floyd merrell

# Entangling Forms

Within Semiosic Processes

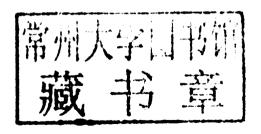
SCC

**DE GRUYTER** MOUTON

# **Entangling Forms**

Within Semiosic Processes

By floyd merrell



De Gruyter Mouton

ISBN 978-3-11-024557-8 e-ISBN 978-3-11-024558-5 ISSN 1867-0873

Library of Congress Cataloging-in-Publication Data

Merrell, Floyd, 1937-

Entangling forms: within semiosic processes / by Floyd Merrell.

p. cm. – (Semiotics, communication and cognition; 5) Includes bibliographical references and index.

ISBN 978-3-11-024557-8 (alk. paper)

1. Semiotics. 2. Signs and symbols. 3. Language and langua-

ges – Philosophy. 4. Logic. I. Title. P99.M3993 2010

302.2-dc22

2010029496

Bibliographic information published by the Deutsche Nationalbibliothek

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available in the Internet at http://dnb.d-nb.de.

© 2010 Walter de Gruyter GmbH & Co. KG, Berlin/New York

Cover design: Martin Zech, Bremen Typesetting: Asco Typesetters, Hong Kong Printing: Hubert & Co. GmbH & Co. KG, Göttingen • Printed on acid-free paper

Printed in Germany www.degruyter.com

#### List of abbreviations

- OAH = Object, Act, and/or Happening. A sign (representamen) interacts with its respective semiotic OAH (in Peirce studies customarily called the sign's object) during which process the OAH becomes the sign's Other, and both sign and OAH are mediated by the sign's interpretant (interpretation through co-participation of the sign and its interpreter). Thus there are three components to the fully developed sign.
- CCC = Contradictory Complementary Coalescence, or Contradictorily Complementarily Coalescent. Signs, as well as imaginary mental worlds and the physical world, are intricately interconnected, such that they complement one another, even though they might otherwise have been conceived as contradictory, and they converge toward and merge with one another by way of coalescent processing.
- *i-i-i-* = Interdependency, Interaction, Interrelatedness, or Interdependently, Interactively, Interrelated. Signs are, as possibilities, interdependent; as possibilities having become actualized they are interactive; and as navigators within the semiosic process they are complexly, divergently, and convergently interrelated (Peirce CP 6.272–86).
- BSO = The concept that what is, is becoming something other than what it was becoming. In a word: process (of the nature of C.S. Peirce's theory of 'continuity') (Peirce CP 6.102–185).
- EZ = Zero ('nothingness', 'emptiness') conjoined with the *empty set* of 'set theory' (silence, a blank page). It is a matter of 'pre-language', or 'pre-semiotic', as purely *possible possibilities*, before any signifying process has begun emerging. It is comparable to what C.S. Peirce labeled 'nothingness' (Peirce CP 6.189-222).
- LW = Living World (the macro-level, empirical 'physical world', and its depiction as a 'semiotic world').
- QW = Quantum World (the micro-level counterpart to LW).

<sup>1.</sup> These abbreviated terms have been years in the making, chiefly out of: (1) my scholarly beginnings in chemistry and physics (BA 1963) and later studies in philosophy of science (especially since 1968), (2) my reading about, and diverse concrete living experiences within, Latin American cultural processes (since 1959, and after beginning my graduate studies leading to a PhD [1973] in Iberoamerican Studies), (3) my immersion in Charles S. Peirce's writings (since 1973), and (4) my more recent interest in Buddhist philosophy (beginning around 1983). I abbreviate these terms for purposes of economy, hopefully without creating undue reading difficulties.

#### **Preface**

During the last couple of decades I've occasionally pondered over the interrelations between physicist John Archibald Wheeler's interpretation of Niels Bohr's concept of the quantum world and Charles Sanders Peirce's process philosophy. I've struggled with the premonition that there are connections between Wheeler and Peirce, especially after I ran across Wheeler's essay, 'Bits, Quanta, Meaning' (1984), where he writes that quantum theory is a matter of 'information' becoming 'reality'. I had a vague feeling that Wheeler was onto something of semiotic nature, and that whatever it might be, it was germane to Peirce's process philosophy. Thomas Sebeok, who had occasionally made allusions to some of Wheeler's ideas in his own books and articles, encouraged me. So I pushed on, gropingly, following a vague, sinuous path that eventually led to this modest inquiry.

This book is basically Peircean in orientation. But it is Peircean in spirit rather than a close reading of Peirce texts. I attempt to write about Peirce's philosophy in view of much contemporary thought, especially in regard to (1) the North American pragmatic tradition insofar as it bears on Peirce, (2) a scattering of ideas from philosophy of mathematics, logic and science, (3) notions of *interconnectedness*, *complementarity*, and *co-participation* between the knowing subject and the known, which have emerged in several branches of physics, chemistry and biology, and (4) certain facets of Buddhist philosophy regarding these same notions. This places Peirce in a new light, which might tend to grate on the minds of those who prefer to focus on the letter of Peirce. But, I would hope, it will provoke new questions and elicit possible responses from those who are in search of alternate means for understanding our increasingly complex world.

This inquiry, then, is the yield of my meditations on semiotics, to be specific Charles S. Peirce's semiotics. At the same time, part of my mind has remained attuned to a diversity of disciplines with which Peirce, polymathic Peirce, was familiar during his times, plus other disciplines that didn't come into existence until after he passed away. I hardly need write that much has transpired since Peirce's times in all the disciplines I draw from, and I attempt to address these changes insofar as I am capable. Consequently, this inquiry should also be placed within the context of current semiotic studies along Peircean lines, largely in the tradition originally set out by Thomas A. Sebeok (1976, 1994,

2001).<sup>2</sup> Those readers experienced in this tradition will have no trouble following the train of thought in the pages that follow. As an aid to a reading of these pages by those who have not (yet) immersed themselves in Peirce and semiotics, I offer the above list of abbreviations, which serve as signposts sending out feelers in all directions such that the reading moves in nonlinear fashion, from each chapter back to preceding readings and forward to future readings.

Briefly to give a hint of what is to come, Chapter One offers tentative qualification of key terms and phrases that will frequently appear in the chapters that follow. Chapter Two begins with contemplation of what Peirce calls the play of musement by focusing on the present, or Peirce's category Firstness, which is what it is, irrespective of bearings in the past and projections into the future. Peirce's categories, three in number, are thoroughly processual. They consist of interdependent Firstness (what is becoming), interactive Secondness (what is becoming with respect to some other), and interrelated ideas, thoughts, meanings, and interpretations, or Thirdness (what is becoming as it mediates Firstness and Secondness in the same way that it mediates itself with them). Thus, we shall note. Secondness and Thirdness cannot help surfacing, as the nature of Firstness pours forth.<sup>3</sup> Chapter Three bears on Peirce's processual, plurimorphic, concept of semiosis in conjunction with the objects, acts, and happenings of everyday living, which vary with each biological species, each human community, and each human individual. It is an attempt to account for the becoming of everything such that it is always becoming something other than what it was becoming. In this respect, the scope of Peirce's pragmatic philosophy overflows the limited confines of disciplines as they are ordinarily conceived.

Chapter Four qualifies Peirce's triadic concept of the sign through a presemiotic 'sign of possibility' I offer in the form of an image (Figures 1 and 1a), which will serve to guide this entire inquiry. Discussion of this image empha-

See especially, Brier (2008a), Chiasson (2001), Danesi (2007, with Sebeok 1999), Deely (1990, 2003), Eco (1976), Emmeche (1996), Engel-Tiercelin (1993), Esposito (1980), Gorlée (2004), Hausman (1993), Hoffmeyer (1996, 2008), Houser et al. (1997), Johansen (1993), Neumann (2003), Petrilli (2009, with Ponzio 2005), Ponzio (1990), Rosenthal (1994, 2000), Rotman (1987), Santaella (1995), Sheriff (1989), Jakob von Uexküll (1957) and Thure von Uexküll (1982, 1986, 1987, 1989), and for a survey, Cobley (2009). Of course the list could be expanded trigonometrically, and I apologize to those scholars I have omitted.

<sup>3.</sup> Vincent Colapietro puts it nicely when he writes that the categories are 'best viewed as recursive heuristic conceptions. To describe them as *heuristic* implies that they are first and foremost guides and goads to inquiry. . . . [They] are not procrustean beds; they are not a priori molds into which the *facts* must be poured. They are . . . relevant guidelines for . . . fruitful [interpretation]' (1995: 29, 30).

sizes the notion of bodymind, and mind's and language's incapacity adequately to think and articulate bodymind knowing, which is in the process of emerging from pre-signness to enter into the flux and flow of iconic, indexical and symbolic signs. Chapter Five introduces Peirce's concept of abduction, and what Peirce calls the 'pragmatic maxim'. These considerations bear witness to the importance of vagueness and generality, inconsistency and incompleteness, and overdetermination and underdetermination, all of which highlight the need for a processual alternative to classical logic and reason. Elucidation of this theme affords a glimpse of nonlinear, timespace contextualized feeling, sensing, perceiving, conceiving, and speaking and writing. Chapter Six introduces Niels Bohr's Complementarity Principle, and with it, Wheeler's coparticipatory universe, both of which emerge as keys toward understanding the nature of semiosis within concrete everyday living.

Chapter Seven suggests that the *semiosic* process of becoming carries the implication that everything is mutually *co-participating*, thus perpetuating that very process of becoming. The watchword in regard to this process is the *inter-connectedness* of signs, worlds, meanings, and sign makers and takers. *Inter-connectedness* calls for particular focus on (1) the process of *contradictory complementary coalescence*, and (2) *semiosic entanglement*, which lie behind the notion of *co-participation*. Development of these topics evokes further words on what Peirce alludes to as 'objective idealism', and Bohr's *complementarity*. Chapter Eight interrelates *semiosic entanglement* with Peirce's 'objective idealism' via a couple of Wheeler's 'thought experiments' that serve further to illustrate the *co-participatory*, *self-organizing* nature of signs and the world as we perceive and conceive them through our communicative channels.

Chapter Nine illustrates how the concept of bodymind becomes effectively delineated in regard to completeness and consistency, vagueness and generality, ongoing process and fixed product, and overdetermination and underdetermination, and it reveals how pragmatism, specifically of Peircean origin, implies various paradoxes of age-old vintage. Chapter Ten offers diverse allusions, through a series of figures, to multiple renditions of temporality and spatiality (as timespace contexts) and their relevance for a Peircean concept of semiosis.

<sup>4.</sup> My allusions to 'bodymind knowing' must acknowledge a debt to those scholars who criticize linear, hegemonic Western 'alphabetic writing', the likes of Jack Goody (1977, 1986, 2000), Robert Logan (1986) and Leonard Shlain (1998); I am particularly beholden to Brian Rotman (1993, 2008), especially regarding his project to take 'God out of mathematics' and put the 'body back in', which serves to amplify the 'alphabet effect'.

These moves reveal the paradoxical complexity of the world's process, especially in view of the virtually infinite range of *possibilities*, regarding science, the arts, and concrete life situations, given their inherent vagueness and baffling ambiguities. Chapter Eleven extends certain implications of twentieth-century physics to the premises of this volume, especially in regard to *timespace contextuality*, past, present, and future. Two Peircean 'thought experiments' help provide (1) a sense of how timespace contextual processes perpetuate themselves, (2) a notion regarding how change and the emergence of novelty can come about through communication, and (3) a possible idea as to how spontaneity, improvisation, and creativity, all by way of *musement*, can begin in the first place.

Chapter Twelve offers further aspects of Peirce's triadic thinking, which include (1) introduction of the importance of 'imaginary' and 'complex numbers', (2) a 'thought experiment' exemplifying these mathematical concepts, and (3) Peirce's categories with respect to vagueness and generality. Ultimately, these considerations bear on the concept of complementarity as it is gradually becoming fleshed out. Chapter Thirteen turns more specifically to issues of Peirce's processual philosophy in view of his categories. This brings much of what has been suggested in previous chapters to bear on various imaginary semiotic situations, by way of two art works, Diego Velázquez's Las Meninas (1656) and Maurits C. Escher's Print Gallery (1956) in order to illustrate these complementary processes of becoming. Chapter Fourteen returns to musement, as the initiation of process, and to the universe of signs becoming signs, ourselves included as bodymind processes, with the aid of another Wheeler 'thought experiment' illustrating co-participation. Chapter Fifteen entails (1) further enigmatic words regarding the perplexing notion of 'emptiness' - which Peirce's calls 'nothingness', and (2) multiple allusions to the polysemeous nature of signs, given their complexly emerging and diverging timespace contexts. Illustration of polysemy comes by way of rhetorical devices, especially what I term 'portmanteau phenomena', and additional allusions to contradictory complementary coalescence.

Chapter Sixteen further qualifies the notion of polysemy and its particular portmanteau nature emerging from a fusion of vagueness and generality and the tension between inconsistency and incompleteness arising out of the over-determination and underdetermination of signs. And finally, Chapter Seventeen drills in on the nonlinear notions – which have surfaced repeatedly in the preceding chapters – of both-and and neither-nor processes, as the middle way between and through the bivalent either/or, which allows for the possibility of overdetermined and underdetermined, inconsistent and incomplete, and vague and general alternatives to the customary ideas of feeling and sensing, experi-

encing and perceiving, and conceiving and thinking and reasoning. An Appendix complements the seventeen chapters with additional words on the concept of *complementarity*.

#### Acknowledgments

Above all I owe a massive debt to Tom Sebeok for his support over the years of my oftentimes apparently questionable efforts. I wish to thank Myrdene Anderson for reading many manuscripts containing bits and pieces of what finally made up this volume. In fact, during research for this project, I've been fortunate enough to have enjoyed Myrdene's wise counsel, as well as that of many judicious students and colleagues here at Purdue University who have served to temper my vanities and soothe my despairing moments.

I thank the following for having over the past years invited me to teach three- to five-day intensive 'mini-seminars' on various topics found in this volume: Fernando Andacht, Montevideo, Uruguay (1992, 1994), Claudio Guerri, Buenos Aires, Argentina (1995), Rosa María Ravena, Rosario, Argentina (1995), Lúcia Santaella, Caxias do Sul, Brazil (1997), José Finol, Maracaibo, Venezuela (1998), Waldomiro José da Silva Filho, at Ilheus, Brazil, and Feira de Santana, Brazil (1999), Susan Petrilli and Augusto Ponzio, Bari, Italy (2000, 2006), Román Esqueda, Mexico City (2001, 2002), Eufrasio Prates, Brasília, Brazil (2002), Mauricio Zouein, Boa Vista, Brazil (2003), Geraldo Oliveira, XiqueXique, Brazil (2004), Adrián Gimate-Welch, Mexico City (2003, 2004), Zuraya Monroy Nasr, Mexico City (2005), Amarildo Trevisan, Santa Maria and Passo Fundo, Brazil (2006, 2007), and Carlos Caroso, Salvador, Brazil (2008). I also wish to thank Lúcia Santaella for inivitations to the Catholic University of São Paulo, Brazil to offer two-month seminars during May and June of each year from 1991 to 1999, and to Waldomiro José da Silva Filho at the Federal University of Bahia, Salvador, Brazil where I taught a two-month seminar in 2000. One might question the importance of a list of brief courses to this inquiry. They were indeed important, because they were intensive, I had lively, inquisitive audiences of graduate students and professors, and I was able to air out many of the ideas I was working with at the time.

My appreciation to John Deely, who once motivated me to write about Wheeler's influence on Sebeok, to Marcel Danesi for his ongoing encouragement, to D. Emily Hicks, whose kindred spirit of inquiry gave me a second wind at a time when I was almost ready to hang it up due to what I thought was terminal burn-out, to Steven Rosen whose work has frequently motivated me,

#### xiv Preface

to Dinda Gorlée, who has kept in touch with me better than I with her, and to João Queiroz for his cheerfully prodding me along in spite of my resistance. I wish also to thank Paul Cobley and Kalevi Kull for helping me see my way through the final draft of this volume.

Most of all, to Araceli, who has always been there.

## Contents

List of abbreviations	vii
Preface	ix
Chapter 1	
Introduction	1
Chapter 2	
The play of musement	19
Chapter 3	
From Nothing to One to Many: plurimorphity	29
Chapter 4	
Simply 'it'	41
Chapter 5	
What emerges from the unthinkable	66
Chapter 6	
Two worlds	80
Chapter 7	
We co-participate with what is becoming	96
Chapter 8	
An alternate view of the process	111
Chapter 9	
More on Peirce, and pragmatism	128
Chapter 10	
Process patterned through topology	144
Chapter 11	
How past, present, and future entangle living	165

#### vi Contents

Chapter 12	
Complexly entangled timespace	182
Chapter 13	
The tacit dimension again	194
Chapter 14	
From the mark of distinction's source	215
Chapter 15	
Neither here nor there nor now nor then	230
Chapter 16	
Signifying the form	242
Chapter 17	
The universe: a book to be read?	253
Appendix	
Otherwise thinking	261
References	273
Index	305

### Chapter 1 Introduction

#### **Preliminaries**

In this introduction I offer preliminary qualification of the key terms and phrases, from the List of Abbreviations, which frequently appear throughout the following chapters. Particular attention to these terms and phrases at the outset will facilitate a reading of this volume, though if you wish, you can go directly to Chapter 2. If you choose to do so, in capsule form the most prevalent abbreviated terms discussed in this introduction are: OAH = Object, Act, and/or Happening; CCC = Contradictory Complementary Coalescence; i-i-i- = Interdependency, Interaction, and Interrelatedness; and BSO = the idea that everything is always in the process of becoming something other than what it was becoming.

#### 1.1. Bodymind: a crucial topic that has never really had its day

If I may begin by paraphrasing Thomas H. Huxley, what we know is finite, and what we don't know is infinite.<sup>5</sup> We inhabit a minuscule islet of knowability in the midst of an illimitable ocean of inexplicability. The task set for every generation is to reclaim a bit more land with hopes that someone will always be around to plug the holes that appear in the dike. It would be nice if there were never any holes – if knowing were continuous, with no breaks. But if so, new knowing would come to a halt, for, without any – discontinuous, finite – holes, there could be no passage to the – continuous, infinite – sea of unknowing, which is the source of all possible knowing.

<sup>5.</sup> This notion is age-old, of course. In recent times it has been at the heart of process philosophy, especially that of Whitehead (1929, Malin 2001), and Peirce (Kauffman 2001, 2002), as we shall see throughout this essay. René Thom's (1975) topographic mathematical theory is at least indirectly relevant. According to Thom, change is continuous (of infinite variations) but punctuated by discontinuous, 'catastrophic' breaks, which entails conjunction of infinity and finitude. However, while we can contemplate the infinite continuum as topological and of logical form, when we think it and say it, we cannot help but do so in large part by way of finite categories and distinctions, differences that make a difference.

New knowing must start with the premonition that there are a few holes in what is known. There must be a tinge of dissonance, the sneaky feeling that things are a little out of whack, that there is something awry. In other words, there must be readiness for some sort of surprise: an object, act, and/or happening (OAH) that doesn't quite meet with expectations. When a surprise springs forth, we usually tend to perk up and take notice. Yet, we need not always be surprised that we often aren't surprised when we should be surprised: there should also be a little dose of skepticism also. It occasionally pays to proceed with jaded know-it-all surety. That way, we tend to cling to what we (think we) know. But at the same time, we should guard against dogmatic certainty, which can easily close the door to the possibility of future knowing. Still, as Yogi Berra once quipped, the 'future ain't what it used to be'. So, a little skepticism regarding what's in store for us is healthy, for there should be some doubt lurking behind what we (think we) know. Hence we should meet most, but by no means all, our surprises with wide-eyed innocence, with child-like curiosity. Putting these three postures together -(1) readiness for surprise, (2) a dose of skepticism, and (3) innocent curiosity – reveals a contradictory complementary coalescence (CCC) of concrete corporeal experience accompanied by mental fabrications, many or perhaps most of them abstract. Allow me to attempt at least a preliminary qualification of this italicized phrase, contradictory complementary coalescence.

Throughout life, we develop expectations as a consequence of past experience regarding what should transpire in the course of future experience. But if we are to a degree wary of our experience, since it can be at times deceptive, we place our trust in what our mind tells us (for example, poke a stick in water and it doesn't actually bend, because we know from practical experience and with scientific certainty that water and air diffract light differently). And since the unexpected, occasionally of the most bizarre and apparently outlandish sort, emerges from time to time, we must re-evaluate what our cogitating mind tells us and look at what our intuitive, contemplative body-mind tells us. This is not a matter of mind over body or vice versa, but rather, the *complementary* – often apparently *contradictory* – *coalescence* of mind and body. It involves *bodymind*. The conjugate term 'bodymind', of course, is nothing new. It has appeared here and there, especially in the social sciences, for a few decades. I use it as part of my own feeble effort to avoid classical dichotomies insofar as possible.

Bodymind is more than simply what body does – body-doing – juxtaposed with what the mind does – mind-doing – and it is more than simply a fusion of what they do as some sort of bodymind mixture. This 'more than' entails both body-doing and mind-doing, and in the same breath, it is more; it is neither

merely the one *nor* the other, but something else emerging from the 'inbetweenness', the artificial 'boundary' presumably separating them; it is something that is new and different. It is the *CCC* of the two forms of doing and of the two words, 'body' and 'mind', fused into 'bodymind'. I would like to think that bodymind, at least within the context of the word's use in this essay, pays due respect to Maurice Merleau-Ponty's (1962) own endeavor to avoid customary dichotomies. If dualisms the likes of mind/body, mind/world, and language/world cannot be discarded outright, refusal to abide by their common usage can nevertheless bring us to perceive and conceive ourselves, others, and our physical world, in a different light.

Having said this much, one of my aims in this inquiry is to illustrate the importance of bodymind doing and meaning through socio-proprioceptive-somatic-kinesthetic *interdependency*, *interrelatedness* and *interaction* (*i-i-i-*) between ourselves and (1) our inner dialogue, (2) our dialogue with others, and (3) our dialogue with our physical world.<sup>6</sup> When I write 'dialogue', I by no means limit my dialogic imagination to words, whether spoken or written or thought. In addition to language, 'dialogue' involves basic signs of sound, touch, taste, smell, and sight, much in the sense of Antonio Damasio (1994, 2000). And when I write 'socio-proprioceptive-somatic-kinesthetic *interdependency*, *interrelatedness* and *interaction* '(*i-i-i-*), I allude to our *complementarity* and our *co-participation* with all signs and all signs with us.<sup>7</sup> For, in the final analysis, we are signs ourselves, signs among signs.

We ordinarily perceive and conceive a world populated by *objects*, *acts* and *happenings* (OAHs). But there is something that precedes perception and conception: feelings, emotions, intuitions, and inordinately vague sensations. During moments of raw bodymind feeling, when mind is no more than *tacitly*, or *subsidiarily*, involved, what is *here*, *now*, is no more than mere feeling. It *is* what it is, in that particular *here* and *now*. It is unspecified and unclassified, with neither qualifying label nor particular attributes. It just is (what Peirce calls category Firstness). Then in a split second the feeling becomes sensation, and perception emerges. Now what there is, an OAH of some sort of *other*,

<sup>6.</sup> Regarding interdependence interrelatedness and interaction, I take a cue from what Peirce calls 'interaffectation' (CP 6.128-31), of 'intrinsic qualities of feeling' (CP 6.132-34) and of 'ideas' (CP 6.135-42), all of which is 'interconnected' (CP 6.142), forming the basis of 'synechism', or 'continuity' (CP 6.143).

<sup>7.</sup> At this juncture I should point out that while the italicized terms, 'interdependent', 'interactive', and 'interrelated', are not exactly Peircean in origin, nevertheless, as I have argued in detail elsewhere, citing derivation of these terms in Buddhist philosophy and quantum theory, I believe they effectively portray the spirit of Peirce regarding his general concept of *semiosis* (see merrell 2000a, 2002, 2003).

#### 4 Chapter 1

becomes perceived as so-and-so. It becomes a particular something instead of something else (Peirce's Secondness). In the next moment, awareness is emerging that the OAH can be conceived as so-and-so because it apparently has such-and-such a set of characteristics that qualify it (Peirce's Thirdness). Mind, conjoined with body in the form of bodymind, is now processing signs in their fullest. During this process, what precedes what? Does OAH precede both body and mind, and if so, do we not have an objectivist 'view as if from no-where'? (Nagel 1986). Does body precede any and all qualification of OAH in good materialist or physicalist fashion? Or does mind precede what there is as some sort of Grand Adjudicator? An answer to final three of these questions, to put it bluntly if I may, is: No, No, and No.

#### 1.2. Flowing categories of the world, thought, mind, and signs

Then where, exactly, am I coming from? As a beginning, I would like to suggest that we contemplate Peirce's notion of the *categories* of mind, the world, and

<sup>8.</sup> I write 'such-and-such a set of characteristics' with certain trepidation, since the very idea of 'characteristics' brings the accompanying notion of fixed categories to mind. However, following George Lakoff (1987), I would rather use the term 'radial categories', that involve 'core tendencies' - 'tendencies', and by no means compulsion or imperatives - that allow for fuzziness, vagueness, variations of the category in question. This term evokes Eleanor Rosch's 'prototype theory' (1977, 1978, Rosch et al. 1976). A 'prototype' is, loosely speaking, a category. And it is much more. It allows us to conceive of ourselves and our social and physical worlds, by way of 'styles of reasoning' (Hacking 1985), that are not objective features of these worlds, but imaginative cognitive creations. If I say 'There's a bird in that bush', the category bird will likely have been evoked in your mind. That's the 'core tendency'. But your preconditioned 'style of reasoning', following certain presuppositions and prejudices, tell you that the bird in question is likely not a duck or a goose or some other class of water fowl, that it is likely not an eagle or a turkey vulture or an Andean condor. Most likely it is a sparrow, a starlet, a cardinal, a finch, and so on. That is, it is a bird of relatively small size and common to the aviary that are usually found in bushes. Certain prototypes may be innate, but for sure, the vast majority of them are internalized through cultural upbringing, formal education, and personal experiences, such that they have become habituated, entrenched ways of breaking up and mutilating and classifying the world in such a manner that it can be made intelligible. So how do new variations of a prototype come about? As I shall attempt to illustrate below, by going 'beyond the information given' (Bruner 1957), beyond the customary prototype where the classical logical Excluded-Middle Principle would otherwise have exercised its force, to what I term the 'Included-Middle', which makes its play and gives rise to the emergence of something hitherto unacknowledged and unexpected.

thought. I must point out, however, that I evoke Peirce's *categories* not as hard-rock fixed entities or concepts – as is too often the assumption – but as flexible tendencies, as heuristic devices, that can aid us in getting a feel for the process.

During the coming and going of our concrete everyday experiences, we interdepend on, we interrelate and interact with, and we reflect upon, myriad OAHs: my car, this book, that building, a brief conversation on the sidewalk, a newspaper article, a game of touch football in the park, and so on. I add the expression 'reflect upon', because when we first interact with the OAHs in our environment, we do not initially encounter them in a reflective way, but in a pre-reflective manner. That is, our bodies respond to certain vague aspects of the world, but these aspects are not yet OAHs elevated to conscious levels as signs of something, for us, in some respect or other. In other words, at the pre-reflective level, OAHs do not (yet) exist as items of our experience. This, once again, raises the question: What precedes what with respect to bodymind, OAHs, and the world?

In order address this question, further account of the categories must be forthcoming. Firstness is what it is, without any interrelationship with any other. It is self-contained, self-reflexive, and self-sufficient. Secondness is what it is, insofar as it enters into interrelationship with some other, interacting with it in the sense of something here and something else there, the first something acting as a possible sign and the second something acting as a possible OAH in interaction with the sign. Thirdness is what it is, in the respect that it brings Firstness and Secondness together by mediating them, and at the same time it brings itself mediatingly into interaction with them in the same way they are brought into interaction with each other (Peirce CP 2.227–390). Mention of the categories seems to belie what I said in footnote eight regarding 'prototypes'. However, like prototypes, the categories have no clear and distinct boundaries, nor are they static. They slide over, under, and merge into one another, which is to say that their boundaries are slippery and vague.

This notion of somewhat vague categories has a bearing on: (1) signs and their respective OAHs, which are never absolutely stable, but always in the process of becoming something other than what they were becoming (BSO) and, (2) the nature of interdependence, interrelatedness and interaction (i-i-i-)

<sup>9.</sup> Sandra Rosenthal (2001) considers Firstness 'the most neglected of his categories' due to the fact that (1) since it is elusive, and vague, it is considered relatively unimportant with respect to the other categories, and (2) because of its characterization as 'inherently inconsistent'. However, as we shall note in this essay, 'inconsistency' is one of the principal actors in the *semiosic* drama of the universe, and should by no means be avoided.