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13 Junkware
Thierry Bardini

12 A Foray into the Worlds of Animals and Humans, with A Theory of Meaning
Jakob von Uexküll

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Jussi Parikka

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Isabelle Stengers

9 Cosmopolitics I
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1 The Parasite
Michel Serres
JUNKWARE

Thierry Bardini

posthumanities 13

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The University of Minnesota is an equal-opportunity educator and employer.
To Fabienne and Léonard,
without whom my life would be only junk.
Junk is not, like alcohol or weed, a means to increase enjoyment of life. Junk is not a kick. It is a way of life.

—WILLIAM BURROUGHS, Junk
Contents

ACKNOWLEDGMENTS xiii

CODA: Lambdas All Over the Place 1

INTRODUCTION, or a Set of Promoters: Robbe-Grillet Cleansing Every Object in Sight, and Vik Muniz Piling Them Up 7

PL Envoi: where one learns about a deafening condition and a couple of figures of junk  
PR Presence of junk, this signature of our age  
PAntiq Philology of junk, or what’s in this name, the fabric of the rhizome, our very fiber  
PRF Mapping junk, or how I wrote this book (or, maybe, how it wrote me)  
PRM Biomolecular junk, first three chapters of the book: this uncanny detail in our genetic capital  
PRM The Junkness of culture, last three chapters of the book, which might not be chapters at all: out of control.

Part I 3' Biomolecular Junk

CHAPTER 1, or a Repressor Complex: How Junk Became, and Why It Might Remain, Selfish 29

cI On genetic insignificance and its semiotics, or variations on the uncanny detail created by a “mini-revolution”  
OR3 Bootstraps: two opposite takes on junk DNA, selfish and snake  
OR2 The selfish contention, a repressor argument in Nature  
OR1 Even the sharpest razor cannot shave its handle (scholastics return with a vengeance)  
cro Genes and signs of meaning, or the fiction that turned us into junk  
N Why junk might remain selfish, after all  
Q Design, or everybody’s good for a makeover.
CHAPTER 2, Mostly Head: From Garbage to Junk DNA, or Life as a Software Problem

\[ \text{cII Incipit junk: Ohno and the birth of a name} \quad \text{A (May) a thousand loops (bloom), or from teleology to teleonomy} \quad \text{B Regulation, without a program} \quad \text{C Bioinformatics, biologists using computers (or the other way around)} \quad \text{D Hyperreal junk, the \textit{aufhebung} of code itself.} \]

CHAPTER 3, Head Again: Multimedium, or Life as an Interface Problem

\[ \text{E The Field, back to the snake} \quad \text{F Rush and Burst, a real-life encounter with the X-files.} \]

Part II 5' Molar Junk: Hyperviral Culture

CHAPTER 4, All Tail: Close Encounters of the Fourth Kind

\[ \text{Z (which could appear to mean the end) The crime of the Millennium: it’s a wonderful world, if you can afford it} \quad \text{U (as in U2 my son) Postscripta: genetic capitalism and the machine of the fourth kind} \quad \text{V (Bio)ethics, or what to do with your brand-new (bio)engineered freedom} \quad \text{G The end of a common nature: junk as the black matter of the ontogenesis of the machine of the fourth kind} \quad \text{T Indivuation, without a principle (or a program): another return of scholastics, from number to Oedipus.} \]

CHAPTER 5, Lysis and Replication: Homo nexus, Disaffected Subject

\[ \text{S A philosophical fiction; nexus, nexialism, and other aliens} \quad \text{R The debt and the contract, or nexi and addicts, all unite!} \quad \text{O Dis-affect, the condition of our times} \quad \text{P Promethean angst: The god of junk and his paradoxical legacy, hope and all.} \]

CHAPTER 6, Tail Again: Presence of Junk

\[ \text{H Stigmata, or the world Dick made} \quad \text{M Kipple: how it got its look and feel, from retrofitting and the semantics of Dr. Junk himself} \quad \text{L (yes, the “l” of “tail,” the point of entry) Hypervirus, where it eventually becomes obvious why } \lambda \text{ phage is the model entity for the ontogenesis of capitalism of the fourth kind} \quad \text{K Junkyard terror, or a mind for murder} \quad \text{I Junkspace, or how it got built} \quad \text{J Future Eves, artificial menials and capitalist regenesis: a junk aesthetics.} \]
Sib Tripping over the organism, or a tribute to Mobius: DNA is a spirit is a drug is a program xis Thinking junk and period pieces; a Gnostic theodicy attP (a vital noncoding sequence) Molecular gods, or when the religious is disqualified, remains the mantic int Vanishing sequences (end credits).
Materials recycled in this book come from various presentations that the entity that claims to be its author—and who usually hides behind the mask of an “I”—had the opportunity to give here and there in the past few years. I thus presented parts of the Introduction at the “Experimenting with Intensities” conference at Trent University, Peterborough, Ontario, in May 2004. I thank Constantin Boundas for this invitation and his great welcome.

I presented parts of chapter 1 at the third international conference of the Centre de Recherche sur l’Intermédialité (CRI) at the Canadian Centre for Architecture in Montreal in March 2001; at the first Gatherings in Biosemiotics, University of Copenhagen, in May 2001; at the annual meeting of the Society for the Social Studies of Science (4S), in Cambridge, Massachusetts, in November 2001; and in the Distortion lecture series hosted by Christine Ross at McGill University, Montreal, in September 2002. The resulting paper appeared first in French in Intermédialités and as a chapter in The Tasking of Identity in Contemporary Art: At the Intersection of Aesthetics, Media, Science, and Technology, edited by Christine Ross, Johanne Lamoureux, and Olivier Asselin (Montreal: McGill/Queens University Press, 2008). I presented other sections of this chapter at the annual meeting of 4S in Vancouver in November 2006. The resulting paper appeared in Biosemiotics Research Trends, edited by Marcello Barbieri in 2007. I presented the final sections of this chapter at the “Science and Belief” colloquium organized by Yves Winkin at Les Entretiens Jacques Cartier in December 2007. I thank Yves, Christine, Olivier, Johanne, Éric Méchoulan, and all the CRI participants in my panel; Marcello and all the Biosemiotics crowd, especially Yair Neumann, Kalevi Kull, Don Favareau, Yagmur Denizhan, Jesper Hoffmeyer, Marcella Faria, Tommi Vehkavaara, Luis-Emilio Bruni, Peter Harries-Jones, and Dominique Lestel.

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Coda  Lambdas All Over the Place

λ phage is the paradigmatic temperate bacteriophage. A bacteriophage is a virus infecting bacteria (E. coli in the case of the λ phage, see glossary entries bacteriophage and phage). This name was coined in 1917 by Félix d’Hérelle, a French Canadian microbiologist working at the Pasteur Institute in Paris. “Phage” comes from the Greek phagein meaning “to eat.” λ phage in fact does not eat its host bacteria, in the sense that it does not ingest, digest, and then incorporate it. Instead, it does rather the opposite: the phage penetrates the unicellular organism of the bacterium, replicates inside of it, and later, when its business is done, “explodes” its host. This later phase is called lysis (also from the Greek lyein, meaning “to separate”), the death of the bacterium by breaking of its cellular membrane. But lysis occurs in only one of the two alternate life cycles of the λ phage, the aptly named lytic cycle. λ phage is a “temperate” phage because it can also enter into its lysogenic cycle, where its viral genome integrates the bacterium DNA, replicates with it, and quite often remains dormant until conditions deteriorate (and only then will the reproductive cycle kick in, leading to lysis).

Lysogeny was controversial from the start. Félix d’Hérelle did not believe it could exist, and neither did many later microbiologists, including some of the most famous, such as Max Delbrück. Lysogeny could indeed appear counter-intuitive, because it leads to the apparent paradox of a “nonvirulent virus”: virulence refers exclusively to the lytic cycle (since only in this cycle is the host cell degraded). “Temperance” then means “nonvirulence,” and it took a while for the community of biologists to accept that such a thing could exist in a virus. It gradually happened after World War II, with the works of some of the key actors of the present book, the so-called French connection: André Lwoff and Jacques Monod, at the Pasteur Institute again; see chapter 2, A: “(May) a thousand loops (bloom).”

The λ phage genomic map provides an alternate representation of the
structure of the present book. It is, however, no “mere metaphor,” nor merely a structural (i.e., formal) point. It is indeed a structural point at first sight: the λ phage genomic map is circular and not unidirectional. Its basic form then is that of the loop, which is the main concept of cybernetics, and thus of both computing and molecular biology, and thus of bioinformatics, and thus of the present state of our culture, that is, cyberculture, or, more precisely, “hyper-viral culture.” The loop is also an archetype of the eternal return, and this is no mere “structural” point, but rather an ontogenetic point, and thus both a physical and a metaphysical point. The loop is the organizing trope and the key bridge between the micro and the macro, the material and the ideal levels of human experience, or, in other words, more in tune with the conceptual framework of the present book, the molecular and the molar.

Finding its ontogenetic references in the body of knowledge that today claims authority on the most basic characterization of life itself, molecular biology, the present book investigates its accursed share, the very existence of allegedly insignificant, albeit massive, details on the source of all meaning—DNA itself—inverts it, and returns with a vengeance to “culture itself” as “junk culture.” The loop is more than a circle; it is the possibility of more circles inside of the same circle; it is the mother of reflexivity and recursivity. Inside the loop resides the possibility, or maybe even the potentiality, of yet another loop, of a thousand loops. The virus genome does not know a privileged direction, a hegemonic sense: here cohabit sense and antisense; it is all a question of circumstances, of chances and choices in relation to a given, albeit ever-changing, state of the world. In other words, and I insist, it is no mere structural metaphor; the virus (and more precisely the λ phage) is the entity of choice, not only for molecular biology that it helped build, but for today’s ontology and ethics, and hence for current metaphysics. Today, we late-modern human beings live in tension between our lytic and our lysogenic pathways.

Junkology, if there is ever to be such a “discipline of study,” is no heterology, certainly not in the sense given to this expression by a however crucial influence on the conceptual framework of this book, the late Georges Bataille. Junk is not “merely” heterogeneous, as Christopher Kelty helped me realize with his final review of my manuscript. For Bataille, the heterogeneous refers to the sacred, “the highly polarized,” and most of his heterodoxy lay in trying to recover some sense of the sacred in some sort of profanation. In other words, heterology was more precisely about TRASH (rather than WASTE), the “merely”—yes, “merely”—heterogeneous, and junkology is ANTITRASH.

Junkology is also about the sacred, but in the sense of Giorgio Agamben rather than in the sense of Bataille. Like Agamben, it wonders about what is
left to profane in a world where everything, including signs, is sold, bought, and consumed. The main thesis of this book is that there might be some redemption in junk, if one properly understands what junk means. Yes, we living human beings are now officially junk, but there is some positivity to be found in this rather bleak matter of fact. More precisely, junk might after all be the perfect “object” to help establish an ethics that would be firmly Nietzschean, beyond good and evil, resolutely participating in the transvaluation of all values. “Lambda” is, after all, the most common name for today’s form of the singularity, the common singularity that Agamben calls “whatever singularity,” and that I consider as today’s mode of expression for us disaffected subjects, instances of Homo nexus.¹

This transvaluation is better understood here as a transduction, in both specialized senses of this term: in the metaphysical and epistemological sense given to it by Gilbert Simondon, and in the more restricted sense of virology. Bateson used to say that “we are our own epistemology,” and this book attempts to prove him right, in developing a viral epistemology. This is why and how transduction is key.

In the sense of Gilbert Simondon, transduction is “a physical, biological, mental, or social operation by means of which an activity propagates itself from one location to another within a given domain.” Simondon’s genial insight is to understand individuation (be it physical, biological, or psychological and social) as both action and structure, correlated in the individuating process of propagation by proximity: each structured region of a given domain serves the following region as a principle for its own structuring, in a kind of bootstrapping process (the quintessential loop), “so that a modification extends itself progressively at the same time as this structuring operation.”²

The sense of the term “transduction” in virology can thus appear as a restricted sense of the Simondonian sense. Here it means the process by which genomic material is transferred from one bacterium to another by a virus, or whereby foreign DNA is introduced into another cell via a viral vector (Wikipedia, “Transduction (genetics)”). The lytic and the lysogenic pathways are thus two alternate modalities of transduction in temperate viruses such as the λ phage. Transduction, in this sense, is a key process harnessed in genetic manipulations; hence it is both a structural analogy for the present book and an aspect of the problem it deals with. In other words, this book operates on a transductive logic, in both matters of structure and contents.³

The schematic map of the λ phage genome and of its main transcription pathways thus provides alternate (and junkier) reading trajectories into the book.