Religion, Cognition and Culture

Series Editors

Jeppe Sinding Jensen and Armin W. Geertz
Aarhus University

The series is based on a broadly conceived cognitive science of religion. It explores the role of religion and culture in cognitive formation and brings together methods, theories and approaches from the humanities, psychology, the social, cognitive and neurosciences.

The series is associated with the Religion, Cognition and Culture Unit (RCU) at the Department of the Study of Religion, Aarhus University at www.teo.au.dk/en/research/current/cognition.

Forthcoming

Past Minds: Studies in Cognitive Historiography
Edited by Luther H. Martin and Jesper Sørensen

Origins of Religion, Cognition and Culture
Edited by Armin W. Geertz

The Burning Saints: Emotion and Motivation in the Fire-walking Rituals of the Anastenaria
Dimitris Xygalatas

Mental Culture: Towards a Cognitive Science of Religion
Edited by Dimitris Xygalatas and William W. McCorkle, Jr.

Religious Narrative, Cognition and Culture

Image and Word in the Mind of Narrative

Edited by

Armin W. Geertz and Jeppe Sinding Jensen
Contents

Contributors vii

Introduction 1

Armin W. Geertz and Jeppe Sinding Jensen

Theoretical Perspectives

1. Religious Narrative, Cognition and Culture: Approaches and Definitions 9
   Armin W. Geertz

2. Framing Religious Narrative, Cognition and Culture Theoretically 31
   Jeppe Sinding Jensen

Levels of Explanatory Interpretation

3. Language as an Emergent Function: Some Radical Neurological and Evolutionary Implications 51
   Terrence W. Deacon

4. The First Hybrid Minds on Earth 67
   Merlin Donald

5. Iconology and Imagination in Human Development: Explorations in Sociogenetic Economies 97
   Chris Sinha

6. The Nature of Narrative: Schemes, Genes, Memes, Dreams and Screams! 117
   Rukmini Bhaya Nair

Contributors

Armin W. Geertz and Jeppe Sinding Jensen

Theoretical Perspectives

1. Religious Narrative, Cognition and Culture: Approaches and Definitions 9
   Armin W. Geertz

2. Framing Religious Narrative, Cognition and Culture Theoretically 31
   Jeppe Sinding Jensen

Levels of Explanatory Interpretation

3. Language as an Emergent Function: Some Radical Neurological and Evolutionary Implications 51
   Terrence W. Deacon

4. The First Hybrid Minds on Earth 67
   Merlin Donald

5. Iconology and Imagination in Human Development: Explorations in Sociogenetic Economies 97
   Chris Sinha

6. The Nature of Narrative: Schemes, Genes, Memes, Dreams and Screams! 117
   Rukmini Bhaya Nair
Contents

   Ilkka Pyykkönen
   Cognitive Approaches to the Study of Religious Narratives

8. Pumping Intuitions: Religious Narratives and Emotional Communication
   Tom Sjöblom

9. Moses and the Invasion of the Body Snatchers: Durkheim, Cognition and Deuteronomy
   Hans J. Lundager Jørgensen

10. Fantastic Re-Collection: Cultural vs. Autobiographical Memory in the Exodus Narrative
    Laura Feldt

11. Parables, Cognitive Shock, and Spontaneous Exegetical Reflection
    Douglas L. Grigg

12. Icons and Agency in the Georgian Orthodox Church
    Anders Nielsen

13. Towards a Socio-Cognitive Approach to Religious Texts: A Case Study in Indian Epic Literature
    James M. Hugarty

14. Pole Position: Space, Narrative and Religion
    Anders Lisdorf

15. Narrativity in View of a Theory of Syncretism
    Anita Maria Leipold

16. The Salience and Relevance of Modern Icelandic Ásatrú: A Preliminary Case Study in the Immunology of Culture
    Guðmundur Ingi Markósson

17. "Baby in a Bowl" and Other Stories: Socialization in Astrological Narrative
    Kirstine Munk

18. To Meet without Actually Meeting: Cultural Models of Virtual Rituals in 3D Cyberspace
    Kenneth Hansen

Index

vi

Contributors

Terrence Deacon, Ph.D., received his degree from Harvard University in 1984 and has served on the faculties of Harvard University, Harvard Medical School, Boston University, and the University of California at Berkeley, where he is currently Professor of Anthropology and Neuroscience. His research combines human evolutionary biology and neuroscience with a focus on the evolution of human language capacity and cognition. His work extends from laboratory-based cellular-molecular neurobiology to the study of semiotic processes and the special challenge of explaining emergent processes in biology and cognitive neuroscience.

Merlin Donald, Ph.D., FRSC, is Emeritus Professor in the Department of Psychology and Faculty of Education, Queen’s University, Kingston, Ontario, Canada. A cognitive neuroscientist with a background in philosophy, he is the author of many scientific papers, and two influential books: Origins of the Modern Mind: Three stages in the evolution of culture and cognition (Harvard, 1991), and A Mind So Rare: The evolution of human consciousness (Norton, 2001).

Laura Feldt, Ph.D., is Assistant Professor at the Department for Cross-Cultural and Regional Studies, University of Copenhagen. She has published articles on ancient religious narratives from Mesopotamia and the Hebrew Bible, on monsters, miracles, and religion and fantasy literature. She is currently working on a project on conceptions of wilderness in ancient religions.

Armin W. Geertz, Dr.Phil., is Professor in the History of Religions at the Department of the Study of Religion, and Chair of the Religion, Cognition and Culture Research Unit (RCC), Aarhus University, Denmark. He is currently involved in coordinating the research coalition called MINDLab at Aarhus University, financed by the Ministry of Science in Denmark. His publications in the cognitive science of religion range from articles and chapters on evolutionary theory, atheism, the neurobiology of prayer and introductions to the cognitive science of religion. He is currently writing a book on the cognitive science of religion and a book on mysticism. He is co-editor of the Religion, Cognition and Culture series at Equinox.
Douglas L. Gragg, Ph.D., is Associate Dean, Library Director, and Professor of Bibliography and Research at Louisville Presbyterian Theological Seminary. He is the author of several book chapters relating cognitive theories to the study of Graeco-Roman religions and the compiler of a bibliography of publications in the cognitive science of religion. He is currently revising the bibliography and writing a book with the working title, Forms and Modes of Religion in the Ancient Roman World.

Kenneth Hansen, Ph.D., is Associate Professor in Communication and Experience Design at the Department of Communication, Aalborg University, Campus Ballerup, Denmark. In his publications he has dealt with anthropological aspects of computer mediated communication and the design of mediated experiences. His first book is about the design of meaningful experiences and is due to be published soon. He is currently writing a new book on valuable experience management and international development.

James M. Hegarty, Ph.D., is Lecturer in Indian Religions at Cardiff University. This is his first publication on aspects of the cognitive study of religion. He has published numerous scholarly articles on Sanskrit narrative as well as on medieval Sikh hagiography. He is the author of Religion, Narrative and Public Imaginaries in Early South Asia: Past and Place in the Sanskrit Mahabharata in the Routledge Hindu Studies Series. He is currently editing the Oxford Handbook of Hindu Literature (with Will Johnson) as well as working on a monograph on the role of genealogical discourse in the formation of early South Asian views of the past (as part of a three year research project supported by the Arts and Humanities Research Council U.K.).

Hans J. Lundager Jensen, Dr.Theol., is Professor in Religious Studies and in Old Testament, Aarhus University, Denmark. He teaches and publishes on structural studies of myth and ritual, classics in the study of religion, and Old Testament myths, legends, and cult.

Jeppe Sinding Jensen, Dr.Phil., is Associate Professor at the Department of the Study of Religion, and Coordinator of the Religion, Cognition and Culture Research Unit (RCC), Aarhus University, Denmark. His research interests include semantics and cognition in religious narrativity, myth and cosmology, and method, theory and the philosophy of science in the study of religion. He is the author of The study of religion in a new key: Theoretical and philosophical understandings in the comparative and general study of religion (2003) and the co-editor of Rationality and the study of religion (2003). He is editor-in-chief of the Religion, Cognition and Culture series at Equinox.

Anita Maria Leopold, Ph.D., received her degree at the Department of the Study of Religion, Aarhus University, Denmark. She is an independent scholar, lecturer and writer. Her publications on the cognitive science of religion range from articles and an anthology on a new theory of syncretism in religion explaining the nature of conceptual blending and religious categorizing in terms of the structure of human cognition. She is currently writing a novel based on cognitive theories of conscience and the "dreaming mind."

Anders Lisdorf, Ph.D., is an independent scholar who earned his degree in the History of Religions from the University of Copenhagen, Denmark. His publications focus on how the cognitive science of religion can aid in understanding the historical reality of and the practice of divination in ancient Roman times.

Guðmundur Íngi Markússon, Cand.Mag., holds degrees in the study of religion and semiotics from Aarhus University, Denmark. His interests include the significance of religious information and signals as social markers (a pilot project with Human Behavior Laboratory, University of Iceland); Western esotericism; contemporary religiosity; atheism; evolutionary psychology and its limits; gene-culture co-evolution; biosemiotics, especially the “rehabilitation” of mimesis through Peircean semiotics (in the work of T.W. Deacon) and the significance of semiotic ecologies for cultural evolution; Darwinism in the humanities and social sciences. He is a member of the Reykjavík Academy, association of independent scholars, in Reykjavík, Iceland, and a member of the International Association for the Cognitive Science of Religion (IACSR).

Kirstine Munk, Ph.D., is an independent scholar who holds a Ph.D. degree in Religious Studies and a Double Masters Degree in History of Religion and History of Philosophy and Ideas from the University of Copenhagen, Denmark. She has been working intensively with divination and is the author and editor of several publications on that topic.

Rukmini Bhaya Nair, Ph.D. (Cambridge) is Professor of Linguistics and English at the Indian Institute of Technology, Delhi. Widely recognized for her work in linguistics, cognition and literary theory, Nair received a second honors causa doctoral degree from the University of Anwerp in 2006. Among her many books are Lying on the Postcolonial Couch: The Idea of Indifference (2002), Narrative Gravity: Conversation, Cognition, Culture (2003), Yellow Hibiscus: New and Selected Poems (2004) and Poetry in a Time of Terror: Essays in the Postcolonial Present (2009). Nair, considered one of India's leading English language poets, has taught at universities ranging from Singapore to Stanford. She is currently working on a study of Salman Rushdie's fiction within the theoretical framework of "Literary Darwinism," a monograph on the evolutionary and pragmatic value of the human ability to deceive as well as a cycle of poems on the recent Mumbai terror attacks. Nair's latest research project, funded by the Indian Department of Science and Technology under their "Cognitive Science Initiative" is in the broad area of "Language, Emotion and Culture" (2010-2013).

Anders Nielsen, Cand.Mag., holds degrees in the History of Religions, Russian, and History from the University of Copenhagen, Denmark. He has published articles on Orthodox Christianity and the popular use of religious images.

Ilkka Pyysäinen, Ph.D., is Academy Research Fellow at the Helsinki Collegium for Advanced Studies. He has published widely in international journals on a variety of topics in the cognitive science of religion. His most recent book is Supernatural Agents: Why We Believe in Souls, Gods, and Buddhas (Oxford University Press, 2009).

Chris Sinha, Ph.D., is Professor of Psychology of Language at the University of Portsmouth. He has taught in departments of Education, Psychology and Linguistics, in Britain, Brazil, the Netherlands, Denmark and India. He has published widely in anthropology, linguistics, education, evolutionary biology and connection science, as well as developmental and cultural psychology. His central research interest is in the relations between language, cognition and culture, and a main aim of his research is to integrate cognitive linguistic with socio-cultural approaches to language and communication, especially in relation to human development.
Contributors

Tom Sjöblom, Dr. Theol., is Docent in the History of Religions at the Department of the Study of Religions, University of Helsinki, Finland. He is the author of the book *Early Irish Taboos—A Study in Cognitive History*. His interest areas in cognitive science include narrative cognition, the origins of religious cognition, emotional communication, and cognitive ethology.

Introduction

Armin W. Geertz and Jeppe Sinding Jensen

This book is about religion as an expression of cognitive mechanisms that are both biological and social and which reveal themselves through culture. The cultural products of interest here are religion and narrative. Both, we believe, are fundamental human features and must be examined through diverse methods and theories that aid us in linking "the self" with "society" and "the mind." Assuming that cognition is neither solely nor perhaps even primarily located in individual brains, rather being distributed and situated in pragmatic social contexts, we are convinced that narrative is a key to discovering important insights into these complex relations.

Cognitive studies in relation to religion and culture have until recently mostly focused on what the mind "brings to the social world," but, here in line with our special point of departure, we focus on what the social world brings to the mind, that is, the formative effects that various kinds of cultural knowledge (in narratives, classificatory systems, rituals, institutions and everyday practice) may have on the ways in which minds are made and how they work. This project has become crucial because of recent breakthroughs in the neurocognitive and psychological sciences. Recent insights on the plasticity of the brain and the central role that social experience and culture plays in forming neural networks in the brain have persuaded neuroscientists and psychologists of the need to deal with areas of expertise in the human and social sciences. In other words, we need the help of colleagues from other fields, and they need help from us. It is exactly this interdisciplinarity which is so exciting about the study of cognition and religion more generally, and religious narrativity more specifically. The sense of excitement is enhanced by the fact that in one way or another and within the framework of one discipline or another, we are all trying to grasp the fundamental features of what it means to be human.

So, what is the mind in narrative, and of what does it consist? Is it the symbolic competence that pushed us along the evolutionary highway and provided us with a remarkably complex organ of self-assembly and self-organizing processes, as Terrence Deacon suggests? Or is it a key cognitive management technique, as Merlin Donald suggests, that creates our hybrid minds? Perhaps the mind is filled with iconicity and imagination in a kind of coordinated sociogenetic economy, as Chris Sinha suggests. Perhaps it is a meme-vehicle that crosses cultural barriers conveying the emotions necessary for cultural survival, as Ruk-
Iconology and Imagination in Human Development: Explorations in Sociogenetic Economies

Chris Sinha

Introduction

"Iconology" is a term introduced by the art critic Erwin Panofsky (1939), who distinguished the general study of the meaning of imagery from the more traditional "iconography," or classification of religious images in art. W.J.T. Mitchell (1986) extended the notion to encompass the reflective understanding of the concept of the image: If Panofsky separated iconology from iconography by differentiating the interpretation of the total symbolic horizon of an image from the cataloguing of particular symbolic motifs, my aim here is to further generalise the interpretive ambitions of iconology by asking it to consider the idea of the image as such. (Mitchell 1986, 2)

Iconology, then, in Mitchell's interpretation, is the study, not just of images, but also of the representation in thought and word of the image: its relations to its cognates—imagery, imagination, figure—and to its Other—text, discourse, word. As Mitchell makes clear, the "idea of image" (remembering that for generations of philosophers, following Aristotle, an idea was itself a mental image) is far from being "clear and distinct." Rather, it is "essentially contested," it has been, throughout recorded history, a focus and a site of political, social, religious, and intellectual conflict, of a struggle between iconophilia (adoration) and iconophobia (iconoclasm). Iconology, then, is about the relationship between image and text, and about the different discourses through which this relationship has been thought and contested.

This chapter focuses on the iconology of human cognition and rationality, in terms of the historical development of specific modes of rationality, the history of the representation in theory of "iconologies of rationality," and the ontogenesis of the personal and social imaginarium. The chapter therefore explores the sociogenesis of iconological concepts, taking as its object a process which is both reflexive (it involves the relationship between thought, and

---

1. This chapter is a revised and edited version of a paper originally published in Cultural Dynamics 5 (1993) 57–82.
thought about thought), and productive (it involves processes which make possible new kinds of thought). I further propose that the specific site, or space, which this sociogenetic process inhabits and populates is what I shall refer to, following Castoriadis (1987), as the social imaginary.

Exchange, Equivalence and the Social Imaginary

We may begin our exploration of the social imaginary by focusing on the notion of exchange, which found wide currency in late twentieth century French structuralist and poststructuralist approaches to anthropology, linguistics, psychoanalysis and social theory. The most explicit formulation of an exchange-based sociogenetic theory is to be found in the work of Jean-Joseph Goux (1990). The intuition underlying his work was already expressed, however, in the early part of the twentieth century by the anthropologist Marcel Mauss, who proposed that "exchange is the common denominator of a large number of apparently heterogeneous social activities" (Goux 1990, 2). By the 1960s it was becoming almost a commonplace to suggest that a unification (in terms both of delineating the conceptual field and of understanding the historical conditions of emergence) of the human sciences might be provided by a generalized notion of exchange, since "the semiotic, economic and psychoanalytic horizons all emphasized the question of substitution and its correlative, value" (Goux 1990, 2).

Yet, as many critics were to point out, the analogy between linguistic communication, monetary exchange, and the symbolic structures proposed by psychoanalysis (especially in its Lacanian variant) may be nothing more than an analogy, and a misleading one at that. That Saussure (1966) employed economic and monetary metaphors in formulating the principles of structural linguistics, is perhaps nothing more than an instance of a "new" science borrowing the terminology of an already established one, for heuristic and didactic purposes. That Lacan (1966) chose a linguistically based exposition of the "symbolic economy" of the unconscious, may be accounted for by reference to the exhaustion and anomolism of the standard "hydraulic" metaphors. And "exchange," considered as an economic-anthropological category, is so far homogeneous in its membership that the inevitable question arises as to whether the very concept is not a universalistic projection (or fetish) of the generalized commodity form of the advanced capitalist mode of production. In short, there are good reasons to doubt that the concept of "exchange" is capable of revealing any more than superficial commonalities between the different human sciences.

Here, though, Goux (1990) takes another tack. Instead of "exchange," he posits a notion which is both more "abstract" and more "historicalist" (that is to say, a socially and historically emergent concept): the concept of the general equivalent. This, following Aristotle, he glosses as a standard "which, by making things commendable, renders it possible to make them equal" (Goux 1990, 3). The "discovery" or "invention" of the general equivalent (or generalized concept of exchange and exchangeability) first occurred, probably, in Ancient Greece—Goux's work coincides, here and elsewhere, with the ideas of the philosopher Alfred Sohn-Rethel (1978), a parallel which I have not the space here to pursue further—and inaugurated a "fundamental configuration" of symbolic practices and value-economics which has persisted and reached its most developed expression in our present societies. This fundamental configuration Goux summarizes thus:

the accession of the father to the rank of privileged subject, controlling the conflict of identification; the elevation of the phalus to the place of centralized standard of objects of drive...the privileged position of language as a phonic signifier potentially equivalent to all other signifiers through the operation of verbal expression—all these appear to be promotions of a general equivalent. In each case, a hierarchy is instituted between an excluded, idealized element and the other elements, which measure their value in it. In short...the Father becomes the general equivalent of [psychoanalytic] subjects, Language the general equivalent of signs, and the Phalus the general equivalent of [psychoanalytic] objects, in a way that is structurally and genetically homologous to the accession of a unique element (let us say Gold, for the sake of simplicity) to the rank of the general equivalent of products. Thus, what had previously been analyzed separately as phallocentrism (Freud, Lacan), as logocentrism (Derrida), and as the rule of exchange by the monetary medium (Marx), can be seen as a part of a unified process. (Goux 1990, 4)

Goux adds that there is no question here of asserting any particular causal priority (e.g., of "base" over "superstructure"). He further proposes that the emergence of this "fundamental configuration" (the rule of the general equivalent, as we might say), is also identifiable as the historical condition for the birth of philosophy "as we know it"—that is, the problematic of equivalence and its logic, as this finds its expression in the "idea of the idea" (an abstraction of identity from perceptible difference) and the law of the excluded middle (here and below I am extending Goux's argument, or at least using a slightly different vocabulary from his).

At this point, we must ask: what precisely is the nature of the equivalence relationship which is constituted between any two terms, the privileged and the non-privileged, that which is the measure of value and that which is measured or equalized? The answer, surely, is that the relationship is symbolic, in the anthropological sense that it is the totality of such equivalences which structures the symbolic order of any given society, and which finds its expression both in the language and in the institutions of that society. Castoriadis (1987) suggests that the realm of the symbolic is not, either in the individual or in the society, one which exists sui generis or autonomously; every symbol presupposes an imaginary relationship between the symbol and that which is symbolized; conversely, the realm of the imaginary (in the life of both societies and individuals) finds its expression in and through symbolization. As Castoriadis puts it:

the imaginary has to use the symbolic...to pass from the virtual to anything more than this... But, conversely, symbolism too presupposes an imaginary capacity. For it presupposes the capacity to see in thing what it is not, to see it other than it is. To the extent that the imaginary ultimately stems from the originary faculty of positing or presenting oneself with things and relations which do not exist, we shall speak of a final or radical imaginary as the common root of the actual imaginary and of the symbolic. This is, finally, the elementary and irreducible capacity of evoking images. (Castoriadis 1987, 127)

Castoriadis finds common ground here with cognitive scientists such as George Lakoff (1987) and Mark Johnson (1987), who emphasize the role of image schemas, and the corporeal, in language and cognition (Lakoff and Johnson 1999). They propose that the interpretation of the meanings conveyed or expressed by the symbolic system of natural language depends upon metaphoric projections and identifications which find their "root" meaning in human bodily experience, and in the capacity to evoke and deploy image schemas.

2. The term "equivalences" refers in this context to all possible symbolic (classificatory, metaphoric, metonymic) identifications in all possible societies.
Iconology and Imagination in Human Development

mas. Such meanings are held to be universally shared, inasmuch as all language users share a common, embodied, human predicament or being-in-the-world.

However, the social dimension of the imaginary (including its role in language and cognition) extends beyond this "inter-corporality" (Merleau-Ponty 1964). Castoriadis argues that underlying the symbolic order of any given society, and grounding its system of social significations, is an order or pattern which he refers to as the social imaginary, and which he speaks of as providing "the conditions for the representability of everything that the society can give [represent] to itself." Castoriadis concludes:

These patterns do not themselves exist in the form of a representation one could, as a result of analyses, put one's finger on. One cannot talk in this case of "images," however vague and indefinite the sense ascribed to this term. God is perhaps, for each of the faithful, an "image"...but God, as an imaginary social signification, is neither the "sum," nor the "common part," nor the "average" of these images; it is rather their condition of possibility and what makes these images, images "of God".... The imaginary social significations do not exist strictly speaking in the mode of representation; they are of another nature, for which it is of no use to seek an analogy in the other spheres of our experience. Compared to individual imaginary significations, they are infinitely larger than a phantasm (the pattern underlying the Jewish, Greek or Western "image of the world" is of infinite extension) and they have no precise place of existence (if indeed the individual unconscious can be called a precise place of existence.) They can be grasped only indirectly and obliquely...as the invisible cement holding together this endless collection of real, rational and symbolic odds and ends that constitute every society, and as the principle that selects and shapes the bits and pieces that will be accepted there. (Castoriadis 1987, 145)

Castoriadis here seems to be proposing a social variant of Kantianism, using analogous arguments to those of Kant regarding the irreducibility of the schema of "triangle" to any particular mental image of a triangle. Critically evaluate this proposal below. For now, employing Castoriadis' notion of the social imaginary, we can now say that what Goux (1990) identified as the rule of the general equivalent, as a general ordering principle manifesting itself in the sphere of symbolic economies, can be seen as having its roots in the restructuring of the social imaginary itself, in such a way that the "space" of the latter is made to conform to an omnipresent "image" of rationality—a rationality that is, as Castoriadis (1987, 156) points out, in its decontextualized self-sufficiency, a second-order imaginary. In this respect, one can speak of the colonization of the social imaginary by the logos, such that imagination (radical, figurative, and social) becomes a kind of repressed Other, haunting reason's construction of the world in its own iconoclastic image.

Metonymy, Writing, and the General Equivalent

The thesis that I shall, speculatively, advance in this section is twofold: (1) that what Lakoff (1987) identifies as the "classical" theory of categorization—a thing either belongs or does not belong, without residue, to a particular category—has as its historical (sociogenetic) condition of existence the emergence, in a complex of sociogenetic economies, of the rule of the general equivalent, and (2) that a major role in this sociogenetic process was played by the invention of the phonetic alphabet.

3. "No image would ever be adequate to the concept of a triangle in general. It would never attain that universality of the concept which renders it valid of all triangles ... it would always be limited to a part only of this sphere" (Kant 1929 [1787], 182).

Before proceeding further, let us explore further what is meant by "sociogenesis." The concept implies some sort of relationship between individual human development (ontogenesis), and the historical, socio-cultural circumstances in which individual human development occurs, and has occurred. In this context, we can refer, in the first place, to the issue of the socio-historical conditions of emergence of the discourses in which human cognition and its iconology are given shape and substance as an "object" of philosophy and science. In a later section, I examine theories of human psychological development, with respect to their implicit or explicit iconologies (their stance in iconological matters).

There is, however, more to it than this, and I shall also try to step down a level, from the meta-discourse of iconology, to ask (in the final section) the question: in what way can we adequately understand the development, in human beings, of conceptualization as a psycho-social activity, and the role of both the "radical imaginary" and the "social imaginary" in this activity? These two questions can be linked by posing a third question, which is the focus of the present section: What is (or was, and is) the historical process which gave rise to the conceptualization of thought itself in terms of abstract, decontextualized general equivalences?

The difficulty with this question lies in the fact that it crosses the two different levels of possible analysis which are referred to above. Goux's analysis of the rule of the general equivalent attempts to show how it is that socially circulating representations (of language, of political economy, of the psyche) have some common point of generic origin, historically locatable and traceable in the web of discourses and practices reaching down through the centuries. But we might go further, and suggest that the sociogenetic mechanism which (in example) elevates the phallus to the signifier (in the realm of the social imaginary) of the object of power/desire, is the very same mechanism which constitutes not only the subject of psychoanalytic discourse, but also actual, individual subjects.

The rule of the general equivalent is, if this is so, a sociogenetic mechanism whose effectivity is at the level both of the description and of the thing described. It is inscribed in our discourses, and also in that which the discourse purports to delineate. Psychoanalytic discourse then becomes the appropriate discourse for a phallocentrically constituted subject—its "ideal" structure mirrors those sociogenetic mechanisms which place the subject in a specific (patriarchally determined) relationship to power and desire.

The same point can, of course, be made in relation to the "mysterious" commodity-form, as analyzed by Marx (1975–2005 [1867]); it is both an imaginary (ideal) abstraction, and a sociogenetic process of production of real social relations. And the same point can also be made in relation to the postulate introduced by Saussure of the "arbitrariness" of the sign: was it meant as a methodological principle, or as a real characterization of a relation between two imaginary terms (signified and signifier), which, on Saussure's own account, cannot in actuality exist without each other?

These mysteries of reflexivity and level of discourse are especially recalcitrant in the case of thought (cognition) and its sociogenesis. For, as I have intimated, it is easiest to think of the rule of the general equivalent as constituting, in Western thought, the "idea of the idea": the representation of the representation of an essence which remains unchanged despite the flux of appearance. And this is, in itself, a challenging and bold thesis. But what if we were to make the thesis bolder still? What if we were to hypothesize that this very same sociogenetic mechanism (or complex of mechanisms) constituted or made possible thought itself, not just philosophy (thought about thought), but the kind of thought which is philosophy's object?
What if what we call (developed) human cognition is a product of a sociogenetic mechanism (the rule of the general equivalent), that is mediated by ontogenetic processes, and whose entry into human culture can be dated to about the fifth century BC in the Ionian peninsula (and probably elsewhere, at around the same time)? What if this "developed" human cognition is not a universal of either biology or of culture, but a specific socio-historical acquisition? If this is so, it might help to explain why the "crisis" of the rule of the general equivalent is nowhere so acutely manifest and so laden with implications as in the science of cognition itself, deeply divided between "symbolic" and "post-symbolic" paradigms.

If, however, we are to think of a sociogenetic mechanism (such as the rule of the general equivalent) as having effects at different levels which are at the same time somehow reciprocally linked, we need some reflexive conceptual apparatus, and a vocabulary in which to express it. To attempt an expansion of this: only a certain kind of "thought" can permit a certain kind of "thought about thought," and that "thought about thought" constitutes the thought thought-about as that kind of thought furthermore, both the thought about thought and the thought about it are brought into existence by the self-same sociogenetic process.

To make this point more concrete, let us critically examine the thesis advanced by Goux (1990). This is, essentially, that the originary, and still operative, "fundamental configuration" of what we might call the "Western political economy of the social imaginary" is constituted by a constellation of institutions and their associated ideologies: namely, patriarchy, monothelism, commodity exchange, and logocentrism. Now, the problem with this formulation, as it is, is that it leaves unasserted and unsolved the problem of the cognitive dimension of Objectivist logicocentrism, by which I mean the notion of a decontextualized, univocal notion of meaning as residing in word and text, with formal logic as the paradigm against which expressions and meanings are to be analyzed and evaluated (see Rommetvet 1978; Markóv 1981; Wertsch 1991).

Goux (1990) does, indeed, attempt to specify the sociogenetic relationships which bind together patriarchy, monothelism, the mediation of commodity exchange by money, and Mosaic and Protestant iconoclasticism (the latter being, of course, linked with logocentrism), and I shall return to these relationships in the following section, in which I shall analyze the iconoclastic presuppositions to be found in the developmental psychologies of Freud and Piaget. Yet these relationships are best seen in terms of the mutual motivation of the different components of the constellation by each other, rather than in terms of specific sociogenetic (generative) processes permitting the historical emergence of any particular one of them. Since my concern here is (primarily) with cognition, and the sociology of "thought about thought," it is upon logocentrism that I wish to focus.

Specifically, I wish to bring into play another social institution and social practice, and suggest that it played a crucial role in making possible the logocentric stance towards meaning and rationality as univocal, determinate and decontextualized. That institution and practice, I suggest, was phonetic-alphabetic writing, and my proposal is that this institution and practice made possible new ways of conceiving of categorization, in terms of an opposition between "essence" and "appearance" and in terms of the law of the excluded middle. In short, I am proposing that the invention of the phonetic alphabet was the primary sociogenetic mechanism making possible the "classical" theory of categorization and thus in introducing the cognitive prerequisites for the "capture" of the Western social imaginary by the rule of the general equivalent. As should be clear from the foregoing, I am not suggesting that any single mechanism was solely responsible for the sociogenetic institution of the rule of the general equivalent, which cannot have been a single "event," and which should also in any case be thought of in terms of tendencies and relative dominances, rather than as some absolutely all-governing principle. Rather, what I want to examine here is the role played by the invention of the phonetic alphabet in constituting one of the conditions of possibility—through notational externalization—of the concept of generalized equivalence, with specific cognitive and meta-cognitive properties and consequences.

It is important to note here that it is a particular kind or mode of writing (phonetic-alphabetic), rather than writing in general, that I am proposing as being implicated in the sociogenesis of the concept of generalized equivalence. However, I shall first very briefly discuss the role of writing in general, in both cognitive and monetary economies.

Olson (1977), Scribner and Cole (1981), and others have drawn attention to the possibility that literacy, in certain particular socio-functional contexts, may induce cognitive effects at the level of metalinguistic and metacognitive processes. These effects may be seen as the inducement of a shift towards "decontextualized" or "abstract" thinking. What I shall suggest is something similar, but with a focus on the congruence between a particular cognitive figural process, and the figurative bias underlying abstract logical reasoning. This bias, as Rotman (1988) and Walker (1988) have pointed out with respect to mathematical and other kinds of formal reasoning, is metonymic in character.

The advantage of this formulation is that it recognizes that "abstraction" and the "theoretical attitude" are realized, or made manifest, in both the metaphoric and the metonymic dimensions of language and representation (Sinha 1988). The studies of Olson (1977), Cole (1981), and others have tended to see the issue of "abstraction" as one involving semantic and propositional content: that is, as a process whereby semantic content becomes decontextualized along a metaphoric dimension. In contrast, I shall focus here upon the metonymic ("part-whole" or "container-contained") figure, without commitment as to whether writing in general, or alphabetic writing in particular, also induces a kind of textual "abstract cognitive attitude," of the kind conveyed by Olson's notion of a historic shift, attributable to Protestantism and the rise of mercantile capitalism, from a notion of "meaning as mediated by authority," to a notion of "meaning as solely residing in the text." I shall, however, have something to say about the sociogenetic mechanism whereby alphabetic writing potentiates a notion of abstract or formal truth, which is of course intimately connected with the notion of decontextualized propositional or cognitive content. The further exploration of the interactions between metonymic and metaphoric modes of "abstraction," and its relation to writing, lies beyond the scope of this chapter.

There is no question that language-based graphic notation has its roots very far back in human prehistory, perhaps as far back as language itself (Harris 1986). It is also clear that, from the very first, graphic notations of language, that is, writing, played a significant role in ordering and regulating economic transactions, of tribute, trade, and so forth, and in economic activity (e.g., stock-taking and accountancy) in general. The invention of the phonetic alphabet quite definitely post-dates the general use of writing for recording economic information, and I do not wish to suggest that its effects on economic systems (e.g., the emergence of commodity exchange and monetary systems) were direct. Rather, it is more plausible to see the emergence of monetary value-equivalence (monetary token-equivalence), and the emergence of the phonetic alphabet, involving graphic token-equivalence, as being mutually reinforcing processes in the sociogenesis of the rule of the general equivalent.
Let us now turn to the specific role of phonetic-alphabetic writing in the externalization of the notion of generalized equivalence, and the way that this frames meaning and value in such a way that the classical, abstract "concept of the concept" becomes possible. We can begin by distinguishing three general classes of metonymic relations, namely:

Category – Member
Substance – Sample
Type – Token

I want to emphasize that these relations do not map in any straightforward way onto each other, even though each of them does imply some kind of equivalence. Thus, all members of a category are equivalent, inasmuch as they may be named by the term for the category. However, as Rosch (1977), Lakoff (1987) and others have pointed out, this does not mean that all category members are equivalent in their "goodness," "centrality" or "typicality." Category membership is (in natural languages) frequently both vague, and contestable or negotiable in its boundaries.

Similarly, samples of a substance exemplify the substance, and are equivalent in that respect, but some samples may be better, purer, and more "representative" than others. Finally, tokens which instantiate some value are all equivalently tokens of that value (be it a monetary or a semiotic value), but their empirical or perceptible form may vary: the phonetic realization of phonemes being a crucial and well-known case, but we may think also of coins, banknotes, and so forth.

Thus, all these three metonymic relations involve some kind of equivalence relation obtained between the elements comprising that which is "contained," and a metonymic "container." The "container" can be seen as precisely the "abstraction" that "represents" and constitutes the contained as being equivalent in some way. Yet the relations are different: a member of a category is not a sample, since a category is not a substance, and vice-versa. The type-token relationship does, it is true, share properties of each of the other relations. A type can be thought of as a category with an infinite (potential) membership; and tokens may be thought of as sampling either a concrete substance (as in gold coinage) or an abstract substance, as for example the "content" level of Hjelmic's version of structuralist linguistics (Hjelmic 1953).

At the same time, the type-token relation exemplifies most clearly the notion of "abstract equivalence;" an equivalence which is governed by a sual which is "beyond" the phenomenal form of the token. This value is imaginary (it is constituted in and as representation); but it has real effects in constituting and structuring the real, and the perception of the real. Value, as constituted in type-token relations, is constituted in and through the social imaginary.

The category-member and the sample-substance relationships also exemplify (or embody) the social imaginary; since categorization is, in a sense, the world as it is structured and composed for any given language and culture. Categorization processes also impose themselves on, and are also partly shaped by, the "substances" which make up the natural (and "spiritual" or "mental") worlds. These two metonymic relations, and their interplay, govern to a large degree the experienced world of any given culture.

A large body of research supports the conclusion that categorization, while being highly culturally variable, is not arbitrary: it is partly determined by properties both of the natural world and of the psychophysiology of human perception. In their ecological situatedness, categorization processes (including those governing conceptions of substance) are socio-

natural in character; they are Janus-faced, facing both nature and culture, and embodying the co-articulation of nature and culture in specific cultural settings.

The type-token relationship is different. In categorization, "substance" partially lends form to its representation: the category member is an instantiation of a category which is, as it were, "marked," or informed, by the properties of its most representative members. In contrast, in the type-token relationship the substance is a realization of the abstract form: the token, as "substance," is informed by the purely abstract type. Of course, it is also the case that types do not emerge arbitrarily. The phonological systems of languages find their conditions of possibility in the physiology of the human vocal tract. But this shows only that types can also be considered as categories, subject to the same kind of socio-naturalistic double determination as any other category. What concerns me here is not the type considered as a category, but the type-token relation as such, which is different from the category-member relation, while depending for its operation upon it.

The type-token relation is signification in its "purest" form, and is irreducible to any naturalistic form (this irreducibility is constitutive, of course, of precisely the difference between phonology, which is part of linguistics, and phonetics, which is part of the natural sciences). We can add here, too, although the type-token relationship depends upon categorization processes, it is also the case that the manifestation of categorization in human language depends upon the type-token relationship. Without language, which operates as a system of types, there can be no linguistic categorization and no linguistic semantics, no metaphor and no cultural meaning.

It is for this reason that I suggest that the type-token relationship is crucial for an understanding of the concept of abstract, general equivalence, and how it came to achieve the status of a dominant structuring principle in the social imaginary. My hypothesis is that the invention of the phonetic alphabet, which externalized in a notational system the type-token relationship, made it possible to consider equivalence as an abstract and general "rule." That is to say, whereas before the phonetic alphabet, the type-token relation was merely inherent in signification and its products, the phonetic alphabet makes this relationship manifest and graspable as a rule with diverse and powerful applications. And this principle is precisely the principle of abstract general equivalence, or the concept of the concept. The new departure made possible by the phonetic alphabet is the externalization in notational terms of the mediation of meaning by abstraction. Once made manifest, the notion of abstract general equivalence can be generalized, over language and over concepts of mind and reality, yielding a radical restructuring of the social imaginary.

The mode of this generalization, I suggest, consists, in the first instance, of the transposition of the concept of general equivalence to the two other metonymic relations which I described above. This transposition yields a transformation of the governing relations between "container" and "contained," such that the "container," rather than being a sign or representation which signifies a "place" for the generality of its "contents," becomes rather a function defining an extensional set. Through this transformation, the (initially distinct) category-member and substance-sample relation become co-articulated and mutually definitive, in the form of the following "abstract" relationships:

Set – Member of set
Concept – Instance of concept

The co-articulation of these relationships yields the fundamental equivalence mapping which is presupposed by a truth-valued (bivalent) logic.
Iconology and Imaginai) in Human Development

[set] = [members]

Predicate [Arguments]

Where the first notation expresses an extensional, and the second notation expresses an intensional, logical semantics. To put it another way, the co-ordination of the transformed metonymic relations stipulates that a category is defined as an extensional set, each of whose members instantiates a property or set of properties expressible as intensional predicates. This co-ordination constructs and defines the "abstract objectivist" notion of truth.

In summary, I have suggested in this section that the semiotic transformation of metonymic relations, in terms of a concept of general equivalence, derived, via its externalization in the phonetic alphabet, from the type-token relation as "pure signification." This, I suggest, was a specific sociogenetic mechanism enabling the reconstitution of "thought" within an abstract-objectivist, or logocentric, framework. This sociogenetic transformation also constituted a radical restructuring of the social imaginary, by virtue of which the role of the general equivalent was constructed as extensible over the entire domain of the social, and by means of which, also, its figurative-imaginative "origin" was "repressed" and re-constituted as the Unconscious Other of language, law, and logic.

Iconology and Developmental Theory

In this section I examine the iconological stances of the most influential classical developmental psychological theories of the twentieth century: those of Sigmund Freud and Jean Piaget. This examination will reveal a striking degree of unanimity: developmental psychology, since its inception, has been unrelentingly iconoclastic and logocentric.

The concept of a developmental or genetic psychology had, as many commentators have pointed out, its principal roots in evolutionary and sociobiological theories (Sulloway 1979). The evolutionary biological matrix within which developmental psychology took shape was, from the very beginning, intertwined with the notion of a depth psychology, in which the sociological and iconological transformations mediate between "primitive" and "civilized" psychic layers. The linkage between evolutionary depth, and iconological depth, is expressed in Freudian psychoanalysis in the distinction between "latent" and "manifest" mental content.

For the greater part of both the nineteenth and the twentieth centuries, the dominant theory in experimental psychology was associationism. In an associationist framework, there is no principled difference between the "verbal" and the "imagistic" aspects of thought: they are conceived of as simply different kinds of presentation of the same atomistic content. The mechanism of thought—the abstraction of ideas—operates on this content indifferently to its particular mode of presentation in consciousness, and that which remains unconscious is a kind of shadow, which parallels those trains of associations that for one or another reason do break through the threshold of consciousness. Disputes about the possibility of, for example, "imageless thought," did not involve any important departure, on either side, from this model, since what is held to be at question is neither whether images and words are essentially different "kinds," but whether the one can be present to consciousness without the other.

4. Propositions that natural kind terms should be seen as paradigmatic of meaning (e.g., Kripke 1980) represent an attempt to resolve the current "crisis" in the theory of meaning by formulating the substance-sample relation as foundational: see also Putnam (1981).

Freud's theory of dreams and the unconscious differs profoundly from any such assumption that image and word are merely alternative modes of presentation of an identical content. When a psychoanalyst like Lacan (1966) maintains that the unconscious is "structured like a language," this cannot mean that the latent content of the unconscious somehow obeys a syntax which is akin to that of a natural language, for Freud emphasized continually that the unconscious does not know logic, or time, or syntactic ordering. It is not so much the unconscious itself that is structured like a language, as the operations by means of which unconscious contents, forced into self-dissimulation by censurship and prohibitions, are articulated and ordered as signifiers at the level of manifest content—the dreamwork and the processes of symptom formation.

The world of the dream may also violate logic and time, but it does so in a way that can be understood as having a "logic" of its own, in which "the symbols and the temporal sequences used are based on contiguity (Freud's metonymic 'displacement' and synecdochic 'condensation') or on [metaphoric] similarity (Freud's 'identification and symbolism')" (Jakoobson 1956, 81). The world of the dream is a partially "logized" representative of another world, the actual unconscious, which is entirely other to the logos. The unconscious is not a set of propositions awaiting transformation by the dreamwork, nor even a set of propositions lacking temporal, modal or other inflection or qualification. Nothing like a proposition "exists" in the unconscious, and for this reason it is even misleading to speak of unconscious desires, for desire is (or can be formulated as) a propositional attitude, and as such is distinct from the unconscious "investments" (in a pre-symbolic "economy") that power them.

What then is the content of the unconscious? Freud speaks of Triebe (drive, pulsion), but drives must have an object, and the "place" of this object is the imagination. The unconscious is the realm of the imaginary, of fantasy, and of the body imagined. And it is here that Goux's remarkable analysis of Freud's text on Michaelangelo's statue of Moses becomes relevant. Freud, he says, "was unable to interpret the Moses completely without analyzing the analysis, that is, without analyzing the cultural presuppositions of his discovery and, somewhere along the line, denouncing, perhaps we had better say, 'disclosing' the roots of psychoanalysis in Judaism" (Goux 1990, 144); and specifically in the link "between the Judaic prohibition against worshipping images and the prohibition against incest with the mother" (Goux 1990, 137). Goux continues:

What Moses condemns when he casts the idolaters is actually, in a historical perspective, the cult of female, maternal deities, and the fertile incest rites accompanying this cult. The law given to the Jewish people by Moses...is first of all a radical prohibition not only against incest itself but against any incest with the mother in the imagination.... With his written law, Moses institutes a blindness with regard to image, imagination and phantasy—all of which are associated with sensuality and love for the mother. Thus he brings to completion the exodus from Egypt—not merely out of the land that bears this name, but also out of the inner Egypt, the land of sphinxes, toms, and hieroglyphics, land of the imagination and of its invasive icons.... From this perspective, we might say that Freud's psychoanalysis constitutes a second exodus from Egypt, for it proclaims that image and phantasy are delusion and that behind the seductive draparies of the imaginary, an endur- ing symbolic structure homologous to a language must be discovered. Psychoanalysis seeks not to interpret the image with another image but to dissolve it, to reduce it, to repress its well- ing forth by translating it into language. (1990, 138-139)
But there is something strange here. For, as I have already said, we cannot seriously maintain that "beyond" the manifest level of dream-content—"the Egypt" to which we can travel in our imagination—is a language. No, "beyond" that is only the unconscious, another Egypt, which is governed by an imagination (not a law) that precedes "subjection in" language and submission to the patriarchal law. The only sense in which a language, or anything like it, lies "beyond" the imaginary is the sense in which the journey from latent to manifest content can be described as a kind of translation, subject to certain modes of quasi-linguistic operations, whose dynamics can be understood only on condition that certain prohibitions have themselves taken seat in the unconscious. And this condition, the condition of repression, is also the precondition for psychoanalysis itself, the double condition which makes it possible for Goux to speak, apparently so strangely, of psychoanalysis itself "repressing" the imaginary, by repressing its own condition for existence as Freud's "science of the cutting cure."

What then is repressed? Not just the imaginary, perhaps not even the imaginary as such, because despite Freud's deep suspicion of it, he of course recognizes it as some place, or topos, while seeking to subject it to language, in practice as well as in theory. What is repressed is rather the recognition that the imaginary is the other, not just to language, but also to the law of the father: it is the place of the mother. As Goux says, in Judaism:

The prohibition against figural representation amounts to a violent, radical rejection of the maternal. The Jewish tradition thus develops as a systematic exclusion of all metaphysical images of the mother. Conversely, the corollary of this rejection is the importance attributed to the letter, to writing, to alphabetic signifiers. Moses' scribes cannot use hieroglyphics without breaking the law. Rid of its iconic dimension, the symbolic will tend to be reduced to the articulation of scriptural strokes. The utter extermination of the proliﬁc imaginary, in favor of the agency of the letter, enacted by those who followed in Freud's footsteps, is without doubt fully in keeping with this violent repression of the imaginary by a writing that decrees law and name, beginning with Mosaic iconism. (1990, 145)

Let us now attempt a summary of the above. Freudian psychoanalysis is a depth psychology in which the imaginary is a topos other to language images do not accompany words or constitute a complementary mode of presentation of the same content as that expressed in language, but are representatives of a deeper, more "primitive" layer of the psyche. The imaginary does not ground language, but subverts it, and must be checked by rendering it in and subordinating it to language. Psychoanalytic theory is fundamentally iconoclastic, and this iconoclasm is sociogenetically related to the rejection, expulsion, and repression of the maternal and the material. The denigration of the image of the mother, and of sensuous materiality, is coupled with the domination of patriarchal law and language as representatives of both spirituality and reason.

The subject of psychoanalysis (both the actual, individual subject/patient and the topic or topos) is thus constituted not only in language, but also against the imaginary, from whose bondage science must release him/her/it. This emancipation (or exodus) is simultaneous a recognition of, and subjection to, the law, which must (on pain of whose or of the loss of one's identity) be inscribed or introjected in the structures of the Unconscious itself, as operations which simultaneously enable repression and render that which is repressed intelligible. Freudian psychoanalysis is a rationalization (in every sense, including the psychoanalytic one) of a sociogenetic process of the production of a specific type of subjectivity, in specific historical circumstances.

Furthermore, the iconoclasm of psychoanalysis mirrors the iconoclasm accompanying the "exodus" from the land of the glyph to the land of the alphabet. According to Harris, "the modern consensus view [of the origin of alphabetic writing] favours the North Semitic alphabet as the earliest known form and dates its appearance to the first half of the second millennium BC" (1986, 21). Alphabetic writing, then, may have been not only a cognitive technology favoring and permitting the elaboration of an abstract-objectivist notion of truth, coupled with the concept of the concept, but also a means of preserving a written word whose form of expression, in being stripped of iconicity, makes it uniquely appropriate for the revelation of the One Truth of the One God in a sacred text.

Alphabetic writing was, if this speculative, sociogenetic story has any validity, the cognitive-mechanical link between two different aspects of the notion of univocal meaning, which has played such a central role in Western thought: meaning as logically connected to truth conditions on single sentences, and meaning as authoritatively inhering in textually-connected, written sentences. The alphabet represents the blending together of the different strands of sociogenetic process—patriarchal, monarchical, the monetary economy, and writing—eventuating in the rule of the general equivalent; and the elevation of a logocentric, abstract-objectivist Reason to a position of dominance and exclusion over and against imagination. As we have seen, the opposition between Reason and Imagination (the latter seen as primitive, dangerous, unruly, and feminine) is enshrined in the theory and practice of Freudian psychoanalysis.

I want now to suggest that the same iconoclasm is also to be discerned in the developmental theory of Jean Piaget, albeit in a different manner. In Piaget's work (e.g. Piaget 1945) we encounter what seems at first sight a paradox: although Piaget is dismissive of, and accords an essentially conservative (non-progressive) role to imagination and to what he terms figurative thought, he does not, as we might then expect, valorize language over figuration. On the contrary, both language and figurative thought are considered to be instances of a unitary "semiotic function," which can be understood as that dimension of cognition that comes into being with the advent of mental representation. Representation is a literally ambivalent (double-valued) concept in Piagetian theory. First, it denotes the ability to mentally evoke abstract realities, that is to say, imagination. Second, it denotes symbolization, by which Piaget understood not a relation between a sign and an object, but a relation between a (figurative) signifier and a schema; and a schema, while having a figurative (indexical/iconic) component, is principally defined by (or grounded in) actions and (later) logical-mathematical operations.

Representation, for Piaget, is certainly a crucial aspect of human cognition, its advent being concomitant with the acquisition of full object permanence, and constituting what Piaget terms (echoing, no doubt consciously, Kant's phraseology) a "Copernican revolution" in the thought of the child. However, although representation is for Piaget a necessary condition for the development from pre-operational to operational thought, it is neither in itself a sufficient condition, nor the principal cause and motor of that development. This latter role is fulfilled by action, and the co-ordination of actions through their government by operative structures. These structures lie "beyond" figuration, and constitute the conditions of possibility for the "logitization" of representation.

In the structure of Piaget's theory of representation, we can discern striking similarities to the structure of psychoanalytic theory. Piaget's theory, like Freud's, is a "depth" psychology, in which the "manifest" content of representation (figuration and symbolization) stands in a relation of rule-governed (language-like) dependence to a deeper structure which is not
language, but which can only be rendered in a language-like, symbolic notation. This deep structure, for Piaget, is the logos in its purified form, stripped of the figurative and imagistic contaminations of actual, natural languages.

Natural languages, for Piaget, are doubly removed from the "operative" locus of pure reason: first, in that they depend upon sensible figures (the signifiers), and second in that these signifiers, being essentially related to the imagination, are mediated by the imagination in their relation to the operative structures. For this reason, natural languages can only imperfectly reflect and approximate to the "ideal" notation of a logical language (a notation that Piaget variously sought in the work of "Bourbaki," in the propositional calculus, and in the theory of groups). In virtue of this imperfection and contamination, natural languages cannot be accorded more than a peripheral role in the developmental unfolding of the Logos immanent in the relation between the epistemic subject and the real-rational world that it constructs.

The quest for an ideal, logical, universal language is, of course, a familiar trope of Western philosophy, from Leibniz through to logical positivism. But I want to suggest that it is also one manifestation of an equally deep-seated iconoclasm which can be traced back at least as far as the Protestant (and especially English Puritan) concern to expunge rhetoric and "fanciful" imagery from scientific and scholarly discourse. Piaget was, as is evident from his early writings, a thinker with a deeply religious view of the mission of science and philosophy, a view suffused with an idealistic and humanist Protestantism: not so much a harsh, presbyterian Calvinism, as a vision of the harmonious and dialectical unfolding of a nature which is ultimately and immanently identified with reason.

Like Freud with Judaism, Piaget inherited from his own intellectual and religious background a profound iconoclasm, an iconoclasm that extended to language itself, which he saw as an imperfect vessel of reason. And, like Freud, Piaget can be seen as the constructor of a psychology from which the Mother, and desire for the Mother, has been expelled—not just literally, in Piaget's neglect of emotion and of the early socio-communicative environment of the infant, but also metaphorically, in his mistrust and neglect of the sensuous materiality of both representation, and the reality that representation informs (see Sinha 1988, on the notion of the "materiality of representation"). Piaget's patriarchal, masculinist, Apollonian psychology is based upon a denial and a refusal (itself a characteristically Protestant theme) of mediation; his epistemic subject unfolds in monadic self-sufficiency towards a rationality immanent in, and guaranteed by, a law that is beyond imagination. For Piaget, as for Freud, this "beyond" of imagination is also "above," commanding imagination and engraving its authority within it.

In summary, Freud and Piaget both view the imagination as being other to rationality: the imaginary is identified with primitivism, with the (desire for) the maternal and the feminine, and with egocentrism, and rationality is identified with the reality principle, with the law of the father, and with operational thinking. What I have elsewhere (Sinha 1988) called the "phylocultural complex," the mapping of notions of childhood and primitivity onto each other within an evolutionary framework, can in many respects be read as the principle theoretical expression of an iconoclasm that has marked developmental psychological theory since its inception.

Ontogenesis and the Social Imaginary

The present article is by no means the first to link Freudian and Piagetian developmental theories by employing Castoriadis' notions of the social and the radical imaginary. Hans Furth (1990) identifies the ontogenic origin of the radical imaginary with the emergence, at around 2 years of age, of the capacity for symbolic ("pretend") play and mental imagery.

Cognitively (and following Piaget), Furth proposes that this capacity is due to the emergence of a representational ability, predicated upon the differentiation of the object from specific sensorimotor action structures. Affectively (and following Freud), he suggests that this same capacity involves a libidinal investment in the object, dissociated from any biologically-given reproductive function.

These two ruptures in biological adaptation form the indispensable core elements of the radical imaginary and explain why adaptation is an inadequate conception for the open-ended constructiveness of human psychology. This constructive power requires the logical comprehension of the separated object and...the motivational freedom of a libido that is not instinctually tied to its biological purpose. From this perspective, the meaning of an image (or of pretending) is the mental object to which the child's libido is attached: "want-my-object," where object stands for "my world, my society." (Furth 1990, 208–209).

Like Castoriadis, Furth (1990) sees the radical imaginary as the source of the social imaginary, inasmuch as the cognitive-affective significations that constitute the play of radical imagination are social significations: the ultimate object of imaginary desire and knowledge is the social world or surroundings that lend meaning to the child's actions, even as the child's imagination projects personal meaning onto the world. The dialectic of development involves a co-constructive relationship between the radical imaginary (the source of intellectual and social transformation), and the specific, historically given social significations (or symbolic order) that constrain the field of play of the radical imaginary.

The radical imaginary, as a particular developmental creation, is peculiar to the one individual, while as a particular historical creation, it is peculiar to the particular society. In the first case we see society within the individual, in the second the individual within society. (Furth 1990, 212)

It seems at first sight, then, that Furth is departing from the iconoclasm that I have argued to be central to both Piagetian and Freudian developmental theories, and that, like Lallof (1987) and Johnson (1987), he is arguing that the imagination should be seen as being at the core of human mental life. However, Furth explicitly reintroduces a logoscentric and iconoclastic dimension to his theory, in his discussion of the child's development from the age of about 7 years (that is, the age period characterized by Piaget in terms of "concrete operations," and by Freud in terms of "latency"). Furth writes: "children must first construct a play reality before awareness of social, logical and physical constraints leads them to make the adult distinction between pretend and serious...around age 7, at which time the play reality of children is safely conserved in their 'unconscious.'" (207). The telling notion of "safe repression" recurs in Furth's text:

After [7 years], logical operations reach a critical closure. . . . Faced then with the internal demands of conscious logic and the external pressures of social reality, children by this time have completed the psychological repression of their pretend world...in the early years serious learning is secondary and is in fact constantly distorted in the service of the child's imaginary. But after its safe repression and unconscious conservation, learning and cooperation take on an increasingly serious, nonplayful character...having more or less willingly repressed their imaginary worlds, [children] are open to the impact of the "real"
social world...progress in logical and societal understanding in the few years following age 7 is truly phenomenal and easily observable in all cultures. (Furth 1990, 210–211)

Given our previous discussion of the sociogenesis of the rule of the general equivalent, it is natural to read Furth's theoretical approach as involving a translation of the processes which I have designated as a historical transformation of the structure of the social imaginary, onto the timescale of ontogenetic development (at least within Western cultures). Just as (I have proposed) the imagination is positioned by logocentric, univocal reason as an excluded and repressed Other, so within the (Western) individual (Furth proposes), the radical imaginary is "safely" repressed as an "indelible core of human society and each person within it" (1990, 210). Behind all adult achievements are unconscious forces which have been gathered and structured in childhood. "These forces are pregnant with what is considered the best [creative imagination, etc.] as well the worst [ambivalence, frustration, delusion, etc.]." (1990, 212) their "safe" socio-psychological repression is a necessary condition for the constructive growth of the social individual.

There are several critical remarks that I wish to address to Furth's developmental theory. The first concerns his apparent obliviousness to the culture-specific nature of his developmental story. Gustav Jahoda, in his critical commentary appended to Furth's article, notes that "the picture drawn by Furth of the life of the young child... is EuroAmerican-centric" (215). The elevation of the culturally specific to the status of universal has been criticized in the work of both Freud and Piaget, and Furth's theoretical synthesis of the two fails to break with this weakness. Second, Furth's account, far from abandoning the traditional iconoclasm of developmental theory, merely repeats its central presupposition: Imagination represents, once again, a "primitive" stage which must be simultaneously abandoned and (unconsciously) preserved, in the growth towards mature reason. Logic, and awareness of its objectivizing constraints, are equated with both social stability and psychic health.

In this respect, Furth's account is a normative generalization of Western views of the relations between reason and imagination, over all places and times. This is not to deny that this normative account does indeed express a truth of our culture's social practices of education and socialization of children, inasmuch as these practices are themselves expressive and reproductive of the symbolic order and social imaginary of modern Western society. Furthermore, in so far as this society "functions properly," Furth's account also expresses a truth of child development itself. Yet it is, at best, a half-truth, since it denies and excludes the constitutive and continuing role of embodiment and imagination in human cognition.

In a sense, because Furth wishes, on the one hand, to recognize the centrality of the imaginary in human development, and on the other hand, to preserve the iconoclastic premises upon which Piaget and Freud erected their theories, his own text can be seen as a deeply ambivalent expression of the iconological crisis of the contemporary cognitive sciences, riven by the split between a "Classical", rules-and-symbols based, logocentric paradigm and a "New Romantic" (Sinka 1993), image-schematic, connectionist, situated embodied paradigm (Sinka 2007; Zlatar 1997).

At a more specific level of ontogenetic theorizing, Furth counterposes (as did Piaget) pretend or symbolic play (considered by Piaget to be dominated by assimilation) to logical-mathematical reasoning and the pretend or imaginary social world to the "real" social world. In contrast with this dualistic view, Sinha (2005) argues that pretend play depends on the ontogenetic development of the cognitive capacity for what Fauconnier and Turner (2002) call conceptual integration, or blending. Far from being a "primitive" stage repressed in later development, Fauconnier and Turner demonstrate the centrality and ubiquity of conceptual blending in the everyday construction of novelty in language and cognition. Sinha (2005) also argues (following Vygotsky 1986 [1934]), that pretend play, far from involving a negation of the real social world, provides a field for its exploration and, in particular, for the exploration of the negotiability of norms and the construction of identity. Despite their dialectical emphasis on the mutability of the "radical" and the "social" imaginaries, both Castoriadis and Furth seem to reproduce in their accounts the dualism, fundamental to the Western intellectual tradition, between the individual and the social, seeing the former as both the condition and the antithesis of the latter. I remarked above on the neo-Kantian structure of Castoriadis' argument against the reducibility of the social imaginary to individual representations. Perhaps this argument appeals to Furth, an eminent Piagetian, precisely because it is analogous to Piaget's distinction between the Kant-inspired "epistemic subject," with its necessarily universal developmental stages, and the actual, historical, culturally and inter-individually variable psychological subject. Castoriadis, Furth and Piaget all follow Kant in considering the proper object of science to be not the messy, empirical and historically specific subject, but the transcendent subject that grounds all possible cultural modes of subjectivity.

This is not the place to explore an alternative account of human cognitive, linguistic, and communicative development. It is possible, however, to sketch some key features of such an alternative. First, the notion of "object" needs to be recovered from the anonymity of abstraction, whether in its role as the "general equivalent" of traditional epistemology, or in its Freudian guise as a mere screen for the projection of libidinous impulses. A more adequate conception of the object, and its role in development, addresses the social significations that are materially instantiated in its use-values (Sinha 1988, 2005; Sinha and Rodrigues 2008). Second, the constitution of subjectivity in language, discourse and narrative needs to be conceptualized as part of, and not merely a consequence of, the process of acquisition and development of language (Bruner 1990; Sinha 2000). Third, and perhaps most fundamentally in relation to the theories of Castoriadis and Furth, the separation between the "primitive," "individual" radical or root imaginary, and the "developed" social imaginary, needs to be challenged with the recognition that Piaget's "semiotic function" is social from the very beginning.

The development of the semiotic function is not, at any stage, a purely intra-individual affair. The discovery and exploration of meaning (and of the acts that constitute meaningful communication) involves participation in normatively framed intersubjective and "inter-objective" engagements. It is this framing, not an "in itself" quality of signs, or an intrinsic distinction between signifier and signified, that lends to certain actions the status of "counting as" acts of meaning (Bruner 1990; Searle 1995). Thus, the radical imaginary is the social imaginary, the foundational source not only of the Vygotskian semiotic mediation of individual cognition, but also of the construction of all social institutions and social objects.

Such an alternative account of human development is both necessary and possible, and its construction could contribute to both a theoretical and a practical emancipation of imaginative reason from the Objectivist straitjacket of logocentric, univocal rationality that currently constrains and discursively "represses" it. Furth, as we have seen, regards "repression" (that is, the repression of the imaginary) as being both a psychological and social process. He remarks cryptically:
Personal repression was described in Freudian terms as the conservation of the radical
imaginary in a person's psychological structure. But as far as this becomes the structure to
which adult society is presently assimilated, it is clear that social repression in the Marxian
sense is already at work in that primary repression. Personal and social unconscious are in
fact two sides of the same human situation. (1990: 212)

Furth goes on to reject the possibility of "a utopian social situation that would have no
repression, no alienation nor false consciousness, even as there is no person without these
characteristics" (1990: 212). No doubt this latter, as a generality, is true. No doubt, either,
that it is a sentiment in tune with our time, when we have become wary of Utopias as a
result of historical experience of where attempts to realize them have actually led to.

The problem, however, is that Furth seems to locate the "danger" of Utopias exactly
where iconoclasts have always seen danger: in the imagination, and (presumably) particu-
larly in its destructive and aggressive aspect (perhaps here Furth is taking inspiration from
Melanie Klein as well as from Freud). Yet it is arguable (and has often been argued) that
the totalitarian nightmares that motivate Furth’s rejection of the utopian imagination are
grounded, not in the imaginary as such, but in the rationalization (bureaucratic, logocen-
tric, and univocal) of the social imaginary that so largely characterizes modern, Western
societies—including their dystopian nightmares as well as their utopian dreams.

If it is true (and I certainly don’t wish to quarrel with this) that reason is a bulwark of
sanity against the not-so-imaginary dangers posed by the resurgence of both national-
istic and religious ideologies of "imagined community" (Anderson 1991), it is also true that
Activist reason and its socio-technological concomitants have, while professing univer-
sality, systematically excluded, denied, and repressed the claims of human communities
that "fail" to live up to its own image of what it is to be rational and civilized. None of
us, either, can fail to be aware of the danger in which the unremitting exploitation of
the natural world places our, and other, species.

There is a temptation to say that "rationality" is part of the problem, not the solution.
We need not, however succumb to this temptation, if we are able to recognize that the
problem with the dominant mode of rationality lies not so much in its internal normative
machinery, as in the exclusions that, in the guise of Objectivism, it exercises on the claims
of imagination, empathy, embodiment and community. To reassert the ethical, social and
political primacy of these claims is not to indulge a Utopian fantasy. It is a matter of sur-
vival in our current, global historical predicament.

References

Jakobson, R. 1956. "Two Aspects of Language and Two Types of Aphasic Disturbance." In Funda-
Chicago, IL: Chicago University Press.
Lakoff, G. 1987. Women, Fire and Dangerous Things: What Categories Reveal about the Mind. Chi-
ago, IL: Chicago University Press.
Lakoff, G. and M. Johnson. 1999. Philosophy in the Flesh: The Embodied Mind and Its Challenge to
London: Lawrence and Wishart.
Olson, D. 1977. "From Utterance to Text: The Bias of Language in Speech and Writing." Harvard
In Thinking: Readings in Cognitive Science, edited by R.N. Johnson-Laird and P.C. Wason,
212–222. Cambridge: Cambridge University Press.
Marková, 113–150. Chichester: John Wiley and Sons.
vard University Press.
———. 1993. "On Representing and Referring." In Conceptualizations and Mental Processing in
Gruyter.
———. 2000. "Culture, Language and the Emergence of Subjectivity." Culture and Psychology 6:
197–207.
University Press.
Imagination," In The Shared Mind: Perspectives on Intersubjectivity, edited by J. Zlatev, T.
The Nature of Narrative:
Schemes, Genes, Memes, Dreams and Screams!

Rukmini Bhaya Nair

Introduction

Perhaps appropriately for a paper that has religious narrative cognition as its theme, but inappropriately for an academic presentation, I want to risk introducing my subject here with a confession—pecavi. The confession I have is simple. It is that, in addition to its irritatingly long title, marked by such an awful excess of rhyme, my paper sins against what may be thought of as a fundamental ethical imperative in narrative. It fails to present a story with a clearly demarcated beginning and a quasi-moral ending that would satisfactorily clinch my own argument. In this respect, it appears to contradict the very thesis that I earlier outlined with naïve conviction in my book Narrative Gravity (2002)—namely, that narrative constitutes a well-attested species of "proto-" or "natural theory." There, I argued that:

Cognitively, narrative seems to have been designed as a evolutionary mechanism to probe experience and create competing theories about the world, especially the world of emotional experience, which is so crucial to cultural survival. What narratives do is provide us with relatively low-cost "theoretical" means of taking mental risks. Consider, for example, our physiological reactions when we read ghost-stories or adventure fiction. Our palms sweat, our pulse-rates shoot up and our throats go dry, even as we "know" that the words on the page are pure make-believe. We don't actually have to go and climb that cliff or love that bounder in order to realize the dangers and aches inherent in these situations. Just imagine, then, how infinitely useful the "lazy machine" of fiction is: it extracts intellectual labour from us while giving us the illusion of enjoying our leisure. (2002, 343–344)

1. This Latin tag has a particular resonance in the colonial/postcolonial Indian context owing to a widely disseminated historical narrative that attaches to it. It is reported that when Sir Charles Napier conquered the territory of Sind in 1843, he sent a one-word message to headquarters: "Pecavi" which translates as "I have sinned." While sources tell us that the pun in question only appeared in the magazine Punch a full three years after Napier's conquest of Sind, this fact has not prevented the Pecavi story circulating rigorously as a "true" meme in the imperial narrative ever since (Morthouse 1983, 16–17).