* are excentric in one way or another (either hyper-rational or openly superstitious), there is no essential difference between paranoia and official discourses. Practically everyone forges interpretations of reality which attempt to incorporate everything and to deny the aleatory. Even Heinrich acknowledges the existence of psychics (234), and Denise maintains that spaceships are mostly seen upstate because that is where they can hide from radar (235). The Stovers, the Gladneys' neighbours, think that their new dog is a "space alien" (187) waiting for instructions from outer space, while Babette's elderly listeners during the Airborne Toxic Event find nothing extraordinary in the idea of no-risk bonus coupons that guarantee life after death (142). The predictions of the country's leading psychics for the coming year are savored with an equal fascination. Most ironically, even the police, traditionally skilled in investigating causes and effects, procede by chance rather than by reason when calling in a psychic to find the Treadwells; and although the woman does not lead them to the lost couple, she helps to uncover several other crimes. Bizarre rituals, then, turn out to be more efficient than rational calculations. Another policeman pretends to have witnessed a body being thrown from a UFO and relives the details under hypnosis, while one of his colleagues senses "an eerie message being psychically transmitted to his brain." (234) Instead of resorting to common sense or rational logic, police hypnotists plan to intensify their efforts in order to decipher the message. Furthermore, after the Airborne Toxic Event, sightings proliferate in the area affected by the lethal black cloud. People flock to remote areas where they expect some voice or noise to "crack across the sky and we would be lifted out of

death."(234) "The American mystery deepens." (66) is Jack's early anticipated conclusion. The more advanced the surrounding media landscape, the more obscure and irrational its attendant undercurrents. Sanctioned by institutions and authorities, paranoia is then depicted with a high degree of plausibility and almost achieves the status of wisdom. It is further ontological rather than epistemological, in that it constitutes a mode of being in order to escape unpredictabilities and find some security rather instead of being a strategy to find out the true order of the universe, true orders and false patterns being indistinguishable. As DeLillo himself has professed, "[b]elieving in conspiracy is almost comforting because, in a sense, a conspiracy is a story we tell each other to ward off the dread of chaotic and random acts."¹⁵

The information networks which promised disenchantment, enlightenment, and rationality turn out to provoke the very opposite, namely the belief in mystery, occult forces and secret cults. Given its cosmic dimensions, paranoia can therefore be seen as a metaphysical belief system, deriving from the religious impulse to experience patterns, intention, meaning. In this sense, all guardians of information embody old mysteries and resemble churches as they seem to possess the ultimate transcendent truth. Paranoia and conspiracy, in other words, are re-spiritualized in *White Noise*, since they provide a form of consolation:

conspiracy theory [...] replaces religion as a means of mapping the world without disenchanting it, robbing it of its mystery. For conspiracy theory explains the world, as religion does, without elucidating it, by positing the existence of hidden forces which permeate and transcend the realm of ordinary life. It offers us

¹⁵ DeLillo in *Publisher's Weekly* (quoted in Keesey p. 174).

satisfactions similar to those offered by religions and religiously inflected romance: both the satisfaction of living among secrets, in a mysterious world, and the satisfaction of gaining access to secrets, being 'in the know', a member of some esoteric order of magicians or warriors.¹⁶

In *White Noise*, God, the ghost of a pre-existing order, may no longer exist; religion may have been displaced and replaced with consumerism; its aura may have been transferred to objects of photography and to unnaturally glorious sunsets, but its structures and mechanisms have not disappeared. Rather than being a collective practice, however, quasi-religious attitudes in *White Noise* take place on the individual level and lack the official authority of an institutionalized discourse. They may therefore be considered as magical or mystical thought. As the anthropologist Bronislaw Malinowski has shown¹⁷, magic is dominant when the environment appears out of control. In a culture where cause and effect relationships seem at least inscrutable if not nonexistent, magic and mysticism are called upon to complement scientific knowledge. For magic helps to fill in links in a chain of causation between apparently unrelated events; it reduces chance, provides psychological reassurance in situations where risk is high and can therefore act as an extension of technical competence. According to Malinowski, magic helps to create intelligibility when science's explanations fail.

¹⁶ McClure, John A. "Postmodern Romance: Don DeLillo and the Age of Conspiracy." *Introducing Don DeLillo*. Ed. Frank Lentricchia. Durham: Duke UP, 1991. 99-115, p. 103. In his book length study *Late Imperial Romance*, where he examines a series of novels by Joan Didion, DeLillo and Pynchon about America's imperial adventures, McClure has convincingly illustrated their turn toward the irrational, savage or primitive. He notes how countercurrents to the project of modernization survive in the shape of labyrinthine systems and occult techno-jungles. That the enlightenment project reverts to new forms of mythology is of course also the central argument of Adorno's and Horkheimer's *Dialectic of Enlightenment*.

¹⁷ See e.g. his *Magic, Science and Religion, and Other Essays*. Boston: Free Press, 1948.

While Karen, in DeLillo's *Mao II* wonders, "When the Old God leaves the world, what happens to all the unexpended faith?"¹⁸, *White Noise* illustrates how an essentially secularized existence without God/s can nonetheless found a new type of pseudo-religious existence. The new liturgy consists of watching television and shopping at the secular paradise of the supermarket, where all dreams and desires can be fulfilled. This miniature world provides a comforting shelter from the decadence of the outside world. Carefully planned, its products neatly arranged, the supermarket suggest a sense of replenishment, "of well-being, the security and contentment [...] it seemed we had achieved a fullness of being" (20). In the supermarket and the mall, the Gladneys can sail for hours for these places obey their own temporal and spatial vectors. Not only is it possible to go shopping 24 hours a day; the supermarket seems to dispense with nature's cycles in yet another respect. For inside, there are no signs of decay or timeliness, destruction or degeneration. "Everything seemed to be in season, sprayed, [...] bright." (36) Jack unconsciously appreciates precisely its renewal of worn parts, its clean perfection, banishing the fact of time. Whereas the houses and benches in Blacksmith deteriorate,

the supermarket did not change, except for the better. It was well-stocked, musical and bright. This was the key, it seemed to us. Everything was fine and would continue to be fine, would eventually get better as long as the supermarket did not slip. (170)

Shopping at the supermarket, then, confirms Jack's presence and numbs or suffocates his fear of death.

The Gladneys have, moreover, introduced the entirely secular ritual of assembling in front of the TV on Friday nights in order to

¹⁸ *Mao II*. New York: Vintage, p.7.

create a sense of coherence, immutable routine, and regularity. Ironically, however, whereas religious people seek to flee or to transform the inconsequential banality of ordinary life by enacting a return to the cosmic structures or sacred presences encountered in ritual, the Gladneys' rituals are precisely grounded in their profane and banal consumer culture. They seek to live in contact with the mysterious reality on the screen or in the mall, a symbolic experience of the divine. These actions not only unify the different family members into a community and create a social structure out of their diffuse relationships. Furthermore, the cyclic repetition or periodic recurrence of these habits does not leave any space for the unpredictable and thus functions as a guarantee of security. The Gladneys, in other words, seek protection, harmony and equilibrium in stable monotony where time is continually renewed. However, after the Airborne Toxic Event, periodic recurrences lose their aspects of stability and protection and become the disquieting symptoms of mental disorder. As Pireddu has pointed out, the *déjà-vu* effect provoked by the toxic cloud denaturalizes the notion of repetition and familiar regularity that seemed to provide reassuring safety: "la ripetizione offerta a Jack come garanzia di regolarità si snatura in *déjà-vu*, sostituendo alla reversibilità tra passato e presente l'effetto perturbante della defamiliarizzazione."¹⁹ As Freud said of the uncanny double, from having been an assurance of mortality, it turns into the harbinger of death.

¹⁹ Nicoletta Pireddu. "Il rumore dell'incertezza: Sistemi chiusi e aperti in *White Noise* di Don DeLillo." *Quaderni di Lingue e Letteratura* 17 (1991-92): 129-140, p.137. In her intriguing reading, Pireddu sees DeLillo's novel as revealing the contemporary epistemological crisis or paradigm change from the deterministic epistemology of closed systems to a stochastic vision of reality.

Furthermore, for Jack and Babette, Baba's youngest son Wilder becomes a talisman against death. Whereas Heinrich, Steffie, Denise, and Bee are far from symbolizing childlike innocence, purity or ignorance, Wilder appears as a quasi-mystic figure who may possess secret wisdom.²⁰ Precisely because he is still unable to distinguish between various levels of reality (when Babette's figure appears on television, he starts speaking to her), Jack considers him to be a potential medium, initiated into a world that remains inaccessible to the rest of the family. After having stopped crying for hours, Wilder is watched with "awe":

It was as though he'd just returned from a period of wandering in some remote and holy place, in sand barrens or snowy ranges - a place where things are said, sights are seen, distances reached which we in our ordinary toil can only regard with the mingled reverence and wonder we hold in reserve for feats of the most sublime and difficult dimensions. (79)

When Wilder wakes Jack at night to show him the figure in the backyard, Gladney similarly perceives of him as having "the look of a primitive clay figurine, some household idol of obscure and cultic derivation" (242) Since Babette's youngest son is committed to the immediate moment and does not yet possess a concept of temporality,

²⁰ DeLillo has confirmed this idea in an interview with Anthony DeCurtis: "I think we feel, perhaps superstitiously, that children have a direct route to, have direct contact to the kind of natural truth that eludes us adults. In *The Names* the father is transported by what he sees as a kind of deeper truth underlying the language his son uses in writing his stories. He sees misspellings and misused words as reflecting a kind of reality that he as an adult couldn't possibly grasp. And I think he relates this to the practice of speaking in tongues, which itself is what we might call an alternate reality. It's a fabricated language which seems to have a certain pattern to it. It isn't just gibberish. [...] And I think this is the way we feel about children in general. There is something they know but can't tell us. Or there is something they remember which we've forgotten. Glossolalia or speaking in tongues [...] could be viewed as a higher form of infantile babbling. It's babbling which seems to mean something, and this is intriguing." ("An Outsider in the Society." *Introducing Don DeLillo*. Ed. Frank Lentricchia. Durham: Duke UP, 1991. 43-66, p. 64.)

Wilder brings healing in that he keeps the parents from reflecting upon death.

Babette's posture classes (appropriately taking place in the basement of the Congregational church) are another symptom of the general helplessness and the need for some spiritual stability and reassurance in life, where even the most basic activities have been questioned. Similarly, Howard Dunlop, Jack's German teacher, experienced a quasi-religious conversion after his mother's death, when he "turned to meteorology for comfort" (55). His dubious pseudo-scientific beliefs became a new Weltanschauung, an Ersatz religion:

I read weather maps, collected books on weather, attended launchings of weather balloons. I realized weather was something I'd been looking for all my life. It brought me a sense of peace and security I'd never experienced. [...] I believe there is a grandeur in the jet stream. (55)

Dunlop, too, teaches meteorology in church basements to people with "hunger, a compelling need" (56) in their eyes. Moreover, people undertake pilgrimages to the most photographed barn in America and seek a spiritual experience when attending the postmodern sunsets. The sunsets eventually develop into dramatic public events from which especially the helpless and handicapped expect some hope:

The sky takes on content, feeling, an exalted narrative life. [...] Some people are scared by the sunsets, some determined to be elated, but most of us don't know how to feel, are ready to go either way. [...] There is anticipation in the air, but it is not [...] a sandlot game, with coherent precedents, a history of secure response. This waiting is introverted [...] Certainly there is awe, it is all awe, it transcends previous categories of awe. (324)

This revival of spiritual attitudes is particularly conspicuous during the Airborne Toxic Event, when the Jehovah witnesses and other evacuees interpret the catastrophe (significantly in the shape of a cloud) as a

divine hint, preceding the revelation of the Supreme Being. "God's kingdom is coming." (135)

While their chaotic environment urges people to resort to various paranoid beliefs and quasi-religious practices, it also pushes them dangerously close to charismatic figures of order. Jack Gladney's intellectual interest in Hitler is therefore strangely paralleled by his attraction to Murray Siskind's demonic character. A Jewish New York expatriate, who is a visiting lecturer in the popular culture department at the College-on-the-Hill, Siskind is the most subversive and Macchiavellian character in *White Noise*. Although the novel's action does not center around him, Murray is always there, accelerating crucial developments, advancing the plot. Apparently met by accident, he mysteriously seems to return at unpredictable intervals and is always in the right place at the right time. In addition to making openly seductive allusions to Babette, Siskind manipulates Jack in a much more cunning and sneaky way and eventually even provokes Jack's attempted murder of Mink. Not only does he entice DeLillo's narrator by flattering his achievements in the Department of Hitler Studies; neither does he hesitate to involve him in his personal plot when asking him to appear in one of his seminars so that Siskind himself may obtain more prestige and influence in his efforts to establish Elvis Studies. Even though he usually appears as a neutral observer, who just listens, smells, and takes notes about what he believes to be important data, it is precisely his cultural theories and philosophies which make him the overarching plotter. For they provide solutions to Gladney's mental puzzles and introduce an orderly intention into what appears to be entropic randomness.

Murray perfidiously seizes upon precisely those aspects the Gladneys try to repress - their fear of dying and their spiritual "hunger", the uncertainty that something might be in the air, the terror of unpredictable accidents, the search for clues that might reveal their destiny - and pretends to pierce through the inexplicable, to anticipate the unforeseeable, thus providing comfort and psychological reassurance. A regular reader of ads in the *Ufologist Today*, Murray has a penchant for "American magic and dread" (19) and is hence more often met in the supermarket than on campus. For noise, to him, appears to represent an intensity of data, a sign of promise and annunciation rather than the technological fallout of information systems. Siskind fools his colleague into believing that there is some underlying purpose in events, that the omnipresent white noise obeys some spiritual principle. Noise, to him, becomes message, signal, the music of the spheres.²¹ Television for instance is a great and humbling experience to him, "[c]lose to mystical." (51) In his prophetic speeches, the TV set appears as a supernatural medium by which he accesses a different level of reality:

the medium is a primal force in the American home. Sealed off, timeless, self-contained, self-referring. It's like a myth [...] TV offers incredible amounts of psychic data. It opens ancient memories of world birth, it welcomes us into the grid, the network of little buzzing dots that make up the picture pattern. (51)

²¹ This connection is, of course, not new but has a long-standing cultural history. Noises of various kind play a crucial role in religions all over the world, where they are not only used to call the community to prayer, but they also enhance the specific moments of ritual solemnity, intensity, and mystery and suggest communication with or the manifestation of the supernatural. As Attali confirms, "in most cultures, the theme of noise, its audition and endowment with form, lies at the origin of the religious idea. Before the world there was Chaos, the void and background noise. In the Old Testament, man does not hear noise until after the original sin, and the first noises he hears are the footsteps of God. Music, then, constitutes communication with this primordial, threatening noise - *prayer*." (*Noise* 27)

In the psychic sense a forest fire on TV is on a lower plane than a ten-second spot for Automatic Dishwasher All. The commercial has deeper waves, deeper emanations. (67)

Inciting Gladney to consult the TV as an oracle so as to communicate with the supernatural, Murray pretends to perceive a design in all that appears accidental to Gladney. He even investigates the "otherworldly babble of the American family" (101), and considers the Gladneys' children a "visionary group". Moreover, he revels in the numerous levels of psychic data the supermarket seems to offer to him: "This place recharges us spiritually, it prepares us, it's a gateway or pathway. [...] Everything is concealed in symbolism, hidden by veils of mystery and layers of cultural material." (37)

However, resembling the utterances emanating from information networks, his remarks remain highly ambiguous and never provide unequivocal interpretations. "Death, disease, afterlife, outer space. It is all much clearer here." (36) is one of his cryptic comments, which catches Jack's attention, yet explains nothing. Siskind creates a prophetic aura by just uttering "Extraordinary" or "It's obvious". That "on the road everything is linked. Everything and nothing." (217) is another of his statements which cannot possibly be contradicted. Murray also pretends to pierce through Howard Dunlop's character - an enigma to Jack - and calls Gladney at one in the morning to reveal the entirely banal news: "He looks like a man who finds dead bodies erotic." (238) Similar to a Tibetan lama or a guru, he whispers pseudo-wisdom into Jack's ear; his mantra-like phrases suggest that he senses something beyond the realm of the human senses, that he possesses second sight and can see into the cause of things. At the same time, Siskind only speaks "in theory" and rejects the responsibility for

his manipulations: "I only want to elicit truths you already possess, truths you've always known at some level." (293) Even though his rhetoric parodies prophetic equivocation and is far from elucidating the meaning of the surrounding white noise, it resonates deeply in Jack Gladney's mind and inspires his narrative. DeLillo's narrator, in fact, increasingly echoes Siskind's approach to noise, when for instance remarking that the levels of data are numerous and deep (48). By the time Babette unexpectedly appears on TV, he has been sufficiently inculcated by Murray so as to experience a "psychic disorientation". Jack, following Siskind's beliefs, in fact interprets Steffie sitting in front of the TV set and moving her lips as performing some kind of sacrament, although a rather unholy communion. And when Murray informs him about Cotsakis death in the supermarket, Jack becomes "suddenly aware of the dense environmental texture. The automatic doors opened and closed. [...] Colors and odors seemed sharper. The sound of gliding feet emerged from a dozen other noises [...]" (168) During their "serious looping Socratic walk, with practical consequences" (282), Murray's final appearance and the culmination of his pernicious influence, Siskind pretends to sympathize with Jack's anxieties, but malevolently persuades him that murder is the only remaining way of mastering one's life:

The killer, in theory, attempts to defeat his own death by killing other. He buys time, he buys life. [...] It's a way of controlling death. A way of gaining the ultimate upper hand. [...] He dies, you live. See how marvelously simple. [...] Slaughter is never random. The more people you kill, the more power you gain over your own death. [...] To plot is to live [...] We start our lives in chaos, in babble. As we surge up into the world, we try to devise a shape, a plan. [...] Your whole life is a plot, a scheme, a diagram. (291)

To plot is to affirm life, to seek shape and control. [...] To plot, to take aim at something, to shape time and space. This is how we advance

the art of human consciousness. (292)

Despite Murray's spiritual pretenses (his references to the Books of the Dead, his quasi-religious jargon) there is nothing noble, virtuous or spiritually uplifting in his suggestions on how to prepare oneself for death. Moreover, although his theories promise to postpone the ending - Jack's death - Murray provokes the opposite effect. He is the character who suggests Ariadne's thread in the labyrinth of noise and who incites Gladney to murder, thus catalyzing Jack's plot, which significantly starts at the beginning of the school year when Murray is met for the first time.

Siskind's theory that random noises represent a meaningful order has, in fact, its scientific counterpart in information theory in general and Henri Atlan's formalism of self-organization from noise in particular. In contrast to the notion of entropy, a measure of disorder within closed systems defined by the second law of thermodynamics, noise, being defined as the corresponding amount of negative entropy, came to play a constructive role in information theory. For the notion of entropy, after having been introduced by Rudolf Clausius in mid-nineteenth century, underwent significant modifications by Boltzmann, Brillouin, and Shannon, who, due to their probabilistic interpretation, not only opened up the concept to systems having nothing to do with heat engines, but who also equated information with entropy. Shannon, in particular, initiated a new view of chaotic noise as a source for renewal and a sign of rich complexity when understanding randomness and uncertainty as maximum information. Weaver's commentary on Shannon later suggested that noise be seen as surplus meaning rather than a destructive addition to a message,

resulting in the system's more complex reorganization. Also drawing on Shannon's information theory, Henri Atlan, a theoretical biologist, mathematically formalized the conjecture that self-organizing systems feed on noise. He developed a kind of biological information theory by conceiving of living organisms as self-organizing automata and of their performances as the result of particular cybernetic principles: "Randomness is a kind of order, if it can be made meaningful; the task of making meaning out of randomness is what self-organization is all about."²² However, while science attributes the emergence of meaning to the system's internal mechanism of self-organization, DeLillo's novel reveals that there is nothing natural or spontaneous about the emergence of meaning, *White Noise* insists on the sly machinations of individuals who manipulate secrets to cover up their hidden intentions.

Interpreting noise as a pseudo-religious phenomenon, Siskind further explores the power and fear of sounds in incantations, spells and recitations. It is certainly not by accident that Murray and, in his wake, Jack seize upon the language of advertising and brand-name consumerism in their efforts of finding cosmic structures in the chaotic, transcendence in dailiness and some sacred connection in profane celebrities and consumerism. For commercials and brand-names have achieved something of a poetic lure in contemporary jargons. They

²² Henri Atlan, "Disorder, Complexity, Meaning." in *Disorder and Order. Proceedings of the Stanford Conference*. Ed. P. Livingston. Stanford: Anma Libri, 1984. 109-128, p.110. For a more specific account of self-organizing systems, see chapter three, "Self-organizing Systems: Information and Noise" in William R. Paulson. *The Noise of Culture. Literary Texts in a World of Information*. Ithaca: Cornell UP, 1988. 53-100. N. Katherine Hayles focuses on the passages between entropy and noise in "Self-reflexive Metaphors in Maxwell's Demon and Shannon's Choice: Finding the Passages." *Chaos Bound. Orderly Disorder in Contemporary Literature and Science*. Ithaca: Cornell UP, 1990. 31-60.

appear as so inherently cryptic and self-referential that they border the transcendent. Detached from the products they are to promote, computer-generated words like "corolla" or "celica" are based on their pure sound and thus take on an aura independent of their denotation. The sheer magic evoked by their recitation ensures their quasi-mystical power and promises to lead to a revelation. Steffie muttering "Toyota Celica" in her sleep is therefore interpreted as transmitting "a language not quite of this world", "part of a verbal spell or ecstatic chant" (155), as if Jack's daughter was simply the medium of a revelation coming from somewhere. Resembling spells or magical chants ("Coke is it", 51), these universally pronounceable brand-names resist interpretation, since the signified collapses into the signifier. Free and unassigned, these self-referential words have lost the connection to their referent, so that their meaning achieves the aura of sacred mystery.

Interestingly, brand-names can thus be seen as functioning in the same way as the mortuary texts made up of spells or magic formulas in the Egyptian Book of the Dead, a copy of which intrigues Jack during one of his visits to Howard Dunlop. And significantly, "The American Book of the Dead" was one of DeLillo's working titles for *White Noise*.²³ The Egyptian texts collected in the Book of the Dead were placed in tombs in order to protect and aid the deceased in the hereafter. Language, in this case, was reduced to ritual and liturgy while the realm of the dead coincided with the book. As in the case of brand-names or advertising slogans, the quasi-divine power of these texts lies in their recitation or incantation. Murray's association of the entirely profane supermarket with spiritual care is even more explicit in his designation

²³ See LeClair, Tom. *In the Loop: Don DeLillo and the Systems Novel*. Urbana: University of Illinois Press, 1988, p. 228.

of the supermarket as a Tibetan lamasery. For the Tibetan book of the dead, the "Bardo Thödol", consists of a number of Buddhist directives, which are read by a lama to those who are dying or who have just passed away. Their aim is to prepare them for the white light appearing in the moment of death (a symbol of the encounter with the true self) and to guide them during the period of their 'bardo' existence, an intermediate phase of 49 days between death and reincarnation. Holding that the highest revelation and illumination, and thus the greatest possibility of redemption, occurs in the moment of death, the Tibetan Book of the Dead aims at revealing the nature of their illusions to mortals so that they may achieve independence. If this knowledge or insight is not achieved, reincarnation follows.²⁴

Siskind seductively exploits Jack's fear of dying when interpreting the supermarket, in analogy to Buddhist beliefs, as not just a consumer temple, but something spiritually recharging, "a waiting period, basically. Soon a fresh womb will receive the soul. In the meantime the soul restores to itself some of the divinity lost at birth." (37) According to his theories, the realm of the dead is now no longer in books (nor on burying grounds, as Jack himself has learned), but in the contemporary version of informational noise. The hallucinatory power of reading has become obsolete, but media jargon has taken over its function to provide access to the realm of the dead. If Jack wants to prepare himself for death and regain his calm, he had better - Murray indirectly suggests - listen to the sounds of the supermarket, television, and his family and decipher its layers of data. Appropriately, Murray

²⁴ See e.g. Mircea Eliade, ed. *History of Religious Ideas* (III.1, "The Tibetan Religions"), Chicago: U of Chicago Press, 1975-85, as well as C.G. Jung's psychological commentary to the "Bardo Thödol" in his *Gesammelte Werke*, vol. 11 [Zur Psychologie westlicher und östlicher Religionen]. Zürich, Stuttgart: Rascher Verlag, 1963.

himself comes directly to the supermarket after his colleague Cotsakis died in order to communicate with him.

Spiritism, the belief that the spirits of the dead can hold communion with the living, usually through a medium, is of course not a new phenomenon. Highly popular in nineteenth century America and France, spiritism taught how to pass from the world of the living to the world of the dead, generally by way of table tippings or séances of spirit rapping. An art of survival as well as a form of consolation, spiritism promised to relieve the anxieties of mortals, who would one day be separate from their friends and family or had already lost their beloved. While the function of spiritistic practices remains the same in DeLillo's novel, its actual forms have been updated: rather than taking place in Victorian drawing rooms, spiritual séances are moved to television and the supermarket, where the vibrations, the invisible waves and radiation suggest a form of higher life just outside the range of human perception. As Friedrich Kittler has shown, the introduction of a new media technology has always conjured up a new generation of ghosts, a new way of access to the realm of the dead. While the Morse alphabet entailed the belief in tapping specters, the introduction of tape and radio provoked the perception of paranormal voices.

The realm of the dead has the same dimensions as the storage and emission capacities of its culture. Media [...] are always already flight apparatuses into the other world. If grave stones stood as symbols at the beginning of culture, our media technology can bring back all the gods. [...] In the media landscape immortals have come to exist again.²⁵

²⁵ Friedrich Kittler, "Gramophone, Film, Typewriter." *October* 11 (1987): 101-118, p. 112. Reading the telephone as a synecdoche for technology, Avital Ronell has traced how the birth of the telephone was connected to spiritualism and the occult, how the

While Walter Benjamin held that the work of art in an age of technological reproduction loses its quasi-religious aura, DeLillo's novel questions this evolution. For Jack conceives of the elaborate side effects of consumer culture, above all the chaotic yet somewhat poetic noise produced by communication technologies as a complex quasi-sacred configuration within which order, and hence meaning, may be implicitly encoded. Given the enigmatic nature of the omnipresent white noise as well as Murray's suggestive theories, Jack Gladney thus embarks on a hermeneutic quest to find out the potential meaning hidden within, the cosmic secrets of the universe in general and his life in particular. Similar to Pynchon's sorting demon Oedipa Maas in *The Crying of Lot 49*, who fittingly conceived of communication as a "secular miracle", Jack hesitates between deciphering the sounds around him as waste or structured system (after all, the black cloud, a traditional symbol of impending revelation, consists of Nyodene D, a "whole new generation of toxic waste" (138)). In a kind of mise-en-abyme of his interpretive quest, when sifting through the garbage of his family in order to find the missing Dylar tablets, Gladney comes across a strange piece of twine with knots and loops:

It seemed at first a random construction. Looking more closely I thought I detected a complex relationship between the size of the loops, the degree of the knots (single or double) and the intervals between knots with loops and freestanding knots. Some kind of occult geometry or symbolic festoon of obsessions. (254)

And yet, given Jack's paranoid excesses, the apparent complex connections may just be a deceptive lure. Above all, Jack hopes to

scientific inquiry of Thomas Watson, for instance was entirely compatible with supernaturalism: the new medium was considered a superior channel for a connection to the beyond. (See *The Telephone Book. Technology - Schizophrenia - Electric Speech*. Lincoln: U of Nebraska Press, 1989.)

understand the confusions of his life as well as the structure of the omnipresent noise through his first-person narrative, his fiction of coherence.

Plots out of noise

Narrative plotting, then, the fictional counterpart to paranoia, becomes Jack's supreme ordering mode, his most important strategy of making sense of the circumstances and of containing or playing off the unpredictable force of death. Perplexed by the unintelligibility of sounds, accidents, and catastrophes, Jack synthesizes the randomness of events by imposing upon them the structuring process of emplotment. Narrative, he hopes, will make the events in his life intelligible and help him to gain some (self-) understanding. Narrating and plotting can thus be seen as a consoling response to the mysterious proliferation of noises and crises. Narrative has indeed been described as a unique human mode of explanation and understanding, "a primary and irreducible form of human comprehension" (Mink); "a solution to the problem of fashioning human experience into a form assimilable to structures of meaning that are generally human rather than culture-specific" (White).²⁶ For Ricoeur, too, "[t]o make up a plot is already to make the intelligible spring from the accidental, the universal from the singular, the necessary or the probable from the episodic."²⁷ In devising

²⁶ Louis Mink, "Narrative Form as a Cognitive Instrument." *The Writing of History: Literary Form and Historical Understanding*, Ed. Robert H. Canary and Henry Kozicki. Madison: U of Wisconsin Press, 1978, p. 128. Hayden White, "The Value of Narrativity in the Representation of Reality." *On Narrative*. Ed. W.J.T. Mitchell. Chicago: U of Chicago Press, 1980. 1-23, p.1.

²⁷ Paul Ricoeur. *Time and Narrative*. Vol. 1. Transl. by Kathleen McLaughlin and David Pellauer. Chicago: U of Chicago Press, 1984, p. 41.

a plot, a meaningful intended form, Jack, in other words, may understand the semantics of action and grasp together the intentions motivating actions (as opposed to their coincidental circumstances), the actions themselves and their consequences. By repeating and reworking what has already happened, Gladney thus hopes to succeed in revealing the meaning, coherence, and significance of events. In the midst of uncontrollable forces, his narrative counterbalances the incoherent, random, alienating sounds around, which collapse all forms and contents into a babble. For plot, as Peter Brooks has pointed out, abstracting from its various meanings²⁸, implies the idea of demarcation or bounded organization of that which was previously undifferentiated - such as white noise. By plotting, then, Jack imposes a structuring grid upon noise and assorts the chaotic babble into meaningful contexts. Writing, to him, is a way of deriving some meaning from the mysterious power of technology's white noise, of disentangling himself from its plots and of opposing his personal pattern of meaning to the scheme that appears to unfold around him.

Jack must create his own plot in order to compete with the world that is constantly elbowing him out of the way. His life is so riddled with stories which demand the assistance of narrative that his private fiction allows him to understand how he is caught up in other plots. Gladney indeed fears that his life might be preordained by someone or something. When Babette, for instance, is terrified that she might die first, Jack wonders: "Who decides these things? What is out there? Who are you?" (103) Human experience, Ricoeur also maintains, has a pre-narrative quality and is hence in search of a narrative:

²⁸ See e.g. the entries in the OED and Peter Brooks. *Reading for the Plot: Design and Intention in Narrative*. Oxford: Clarendon Press, 1984, p. 11/12.

fiction, in particular narrative fiction, is an irreducible dimension of *self-understanding*. If it is true that fiction is only completed in life and that life can be understood only through the stories that we tell about it, then an *examined* life, in the sense of the word as we have borrowed it from Socrates, is a life *recounted*"²⁹

In recapitulating the stories he has experienced, Jack therefore tries to forge his identity and obtain a narrative understanding of himself. Even though Gladney may not be able to control the various plots surrounding him, at least he can satisfy his phantasies of order and control by imposing shape and form upon his personal narrative. He will not have the patterns of his life dictated to him and is anxious to present himself as an author/ity. If he cannot be the author of his own life (and numerous incidents in his life reveal to him that he is at the mercy of superior forces), at least he wants to become the narrator of his own story. Narrative plotting, then, also becomes an opportunity of self-fashioning or self-affirmation. DeLillo's narrator, in other words, duplicates his role-playing as the inventor of Hitler Studies through his self-dramatization within his narrative account; whether he invents a middle name, wears dark glasses or plots the story of his quest and missing redemption, he is eager to exorcise his fear of death and obtain the authority to define the plot of his life.

Above all, Jack seeks to circumvent his supposed fate and to become the master of his own historicity. Writing is for him a protest against his mortality and a means of exorcizing his fear of death. In refashioning his experiences, he tries to suspend the traditional perception of time and achieve a moment of transcendence. Plot, in Ricoeur's view, is indeed the crossing point of narrativity and

²⁹ Paul Ricoeur, "Life in Quest of Narrative". *Paul Ricoeur. Narrative and Interpretation*. Ed. David Wood. London: Routledge, 1991. 20-31, p. 30/31.

temporality, and emplotting effects a mediation between events and human experiences of time: "Time becomes human time to the extent that it is organized after the manner of a narrative; narrative, in turn, is meaningful to the extent that it portrays the features of temporal experience." (I:3) Brooks confirms that "plot is the principal ordering force of those meanings that we try to wrest from human temporality." (ix) Plots help us grasp the heterogeneous and impose a meaningful order on the flux of our temporal experiences. Narrative, the guardian of time, is "the privileged means by which we re-configure our confused, unformed, and at the limit mute temporal experience." (Ricoeur I:xi) For Jack, then, narrative plotting becomes a useful way of negotiating human time-boundedness. Just as the Gladneys' family frequently escape to the supermarket, where time is liberated from its natural rhythms, so Jack wishes to solve his problem with time in narrating, where he can devise alternate routes for his life and invent detours to its deathward plot. Since he conceives of time as "the agent of our particular ruin" (177), narrative may not only help him to transform the inscrutable passage of time into something concrete and tangible, but also to construct a different temporality. Jack in fact attempts to demarcate and stabilize the passage of time by dividing his narrative into three parts comprising forty chapters altogether. As will be seen, he tries to maintain the greatest possible distance between beginning and end by a play of retardation and repetition in the postponement of the end.

In fact, Jack's resistance to the plot that tries to entangle him, i.e. his own narrative, already implies a new scheme with its own fatal dynamics. His counterplot merely replicates the system he tries to

combat, for the force of death is located within every plot. Walter Benjamin, in his famous essay on "The Narrator", holds that every storyteller borrows from the authority of death: "Death is the sanction of everything that the storyteller can tell."³⁰ It is only at the moment of death, i.e. in retrospect, that life becomes meaningful and transmissible. Arguing that "plot is the internal logic of the discourse of mortality" (22), Brooks has confirmed the link between narrative and time-boundedness. According to Benjamin and Brooks, what readers seek in narrative fictions, and what Jack seeks in watching disasters on TV is that knowledge of death which he is yet spared in real life. At the same time as he longs for orderly structures and their timelessness, Jack is therefore afraid of his narrative design since it inevitably implies finitude. He realizes that plot making cannot relieve him of time's burden, because the plot's configuration inevitably imposes "the sense of an ending", to use Kermode's expression. The death Jack so desperately tries to repress therefore inescapably returns, since a life can achieve meaning only in terms of its end, i.e. death. Plots are meaningless unless they contain death in their very structure. Gladney himself explains in one of his seminars on "Advanced Nazism" that

All plots tend to move deathwards. This is the nature of plot. Political plots, terrorist plots, lovers' plots, narrative plots, plots that are part of children's games. We edge nearer death every time we plot. It is like a contract that all must sign, the plotters as well as those who are the targets of the plot. (26)

Accordingly, the novel's first part, fragmented into twenty brief chapters, remains plotless and does not seem to advance according to a pattern. Although Gladney assembles numerous pieces of information

³⁰ "The Storyteller." *Illuminations*. Transl. Harry Zohn. New York: Schocken Books, 1969. p. 94.

- on Blacksmith, the College-on-the-Hill, his family and their daily routine - he does not present an organizing line which would unite the various incidents, episodes and actions. He favors the paratactical mode, avoiding conjunctions and logical links so that sentences remain disconnected and paragraphs incoherent. No logical necessity emerges. In this part Jack Gladney further aims at establishing normality and typicality, as John Frow has confirmed.³¹ He struggles to fit everything into a fine grid of typifications in order to evade contingency and to keep death away from his plot. DeLillo's narrator describes regular customs and recurring activities, thus interrupting and freezing the time line of his story while creating an atmosphere of regular, almost monotonous immutability.

At the same time, however, chapters more often than not include disquieting side remarks about death and frequently end on a mysterious note of dark apprehension³². Chapter 12, for instance, informs us in its closing sentence that "By noon the next day they were dragging the river" (58), switching abruptly from a description of Babbette's relation to her former husband to the disappearance of the Treadwells. Gladney thus unwillingly lends an apocalyptic tone to his prose and intimates that something terrible is about to happen.

³¹ However, Frow stresses that this construction of typicality no longer represents a continuous process of extrapolation from the particular to the general - a process rooted in general structures of human and historical destiny. Instead, in *White Noise*, generality and typicality always depend on previous representations of life, essentially of television. "this new mode of typicality has two features: it is constructed in representations which are then lived as real; and it is so detailed that it is not opposed to the particular." (180) See "The Last Things before the Last: Notes on *White Noise*". *Introducing Don DeLillo*. Ed. Frank Lentricchia. 175-191.

³² Lentricchia has made the same observation: "The opening and closing sentences of a number of this novel's chapters are so unusually weighted with emotive freight that they seem discontinuous and self-sufficient, virtually leaving the text, so much the better to haunt the mind." ("Tales of the Electronic Tribe" in his *New Essays on White Noise*. Cambridge: CUP, 1991. p. 94)

Naturalistic paragraphs on the political calm of Blacksmith and the serene atmosphere at the College-on-the-Hill barely cover over the repressed plot that all things are doomed. The Treadwells must be dead; the Mylex man (in chapter nine) must have died because of the toxic air; all plots will move deathwards. Gladney, then, is not only obsessed with paranoid connections in his private life, but he reproduces the possibility of strange links in the very narrative structure he imposes, thus turning readers, too, into paranoiacs. As they look for clues, note recurrences, project connections, the process of interpretation itself is revealed as the result of paranoia, i.e. the neurotic compulsion to impose some meaning. Jack fears "some kind of deft acceleration" (18) readers learn early on in the novel - a fear which both explains the slow rhythm of the novel's first part and heightens readers' expectations to something uncontrollable which is to follow. "Is this true? Why did I say it? What does it mean?" (26), he wonders after having elaborated on the notion of plots and their link to death in one of his seminars. "Who will die first?" (15, 30) similarly highlights a recurring obsession and inevitably introduces a direction or determinism into his account, of which death becomes an integral component. These remarks of foreboding, seemingly incoherent free associations, add to the impression of something unexpected waiting to erupt under the neat surface of ordinary life. Though pregnant with meaning, the mental unfolding of these random occurrences is abruptly aborted. Jack is as yet incapable of or unwilling to insert them logically into his narrative and draw connections. He does not resolve tensions, but creates suspense by merely registering disturbing incidents and juxtaposing them with the regular flow of ordinary life. However, precisely because of their

disjunction and difference from the rest of the narrative, these ominous remarks take on a particular significance in that they represent the plot's dynamic principle and suggest that behind it all there is pattern and purpose: the inexplicable crises in Blacksmith - the toxic spill, the disappearance of the Treadwells, Wilder's mysterious crying - keep the narrative moving forward, even though none of these strings of action is brought to the forefront. Like Jack, who is bombarded with incoherent information, but incapable of making sense, readers are left unsure about what exactly the various chapters will add up to. It is only the second part of *White Noise*, "The Airborne Toxic Event", which breaks up the episodic, fragmented nature of "Waves and Radiation", where the underlying principle of order is purely chronological, and introduces a coherent action, the mass evacuation of Blacksmith's inhabitants due to the sudden appearance of the black billowing cloud.

Interestingly, Jack plots his narrative so that the structure of *White Noise* corresponds to the temporality of television.³³ Its division into three sections comprising twenty, one, and nineteen chapters respectively, produces different time effects. The first section with its episodic serial structure reflects the regular flow and safe domesticity of the Gladneys' peaceful family life. As has been shown, time, in this

³³ The complicity of Jack's narrative with the plots he would want to escape ties in with Lentricchia's argument that Jack strives to write the aestheticizing history of his own mind. He cultivates his state of self-consciousness because he needs to experience sublimity, "to make grand, sweeping, literary sense of the good-old fashioned sort, when there were heroes " (107/8) According to Lentricchia, Jack, in the manner of nineteenth century novelists, especially naturalists, has the ambition to read the significance of the place, the position, the moment. However, despite Jack's efforts to create high art, to counterbalance the banality of media jargon, mass culture takes its revenge. In Jack's consciousness, the cloud resembles the national promotion for death, and the unreflected insertion of media-speak in the rhetoric of the weather report similarly reveals that he cannot escape the culture he wishes to subject to social criticism.

section, is relatively static, continuous, slowly changing. Jack even admits his longing for slowness: "May the days be aimless. Let the seasons drift. Do not advance the action according to a plan." (98) Yet this peaceful regularity is suddenly disrupted by the chemical spill, which introduces an abrupt discontinuity. This 'other' temporality created by the intrusion of disasters or crises might explain the bizarre fascination with car crashes or catastrophes on television, which many of DeLillo's characters in *White Noise* exhibit. Their attraction does not signify an evasion of Jack's own mortality, but it rather expresses the longing for a different temporality, away from the endless cyclic repetition of television commercials and daily programs towards the thrill of the exceptional. This is, in fact, also the theory advanced by Alfonse, the popular culture expert at Jack's college:

'we're suffering from brain fade. We need an occasional catastrophe to break up the incessant bombardment of information. [...] The flow is constant. [...] Words, pictures, numbers, facts, graphics, statistics, specks, waves, particles, notes. Only a catastrophe gets our attention. We want them, we need them, we depend on them.' (66)

Although, in the second part, again, Jack exerts no control over the incidents that suddenly unfold around him - the plot is advanced entirely by chance, by the unpredictable appearance of the toxic cloud whose course cannot be controlled - he now manages to encompass a succession of events in an intelligible whole and develops the single theme of impending catastrophe. The Airborne Toxic Event therefore gives birth to a story that was latently under way in the novel's first part. As the toxic spill throws him into new and unexpected circumstances, Gladney tries to normalize its singularity by retrieving a tradition of legendary accounts of exodus; by inserting himself into a sequence of previous generations, he subsumes his personal fate into a

collective destiny and thus ennobles his life. The toxic spill permits a coherent structure, for it satisfies Jack's nostalgia for the good old narratives, which are already endowed with meaning. Just as the buildings of Hitler's architect Adolf Speer evoke a nostalgia for the ruins of the Roman Empire, aiming at structures "that would decay gloriously, impressively" (257), so Gladney's first-person account nostalgically recalls the heroes, "epic qualities" and the order former (redemptive) plots once bestowed on human lives. The second section of *White Noise*, consequently, practically overflows with religious, literary and historical allusions: The parade of cars crawling out of Blacksmith, the spectacle of a long line of people trudging on the overpass, for instance, confirms Jack's phantasies of "a kind of fated determination" (122):

The whole affair had about it a well-rehearsed and self-satisfied look, as though they'd been waiting for months to strut their stuff. [...] they seemed to be part of some ancient destiny, connected in doom and ruin to a whole history of people trekking across wasted landscapes. [...] The sense of injured people, medics, smoking steel, all washed in a strong and eerie light, took on the eloquence of a formal composition. We passed silently by, feeling curiously reverent, even uplifted by the sight of the heaped cars and fallen people. (122)

Gladney, it seems, feels no longer intimidated by the idea of a preplotted existence, but is almost relieved to have found one of the old biblical plots, exodus and liberation, still alive in his culture. He invests his account with all the overtones of a new bond, a communal experience, giving rise to a common identity of the refugees. Similarly, when the Gladneys first see the black cloud lighted by seven army helicopters, Jack perceives the dark mass as moving "like some death ship in a Norse legend, escorted across the night by armored creatures with spiral wings." (127) He abolishes partly the unbridgeable difference

between life and fiction "by his power of applying to himself the plots that he has received from his culture and of trying on the different roles assumed by the favourite characters of the stories most dear to us."³⁴ Gladney indulges in the thought of following the same line as those archaic warriors he so admires because they were fearless of death, and the new identity he adopts provides him with a sense of belonging and empowerment. Not only Heinrich blooms in the face of disaster and catastrophe; Jack, too, conceives of the event as an opportunity to relieve him of his entropic apprehensions and hence to achieve transcendence. For significantly, all of the accounts he alludes to are narratives of beginnings in which human time is promised a fresh start. In Gladney's prophetic vision, his culture has already collapsed, but will enjoy a new beginning. Accordingly, when the evacuees finally have to leave their camp and head for Iron City (they have to avoid the toxic cloud which is moving in their direction), the spectacle reminds him of "the fall of a colonial capital to dedicated rebels. A great surging drama with elements of humiliation and guilt." (157). Jack further assimilates his experiences by conjuring up the pioneering past of "wagon trains converging on the Santa Fe Trail" (159).

However, in the end, the pattern of his narrative construction does not provide an escape from the limits of his mortality. There may be exodus, but there is no redemption. There may be apocalypse, but there is no annihilation. Gladney may have undergone suffering and hardship; however, despite his narrative self-fashioning, he does not experience any transcendent moments nor glimpse any sublime truth.

³⁴ Ricoeur, "Life in Quest", p. 33.

The Airborne Toxic Event may have provided him with the promise of an aura; yet ironically, Jack does not even achieve the status of a victim that might appear on television (and thus achieve a moment of timeless celebrity), since the official organs completely ignore the event. What is more, DeLillo's narrator feels cheated and betrayed in a much more crucial aspect: owing to the breath of Nyodene D, death has now entered his body. The nasty intrusion of this synthetic death produced by technology, due to the unfortunate circumstances of running out of gas in a vital moment does not conform to his idea of death as a spiritual victory, a release from experience and a prelude to a higher existence. Having lost all existential connotations, Jack's death will no longer be the culminating experience of a meaningful life, but pure chance or accident, the result of being in the wrong place at the wrong time. Moreover, this unfortunate coincidence will in all probability schedule his death to precede Babette's, even though Jack does not want to die first.

Although the urgency of crisis has dribbled away in the novel's third section and even if readers experience a certain *déjà-lu* due to the episodic character of the first chapters in "Dylarama", Jack is all the more convinced that the scenario of his life must be preordained now that his death seems to be approaching even more rapidly. Seeing himself as the victim of a plot, Jack conceives of his existence as a passion play; he is the sufferer who awaits redemption. Accordingly, he is eager to interpret Babette's secret activities with the shady Mr Gray as the classical story of a wife's deception, turning him into a betrayed victim. However, when he finds the Dylar pills, Jack also starts to conceive of plot as a cunning scheme, an intrigue to counter Babette's

secrecy. Passion play, revenge tragedy, and quest start to mingle, and the Dylar bottle's various journeys as it is hidden in different places by different people constitute a detective subplot in themselves. Jack now embarks on a desperate quest to find the missing pills and to combat his fear of death in an immediate way. This scheme, however, parallels his fictional one in significant ways. Given Jack's intoxicated exhilaration when confronting Mink, (narrative and other) plotting, for Gladney, has a similar function to Babette's use of the Dylar drug. For just as Baba swallows the tablets in order to cure her fear of death, so Jack becomes addicted to the orderly consolations of narrative sequence and the swerve from death it appears to provide as well as to the power with which his intrigue against Mink provides him. Both Dylar and Jack's various plots represent systems (the tablets are called a "drug delivery system" (187)) and a kind of psycho-pharmaceutical, the "benign counterpart of the Nyodene menace" (211). Both seem to constitute an instrument of protection in that they promise to ward off the fear of death; yet in the end, when medication is poured out of it, when the scheme is executed, both implode or self-destruct and mock their user. For, although he would be master of his intrigue, Jack eventually becomes a victim of his plot, which literally backfires. Analogous to his narrative plot, which implies its ending as the all-determining element, so the scheme against Mink confronts him with the danger of death instead of providing a solution.

In the novel's crucial showdown, Jack portrays himself as if undergoing a revelation. When driving through Germantown to meet Mink in the motel, Jack pretends to have attained a higher state of consciousness as he deciphers technology's jargon: "Random Access

Memory, Acquired Immune Deficiency Syndrome, Mutual Assured Destruction." (303). Being in a room with Mink, he notices the density of things and plays out his mental state as a Buddhist-like encounter with a "heightened reality" (307):

I sensed I was part of a network of structures and channels. I knew the precise nature of events. I was moving closer to things in their actual state as I approached a violence, a smashing intensity. [...] Information rushed toward me, rushed slowly, incrementally. (305)
 I could feel the pressure and density of things. So much was happening. I sensed molecules active in my brain, moving along neural pathways. [...] I heard a noise, faint, monotonous, white. (306)
 The air was rich with extrasensory material. Nearer to death, nearer to second sight. A smashing intensity. (309)
 The precise nature of events. Things in their actual state. [...] White noise everywhere. [...] I continued to advance in consciousness. Things glowed, a secret life rising out of them. [...] I believed everything. I was a Buddhist, a Jain, a Duck River Baptist. (310)

Ironically, however, Mink³⁵ is watching television without the sound, so that Gladney cannot possibly gleam meaning from the surrounding noise of culture.

Even though Jack incessantly repeats his plan, his carefully rehearsed scenario again follows its own logic and goes awry. For Jack, so overwhelmed by the noise of his second shot, completely forgets to fire a third time; as a result, when Mink has the weapon in his hand and triggers, there is still the third bullet left to harm Jack, who, moreover, completely forgets to steal the Dylar tablets. And yet, his mock assassination of Mink is, ironically, ultimately a means to good. In an attempt to cover over the failure of his plot, Jack plays out the scene of confrontation as a cathartic experience, with all the religious

³⁵ Sucking the Dylar tablets like candy, Mink, the living incarnation of the white noise, acts "in a somewhat stylized way" (310) and confuses words with the things they refer to. This "disease" is diametrically opposed to Jack's infatuation with those free-floating signifiers which, detached from their referent, promise a revelation.

overtones of a conversion or redemption: "The old human muddles and quirks were set flowing again. Compassion, remorse, mercy." (313). "There was something redemptive here. [...] I know I felt virtuous, I felt blood-stained and stately, dragging the badly wounded man through the dark and empty street." (314) It is precisely due to the failure of plot that Jack eventually manages to achieve a crucial insight; by accident, he experiences the parody of a "spiritual rebirth", a reincarnation. For Gladney is cured from his super perceptions of higher planes of energy due to the very physical pain in his wrist and the experience of seeing blood everywhere. Instead of achieving transcendence and immortality, Jack returns to his bodily existence. Far from revealing any divine truth, Sister Hermann Marie confirms this materialist and pragmatic vision and categorically rejects every belief in transcendence:

'Saved? What is saved? This is a dumb head, who would come in here to talk about angels. Show me an angel. Please. I want to see.' (317)

'It is our task in the world to believe things no one else takes seriously. To abandon such beliefs completely, the human race would die. This is why we are here, a tiny minority, to embody old things, old beliefs. The devil, the angels, heaven, hell. If we did not pretend to believe these things, the world would collapse.' (318)

'As belief shrinks from the world, people find it more necessary than ever that *someone* believe. ... There must always be believers. Fools, idiots, those who hear voices, those who speak in tongues. We are your lunatics. We surrender our lives to make your nonbelief possible. ... There is no truth without fools. We are your fools, your madwomen, rising at dawn to pray, lighting candles, asking statues for good health, long life.' (319)

The German nun, in other words, dismisses religious faith as a necessary illusion to help others survive.

White Noise in the end records a breakdown of all plots as well as of all attempts to test one's limits and to achieve immortality. Orest Mercator will not go down into the Guinness Book of World Records for

having spent hours in a cage with venomous snakes. Mink's clandestine research in developing a drug that would counteract the human fear of death has failed. Babette's arrangement with Mink to obtain the Dylar tablets has not accomplished its aim, since Baba not only continues to be afraid of death, but even suffers from memory lapses. Murray's way of turning Jack into one of his followers has been countered (though not superseded) by Sister Hermann Marie's speech. Most flagrantly of all, Jack's attempt to become a killer in order to live has become a fatal threat to his own life. Only his sly device of convincing Mink that he injured himself has been successful and continues to protect Gladney from being judged.

In the final chapter, written in the present tense, Jack does not move beyond the repetitions that characterize his life: he still has to undergo medical checkups, undertakes pilgrimages to the postmodern sunsets at the overpass and is still confused by the supermarket's enigmatic arrangement. Despite his encounter with Sister Hermann Marie, Jack does not stop believing in mysticism or transcendence and the final chapter re-introduces the notion of magic when Wilder, "mystically charged" (322), according to the awe-struck account of two elderly ladies, pedals across the highway on his tricycle and, as if by mystery, remains unharmed. This episode and the highly ambiguous pilgrimages to the postmodern sunsets that close the novel, leave a final meaning, a definite interpretation of the omnipresent white noise in suspense. On the one hand, Wilder's episode represents a refreshing counterpoint to the stifling order of the novel's opening scene, where all things are controlled and nothing is left to chance. On the other hand, the Mylex men continue to gather their "terrible data" (325) and

the supermarket appears all the more threatening and intimidating, its noises still being interpreted as the "language of waves and radiation, or how the dead speak to the living." (326) In *White Noise*, the ending does not retrospectively illuminate the beginning or middle. Jack is unable to find that significant closure that would illuminate the sense of his existence, the meaning of his life. However, Gladney has been cured from plot and now renounces any attempt to direct his life. After Sister Hermann Marie has disillusioned his hope for transcendence, his belief in the immaterial and has thus invalidated Murray's theories, Jack has come to adopt an attitude of calmness. Knowing that there is no such thing as a weapon or shield against death, he eventually trusts in the consoling power of the tabloid stories with their optimistic twist, the "tales of the supernatural and extraterrestrial" (326), as well as in the catharsis produced by his narrating. Plot itself, as Brooks has pointed out, is a working through. Resembling a patient who remembers and works through his traumatic fear of death and who indirectly gives account of the crime he has committed, Jack thus narrates the scattered fragments of his life to himself. After having told the story, he is, however, reconciled to himself and after having been told, the past belongs to the past.

In a world dominated by computer-generated discourses and incoherent bits of information produced by the mass media, Jack returns to the old-fashioned medium of literary and autobiographical narrative. He shows up the limits as well as the usefulness of plotting and storytelling, both ordering activities in an ever more complex, disorderly world. In this respect, *White Noise* echoes DeLillo's previous novel *The Names* (1982), in which James, the narrator and a

risk analyst, decides to stop writing reports for the insurance company and the CIA in order to return to his freelance life and to cope with the terrorism of the uncanny ritual killings; in this respect, *White Noise* also foreshadows DeLillo's following novel, *Libra* (1988), in which Nicholas Branch, piecing together countless traces from the flow of computerized data, writes a secret history of the Kennedy assassination to uncover what has been muffled. While revealing that plots follow their own logic and are incapable of mastering time, *White Noise* nonetheless insists that the stories must get told to unravel the plots that entangle us. Narrative and other orderings, even in their supposedly excessive, paranoid form, are needed to organize, map and explain the world - an attitude which DeLillo himself has adopted in *Libra*, the novel about Kennedy's assassination, which profoundly influenced his vision of reality:

what's been missing over these past 25 years is a sense of a manageable reality. Much of that feeling can be traced to that one moment in Dallas. We seem much more aware of elements like randomness and ambiguity and chaos since then.³⁶

And yet, DeLillo seems to be implying that the more our world seems to disintegrate and fall prey to chaos and ambiguity, the more we need narrative as a means of representing and structuring this reality, and ultimately of making some sense of it. For narrative, in addition to satisfying our psychological need for working through and warding off the dread of randomness, also provides us with interpretive categories by which we can reconstruct connections and interpret intentions. In the same interview, DeLillo has emphasized that his books

³⁶ De Curtis, Anthony. "An Outsider in the Society." *Introducing Don DeLillo*. Ed. Frank Lentricchia. Durham: Duke UP, 1991. 43-66, p. 48.

are *about* movements or feelings in the air and in the culture around us, without necessarily being *part* of the particular movement. [...] Well, strictly in theory, art is one of the consolation prizes we receive for having lived in a difficult and sometimes chaotic world. We seek pattern in art that eludes us in natural experience. (66)

V. Conclusion

It was the inadequacy and inefficacy of "applying" chaos theory in literary criticism that initially stimulated my interest in the workings of narrative. Although the concepts and definitions elaborated in today's scientific chaology have not proven useful for the study of literary texts, my thesis has hinted at their temporal coincidence with the return of narrativity especially in the human sciences. At the same time that we decided to conceive of everyday nonlinear dynamical systems as disorderly order, we decided to heed narrative, organize our knowledge in narrative terms and look at the grounding of criteria for such narrative orderings and plottings. Questions of ordering and their double logic, as well as the integration of temporal aspects have thus become urgent in inquiries both in the natural and in the human sciences, eventually pointing to an underlying common cultural matrix. Yet, as has been argued in my introduction, these preoccupations take vastly different directions in the various disciplines. Science's chaology might in fact itself be considered a "concord-fiction" in Kermode's sense of the term. Similar to the Principle of Complementarity developed by Heisenberg or the Principle of Synchronicity for Jungians, chaos theory provides an interesting example of the ways in which an operationalist fiction has outgrown its immediate purpose and become "humanized". Our imagination chooses, once again, to be at the end of an era, and this supposedly supreme moment of crisis reflects all the elements of the apocalyptic pattern, the terrors of decline, the sense of a transition and the confidence of renovation.

As should have become clear in the preceding analyses, although contemporary fiction may display an awareness of chaos theory, the authors discussed contrast scientific explanations of disorderly phenomena in the domains of nature, history, and technology with a form of narrative understanding or *Verstehen*, which emerges as superior. Mr Palomar, for instance, is certainly on a quest for wisdom rather than on a search for knowledge. Calvino thus seems to favor a hermeneutic understanding of the world and simultaneously subtly ironizes the mystic tendencies of today's scientific chaology. By its inclusion of various genres, Barnes's *History* highlights the narrative status of all histories and reveals the supposedly universal directions in history as only one possible order among others, constructed by means of rhetoric and emplotment rather than by any inherent historical law. DeLillo, for his part, stresses the particular value and importance of narrative in today's information society where the continual inundation with snippets of information challenges conventional notions of knowledge and wisdom. In *White Noise*, the process of integrating pieces into a coherent narrative emerges as the fundamental and unique means of making sense of the world as well as of one's life.

The wish to apply a "scientific" theory to the subjective realm of the arts in general has of course been a temptation since the institutionalization of the humanities. With the birth of the human sciences in the nineteenth century, the problem arose of how to fix their domain of inquiry, how to elaborate scientific concepts and methods. Around 1900, the German philosopher Wilhelm Dilthey attempted to ground the human and social sciences, the *Geisteswissenschaften*, as he

called them, in a theory of interpretation and saw hermeneutics as their epistemological foundation. In opposition to the objective analyses, causal explanations and static categorizations of the natural sciences, the human and social sciences, according to Dilthey, ought to aim at a *Verstehen*, an understanding. He defined this process of interpreting as one in which one had to imaginatively reenact the subjective experience of objects or actions. Although Dilthey's diametric opposition of the natural sciences and the *Geisteswissenschaften* has come to be revised - there certainly is interpretation in the natural sciences just as the study of literary texts requires explanation - a gap between the "two cultures" remains. While, on the one hand, various disciplines in the human and social sciences have increasingly become aware of the fundamental importance of narrative in human life - a development already alluded to in my introduction - natural scientists, foremost among them Alan Sokal, are scandalized by the claim to narrative as a universal mode of knowledge.

The debate on the scientific status of history is exemplary in this context, and the institutionalization of this discipline has already been delineated in chapter three. The reappropriation of historical understanding by Hempel's covering-law model has recently seen a revival when attempts were made to subsume even the chaos of historical records and unpredictable events under rational scientific modes of knowledge. In contrast to Mink, H. White, or other philosophers of history who favor several modes of historical epistemology rather than a single and supreme explanation, and a narrativist view rather than an empiricist one, several historians have recently re-introduced scientific explanations and quasi-laws to cover

history. Trying to refute the Hempelian covering-law model on the basis of chaos theory, George A. Reisch¹ has argued that there are laws in history, but that these follow the dynamics of chaotic, i.e. non-linear systems. Hence, "any science of history should fall into this new branch of physical theory." (2) He affirms that "history is chaotic", but nevertheless assumes that "historical processes and events are ultimately underpinned by, or supervene on, causal physical mechanisms"(6). When inferring from an hypothetical animal colony and its erratic populations "that the laws that govern lives and history are nonlinear" (13), he thus reinstates notions of chaotic, but nevertheless determinate behavior in history. Yet, since it is impossible to accurately determine initial conditions, he concludes that only scene by scene narration can provide an adequate way of historical explanation.

In a similar vein, Donald N. McCloskey² has tested the usefulness of the model of differential equations, which he sees as providing a middle ground between physics and history, i.e. between a technical scientific and a narrativistic concept of history because differential equations make room for dynamic processes of time; both science and history "can be made [...] to lie down on a Procrustean bed of the differential equation." (25) To him, history seems chaotic primarily because of its odd causality, the disproportion between historical causes and the events they lead to. However, McCloskey deduces from history's infinite richness and complexity the non-narratability of history. Since everything can never be taken into account and any

¹ "Chaos, History, and Narrative." *History and Theory* XXX (1991): 1-20.

² "History, Differential Equations, and the Problem of Narration." *History and Theory* XXX (1991): 21-36.

subject or event could potentially be brought into the story, "storytelling is cast into doubt." (33) Even if one had infinite knowledge of all conditions of history, this mass of facts would become "unmanageable, untellable." (34) Therefore, the model of nonlinear differential equations implies for him the impossibility to explain history. Examining the boom of articles which argue in favor of an "application" of chaos theory to problems of historical explanation in general and reviewing Reisch's and McCloskey's articles in particular, Roth and Ryckman³ have more recently rightly concluded that such pseudo-scientific approaches do not further historical understanding. Analogies can only be established by ignoring "deep conceptual difficulties" (43), and so chaos theory does not offer any novel approach to understanding causality in history.

Counteracting the neglect of narrativity as a respectable and legitimate mode of comprehension, Paul Ricoeur, above all, has stressed the existential and historical implications of narrative. He may well be the philosopher who has most radically argued for a certain "ontological narrativity", holding that "the meaning of human existence is itself narrative"⁴. Ricoeur clearly argues against the rationalistic narratological approach which presupposes an atemporal deep structure or logic presiding over narrative. Instead, he claims a preunderstanding of human action forged by the familiarity with the symbolic structures of our culture; action is thus already mediated by culturally transmitted signs, rules and norms. The explanations of the semio-linguistic sciences are only needed to improve, though not

³ Roth, Paul A. Thomas A. Ryckman. "Chaos, Clio, and the scientific illusions of understanding." *History and Theory* 4 (1995): 30-58.

⁴ Richard Kearney. *Dialogues With Contemporary Thinkers*. Manchester: Manchester UP, 1984, p. 17.

precede, our prior understanding. Narrativity has a further relationship with praxis and ethics in that, by representing it, narrative simultaneously nourishes and renews action, ultimately clarifying its meaning and resignifying temporality. Although narrative may not be completely capable of overcoming all aporia of temporality, it provides a grip on the temporal reality of human action by imposing a structure. Narrativity, then, is a way of giving people a memory, a history and thus also a future. "A society where narrative is dead is one where men are no longer capable of exchanging their experiences, of sharing a common experience." (*Dialogues* 28) History, in particular, will cease to be history if it abandons its narrative structure, for the act of narrating alone can deepen our temporal condition and transform cosmological time into a specifically human time. Narrative makes historical consciousness and anticipation of the future possible. And since narrative always deals with agents and victims, it is imperative for Ricoeur to preserve the history of the defeated and the lost and to renew the sense of human suffering. On the level of the individual, narration offers a medium through which self-understanding and self-identity can be achieved. In the same way that a patient tells his as yet untold stories to the psychoanalyst in order to derive from them a bearable and intelligible biography, every individual acquires a narrative identity in passing through her memory, present perceptions, and expectations. A life thus examined is transformed into a different life.

The previous chapters should have shown that the shaping forces of every narrative as well as the double orientation at work in them, may fruitfully be conceived in terms of disorder and order. This

paradoxical movement arises from the collision of two incompatible modes of narration, since narrative mediation always serves a double function: it assembles heterogeneous elements and synthesizes them; it is oriented towards its end, yet always postpones it; it presents individual incidents and grasps them together in a temporal whole. The internal dialectic of poetic composition therefore seems to reside in the interplay of concordance and discordance, order and disorder. "Emplotment is never the simple triumph of order", as Ricoeur stresses⁵, for *mise en intrigue* necessarily proceeds by peripeteia and is thus marked by discordance; eventually, however, despite the subtle play of discordance internal to concordance, order triumphs in Ricoeur's view.

There is always *more* order in what we narrate than in what we have actually already lived; and this narrative excess (*surcoût*) of order, coherence and unity, is a prime example of the creative power of narration. [...] All narrative, however, even Joyce's, is a certain call to order. Joyce does not invite us to embrace chaos but an infinitely more complex order. Narrative carries us beyond the oppressive order of our existence to a more liberating and refined order. The question of narrativity, no matter how modernist or avant-garde, cannot be separated from the problem of order. (*Dialogues* 22)

The three literary works analyzed here, however, have made readers aware of the ways texts may not achieve this narrative coherence. They mark the limits of plots and emplotment and may to some even announce the death of narrative form. In any case, they question the nature of, or shed light on, their specific modes of narrativity. Their highly artificial and certainly not mimetic structures reflect a search for pattern and suggest a game with plots at the same time as the texts are concerned with secrets and ironies within systems. Their

⁵ *Time and Narrative*, vol. I, p. 73.

discontinuous, disordered effect is hardly the result of simple randomness or a writer's clumsiness, but rather the product of careful, subtle composition.

Although each work has been analyzed with respect to its own problematics, similar aspects and questions reappear to a varying extent in each of the preceding chapters. Discordance, in Ricoeur's (as in Aristotle's) view, primarily derives from a text's episodicity, while concordance can be associated with its configurational aspect. Emplotment endows the sum of chronicled events with an additional theme or principle of selection and imposes a direction so that the episodes appear as necessary factors in a temporal development. Accordingly, disorder has been related to discontinuity, fragmentation, the sheer succession of isolated episodes while order has been linked to the introduction of connections so that a coherent temporal whole can be forged out of a heterogeneous melange of events, characters, and circumstances. As has been argued in the preceding chapters, discordance seems to outweigh concordance in the literary works discussed here. Julian Barnes's *History of the World in 10 1/2 Chapters* presents an episodic plot *par excellence* in which self-sufficient accounts accumulate; one segment follows another rather than because of another. Sequence clearly outweighs configuration, for this history offers a multiplicity of spatio-temporal frames, both factual and fictional, which do not yield any consistent network. Although the presence of Mr Palomar provides a continuous thread in Calvino's final work, the action is similarly scattered in 27 extremely short episodes, which follow one another without any sense of necessity or probability and which find their enigmatic ending in an unexpected

death. Their typographical configuration already announces a discontinuous oscillation between articulation and silence, since the segments are separated from each other by blank spaces. Both Barnes's and Calvino's text then question the logic of the whole by omitting the efficient segment to segment hooks which conventionally make narratives cohere. Paradoxically, it is precisely their dissonance which inspires curiosity as to what complex unity they may add up to and which highlights the very process of emplotment or *mise en intrigue*. Fragments, then, become an epistemological instrument to investigate relationships between order and disorder, the part and the whole; they question the logic of cause and effect and force us to rethink notions of singularity and universality. Barnes's and Calvino's patterning, or undoing of patterns, undermines the emphasis on context and directs attention to the interplay of fragments rather than to their decoding.

Don DeLillo's narrator Jack Gladney experiences such problems of connectivity first-hand, for *White Noise* is concerned with the dissolution of unities on several levels. Connections are already highly obscure on the simple level of family relationships, the family representing the nuclear unit par excellence. Blood ties no longer have any existential significance, and lineage is the random product of circumstance. More important, however, the seemingly random bits of information spewed out by the mass media need to be linked if they are to make sense. Gladney therefore has to sort out the various sounds surrounding him and plot bits of data. As he tries to derive from them a significant message and retrieve the various conspiracies that might be going on around him, readers follow a plot-in-the-making.

Discordance in Barnes's, Calvino's, and DeLillo's texts can therefore be said to manifest itself more specifically in the following ways: First, in the conspicuous gaps between cause and effect, and above all in the prominence of accidents, failures, and disasters, those fearful and pitiable incidents that constitute the Aristotelian peripeteia. Second, in the frequency of repetitions, which appear to stabilize the narrative and reveal some pattern; yet, recurrences eventually undermine such coherence and expose singularities. Finally, in the paradigmatic disordering inherent in descriptions, lists, digressions, and information, or in what Ross Chambers has labelled the "etcetera principle"⁶; connected to this is the large space occupied by silence and meditations, which, similar to the etcetera principle, slows down narrative movement to the point of stasis.

Accidents, catastrophes, and other chance events constitute precisely those disturbing incidents which, according to Aristotle, threaten the plot's coherence and ought to be carefully controlled. By making them necessary or probable, i.e. by subordinating their rationale to the requirements of the plot, the poet has to purify and purge these reversals of fortune and suffering. As has been shown in my preceding analyses, however, implausibility reigns in the works by Barnes, Calvino, and DeLillo, where crises are no longer in the service of an all-englobing plot that might render them necessary. The action in *White Noise* most conspicuously rests on external accidents, for the narrator does not (and cannot) but chronicle the proliferation of failures, errors, crises, and catastrophes. The course of events is entirely determined by

⁶ "The Etcetera Principle: Narrative and the Paradigmatic." *FLS* XXI (1994): 1-24. "Meditation and the Escalator Principle (On Nicholson Baker's *The Mezzanine*)." *Modern Fiction Studies* 40.4 (1994): 765-806.

these unexpected and unpredictable incidents, which portray humans as being at the mercy of some higher power inherent in technology. Incapable of controlling or mastering, human beings seem to have become the objects in global computer and communicational networks. Cause-and-effect relations are equally inscrutable in the various shipwreck episodes that make up Barnes's *History*. Catastrophes simply follow their own logic regardless of human intentions; yet they have nothing of the uniqueness and pathos of Greek tragedy, but remain almost banal incidents in a series. History, therefore, cannot be made or mastered; one is simply immersed in it. Although Calvino's work does not depict any crises or accidents as such, chance occupies an equally large space in *Palomar*, since the protagonist's quest follows a random path. His observations are never clearly motivated, and subject-object relations have been reversed, as Mr Palomar mostly stumbles across his objects of observation by accident; the "objets trouvés" thus encountered appeal to him rather than vice versa. That human plans prove useless thus suggests a rather tragic vision. As history, nature, and technology do not conform to the purposes of those involved in them, their plots seem to move towards annihilation and apocalypse.

Paradoxically, catastrophes and other chance incidents automatically seem to call for narrative and its orderly consoling structures. They demand to be told so that human beings can grasp the irrational and subsume its monstrosity under human forms of intelligibility. Discordant, pitiable, and fearful episodes, in other words, provoke the desire to make them followable, plausible and concordant by inserting them in a story (or even history) of catastrophes. For narration transforms contingent events into necessary ones by

providing a context for them. This aspect of traditionality is precisely what is exploited by Jack Gladney as he tries to normalize the singularity of the Airborne Toxic Event by retrieving a tradition of redemptive narratives of exodus already endowed with meaning. Yet, DeLillo's first-person narrator has to realize that catastrophes engender no universals; that it is impossible to extrapolate from the particular crisis to a general logic of fate. The narrator in Barnes's chapter five ridicules this immediate transfer of catastrophe to art, though he also admits its inevitability and usefulness as a reminder or at least temporary survivor of the catastrophe.

Nowadays the process is automatic. A nuclear plant explodes? We'll have a play on the London stage within a year. A President is assassinated? You can have the book or the film or the filmed book or the booked film. [...] Well, at least it produces art. Perhaps, in the end, that's what catastrophe is *for*. (125)

In his notes to Géricault's painting of "The Raft of the Medusa", the narrator further indicates how readily catastrophe is consummated and how it is always informed by ideological motives. Moreover, in order to produce the impression of catastrophe on the spectator, factors of form, balance, structure have to be taken into account. A painting, it emerges from his reflections, cannot be true to life. It is impossible to render the catastrophic moment, its violence and disorder truthfully, for art by its very definition involves an aesthetic organization; artistic products necessarily focus, stretch, adjust, thus falsify. It is only by letting history's factual anchor slip, the narrator suggests, that the painting works on us, that the subject can be revitalized. Paradoxically, because the figures on Géricault's raft are so full of vitality and dynamism, they stir in us deeper human emotions of hopelessness, violence, and panic: "Catastrophe has become art; but this is no reducing process. It is

freeing, enlarging, explaining. Catastrophe has become art: that is, after all, what it is for." (137)⁷

Repetitions and returns (of events, motifs, settings, phrases) are significant in this respect, since, as Peter Brooks has pointed out⁸, repetitions constitute major operative principles which bind textual energies into coherent wholes. They counterbalance the serialized fragmented structure in that they correlate and introduce connections, thus suggesting the possibility of pattern and coherence. Yet, apart from moving forward and indicating a direction, repetitions also take us back to an enigmatic past. A double-edged advice, repetitions constitute both returns of the repressed and returns to origins: "repetition is a kind of remembering, reorganizing a story whose connective links have been obscured and lost." (*Reading* 139) J. Hillis Miller's distinction between two kinds of repetition is equally significant in this context.⁹ Examining how recurrences work to generate meaning (or inhibit its determination), Miller distinguishes the Platonic from the Nietzschean mode of repetition. While the Platonic reading of the world conceives of difference on the basis of identity, the Nietzschean mode thinks of similitude and identity as the product of disparity. Whereas the first conceives of the world as mimetic representation, the second

⁷ That "this is a painting and not an opinion" (129) seems to be the key to its enduring impact. "[T]here's nothing like a good catastrophe to get people thinking clever thoughts" (86) sounds like a cynical and pessimistic conclusion. Yet this is what emerges from the fifth chapter in *A History of the World*. Barnes himself, in an interview, refers to Flaubert, who similarly reflected on how to justify the terror and suffering of the Franco-German war in 1870/71. The only answer the French novelist could find is that, maybe, the catastrophe inspired a gifted author to write a few pages. Barnes himself does not consider this statement as justifying or glossing over catastrophes, but treats it rather as an explanation, a classification or an attempt to understand the disaster. (See the interview with Julian Barnes by Martin Hielscher in *Die Zeit* #50, 7.12.1990.)

⁸ *Reading for the Plot*, Oxford: Clarendon Press, 1984, p. 123, and chapter five in general.

⁹ John Hillis Miller, *Fiction and Repetition. Seven English Novels*. Cambridge: Harvard UP, 1982.

establishes the world as simulacrum or phantasm. In contrast to the Platonic reading of the world, the Nietzschean view of repetition is therefore not grounded in an archetypal model or origin. Instead, each supposed copy is unique, fundamentally different from its model, ungrounded in some original paradigm. This kind of repetition arises "out of the interplay of opaquely similar things" and Hillis Miller concludes that "there is something ghostly about [its] effects" (6), for similarity, in this case, remains a riddle that cannot logically be solved.

The three works discussed here all appear to favor the Nietzschean mode of repetition and suggest a return of the repressed rather than a return to origins. Although Barnes's novel repeats histories, sometimes as farce, sometimes as tragedy, and always remains connected to the biblical story of the deluge, *A History of the World* makes clear that nothing repeats in history. Catastrophes, by their very nature, do not follow a law nor fit a plot, and their uniqueness makes supposed repetitions of events incommensurate with one other. Although the repetition of crises and multiplication of accidents conjures up the suspicion of pattern, these seeming regularities resist their reduction to a rational principle of explanation. Although we are inclined to trace likes in unlikes, the new in the lines of the old, Noah's remains in the voyages of subsequent travellers, there is no repetition from person to person nor from shipwreck to shipwreck. The various patterns evoked by recurrences in Barnes's novel thus prove treacherous and misleading, since repetitions turn out to be nothing but false signposts that mock the readerly search for an underlying plot. Significantly, the opening chapter of Barnes's *History* already constitutes a parodic repetition of the biblical story of Noah. Just as the

woodworm's story cannot serve as a model for subsequent chapters, so Genesis cannot represent the source of the history of the world. Instead, there is only an endless sequence of variations, and events emerge as singular and heterogeneous, always separated by time, space, context, and circumstance.

This vision of repetitions simultaneously sheds light on the peculiar logic of cause and effect in narrative. For, as Nietzsche pointed out in *The Will to Power*, there is no a priori causality at work in nature. Causes do not produce effects, but are made by them. We can only infer a causal relationship when later events have happened and have incited us to search for possible causes. It is only a posteriori, i.e. by a chronological reversal, that we deduce and discursively construct a logic of cause-and-effect. Origins, as a consequence, lose their privileged positions, since they no longer represent a natural foundation. Rather, they are the result of rhetorical operations. Repetitions, of course, are commonly understood as mimetical copies of a pre-existing model. This supposed origin, however, may only have been constructed because of subsequent repetitions. A more appropriate way of conceiving of recurrences would therefore be to consider them as non-mimetic, ungrounded, always linked to alterity and transformation rather than similitude.

The numerous simulations, i.e. repetitions without an origin, presented in *White Noise* equally indicate to what extent the fake and the real have been blurred and how futile the search for a supposed origin is. The mass media in DeLillo's novel constitute a realm of secondary information that has ironically become a primary reality. They have already rendered every action or character into a stereotype,

so that human beings cannot help imitating some pre-established media model or some pre-arranged sequence. This illusory idea of *wieder-holen*, or representing an original model, reaches its ironic climax when, during the Airborne Toxic Event, SIMUVAC people use the real disaster to rehearse the simulation. Déjà-vu becomes a common disorder in the wake of the toxic accidents, thus highlighting once again the alienating nature of repetitions. Whatever Jack sees or perceives seems to repeat something earlier, but strangely, this first original encounter has gone unnoticed and cannot be remembered as such. It is only the supposed repetition, the second event, which uncannily brings the first into the open. There is clearly no ultimate referent which could function as the ground for later catastrophic events. Repetition thus paradoxically disrupts teleological thinking and reveals origins and similarities to be human phantasms.

According to Ricoeur, terms of the semantics of action can only acquire integration and an actual significance in passing from the paradigmatic order of action to the syntagmatic order of narrative. This passage from the paradigmatic axis of combination and synchrony to the syntagmatic axis of selection and diachrony is precisely the work of the configurating activity.¹⁰ However, in the three works by Barnes, Calvino and DeLillo, parataxis, i.e. the simple juxtaposition of items, sentences, even episodes prevails. And it is hardly by accident that all three texts are fascinated with numbers, which enhance the impression that items are simply being counted out rather than configurated.

¹⁰ *Time and Narrative*, vol. I, p. 56, 66.

In Barnes's *History*, the syntagmatic order has been loosened to such a degree that the very notion of digressions from a main plot no longer applies. There is no straight line which might be interrupted, but interruption (together with repetition) itself is the design. What is digressive in this work can no longer be distinguished from what is progressive. The various episodes with their different casts of characters do not even appear as the detours because there is no original order, wholeness or norm in the first place. Similar to Borges's *Universal History of Infamy*, a chronicle of the lives of outlaws and criminals that the narrator has culled from different sources, Barnes's text at large has the character of an inventory, where parts, however, can no longer be linked to an underlying grammar, but only to one another.

List-like practices like descriptions and enumerations again bring out the problem of sequence versus coherence that readers already encountered in the fragmented serialized structure of the macrotext. Fragments simply follow one another, and readers are left to wonder why the series starts, proceeds, and ends as it does. Nothing explains the order of presentation. Or is there a narrative line, some intrinsic direction and temporal development? Does one fragment, sentence or item take priority over another and introduce a hierarchy? It is precisely those questions that serialized narratives conjure up, thus making readers scrutinize the narrative's production as such and arrange pieces within a relational network. They provoke the search for connections and the coherence of a contextual order, a meaningful frame of coherence.

According to Chambers, the “paradigm named by description is that of the paradigmatic *per se*”¹¹. Functioning on phrasal coordination, descriptions cohere loosely, relax narrative's syntagmatic order and open up its seemingly closed structure. Their sequence seems arbitrarily arranged and is always susceptible of additional information:

description introduces into the narrative paradigm, which would be incomplete without it, the principle of disorder and inertia I have mentioned, i.e. that relaxation of structure, the outcome of which is described by words like discontinuity and fragmentation. (7)

As has been shown, Mr Palomar's numerous descriptions and correlative list-making practices of nomenclature, inventory and enumeration mirror the combinatory character of Calvino's macrotext. What usually seems secondary or even inconsequential compared to the plot's reliance on actions occupies the foreground of attention in *Palomar*. Being primarily synchronically defined, descriptions minimize the ordering power of plot and have a tendency to expand endlessly. And as the surface of those objects observed by Mr Palomar is inexhaustible and in continual transformation, every description necessarily has to remain open-ended. Descriptions lead Mr Palomar to follow each detail and to conceive of every phenomenon as the convergence of new relationships, the center of a new network of connections, which he cannot master and in which he becomes entangled. Lists, therefore, initially appear to be a way of fixing the heterogeneous into an order; yet they also point to a larger disorder at the basis of classifications. For listed items are in a relation of both conjunction and disjunction, continuity and discontinuity, similarity and difference, abstraction and pedantry. And as juxtaposed items

¹¹ “The Etcetera Principle: Narrative and the Paradigmatic.” *FLS XXI* (1994): 1-24, p.7.

appear ludicrously incompatible, the ordinary frames of reference disintegrate and new contexts have to be found. Consequently, the list, which initially seems the very embodiment of order, due to its open-ended nature tends to subvert the systematic and to call into question the foundation beneath its structure. Informed by the ideological perspective from which culture shapes and interprets knowledge, descriptions and its correlative practices may suggest an alternative epistemology, one more attuned to disorder than to order, as Chambers has argued; they favor diversity rather than coherence and system, welcome limitless supplementation, and anticipate further explorations and discoveries.

Parataxis is also the dominant mode in "Waves and Radiation", the opening section of DeLillo's novel, where Jack Gladney merely chronicles events and records the various noises that flood his environment. Paragraphs, even sentences remain disconnected as the narrative is interspersed with random sounds such as news, advertizing slogans, and loudspeaker announcements. Typographically set apart, these noises announce the intrusion of a foreign discourse that increasingly disturbs the Gladneys' daily routine. Both characters in and readers of *White Noise* thus receive messages out of context and have to draw connections. As the mysterious opening and closing remarks in a number of chapters indicate, however, these seemingly pointless interferences are far from constituting a digression, but they slowly spin out a narrative. In other words, plot ramifications in various directions do not lead to the paralysis of movement (as in Calvino) but provoke an acceleration and multiply narratives. Once connections between pieces of data or the various characters have been

established, these bonds imply a limitless avalanche of other connections. Conspiracy breeds counter-plots, and spying provokes counterspying ad infinitum. To Jack Gladney, sounds seem to be combined and thus to intimate the existence of a larger context. Something is in the air, a crisis is on its way, but its outcome is still unknown. The various noises that accumulate in a "white noise" thus embody the deferred narrativity of DeLillo's novel. The plot machinery is set in motion with considerable delay as time in the first twenty chapters remains static and is only accelerated when the Airborne Toxic Event introduces a direction. Again, the paratactical mode dissimulates the passage of time and suggests a peaceful regularity which could go on endlessly, yet which suddenly gives way to the fated determinism in the novel's second part.

As in *Palomar*, lists in *White Noise* take on a peculiar role, which reflects the enigmatic character of the novel's macrostructure. Patti White has correctly remarked that "list making is a coping mechanism", "a means of information fixation and control. An imposition of order, the list fixes and makes available for use"¹². When Babbette is threatened with memory lapses, list-making thus reflects her effort not to forget and to master the flood of stimuli (including the plenitude of items in the supermarket). Other lists, however, are clearly limited and composed out of three names of the same brand or class: "Mastercard, Visa, American Express" (100). These triads read like mantras and suggest an enigmatic pattern within the system of information. In an atmosphere of information overload, it is precisely because these lists represent a poetic triad that they actually enter Jack's

¹² *Gatsby's Party. The System and the List in Contemporary Narrative*. West Lafayette: Purdue UP, 1992. p. 20, 21.

acoustic unconscious and can be remembered. Rather than pointing to the limitless diversity of the world and emphasizing the classifying process as such (as in Calvino), lists in DeLillo's novel allude to a secret order hidden within the proliferation of noises. While Mr Palomar's excessive enumerations unsettle conventional tables of organization and aim at an all-englobing holism, lists, for Jack Gladney, provide a means of fixing and grasping the enigmatic. As Calvino's lists destabilize and open up the narrative's systemic structure, Jack's lists serve to fix the free floating chunks of information. In both cases, however, lists take on an aura of mystery; they point to something beyond language and verge on the transcendent.

Paratactical dis-ordering, in *White Noise*, in the end points to the central paradox of our information society: even though computers and other networks can store enormous amounts of information, they fail to produce connections and lead to an atmosphere of confusion rather than enlightenment. Masses of information are given, yet no meaning emerges. Indecipherable codes, cryptic names, and irritating statistics do not help to assign causes and effects, but leave people guessing what the point is. The flood of information knows no beginning and no end; facts shift all the time, and knowledge has been reduced to discrete units, to a game of "Trivial Pursuit". Correct information can no longer be distinguished from useless, disturbing noise, for the pointless occupies the same place as the relevant. *White Noise* thus indicates that parataxis, the mode of simple juxtaposition, may well be the dominant mode of postindustrialist experience, as critics like Fredric Jameson have suggested¹³. The noises, slogans, news fragments that infiltrate our

¹³ *Postmodernism; or, the logic of late capitalism*. Durham: Duke UP, 1991. Jameson sees contemporary culture dominated by a spatial rather than by a temporal logic and labels

life are no longer subordinated to a larger frame narrative; yet their very disjunction and their creation by a conglomerate background evokes both the desire for as well as the fear of a global scheme behind them. Emanating from everywhere and nowhere, addressed to everyone and no one in particular, information circulates detached from an identifiable authority.

The rise of information as a new kind of knowledge leading to the atrophy of experience and the end of storytelling has of course been lamented by Walter Benjamin in his famous essay on "The Storyteller". Benjamin regrets that the authority once held by the (pre-modern) storyteller by virtue of his personal experience and the fact of belonging to a community has been lost with the arrival of new forms of production such as the development of the press. Information, implying the void of experience, put an end to storytelling, for it stripped the traditional telling of stories of its central elements, wisdom and good counsel. However, this development need not signal the end of storytelling as such, as for instance Chambers and Godzich have argued.¹⁴ For when the text rather than the teller becomes the source of the story, authority becomes dispersed among several instances of textual mediation and passes from the domain of knowledge to that of propriety. Narrative is thus commodified in a market economy, where

"schizophrenic" writing the series of pure unrelated presents in time. "If, indeed, the subject has lost its capacity actively to extend its pro-tensions and re-tensions across the temporal manifold and to organize its past and future into coherent experience, it becomes difficult enough to see how the cultural productions of such a subject could result in anything but 'heaps of fragments' and in a practice of the randomly heterogeneous and fragmentary and the aleatory." (25) Yet, Jameson, who subsumes a large number of cultural practices under the simplyfying label postmodernism, detects a new mode of grasping in the most interesting works where a new experience of form and a positive conception of relationship emerges: "'difference relates" is the paradoxical slogan with which he characterizes the postmodernist experience of form. (31)

¹⁴ Wlad Godzich, "Foreword" to Ross Chambers. *Story and Situation: Narrative Seduction and the Power of Fiction*. Minneapolis: U of Minnesota Press, 1984.

it circulates and proliferates. *White Noise* clearly illustrates the irrelevance of personal experience in the face of daily shifting facts as well as the multiplication of stories due to the development of information technologies. As information comes to resemble unreliable rumors that are impossible to trace back to any point of origin, facts need to be repeated, reinterpreted, and re-emplotted all the time. Precisely because the authenticity of news has become suspect, the Gladneys feel compelled to tell ever more stories, and to be quick at drawing connections.

Not unlike descriptions or digressions and their suspension of temporality, meditations, culminating in moments of silence, introduce a period of lingering, a "time out". Leading from one plane to another on the basis of sometimes highly loose associative links, they relax the linear structure of story and defer its orientation toward closure. According to Ross Chambers¹⁵, time becomes extendable and narrative so distended that its end-oriented linearity explodes and other connections can be formed; in meditation, "the loosening of disciplinary constraints serves the function of permitting new and more plausible connections to be formed, and an alternative view of things to be glimpsed" (805). Although meditations do not adhere to any methodology and even though the actual path of associations may not be foreseen, contemplative exercises aim at a timeless structure that transcends reality. A mixture of discipline and randomness, meditations should progress step-by-step to mute contemplation. While

¹⁵ "Meditation and the Escalator Principle (On Nicholson Baker's *The Mezzanine*)."
Modern Fiction Studies 40.4 (1994): 765-806.

descriptions may lead to knowledge, meditative rambling aims rather at achieving wisdom.

Calvino's *Palomar* explicitly alludes to the important role of meditations in its final part, both as a theme and as a rhetorical strategy, and its textual 'escalation' corresponds well to the gradual step-by-step progress of Mr Palomar's itinerary. His visual contemplations and the suspension points in his chaotic enumerations already foreshadow extensive meditations and larger silences in the text's third part, where Calvino's figure is almost exclusively concerned with private broodings. Unlike Descartes's meditations, however, Mr Palomar's reflections do not follow any goal-oriented method. Calvino's protagonist doubts that superior knowledge can be attained or that a state of "epistemological maturity" can be attained. In the final stage of his search, which began from conceptual, temporal experience, Mr Palomar finally evokes nonconceptual understandings that are not bound by categorization or time, but aim for simultaneity. Meditations thus highlight a peculiar double time where the use of the present tense becomes an indication of the extratemporal character of this state of levitation. This lightness for Mr Palomar, however, means stasis and the end for the narrative. There is no longer any movement between parts and the whole, so that fragments appear as autonomous and independent.

Barnes's metafictional half chapter and the reflections on Géricault's canvas of the Medusa in chapter five also constitute meditative moments that intensify readerly awareness of a larger context. Although they do not strictly blur the story line - there being no central plot in the first place - these reflections re-orient the reading

activity. The narrator of "Parenthesis", for instance, is shown reading his own work; he explicitly draws attention to the construction of history as well as of his own account and its processes of mediation. Written in the present tense and from a first person point of view, these reflections confirm the view of history as a "multi-media collage" (241) rather than a God-eyed version of what really happened. Similarly, the annotations to Géricault's canvas hints at the artificiality of artistic representations of catastrophes. Although not a framing device, these metafictional remarks are then situated on a different plane than the remaining eight histories. Commenting on what the text is doing, they both separate, sever connections, and re-connect. Precisely because they do not constitute yet another episode in the succession of events, they suggest new connections, guide readers, and provide clues for a decoding of the remaining narrative.

Given the abundance of noises in DeLillo's *White Noise*, periods of silence take on particular importance because they suggest a pause that allows thoughts to crystallize. Some characters, for instance, practice yoga, a technique to cultivate silence, which, similar to the chanting of a mantra, aims at unifying individual and cosmic awareness. People also quietly admire the sublimely beautiful postmodern sunsets and Jack Gladney contemplates his children's sleep in silence. Silence, in *White Noise*, is therefore related to a higher state of consciousness in which it becomes possible to perceive unexpected supernatural connections. Further, since the diffusion of information, including its gaps, constitutes a game for both characters in the novel as well as for its readers, silences function as parts of secrets. They withhold facts and leave patterns incomplete, thus paradoxically

introducing a narrative dynamic. Silence becomes itself a source of information as well as a catalytic force in narrative that opens up several latent patterns (of suspense) and makes readers desire narrative all the more.

The three texts discussed in the end play with such dis/ordering devices as repetitions, the limitless systematization of lists as well as the mystical overtones of silence that suggest the possibility of connection, though not a sense of necessary cohesion. The borders between rationality and superstition, sanity and and paranoia, between meaningfulness and absurdity become increasingly dubious as possible connections verge on the mystical and characters are depicted as hallucinating, dizzy or developing fears of persecution. By pushing plausibility to the breaking point and playing with random encounters and accidental events, which no longer reveal or hide any definitive underlying order, these narratives offer an opportunity of reflecting upon the construction of links, plots, meaning and intelligibility in narrative. They all play with the possibility of order by depicting excesses of orderly vision such as holism, superstition, and paranoia.

Given the invisible agency and the futility of human intentions that is mirrored by the multiplication of disasters in Barnes's *History*, the global surveillance by information technologies in *White Noise*, and both nature's immense diversity as well as the cosmic disequilibrium encountered by Mr Palomar, it is only natural that characters should embark on a quest for patterns and connections. For, anthropologically, this search for clues and explanations in periods of spiritual, political, and other upheaval corresponds to human needs of

comfort and orientation in the world. It represents a strategy of empowerment in that it denies the accidental nature of disasters and crises and locates agency in specific powers - real world individuals or groups in the case of conspiracies and paranoia, supernatural forces in the case of superstition and cosmic holism. During the past centuries, secularization and scientism therefore inevitably led to the invention of spiritual counter-cultures as sources of hope and solace. As nature, history, and technology seem to work as if by mystery, daily life acquires an almost sacred radiance, and moments of hierophany, experiences of the sacred in the profane reality of everyday life, are common in all three works discussed here. This epistemology of seeing secret forces determining one's life and preventing free human will, however, knows no borderline, and carried to its logical conclusion, it may easily turn into absurdist phantasms, which can be logically neither proved nor refuted. In such paranoid delusions, one's sense of reality splits, and everything is subordinated to the phenomenal world - an experience equally described in Borges's "Lottery of Babylon", where the secret agency and "silent functioning, comparable to God's, gives rise to all sorts of conjecture."¹⁶

As its story lines multiply, Barnes's novel also presents several deranged visions of total order in the history of the world. For once one believes in any single pattern in history, this logic necessarily implies the rigorous abolition of all accidents and human will, and even arbitrary signs must be read as being motivated. Absolute belief in divine providence, for instance, easily slides into superstition, for if one believes in God as a master puppeteer, one has to attribute even the

¹⁶ Jorge Luis Borges. *Labyrinths. Selected Stories and Other Writings*. New York: New Directions, 1964, p. 35.

most banal incidents to divine will. Anything from butterflies to "sacred" numbers might be considered a sign of God. By the same logic, however, one has to explain disasters as expressions of divine will. And bitterly, the divine plot in history that human beings have so carefully constructed returns 'with a vengeance' when God remains absent during the Holocaust. That the Jews who have not sinned will perish while the fittest will survive, bitterly mocks all visions of God's benevolence and omnipotence. Absolute belief in History's rational progress or in principles of "natural" selection proves equally cruel and cynical, since the fittest who survive more often than not simply appear to be the most cunning. Again, the course of events, the ongoing eruption of calamities, ridicules all attempts of ordering history according to a logical, intelligible pattern. Even the very contemporary version of cosmic holism displayed by the hallucinating Australian survivor, in the end follows the same logic as superstitious beliefs or an excessively rational-positivist view. If all chains of being are connected and we simply have to deliver ourselves to nature's cycles in order to re-gain an alleged authenticity, free will becomes an illusion. Yet, again, the actual course of events mocks the cyclic plot in history when the "nature's" circular logic involves the re-enactment of killings and catastrophes. Irony thus puts in doubt the coherence we construct because it dissolves ties between events and characters.¹⁷ In the end, ironic returns mock all efforts of finding a pattern and thus being able to predict the course of world history. Simultaneously, they direct

¹⁷ See also Hillis Miller's comment on Hardy's *Henry Esmond*: "If repetition creates meaning in fiction by making the forward movement of the narrative line turn back on itself and become significant thereby, irony loosens those connections. It makes the narrative line blur and finally break up into detached fragments. These may be put together this way or they may be put together that way, but never on the basis of the legitimate authority which [...] *Henry Esmond* seeks." (115)

attention to cunning individuals who may exploit these supposed historical patterns to cover over their egoistic manipulations and will to power.

The traps of holism are similarly depicted in Calvino's text, where Mr Palomar turns the breakdown of classical Cartesian paradigms and its implications for relations between the part and the whole, subject and object, variety and unity, into an exaggerated version of universal connectedness. In an effort to link the infinitesimal to the infinite, his reflections ignore distinct levels of observation. As everything is subjected to his phantasm of cosmic unity, the "new" epistemology (or rather spirituality) of "postmodern" science comes to resemble premodern beliefs in magic and mysticism. Ironically, however, the all-englobing pattern Mr Palomar perceives mocks him in the end. For Calvino's protagonist does not reach a state of mystical transcendence. In the very moment he starts his ascent into the realm of timeless eternity, the earth-bound plot of his life takes him in and reminds him of his mortality. Calvino's text, therefore, parodies holistic notions and its ending ironizes the entire quest: although Mr Palomar has cultivated a heightened sense of interiority, the material world does not prove to be illusory. Palomar remains clearly attached to material reality and does not undergo a state of bliss. Again, the outcome of events contradicts and ridicules the belief in any unifying order that would confer meaning upon human existence.

The turn toward occult beliefs, quasi-religious rituals and paranoia out of a frustration with Western techno-culture and its excessive rationalism is most conspicuous in *White Noise*, where characters believe in anything that might suggest a pattern in events,

horoscopes and psychics, numbers and the color white. As has been shown, all characters in DeLillo's novel are mentally deranged in one way or another. Heinrich's extreme rationality borders the irrational and even the police prefer the directions of a psychic to logical-deductive reasoning. That such supernatural beliefs, especially paranoia, are a logical rather than a patho-logical response to modern society in general and our contemporary information society in particular has been noted by various critics. When power is no longer bound to one or a group of individuals, but divided among parties, its flow cannot be controlled any more. Although persecutory themes have therefore regularly come up in modern politics, they have traditionally belonged to groups.¹⁸ The individual delusion of paranoia, in which the personal crisis of threatened identity is projected onto the world, might more specifically be linked to the world of communication technologies, as Porush has suggested:

The mutual language of cybernetics and paranoia is written in the alphabet of codes, ciphers and intercepted messages [...] To the paranoid, like the cyberneticist, everything is a message and nothing is neutral; everything has information waiting to be recuperated by the correct reading or the application of the right technique.¹⁹

When the mass media have uncannily doubled everyday perceptions, the phenomenon of a "deus ex media" should not come as a surprise. Paranoid thinking turns out to be useful, even healthy, in a culture of

¹⁸ See Carl F. Graumann and Serge Moscovici, *Changing Conceptions of Conspiracy*. New York : Springer, 1987.

¹⁹ David Porush. *The Soft Machine. Cybernetic Fiction*. New York, London: Methuen, 1985, p. 107/108. Elaine Showalter has more recently examined a series of contemporary mental disorders (known by the medical names of Chronic Fatigue Syndrome, Gulf War Syndrome, alleged alien abduction, all linked to general forms of paranoia) that she reads as symptomatic of the late twentieth century. Today's individual hysterias, she argues, are amplified by communication networks (such as the Internet or talk-shows on television) and result in psychological epidemics. These expressions of cultural anxiety tend to spread during the terminal years of centuries and millenia. (See her *Hystories. Hysterical Epidemics and Modern Media*. New York: Columbia UP, 1997.)

perpetual crisis, where disasters may erupt at any moment. According to Hertzberg and McClelland, paranoids display "talents for crisis-management"; being in a constant state of suspicion, they do not panic if invisible, malevolent forces suddenly materialize. The phenomenon of paranoia, in other words, often implies the mechanism of self-fulfilled prophecies: once the paranoid has projected his code and coherence into a situation, his attitudes seem to provoke the very reality of that phantasm.²⁰ Yet, as in Barnes's *History* and Calvino's *Palomar*, the sort of determinism that is introduced by the invention of a plot, an order, a unity, also backfires in *White Noise*. Jack's suspicion of a plot leads him to develop a counter-plot which he eventually cannot control. As if in mockery of his malevolent intentions, Gladney himself becomes a victim when he tries to shoot his wife's seducer.

Such paranoid beliefs all center around a deterministic component: the course of the world in general and the end of an individual's life seems to be already scheduled; time is running out. Accordingly, death and apocalypse become a central theme in the three narratives analyzed and patterns are observed in order to anticipate the ending before it is revealed. Endings are immanent in Barnes's *History* from the very first chapter, since all episodes recount catastrophic shipwrecks. Mr Palomar, too, conjures up apocalyptic visions of the end of time in his first observations, thus introducing a determinism in his account which will measure all that is to follow in terms of an inevitable end. Similarly, Jack Gladney's claim that "all plots tend to move deathwards" informs his narrative with a direction towards disintegration from the novel's opening chapters. When the Airborne

²⁰ Hendrik Hertzberg, David McClelland. "Paranoia." *Harper's Magazine* 248 (June 1974): 51-54.

Toxic Event literally infuses Gladney's life with death, the question of "Who will die first?" becomes even more pressing. The three narratives therefore confirm Kermode's claim that our modern age of crisis has become inherently apocalyptic: ends have lost their finality and become immanent rather than imminent. Longing for apocalyptic transformation, we project our anxieties and hopes into fictional patterns of decadence and renovation, catastrophe and progress.

The end represents a magnetizing force not only for characters within the narrative, but also for readers, who follow the episodic plots in the expectation of reaching an end point, a conclusion which might turn sequence into a significant whole. Endings, as several critics have argued, indeed act as a organizing principle, which interacts with all previous moments of a text. Closure functions as the final imposition of order upon chaos, converting *chronos* (time in its mere successiveness) into *kairos* (the point in time that denotes fulfilment), according to Kermode. In his view, we need these temporal patterns of beginning and end (tick-tock is his model of a minimal plot) in order to make sense of the middle, that is, our present moment. Yet, by creating such fictions and humanizing time, we simultaneously extend that period in the middle and postpone the ending. It is this strange double logic that is also at the center of Peter Brooks's *Reading for the Plot*: "The very possibility of meaning plotted through sequence and through time depends on the anticipated structuring force of the ending" (93) We anticipate a retrospective moment - the ending or death - in order to make sense of our life in the middle, our present situation. Plotters, in other words, always need to stand beyond the end, at a point which even precedes the beginning - a narrative position that is made explicit

in DeLillo's novel, where the first person narrator eventually returns to the present tense. Mr Palomar, too, explicitly reflects on this sense of an ending and the determining power of the last element in a series shortly before his death. Imagining himself dead and looking back upon his life, he tries to glimpse the meaning of his yet incomprehensible life:

A person's life consists of a collection of events, the last of which could also change the meaning of the whole, not because it counts more than the previous ones but because once they are included in a life, events are arranged in an order that is not chronological but rather corresponds to an inner architecture. (111)

However, a meaningful death, which would fulfill the desire for meaning, is denied to characters in all three works. Mr Palomar's unexpected, premature death postpones the mystic epiphany and atemporal infinity he had hoped for and contests his very project. Although Calvino's protagonist tries to maintain the longest possible distance between his life and his death and retard the ending, time is eventually not overturned, because human life inevitably has to end. Even though Palomar's itinerary has taken many detours through ever-expanding descriptions and meditations, death, the end of his episodes, imposes an irreversible direction upon the series and highlights human time-boundedness. While death and the end coincide in Calvino's work, death and apocalypse are eventually postponed in Barnes's *History* and DeLillo's *White Noise*, although these narratives, similar to *Palomar*, satirize the desire for transcendence and ridicule human strategies of evading death. In Barnes's final chapter, the vision of a last judgment in heaven turns out to be just another human phantasm. The detours of human life in the middle do not reach an end as repetitions again proliferate and

intensify the longing for an end. Heaven turns out to be a consumer paradise and the desire for meaningful death remains unfulfilled. Although *A History of the World* is explicitly built upon the biblical paradigm of Genesis and Apocalypse, it parodies this eschatological model (as well as other deterministic patterns in history) according to which history will culminate in a final revelation. Appropriately entitled "The Dream", Barnes's last chapter indicates that we cannot help telling stories, that we in fact need to keep narrating in order to assimilate our experiences. *A History of the World* offers no concordant version of history as a collective singular, both one and plural, centered on one time and one humanity, but retains a multiplicity of unconnectable plots. There is no teleological endpoint which closes the series, hence no moral meaning. However, despite the lack of a final *Aufhebung*, the search for meaning in history must go on. Even though a final judgment may be nothing but a dream, we cannot do without this sense of an ending. Plots need to be created in order to uncover hidden histories, to commemorate and to keep things in mind. Barnes's *History* seems to suggest that we need alternative histories, multiple plots, a discordant rather than a concordant vision in order to do justice to the incommensurability of events. Rather than trying to create a theory, it produces only local, contingent, non-totallizable narratives which convey diversity and unresolvable conflict.

DeLillo's novel also highlights the absence of an ideal end-point which would close the series, but stresses the incomplete process of narrating in its final chapter. What has been important to Jack Gladney is the process of plotting, the cathartic relief it provides rather than the

illumination of a final meaning in an apocalyptic ending. Alternative endings accumulate in *White Noise*, which thus denies any necessity in those sequences that have led to the final episodes. Several plots are left unfinished or have failed, and the mysterious significance of technology's noises remains suspended or becomes even more pressing, given that the supermarket shelves have been re-arranged without warning. The search for an authority that might confer meaning will therefore go on, but Gladney has worked through his deviant detours. The past has thus become passé, so that Jack can change to the present (tense) and return to a state of normality and quiescence. As in Barnes's final "Dream", religion seems to have become a consumer choice, and immortality or transcendence turns out to be just another human projection, designed to console human beings in their time-boundedness. However, given Wilder's survival, the idea of subsequent generations reassuringly veils the limits of Jack's life. Gladney, writing from a point beyond the ending, still chooses fragmentation and disjunctiveness for his account, which thereby is to look "natural", "authentic". It blurs the distinction between literature and diary or abandoned manuscript and asserts its seemingly unplanned nature. Gladney, however, is a highly self-conscious narrator, who clearly premeditated his self-representation as well as the killing of Mink. His fragmented narrative thus also functions to efface the traces of the writer's controlling hand and to veil that his text is also a confession.

In how far are these narratives of death and ending, then, related to the end of narrative so lamented by critics? For all its emphasis on

concordance, Ricoeur's *Temps et récit* is anxiously concerned with the possible eclipse of narrative and often adopts an elegiac tone, which appears more pessimistic than Kermode's *Sense of an Ending*. Whereas Kermode sees the literature of his day, that is, the experimental writings of Robbe-Grillet and Beckett, among others, as a continuation rather than a mutation, Ricoeur joins in the diagnosis of crisis and imagines himself at the end of an epoch. Ironically, while he celebrates the modernist writings of Woolf, Proust, and Mann, and while he wishes to retain the pluralism of peoples and civilizations in historical narrative, Ricoeur insists on wholeness and is alarmed by incomplete, polyphonic texts, which, in his view, undermine the plot's aspiration to order. His central concern is with what might happen if innovation should endanger the principle of discordant concordance as such: "in this period that some call postmodern, it may be that we no longer know what narrating means."²¹ Ricoeur gives anthropological reasons for narrative's survival, yet his formulation betrays his suspicion: "For we have no idea of what a culture would be where no one any longer knew what it meant to narrate things."²²

It is this sense of the limits of emplotment which has also been latent in my own narrative. Although the focus of this thesis has been extremely limited, I hope to have shown that the narrative dynamics in Calvino's, Barnes's, and DeLillo's works are far from signalling the end of storytelling *tout court*. Rather, they indicate the preference for different forms such as serial or multiform narrative. Moreover, the final chapters in *White Noise* unmistakably indicate that plots need not be a paradigm of order, but that they follow their own

²¹ *Time and Narrative* III, p. 270.

²² *Time and Narrative* II, p. 28.

uncontrollable dynamic. For Gladney is both the subject and the object of his plot against Babette's seducer Mink, which literally backfires in the closing chapters of DeLillo's novel. *White Noise*, at the same time, exemplifies a strand of contemporary writing that seems far from any experimental innovations and that might be labelled neo- or hyper-realist. In contrast to nineteenth-century realism, this contemporary variant presents entirely banal, isolated and decontextualized moments with hallucinating exactitude and therefore seems surreal or magic to us. It no longer transmits authentic experience nor knowledge of the real, but is profoundly anti-psychological and defamiliarizes our perception of the real.

As has been mentioned above, Italo Calvino, too, has pondered the fate of literature and the book in the next millenium in his *Six Memos* and, in his lecture on "Multiplicity", singles out hypernovels, i.e. networks in which multiple stories intersect, as those forms which will have a future. The increasing prominence of serial and multiform narratives indeed indicates that a certain form of narrating may be in a state of decline, but that new forms of segmentation, juxtaposition, and connectedness are on their way. Today's most popular and ubiquitous forms of storytelling are probably television serials in their numerous shapes. Their narrative structure comprises a large cast of characters and multiple plotlines, which may provisionally end, but only "to be continued" the following day or week. This structure therefore provides a great source for possible connections among events and characters. Various micro-narratives are not hierarchized and remain open-ended - a state of conflict usually keeps up the plotline - to fuel viewer interest. For the ultimate *raison d'être* of serials is economic:

television melodramas in serial form are to attract as many viewers as possible so that they can be sold to advertizers. They prove all the more profitable since serials not only awake the desire they then feed, but they can also be tested with relatively little investment in their initial phase and are then easily alterable to satisfy the changing tastes and trends of their consumers.²³ As new media technologies develop, their economic potential will surely stimulate new modes of narrative production and distribution.

While the notion of plot still retains some relevance in film serials, it seems less and less significant in what, for instance, today is called hypertext, a term coined by Theodor H. Nelson in the 1960s to designate a non-sequential branching text, in which a set of documents of any kind (images, texts, charts, tables, video clips) is connected to one another by links. In addition to presenting a series of self-contained units, hypertext constitutes a potential text and provides many possible orders in which topics can be assembled and read. It offers an enormous number of combinations of passages and asks the reader to choose where to begin, which links to pursue, where to end. The reader's interest thus determines the text's organizing principle. Information and computer technologies are, then, opening up a new writing space, where traditional concepts of authorship, reading, and emplotment will have to be revised.

Even though the latest technological transformations are unlikely to destroy older media such as the printed book, multiform narratives will surely influence print narratives in their organization

²³ See Roger Hagedorn. "Doubtless to be continued. A brief history of serial narrative." *To Be Continued... Soap Operas Around the World*. Ed. Robert C. Allen. New York, London: Routledge, 1995. 27-48.

and presentation of knowledge as well as shape new ways of reading. After all, our culture's concept of a linear and unitary fixed text which flows from beginning to end constitutes only one paradigm or technology among others. As claims George Landow, the concept of hypertext has been in use in ancient literature such as the Talmud with its commentary, annotations and references to other passages within the main text as well as in biblical narrative:

Like the biblical type, which allows significant events and phenomena to participate simultaneously in many realities or levels of reality, the individual *lexia* inevitably provides a way into the network of connections.²⁴

Joyce's and Borges's works may equally be considered hypertextual in their intertextual allusions and their multithreaded stories. What is more, hypertext is somewhat nostalgically said to evoke the sense of a new orality that McLuhan and Ong predicted; it returns to a notion of narrative linked to the tribal tradition, where the myths and folklore are swapped around the campfire or the computer screen respectively. In Landow's view, the active author-reader of hypertext resembles "the bard who constructed meaning and narrative from fragments provided by someone else, by another author or by many other authors." (197) Both poets and the authors of electronic writing engage their audience in the dynamic process of composition, which consists in putting together formulaic blocks, fragments in a network of stories that could be extended indefinitely. Contemporary narrative, according to Landow, increasingly drifts toward poetry, its distension and slow drive giving way to lyricism.

²⁴ George Landow. *Hypertext.2.0*. Baltimore: John Hopkins UP, 1997, p. 37.

However, hypertext's digressive possibilities, its gamelike aspects of navigating as well as its encyclopedic potential are so immense that they may well prove overwhelming and paralyzing to readers. Critics have expressed the suspicion that infinitely connectable and recombinable pieces might initiate self-satisfying circuits in which the reader no longer feels the desire to move forward. The information overload presented by hypertext thus merely echoes the inundation with information to which we are exposed every day; its sheer number of references and combinations doubles the disorienting effect of the mass media, which bombard us with messages without providing any meaning. Moreover, since hypertext is non-hierarchical and open-ended, organized by association rather than by subordination, readers are likely to be dissatisfied with the lack of a sense of destiny and inevitability.²⁵ A text in which all possibilities can be realized will hardly maintain narrative drive. If Benjamin, Brooks, and other critics are correct that we read narrative to satisfy our need for the closure denied to us in our everyday lives, we might be suspicious of the future of hypertext.

Maybe it is then precisely this form or mode of producing knowledge that future narrative must resist. Narrative and its knowledge should perhaps strain against rather than fit into the technologically and economically dominant modes of knowledge (and of control), the electronic accumulation and manipulation of information. William Paulson has recently argued in favor of a reevaluation of canons as "practices of resistance to the hegemony of

²⁵ Janet H. Murray refers to an interview with Umberto Eco, in which the Italian writer claims that hypertext can never be satisfying because it denies the sense of destiny. (*Hamlet on the Holodeck. The Future of Narrative in Cyberspace*. New York: Free Press, 1997, p. 296, note 16.)

electronic information".²⁶ Although printed texts will not be able to stop the rush to lengthen networks and create some "ultracommunicativity", they can keep narrative, and hence knowledge, more complex and differentiated:

The reading and valuing of old narratives may have been a hegemonic activity for a long time, but in a world increasingly structured by the communicativity of computers it could certainly become a way not of reversing the flow of history but of creating spaces of turbulence and even fixity within it. (245)

The mode of print thus offers an alternative to the mode of information, for the (at least temporary) fixity of print can counteract the fleetingness of information and work against the neutralizing of time and of alterity in an ever-expanding network of information that seems to escape global control.

DeLillo's novel could in fact be read as a defense of print and the book. On the one hand, *White Noise* evokes a wide spectrum of media and presents events as always already mediated by television or radio. On the other hand, while appropriating the mass media, it draws attention to the power of narrative emplotment as a signifying instrument and unmasks as an illusion the promise of liberation and democratization due to information technologies. In an age of electronically processed text and image, the ordering power of plot, its linearity and finitude may prove all the more necessary to counter the endless expansion of information. Moreover, when technologically processed information has become so dense that it can no longer be contained in memory, narrative can act as a guardian of time, memory, and history. It has the power to act against the effects of high speed

²⁶ "The Literary Canon in the Age of Its Technological Obsolescence." *Reading Matters. Narrative in the New Media Ecology*. Ed. Joseph Tabbi and Michael Wutz. Cornell: Ithaca UP, 1997. 227-249, p. 245.

information and master its flows. Parodying Jack Gladney's treatment of history, in which Hitler is compared to Elvis, *White Noise* counterworks a conception of history as the reign of the simultaneous and contemporaneous and declares narrative emplotment or *mise en intrigue* the primary and most efficient form of organizing information into coherent patterns of meaning and cultural knowledge.

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