

# Schemas Theory

<http://schematheory.net>

## Part Four

# Emergent Meta-Schemas

SchemasTheoryDraft\_D4c\_20140625kdp09a.pptx

SchemasTheoryDraft\_D4c\_20140830kdp09a\_retro\_to\_v05a.pptx

# Systems Science Foundations for Systems Engineering Practice

Kent Palmer

[kent@palmer.name](mailto:kent@palmer.name)

714-633-9508

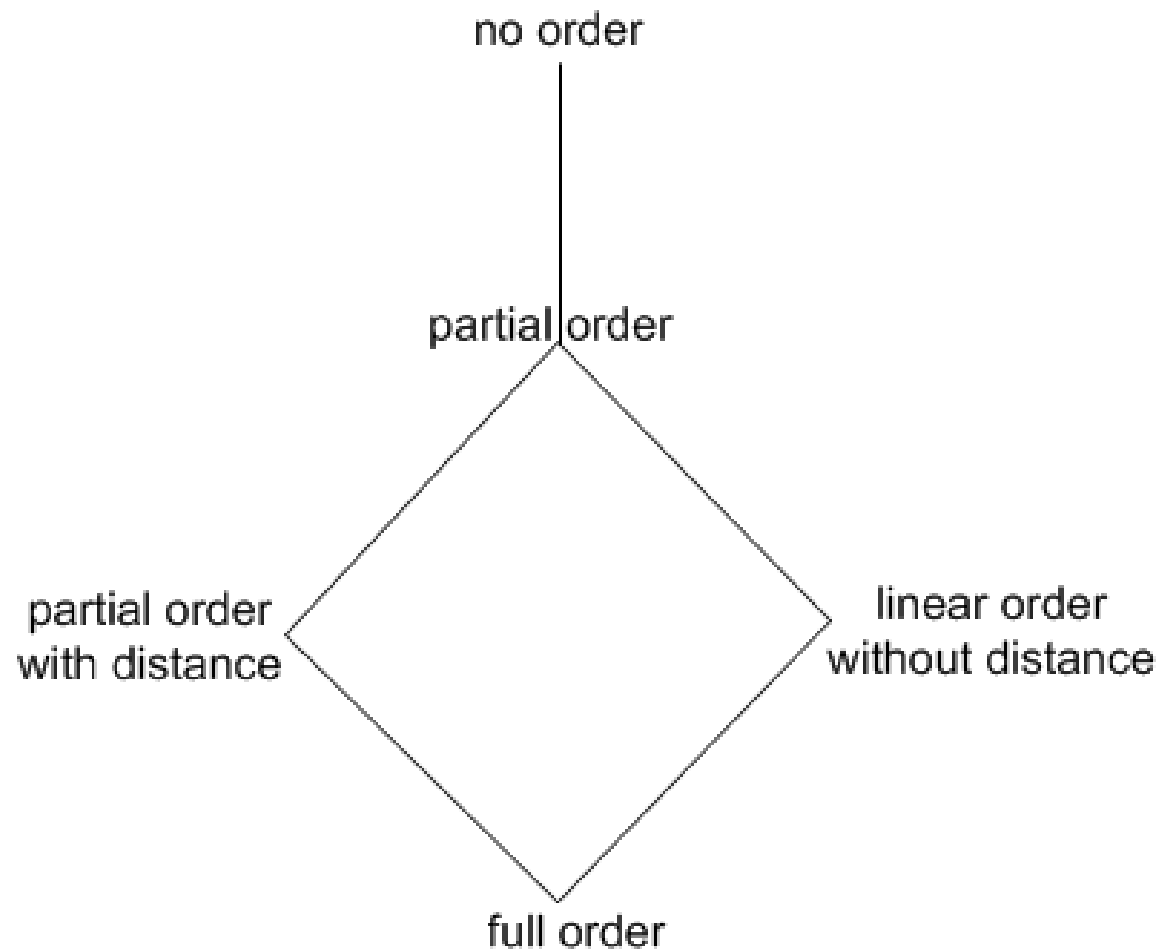
<http://kentpalmer.name>

<http://kdp.me>

Copyright 2014 Kent Palmer. All rights reserved. Not for distribution.

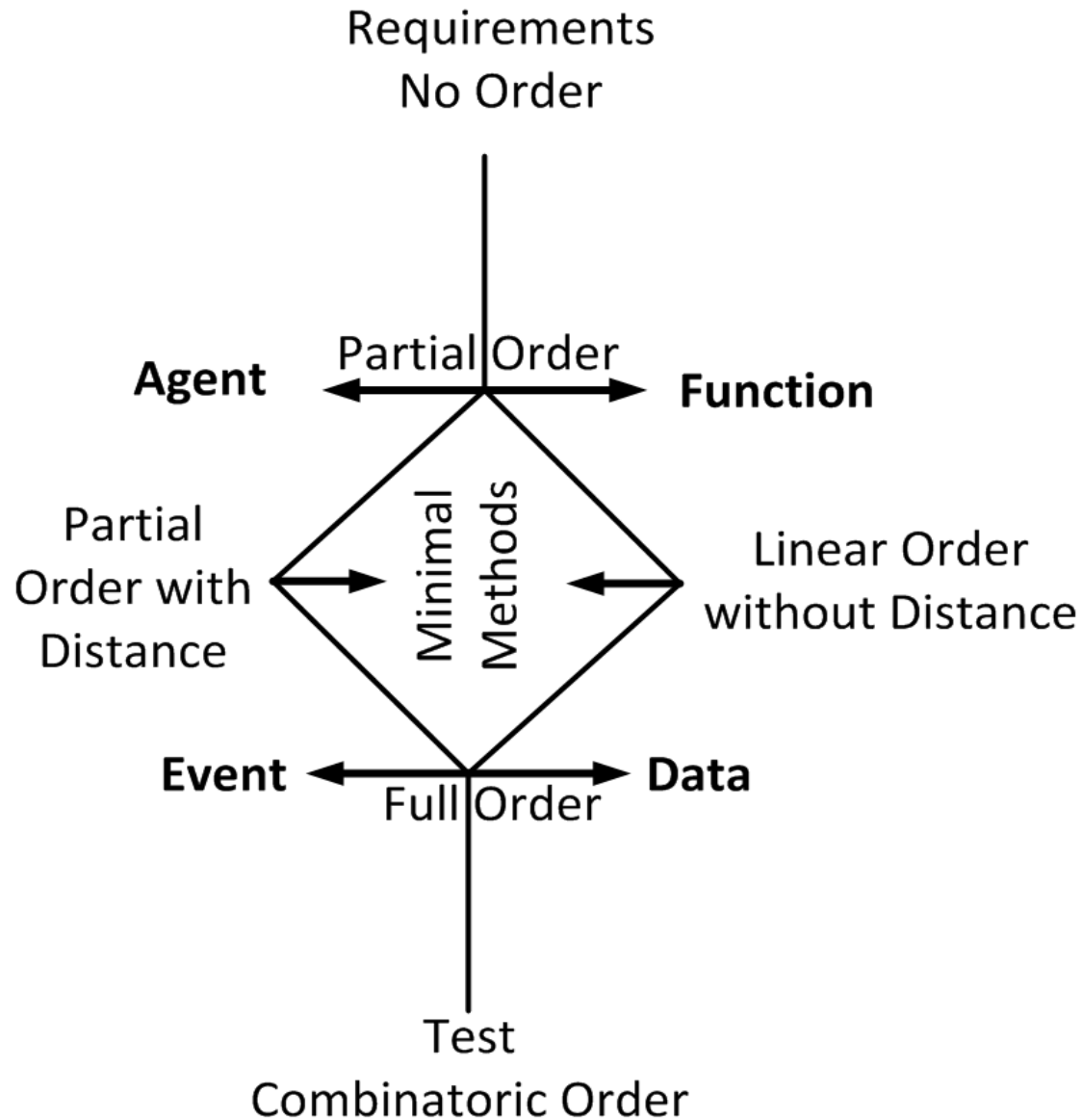
# Where we have been

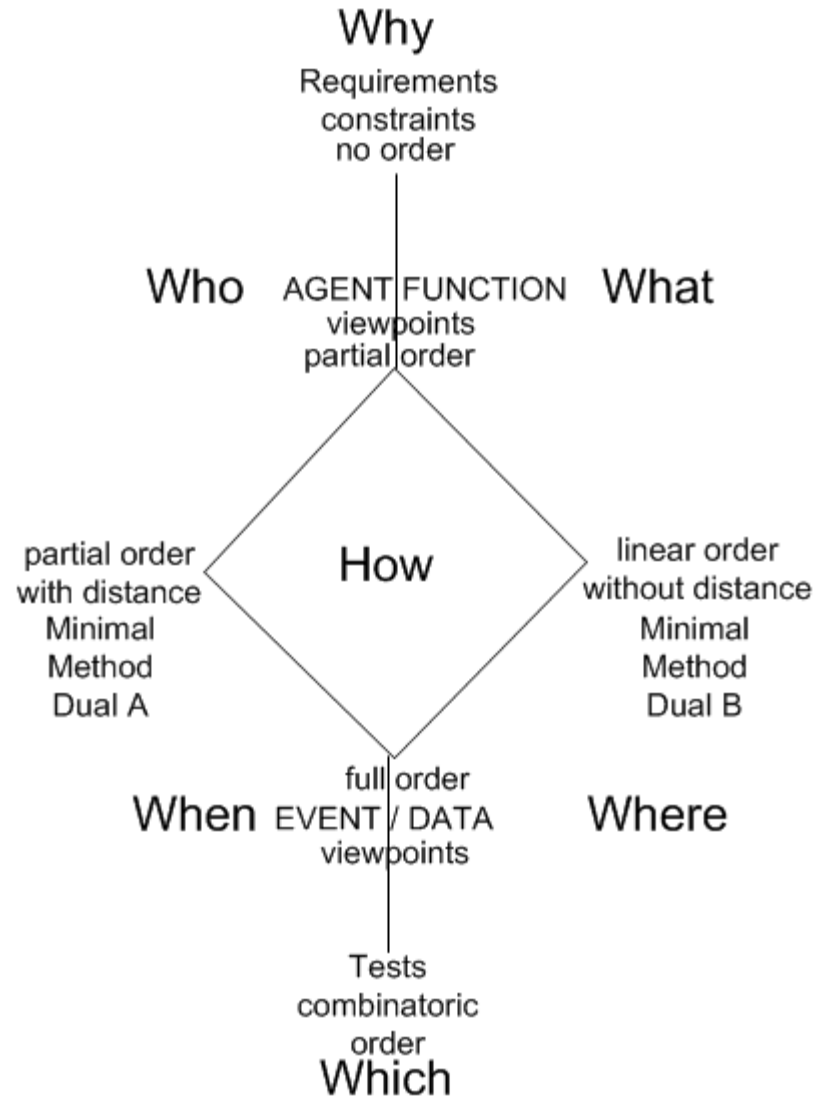
- Principles
- Schemas
- Foundational Mathematical Categories



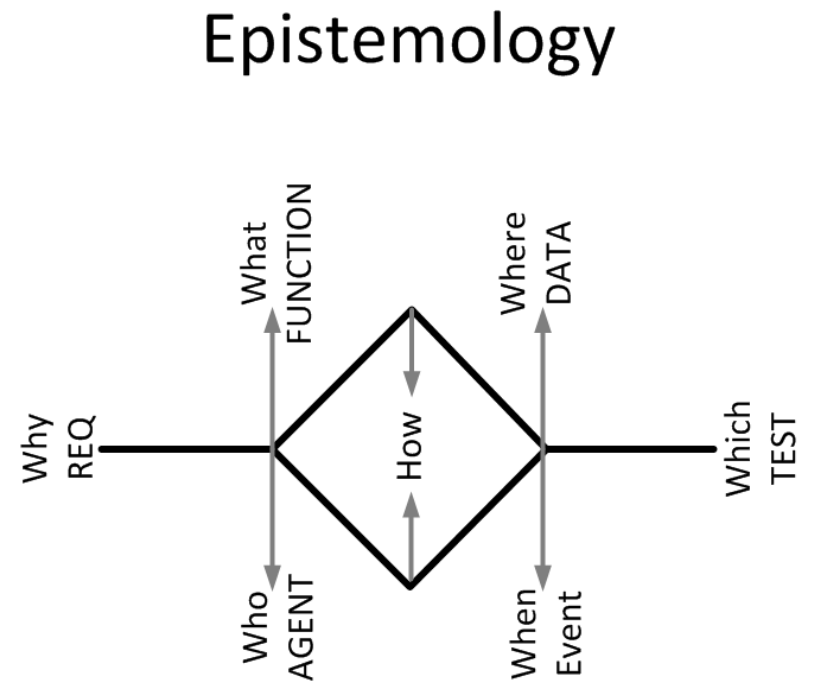
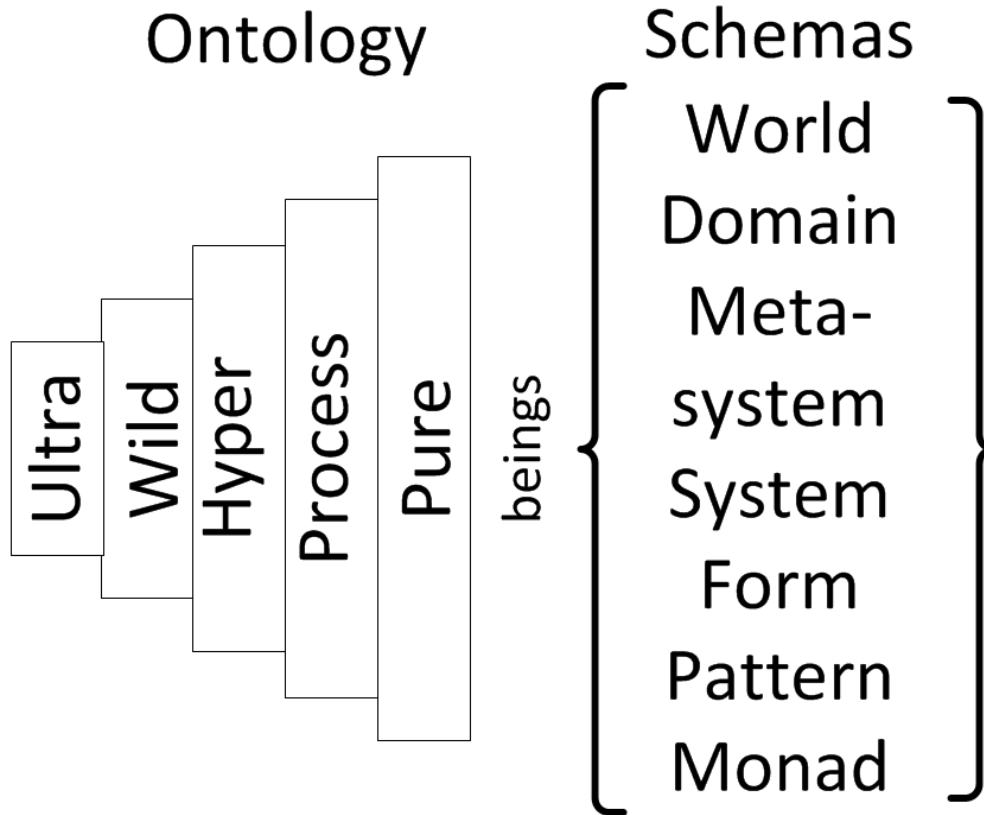
## G. Klir's Methodological Distinctions

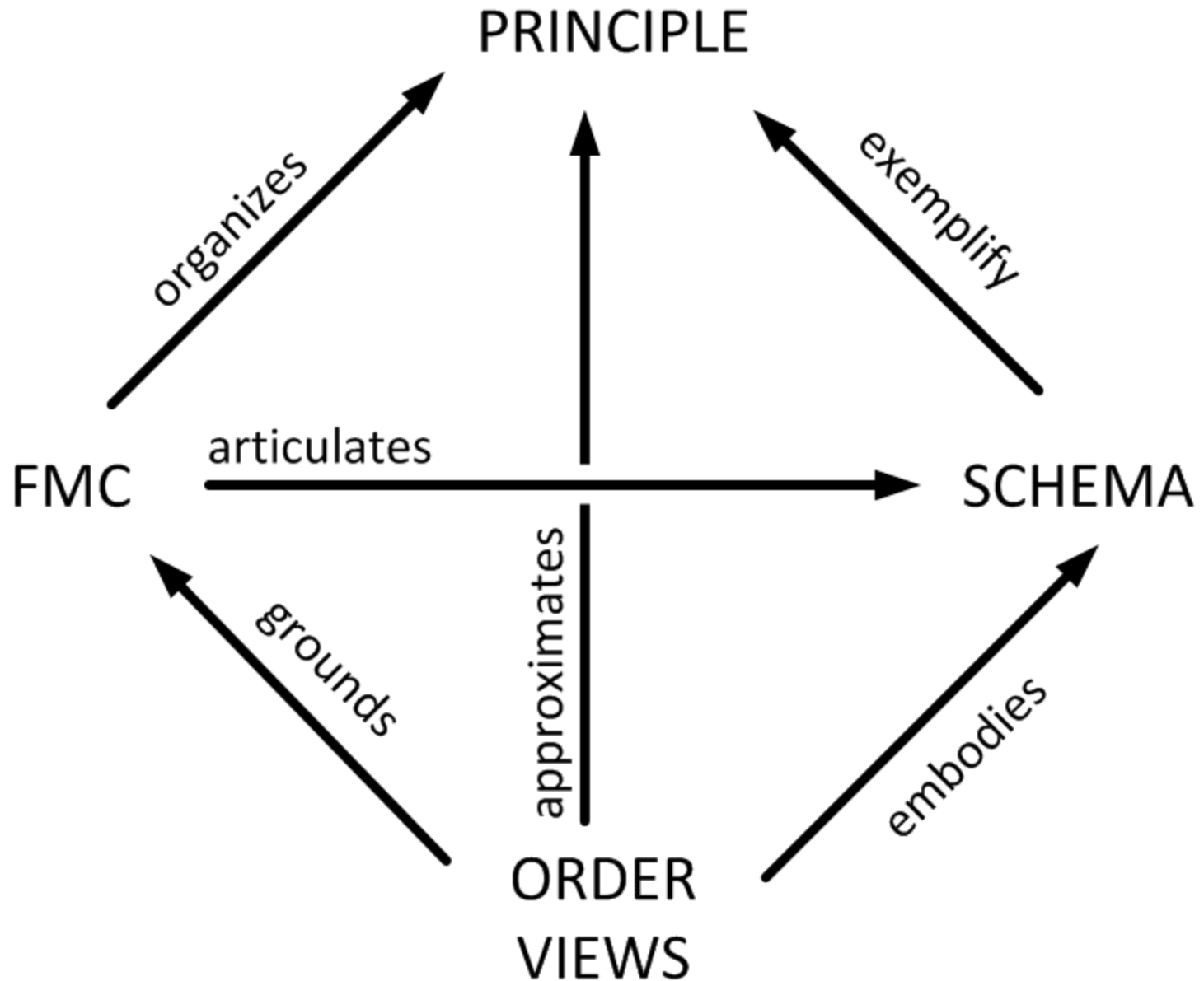
# Methodological Distinctions





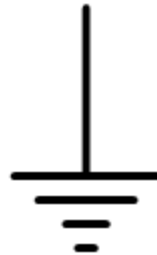
G. Klir's Methodological Distinctions and the relation between the Viewpoints and Minimal Method Duals



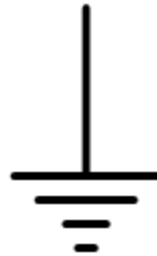




# Order Hierarchies

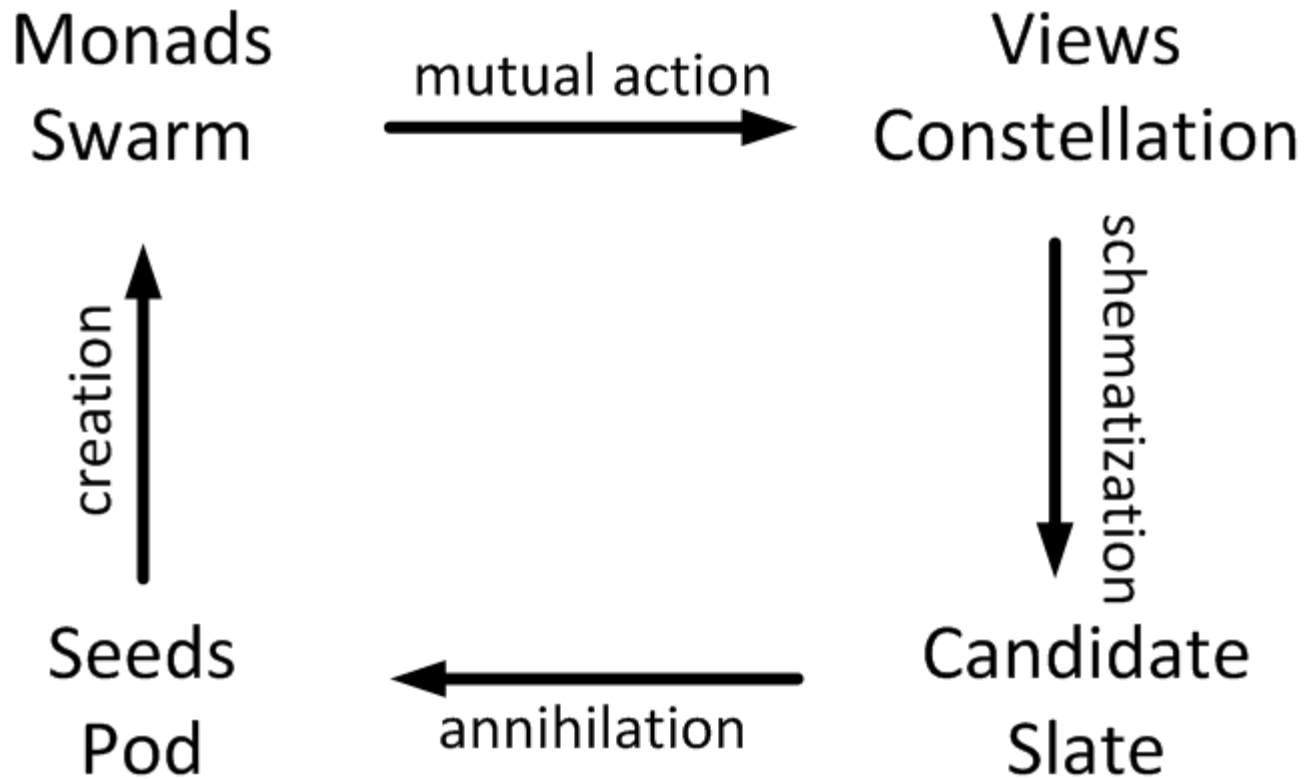


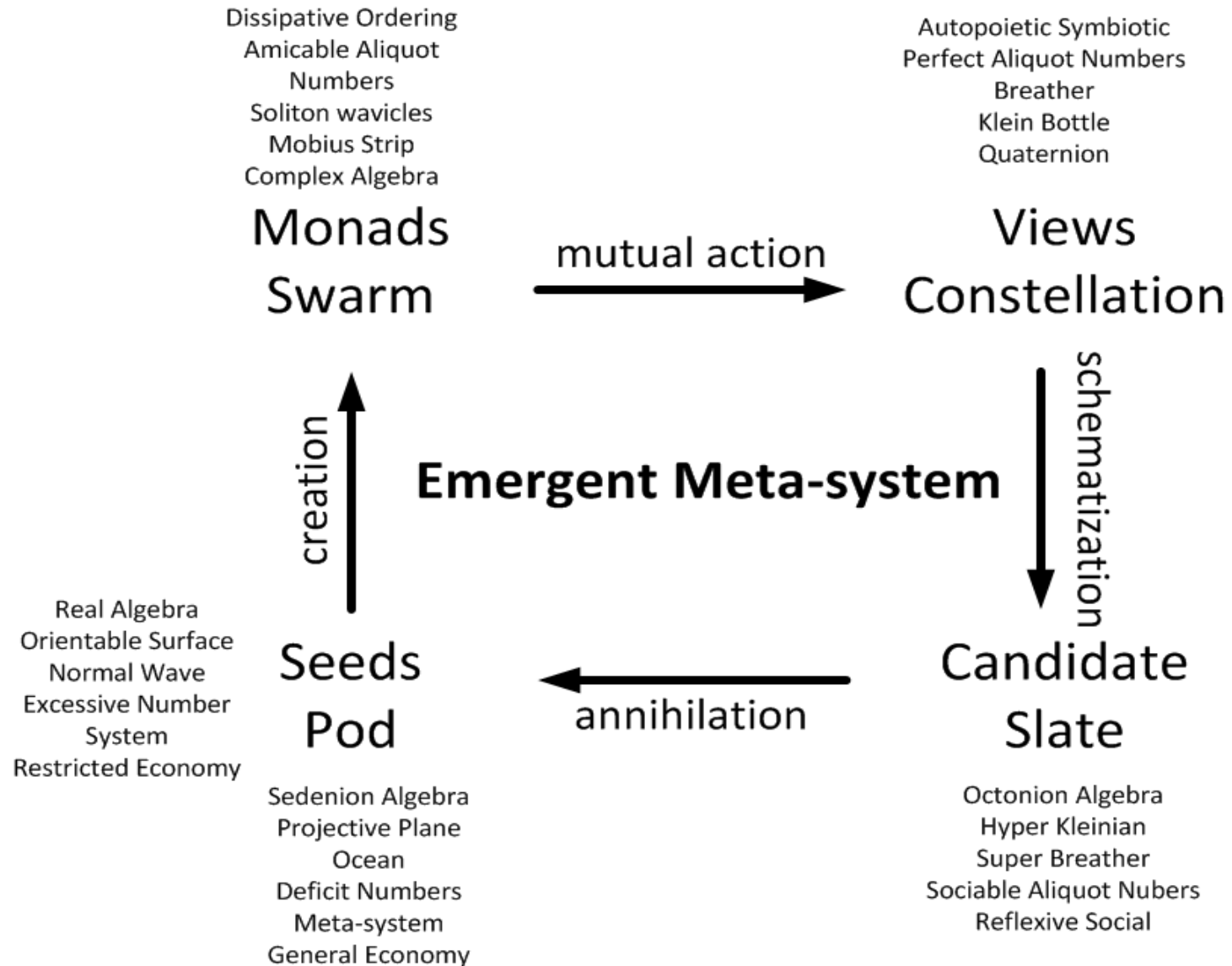
## Emergent Meta-system

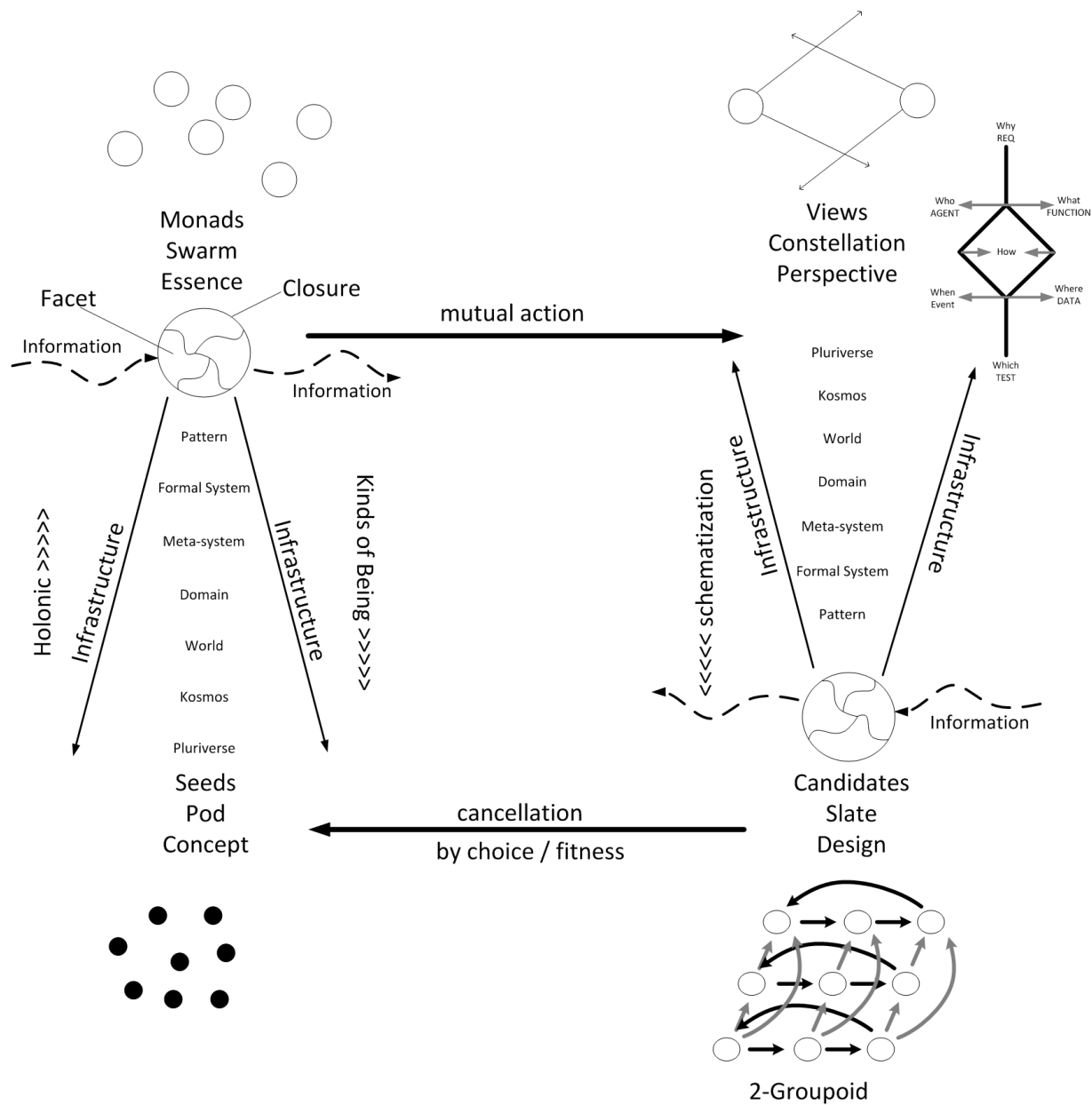


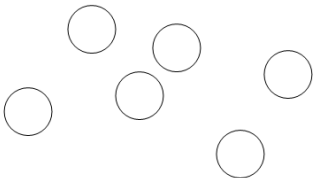
# Foundational Mathematical Categories

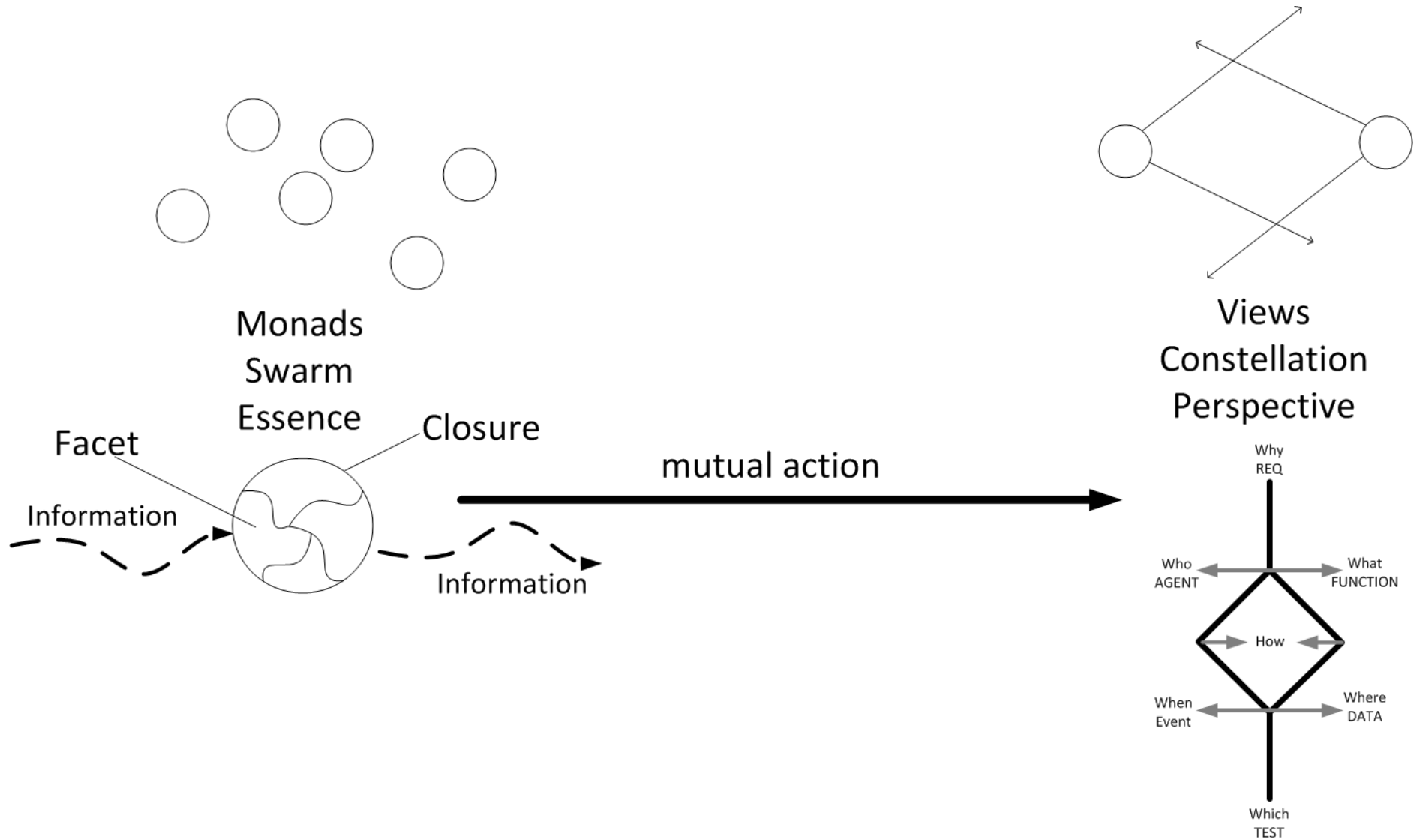
# Emergent Meta-system

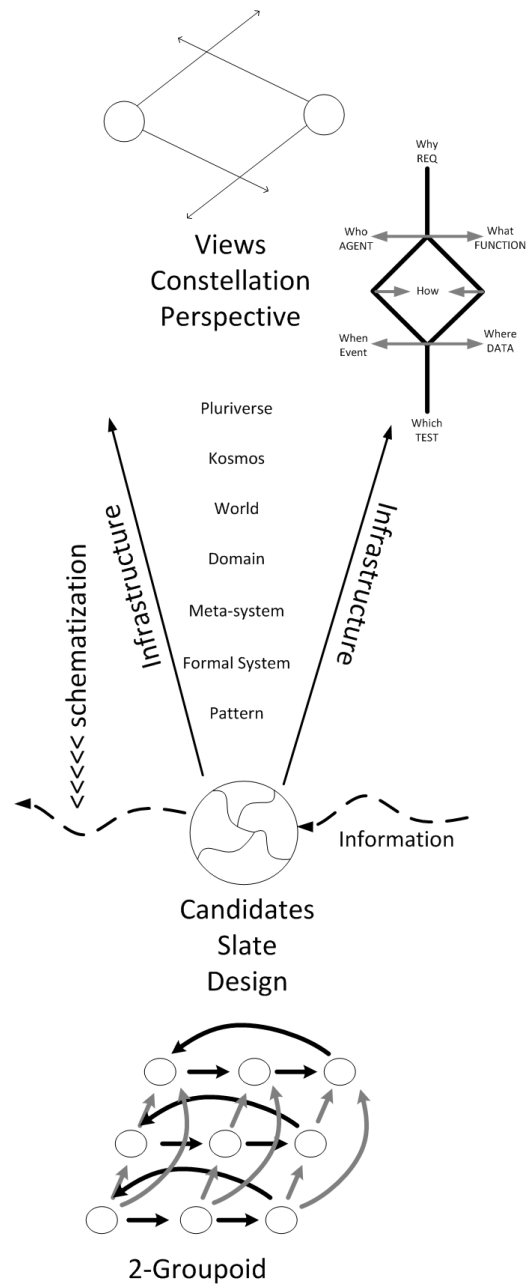


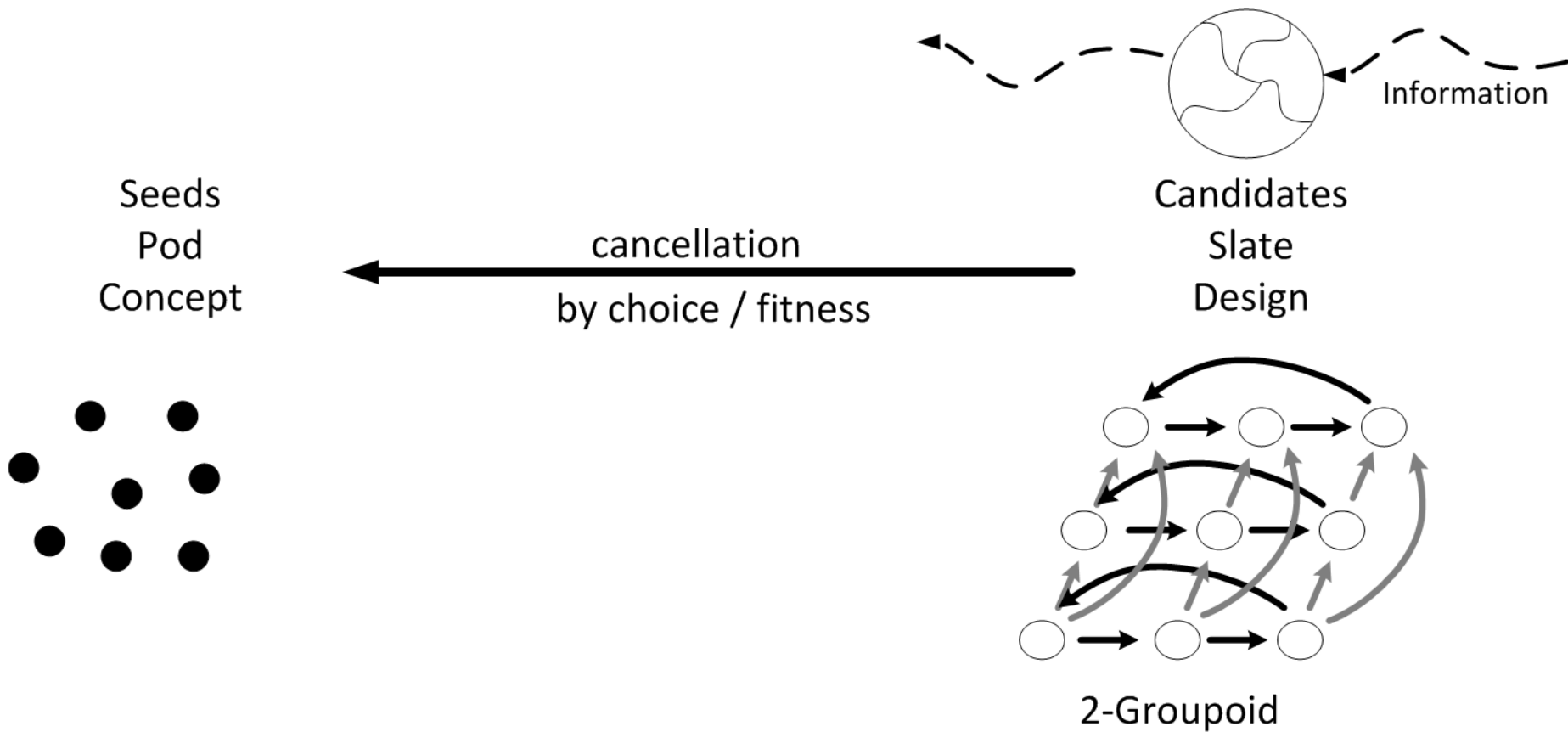




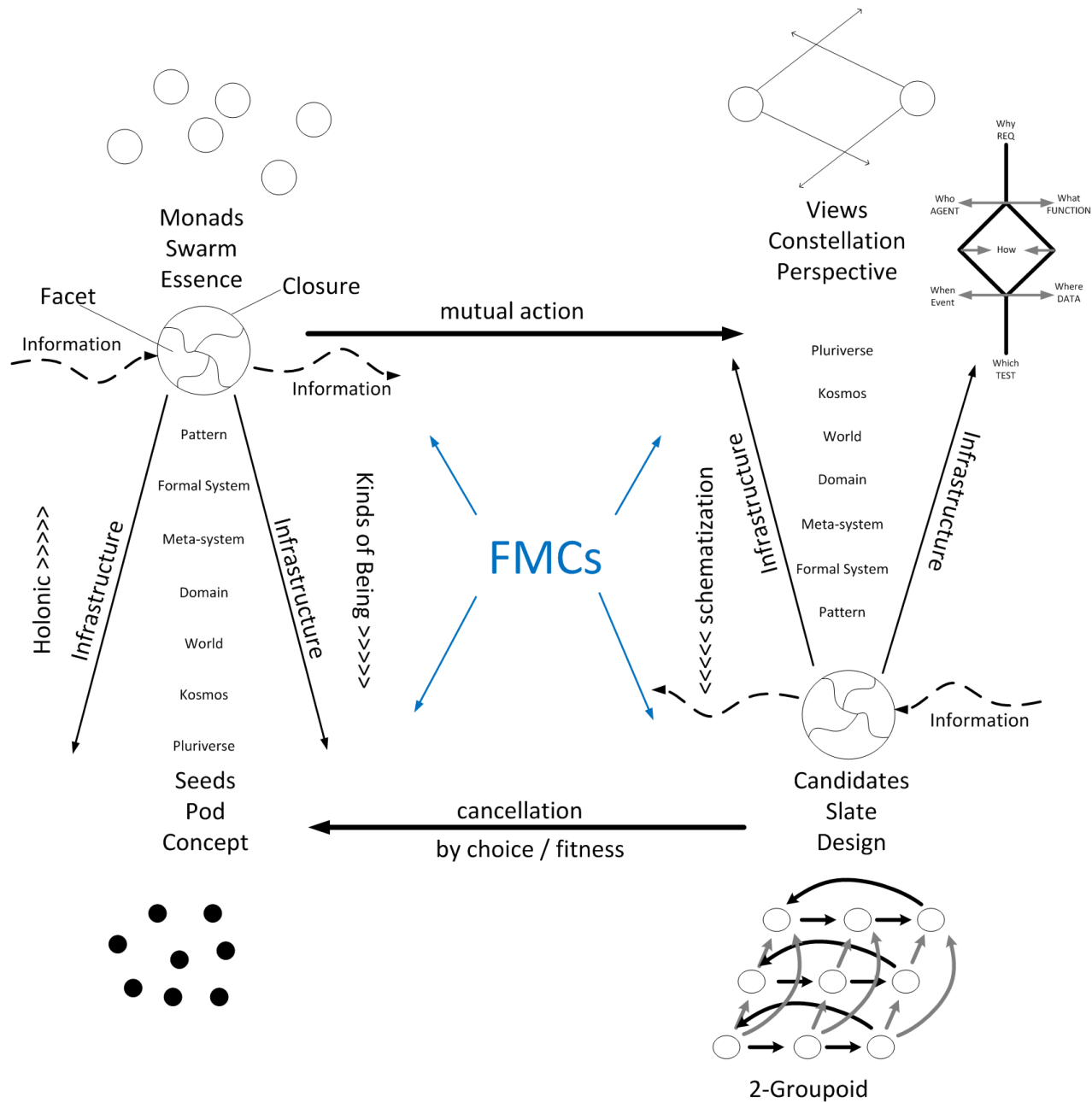






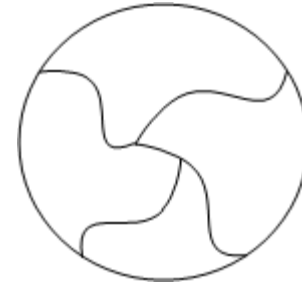


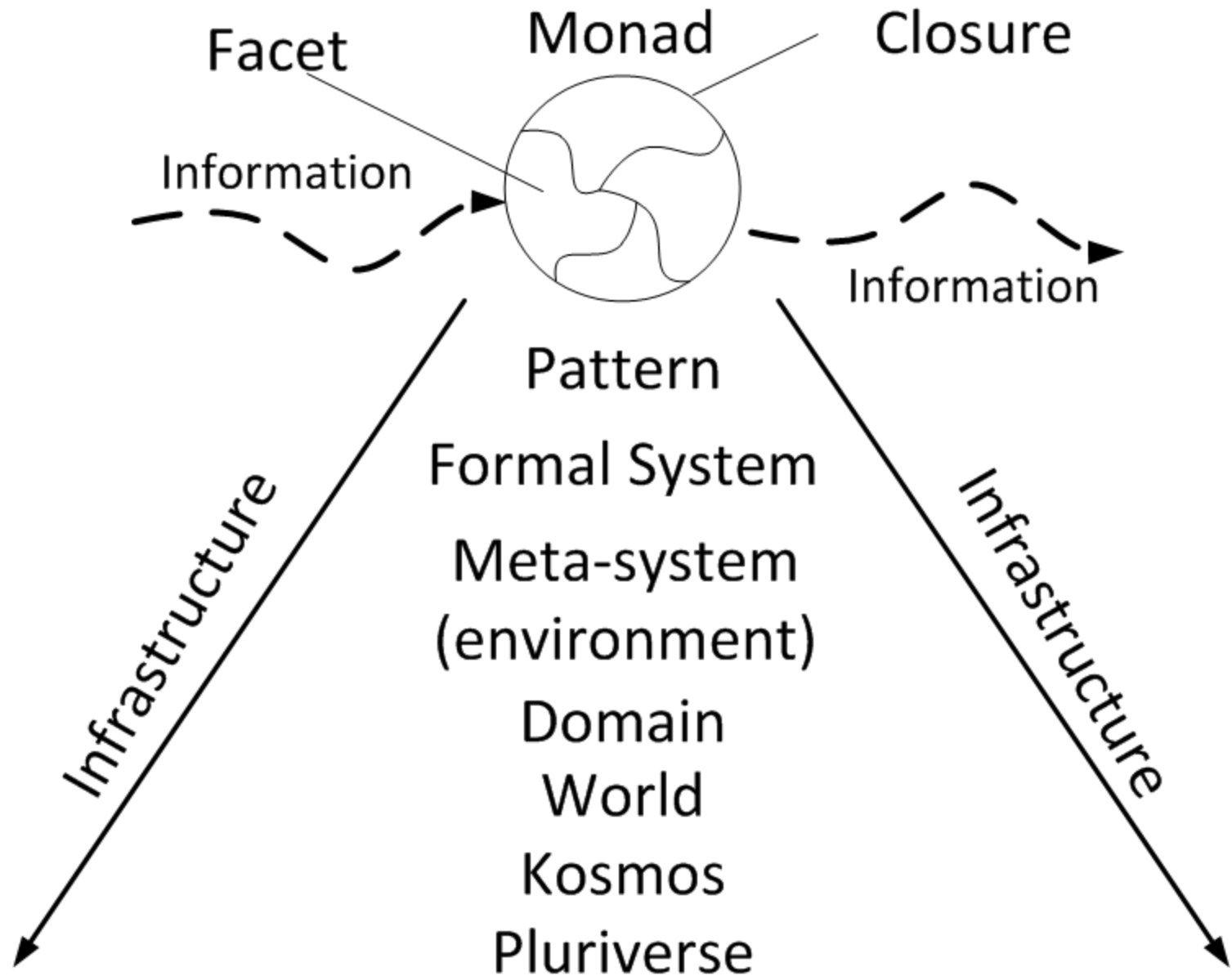




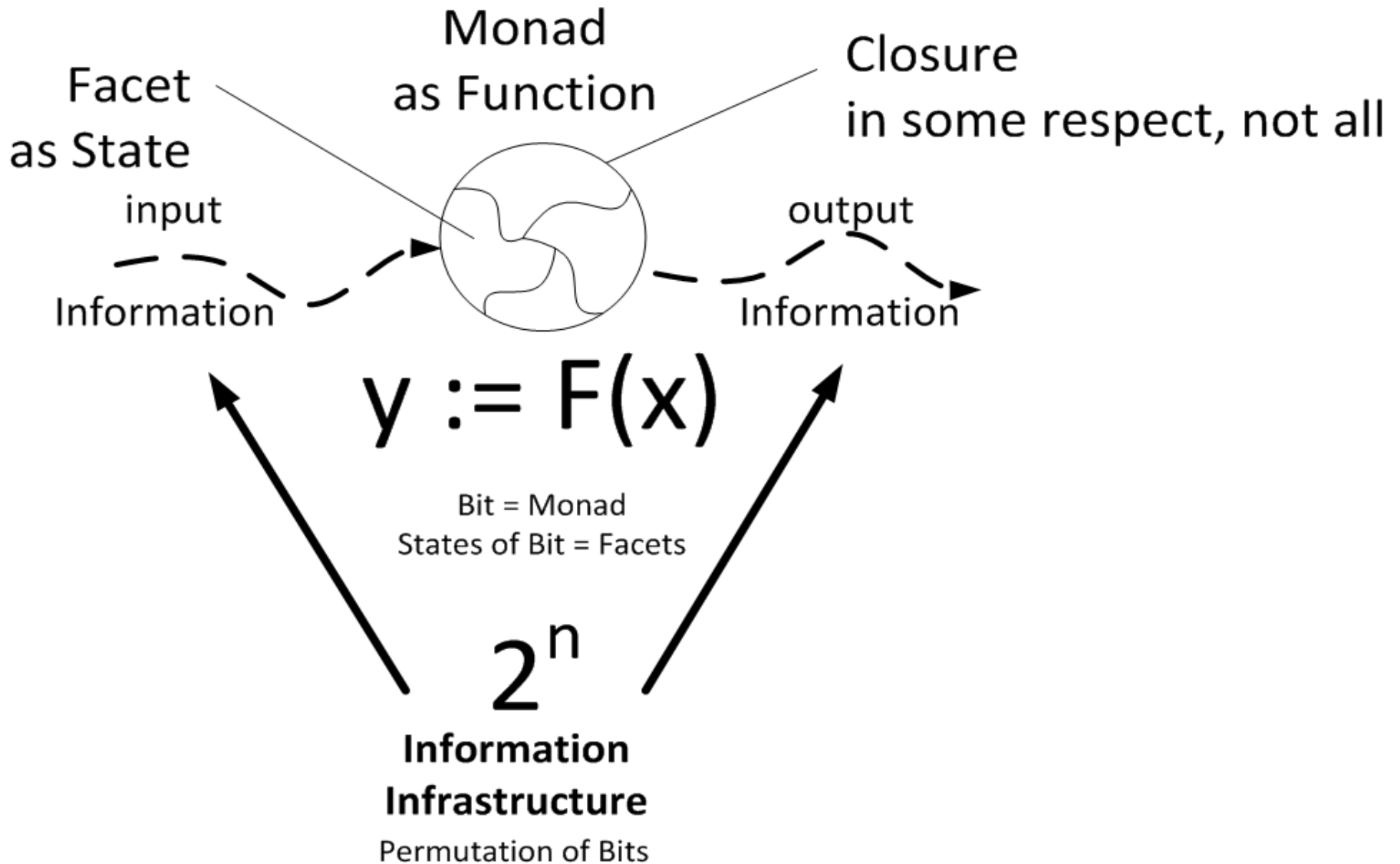
# Monad

- Ultra One
- Closure
- Mathematical Proof
- Democritus
  - Atom/Particle
- Leibniz
  - Openly Closed System
- Kant
  - Transcendental Idealism
- Peirce
  - First Isolata
- Singularity - outside
- Singular – inside
  - Condensate
- Facet
  - Quark
- Design Component





# Pattern



# PATTERN SCHEMA 1D-2D

SET  
Particulars

Cells

MASS  
Instance

Colors

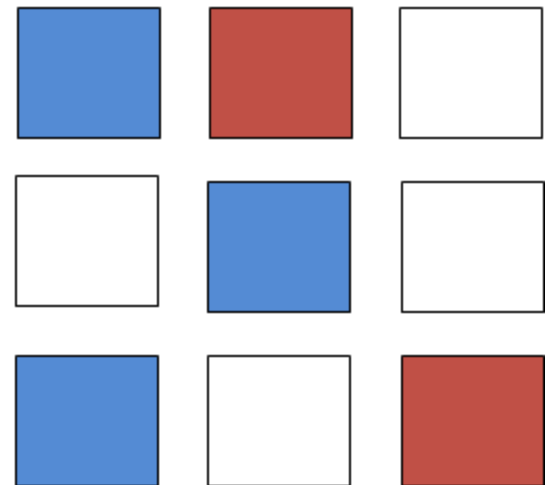
WHOLE  
Part

Rules

MULTIPLE  
Ipsity

Starting  
Positions

## Cellular Automata



Global  
Pattern



SIGN

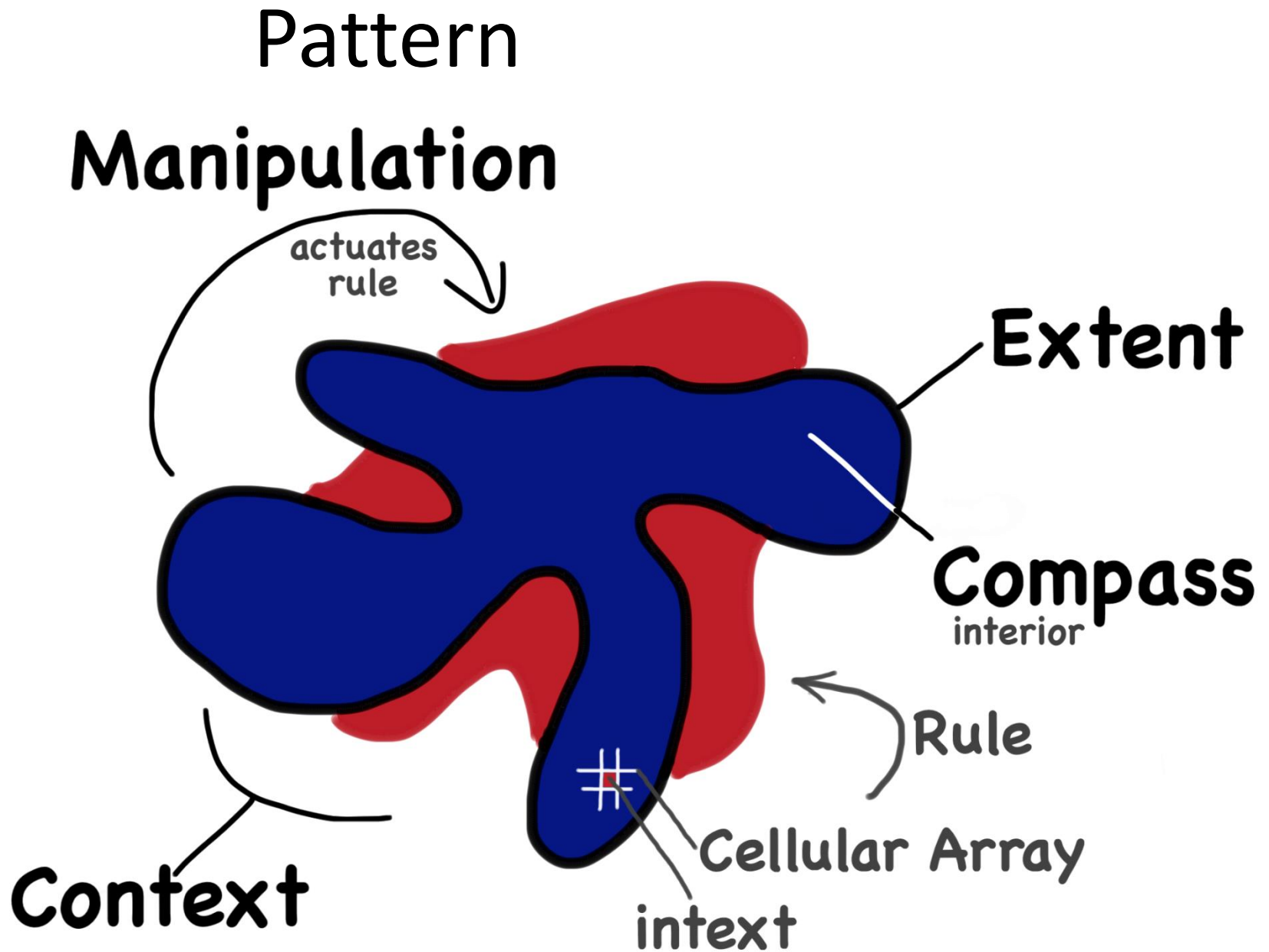
FLUX

RULE  
manipulation

neighbors  
VALUE =>

cell  
COLOR

Array  
STRUCTURE



# Pattern 1D-2D

Meta

**STRUCTURE**

**SIGN**



Chiasm



Meta-Model

**FLUX**

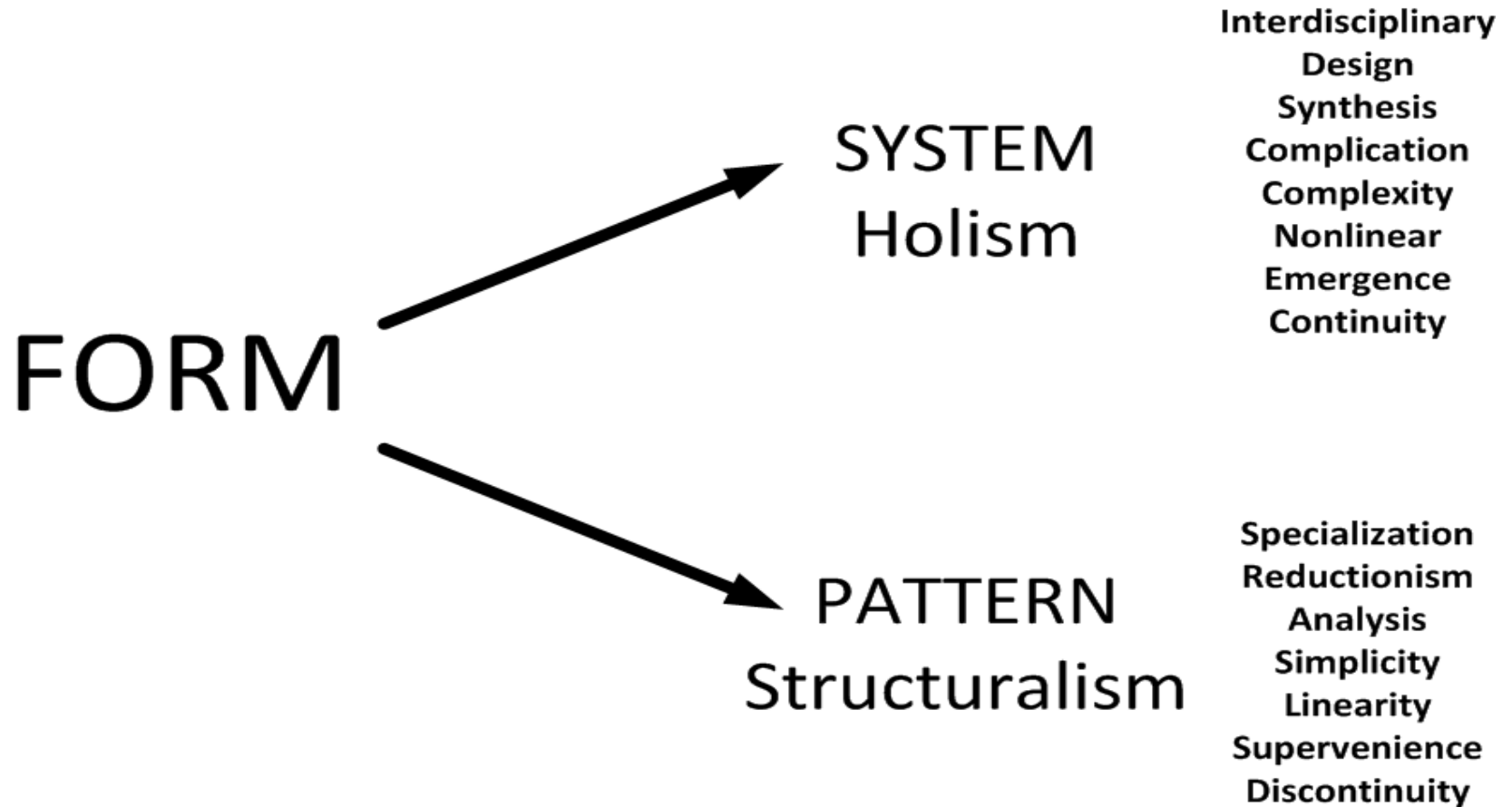
**VALUE**

**Klir**

**Baudrillard**



# Schematic Bifurcation in the 20<sup>th</sup> Century



# FORM SCHEMA 2D-3D

SET

Particulars

Shape

MASS

Instance

Content

WHOLE

Part

Functional  
Behavior

MULTIPLE

Ipsity

Use

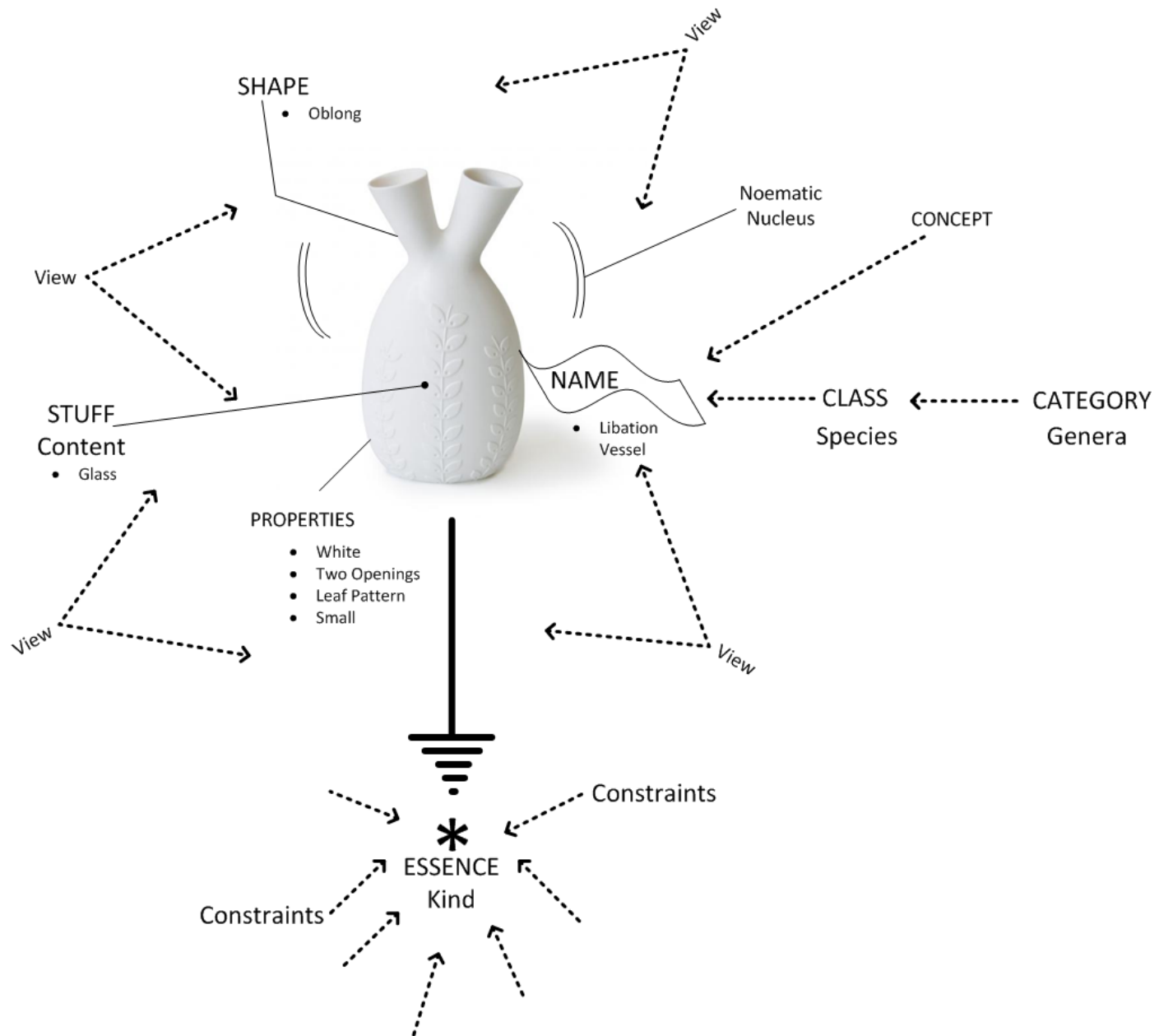
Encapsulation

Data

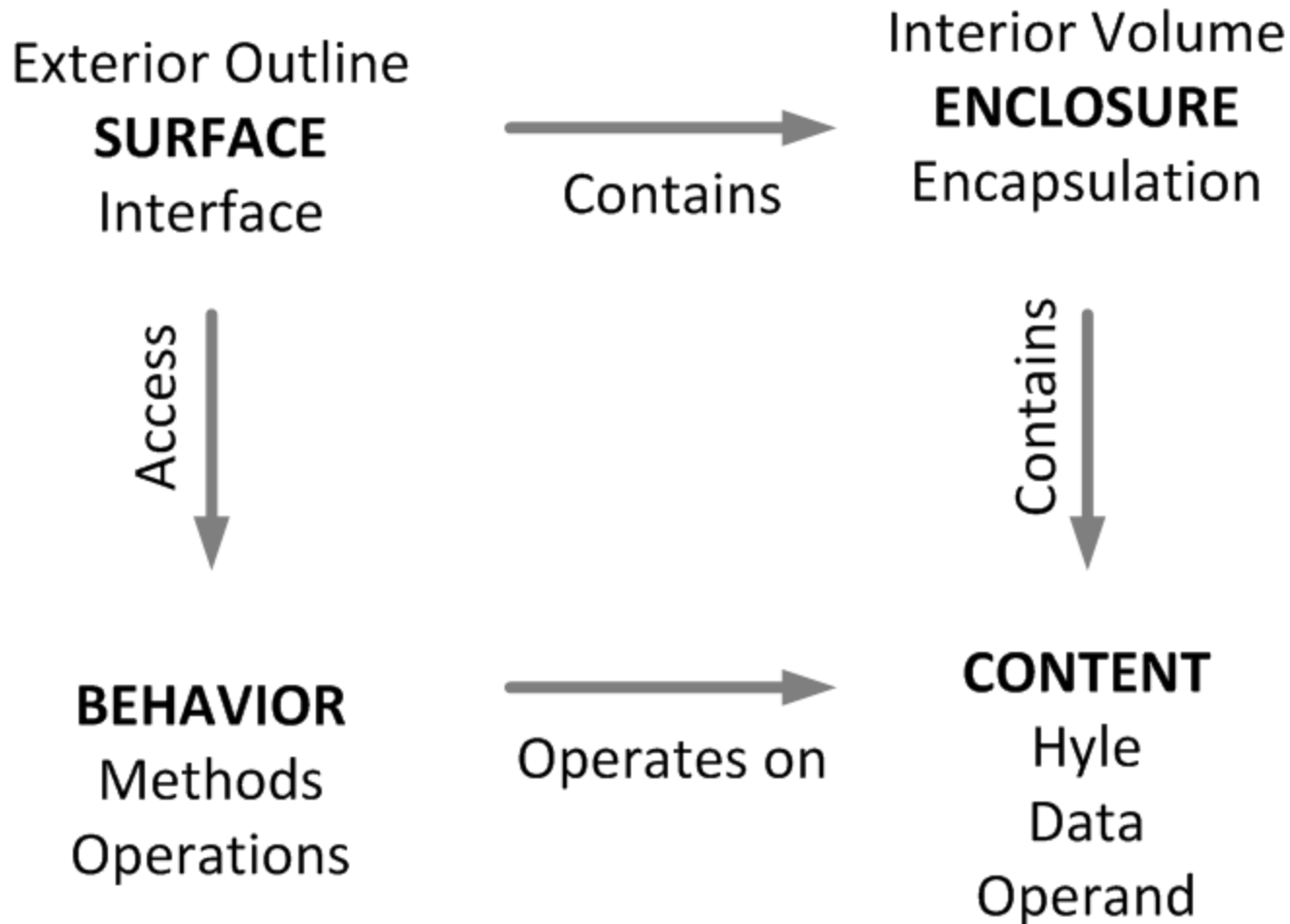
Methods

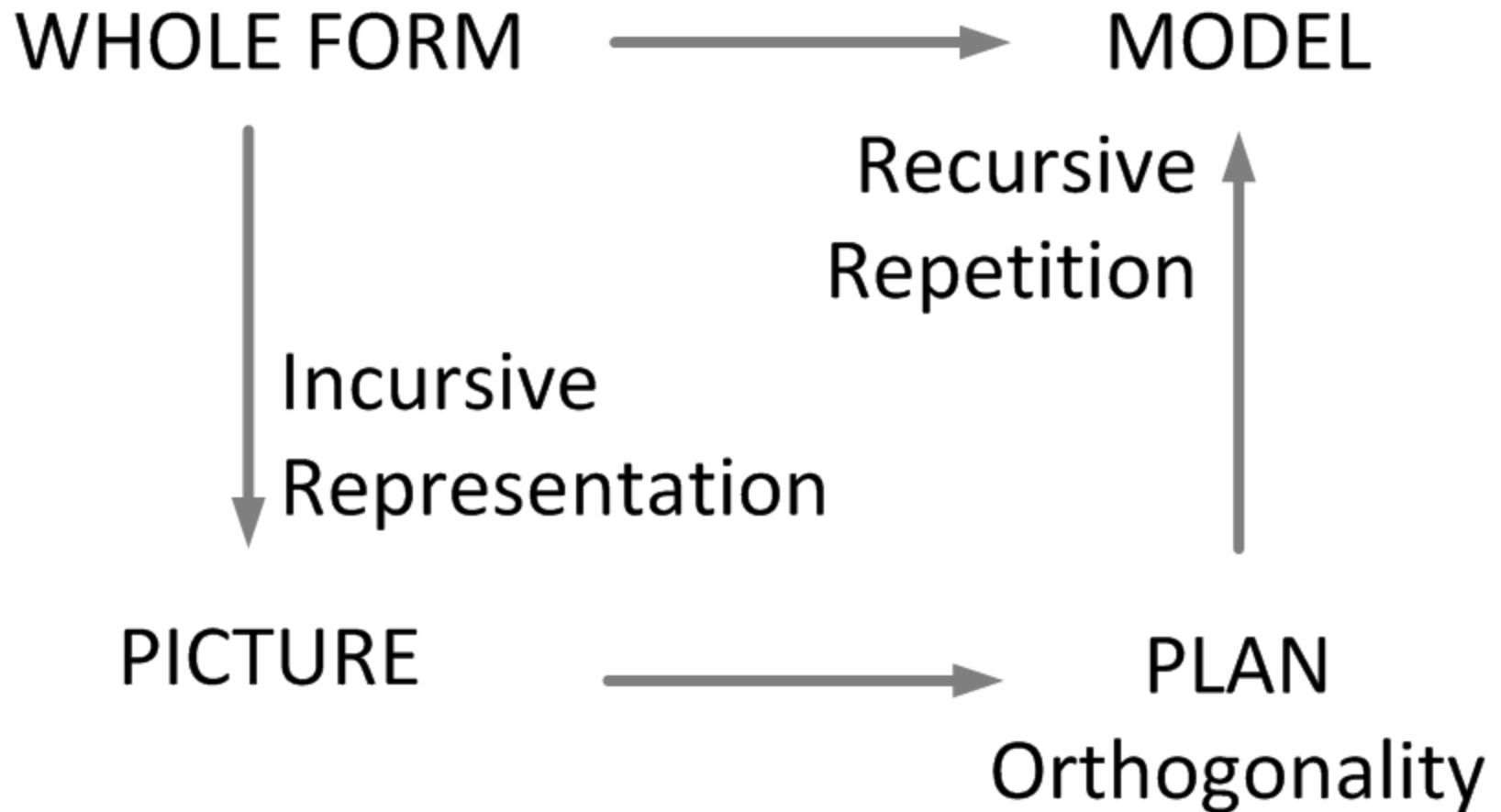
Calls

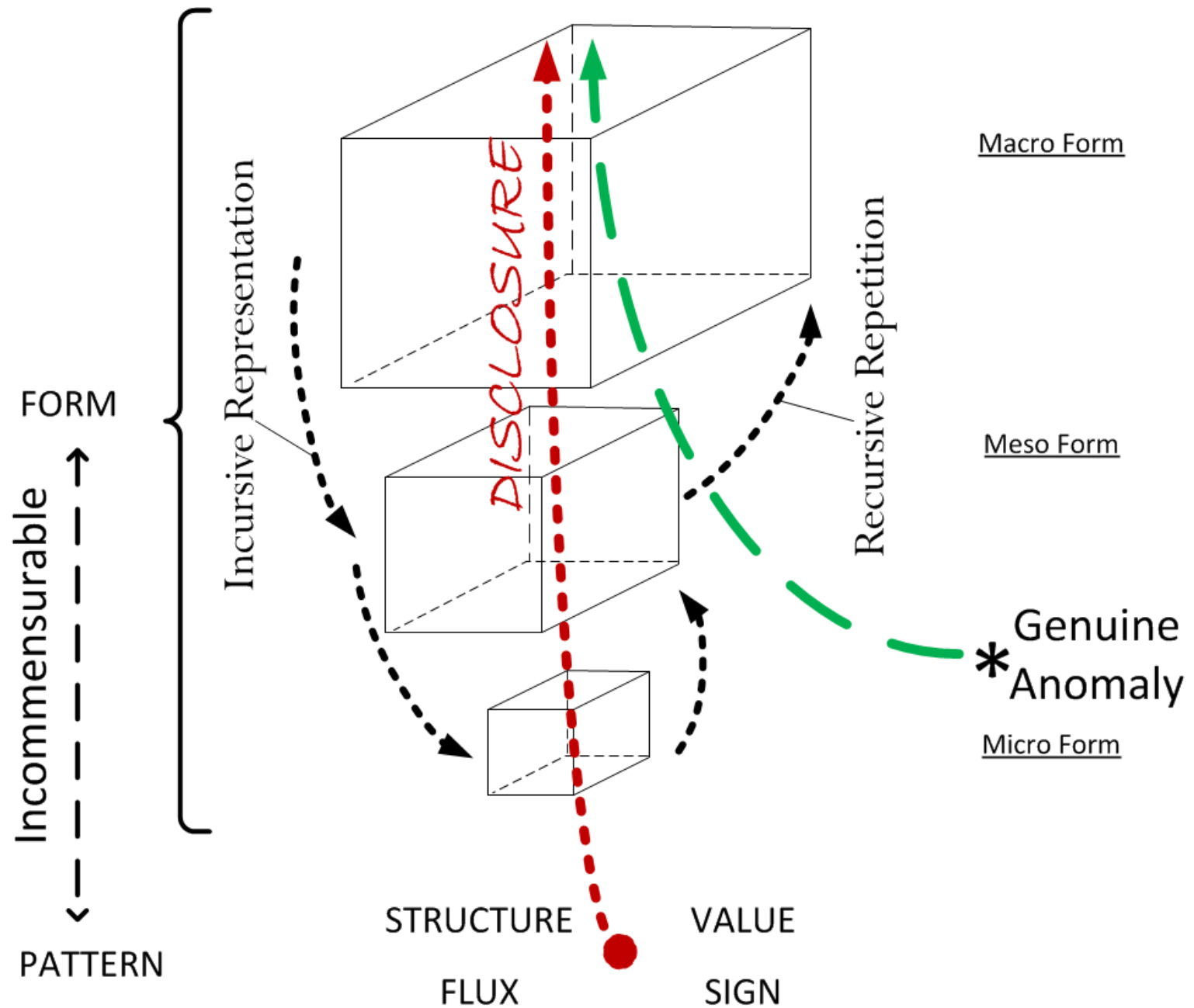




# Form 2D-3D Expanse







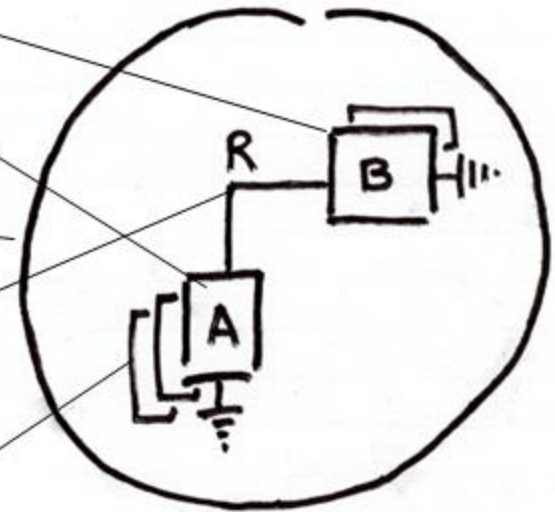
# SYSTEM SCHEMA 3D-4D

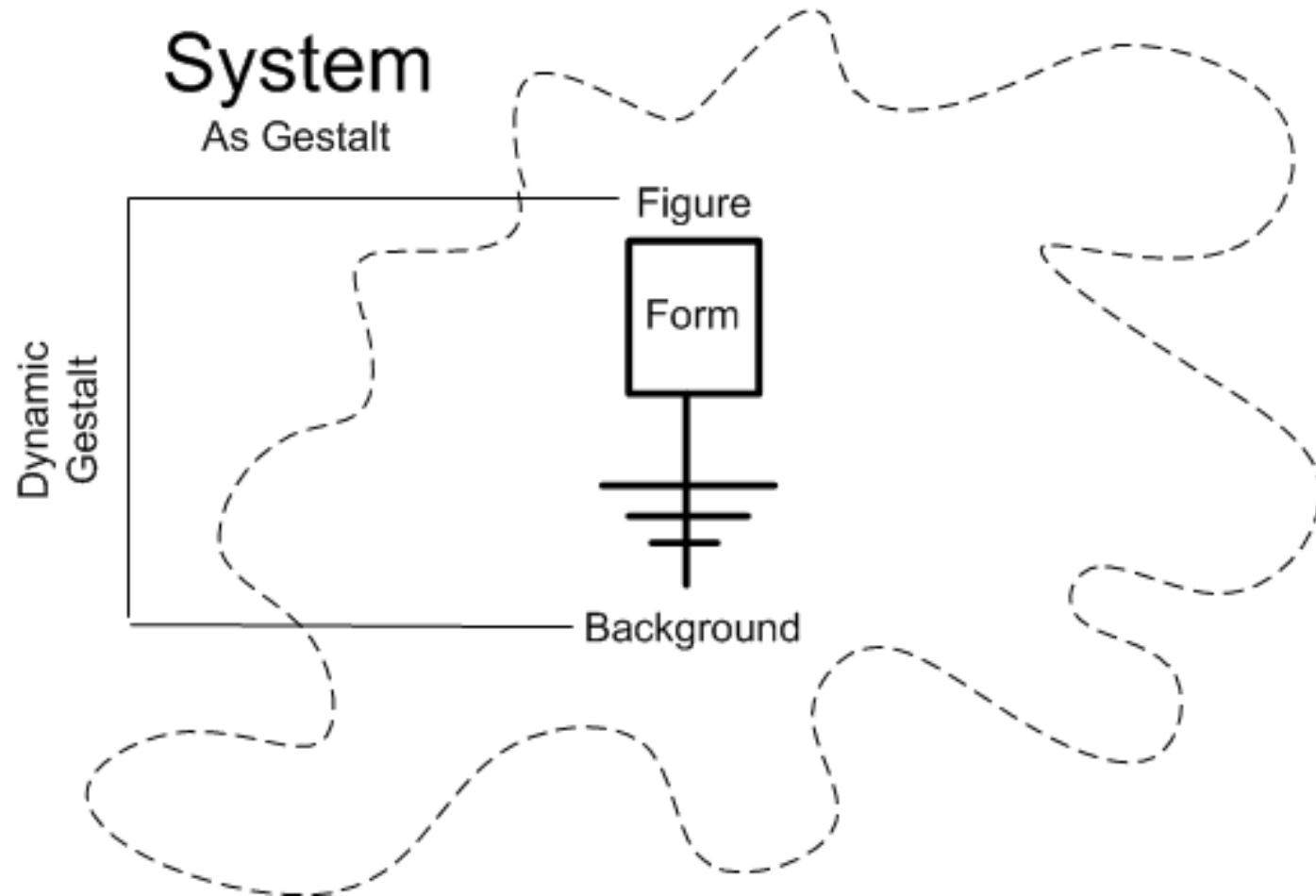
SET -> Particulars

MASS -> Boundary

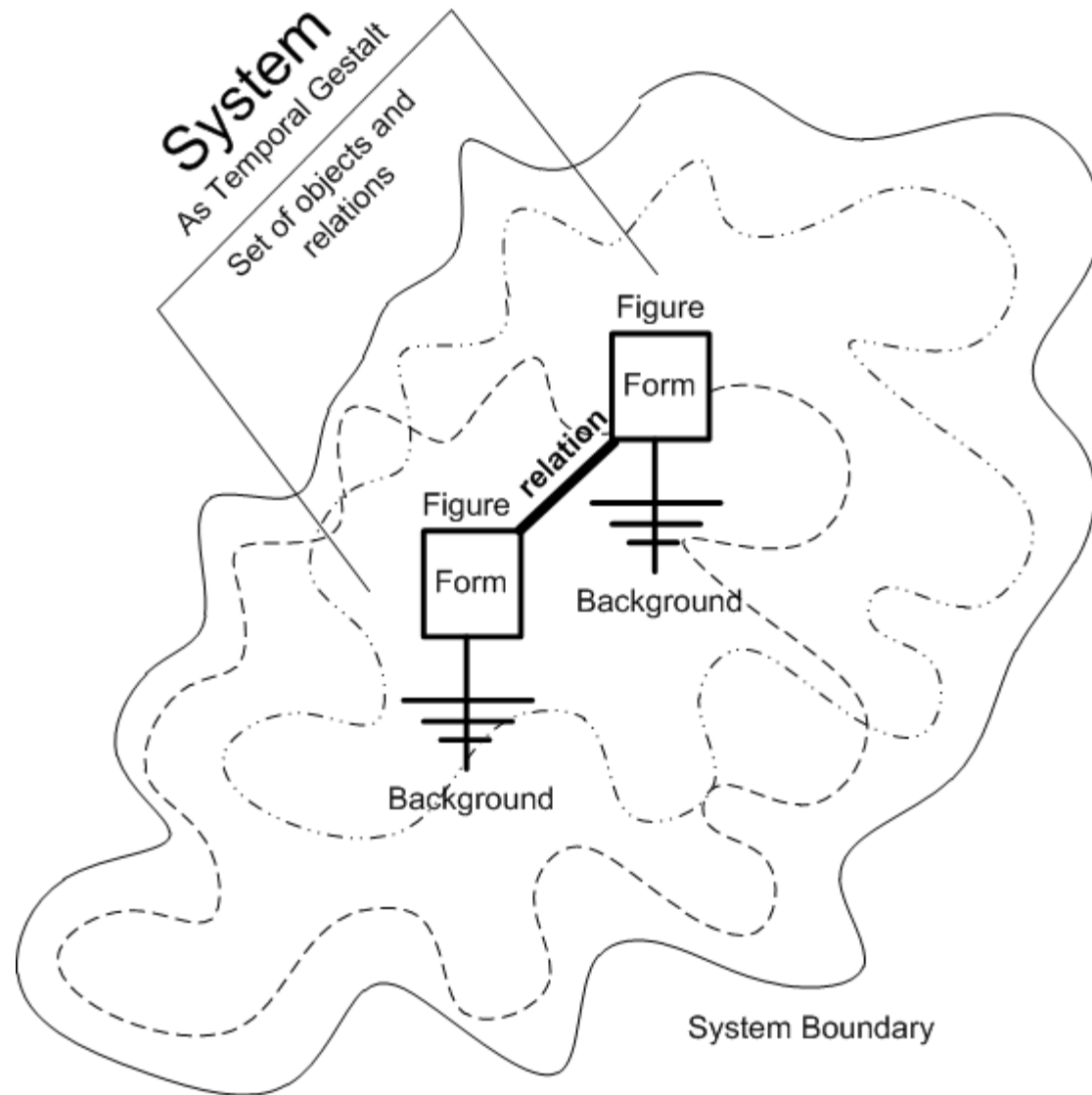
WHOLE -> Mereology

MULTIPLE -> Individuals



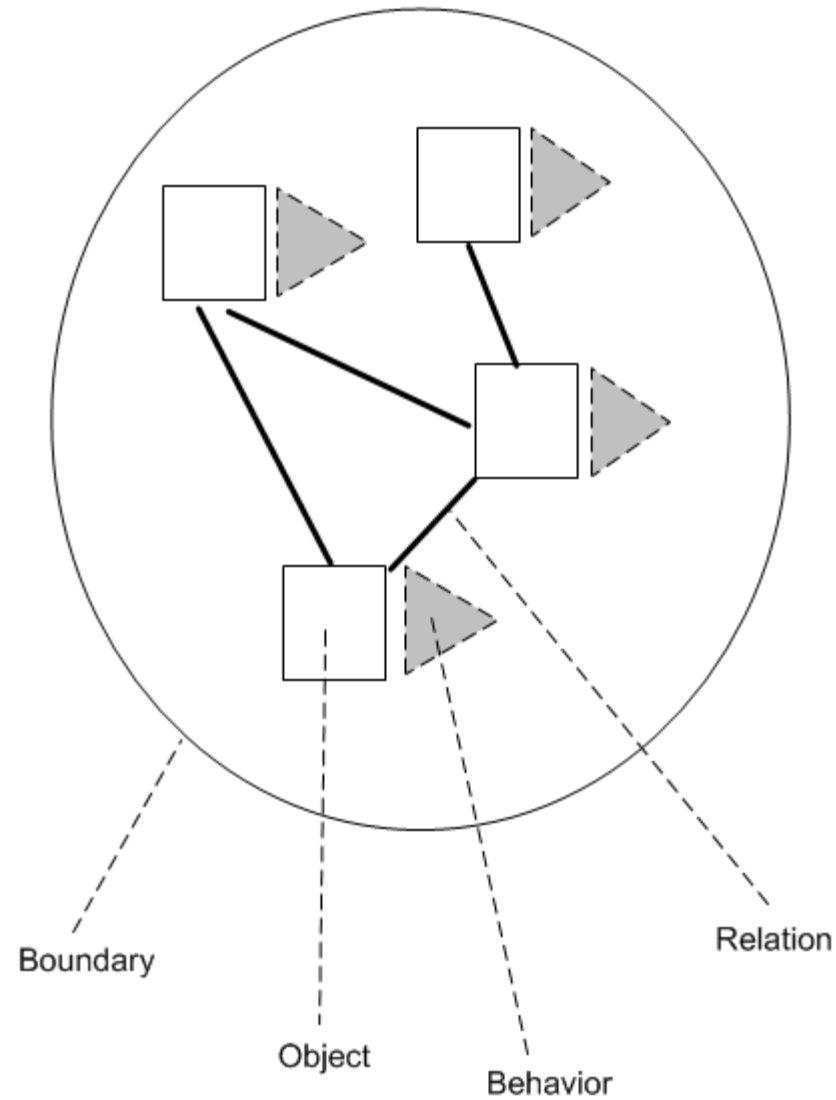


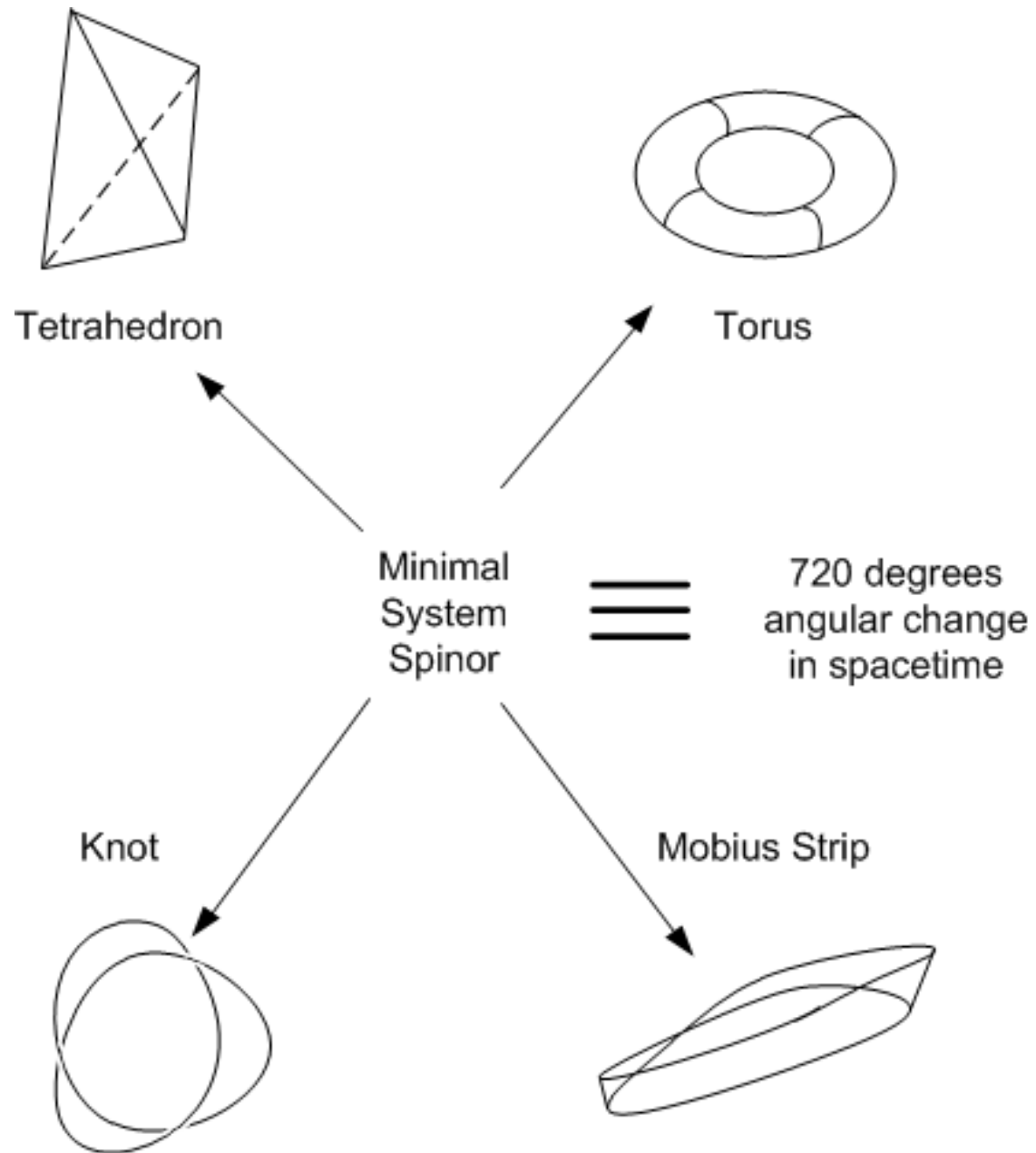






# Idealized System





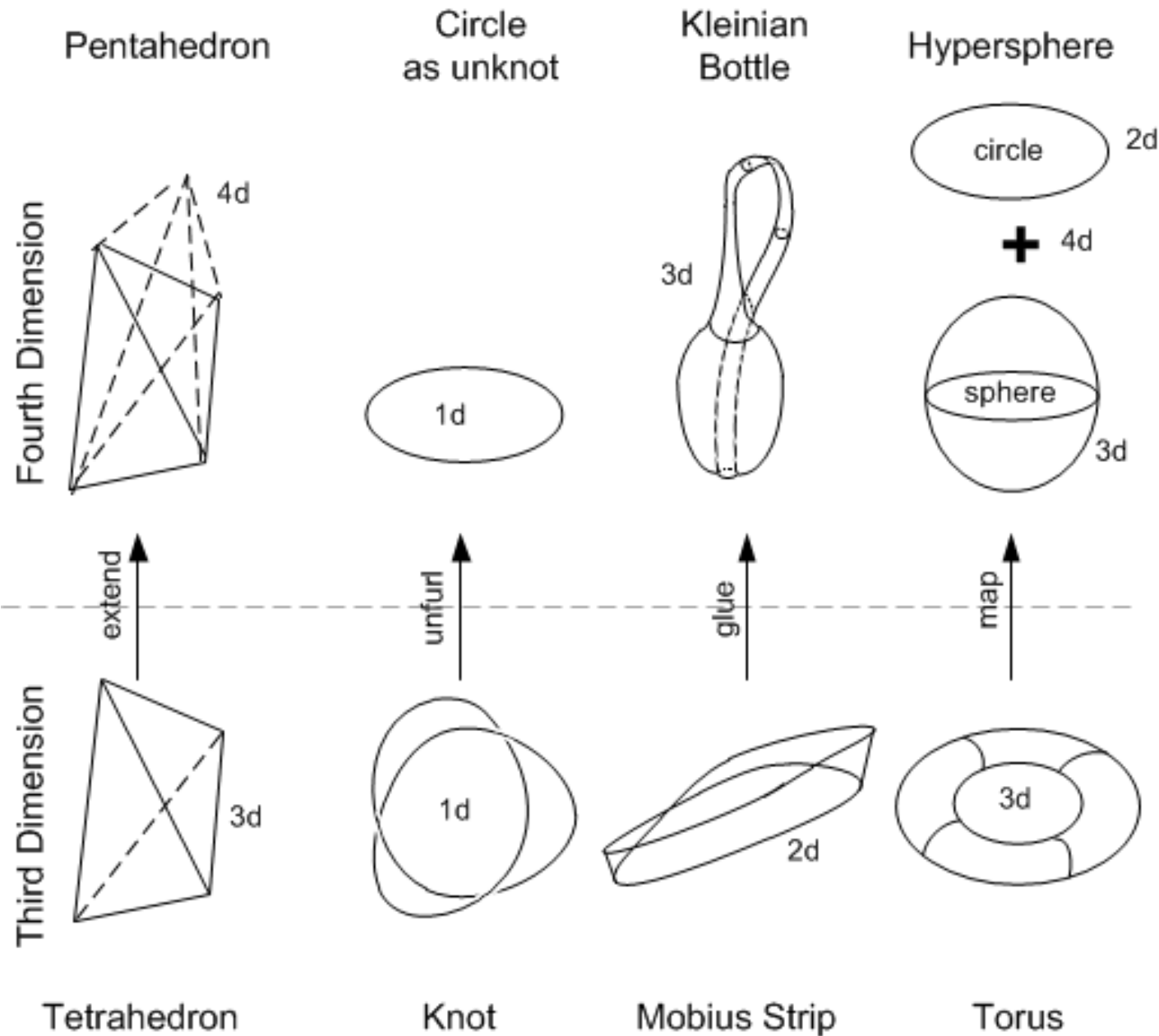


Whole Form  
Torus 3d

Model  
Tetrahedron 3d

Picture  
Mobius Strip 2d

Plan  
Knot 1d



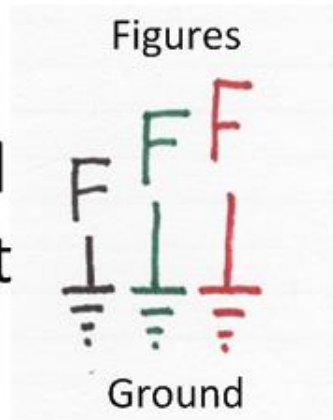
Concept

SYSTEM

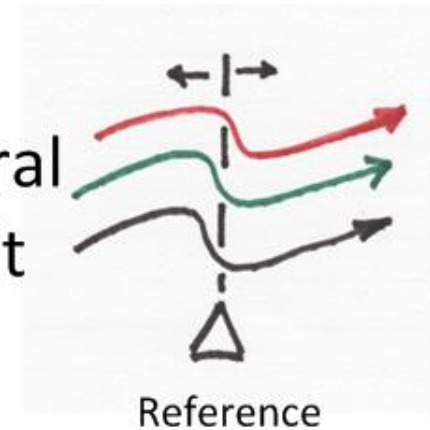
PROCESS

Percept

Spatial  
Gestalt

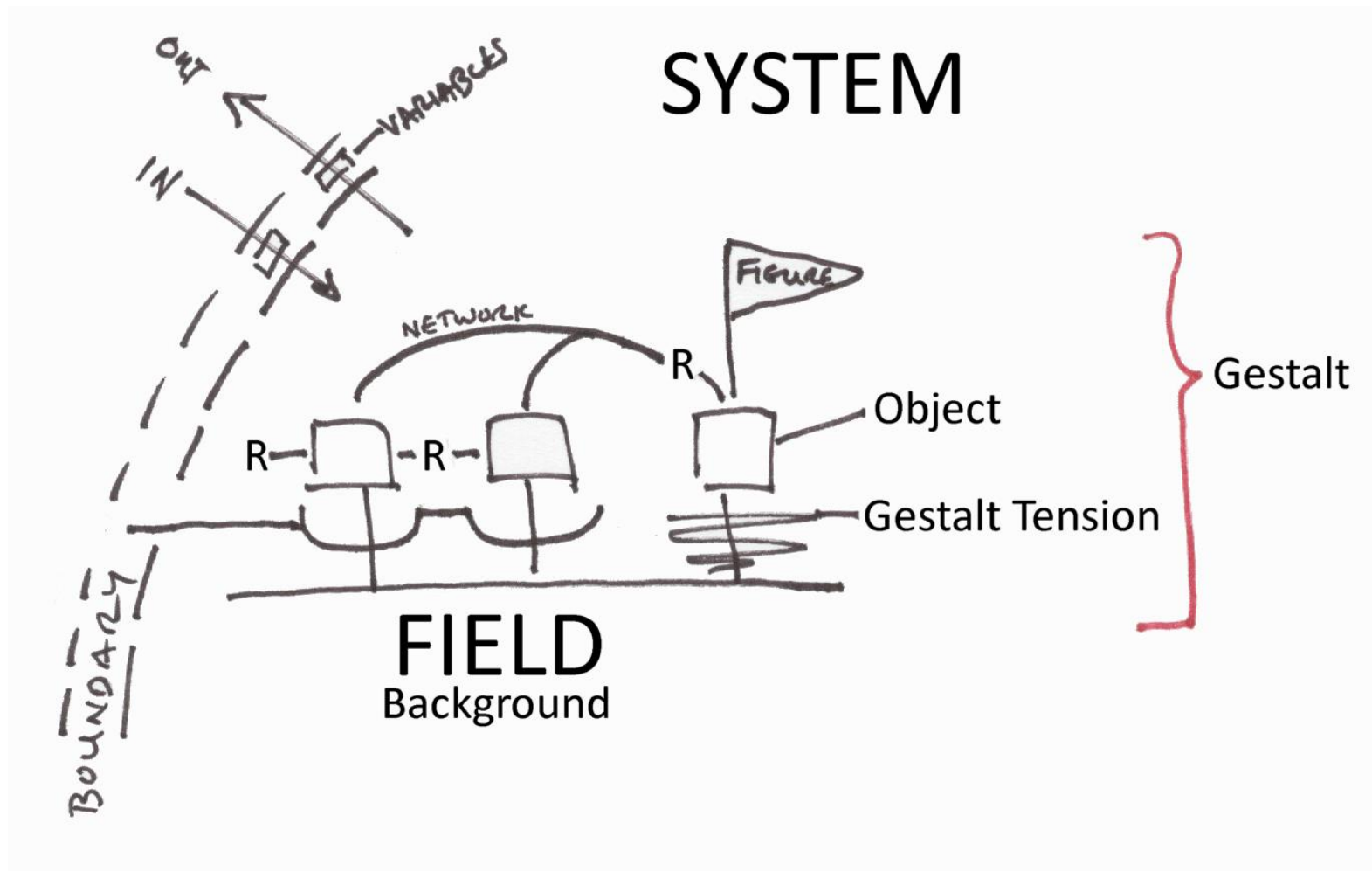


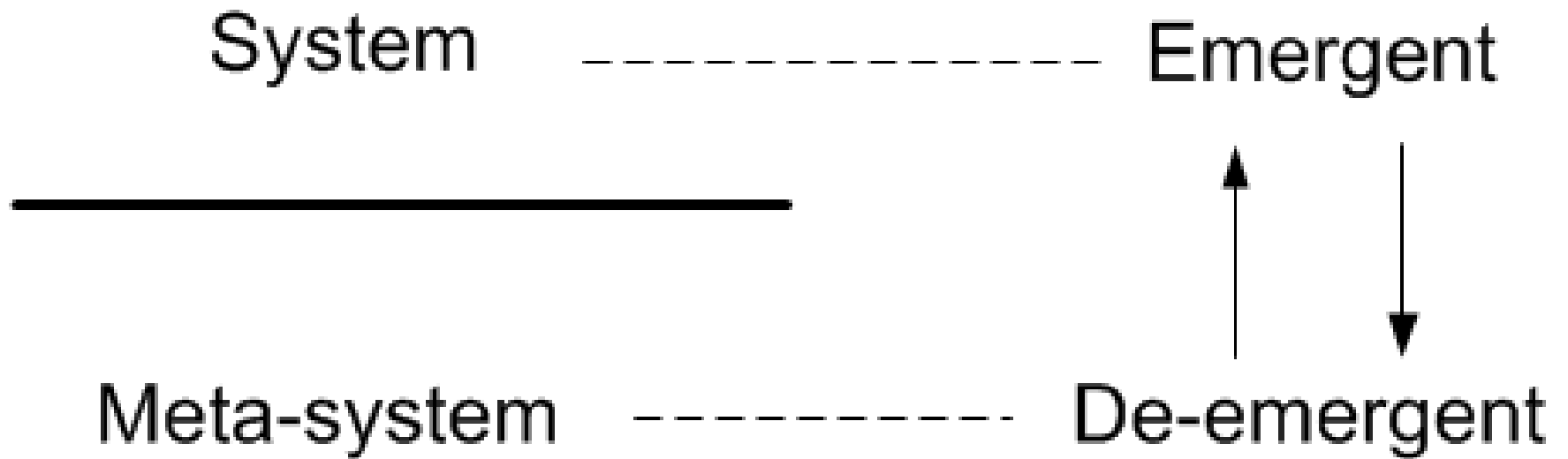
Temporal  
Gestalt



Stasis  
Synchronic

Dynamics  
Diachronic







# 'Meta' meanings



*Above*

logical type  
Meta-levels

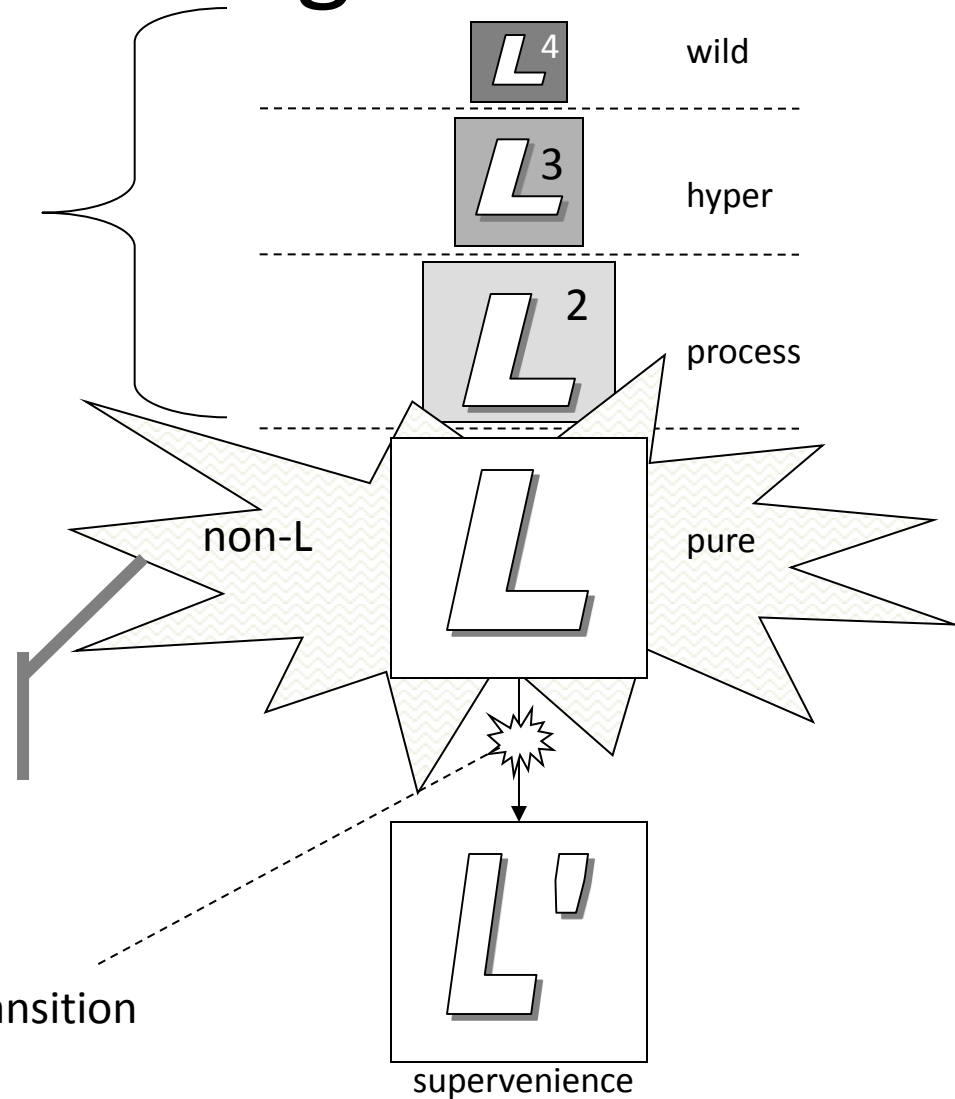
*Beyond*

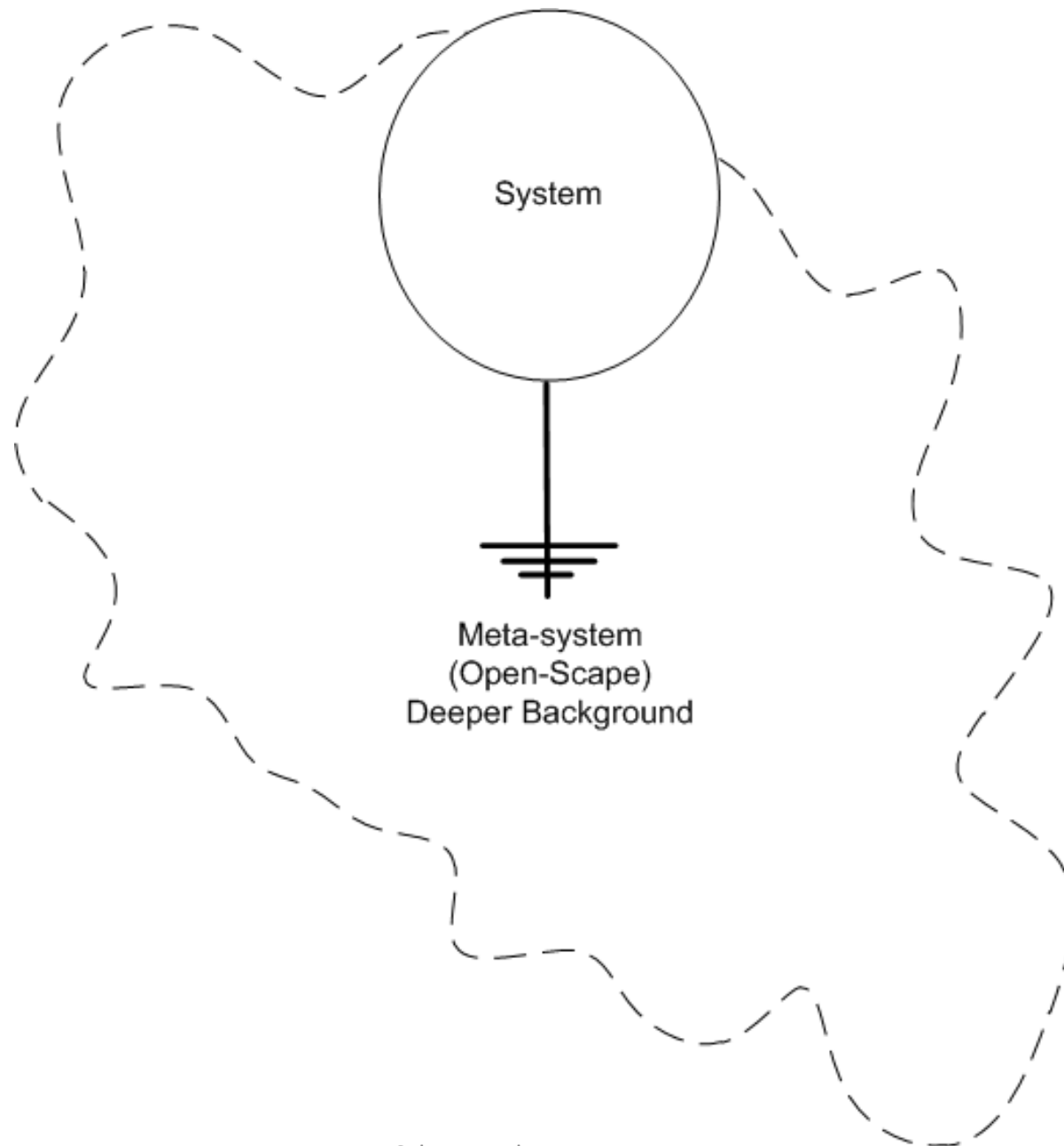
sequence  
complement

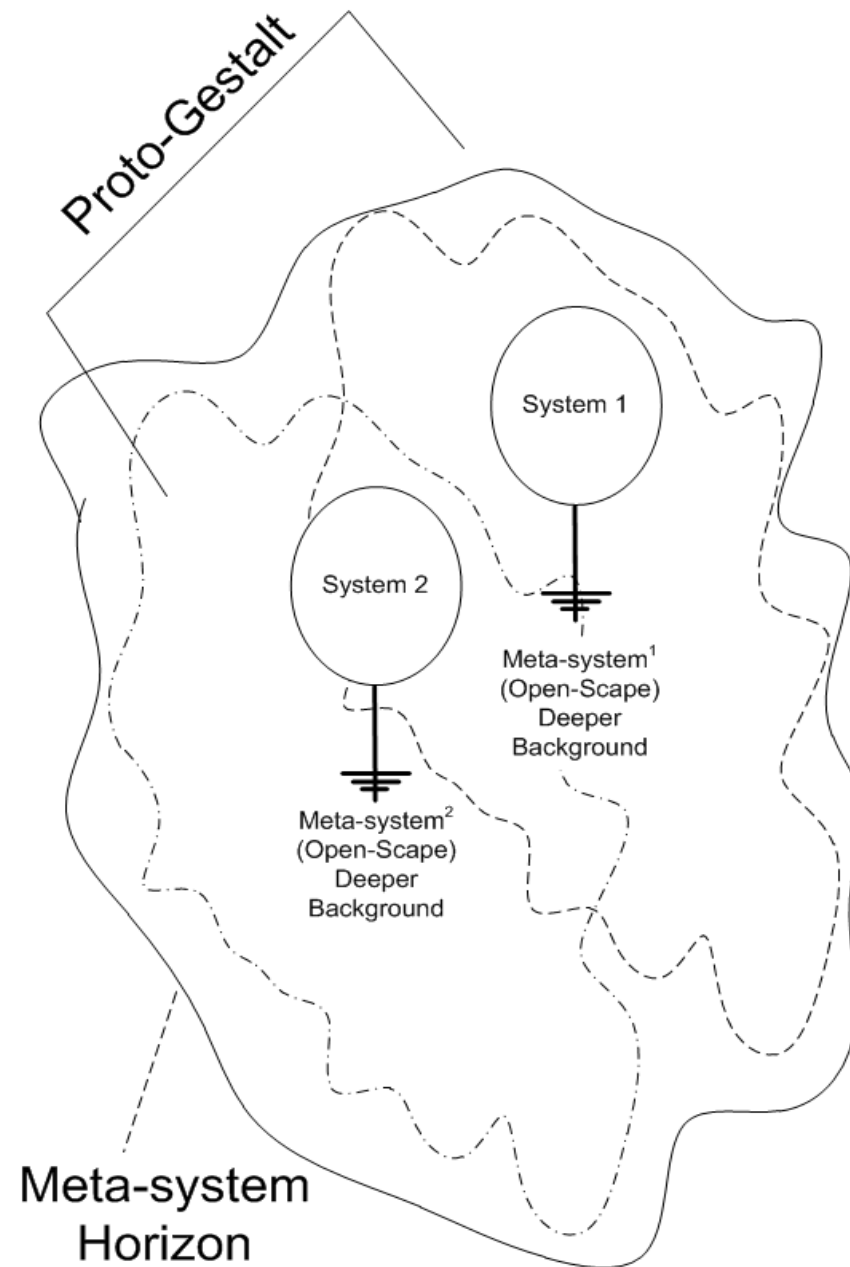
**Meta-system**

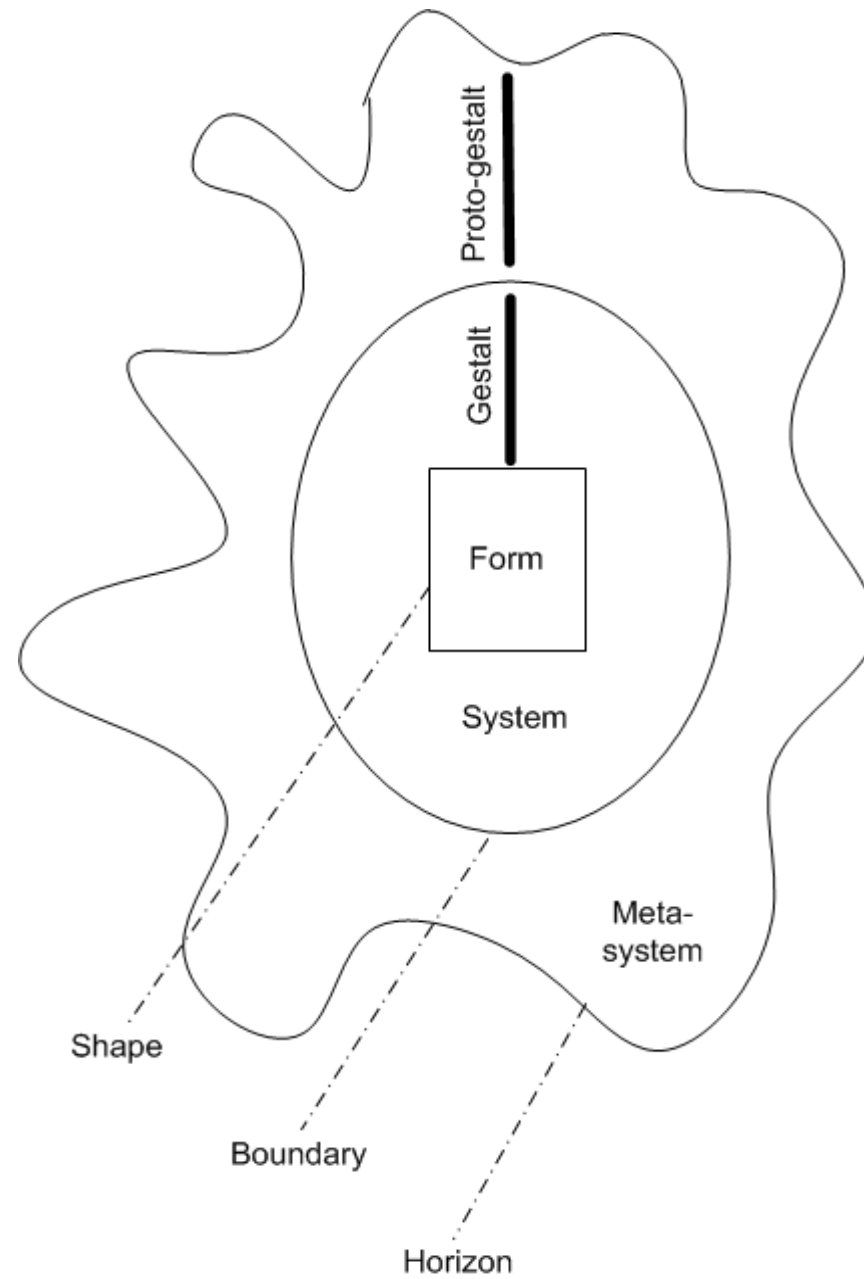
*Change*

succession  
emergent event  
Meta-system transition











## Conceptual

System

Process

Meta-system

Meta-process

## Perceptual

Gestalt

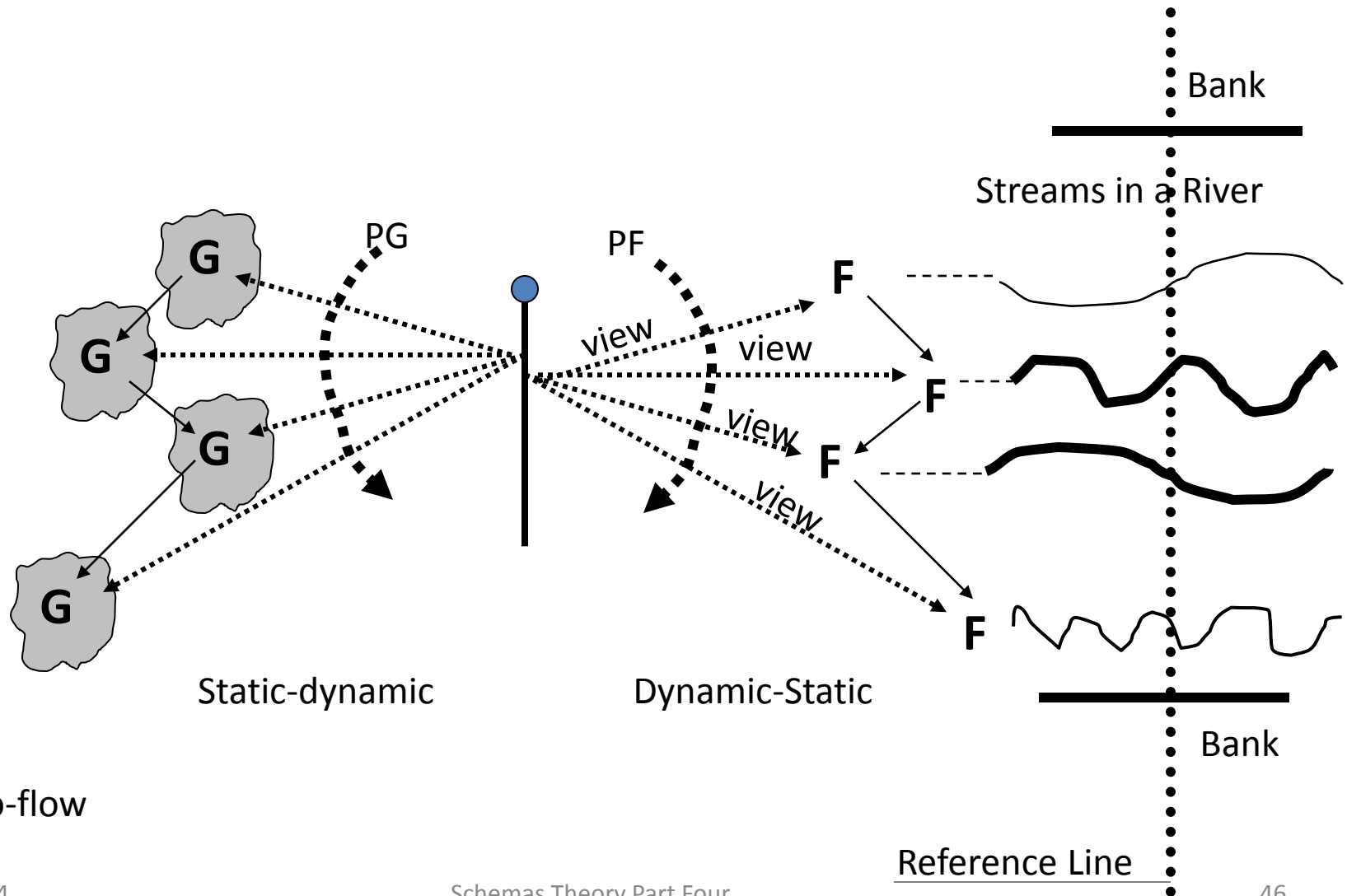
Flow

Proto-gestalt

Proto-flow



# Proto-gestalt / Proto-flow





	Synchronic	Diachronic
Gestalt	Perceptual Gestalt (concept)	Temporal Gestalt (idea)
Flow	Time-lapse Frozen Flow across time presented as a single image by superimposition (emotion)	Temporal Flow (feelings)



# Dual Schemas

**System**  
*description*

Gestalt

Turing Machine

Restricted Economy

Application

**Meta-system**  
*indication*

Proto-gestalt

Universal Turing Machine

General Economy

“Operating System”



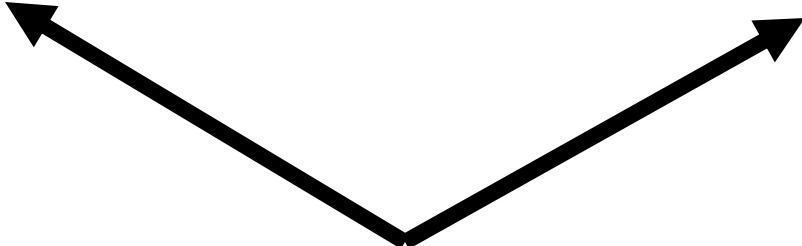


# System and Meta-system Formalization

**System**  
**“Application”**  
Normal Turing Machine  
System dynamics  
with negative feedback

**Meta-system**  
**“Operating System”**  
Universal Turing Machine  
System dynamics  
with positive feedback

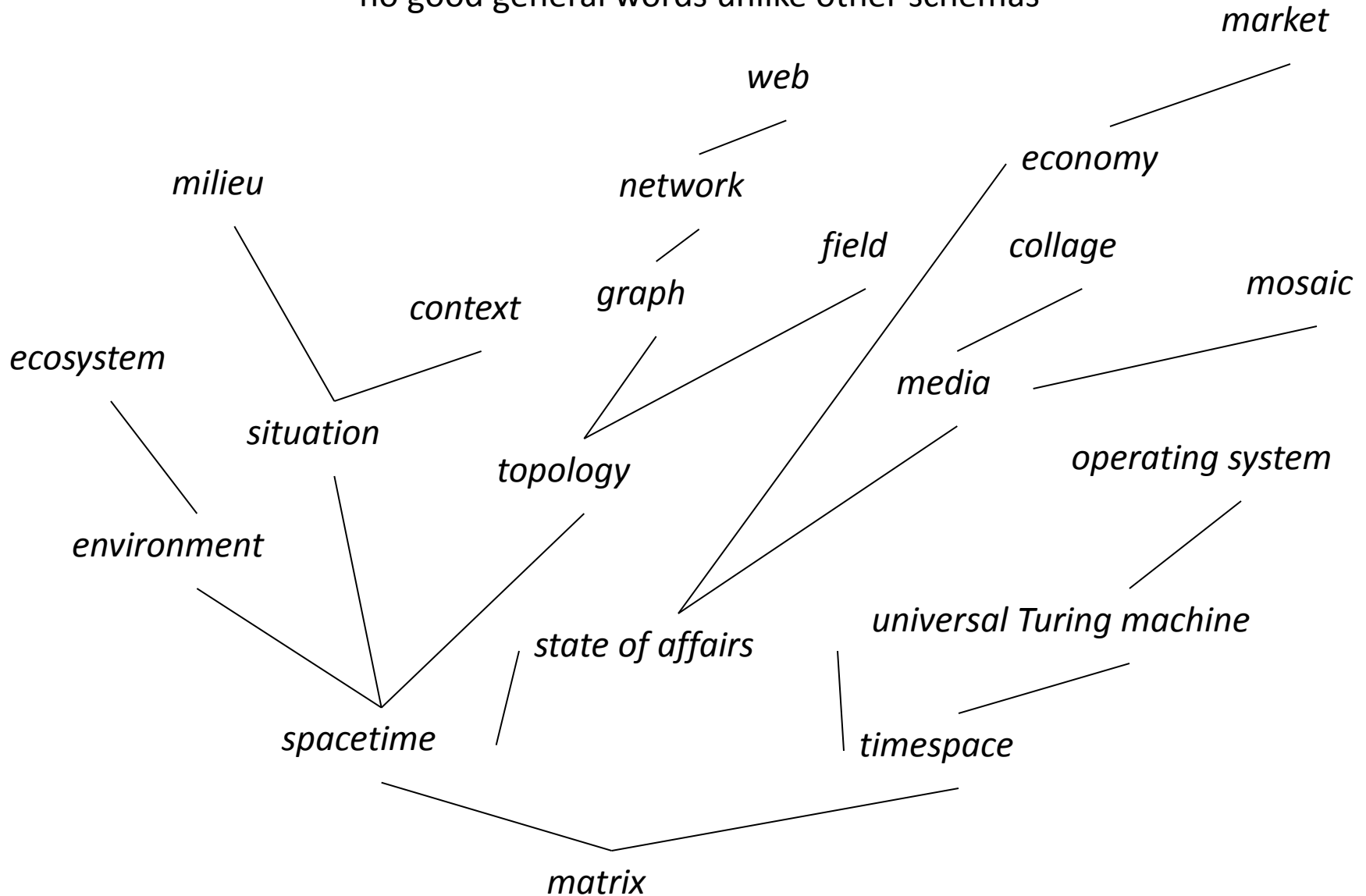
**Turing Machine Representation**  
(Gurevich Abstract State Machine)



# Types of Meta-systems



no good general words unlike other schemas





# Bataille “Accursed Share”

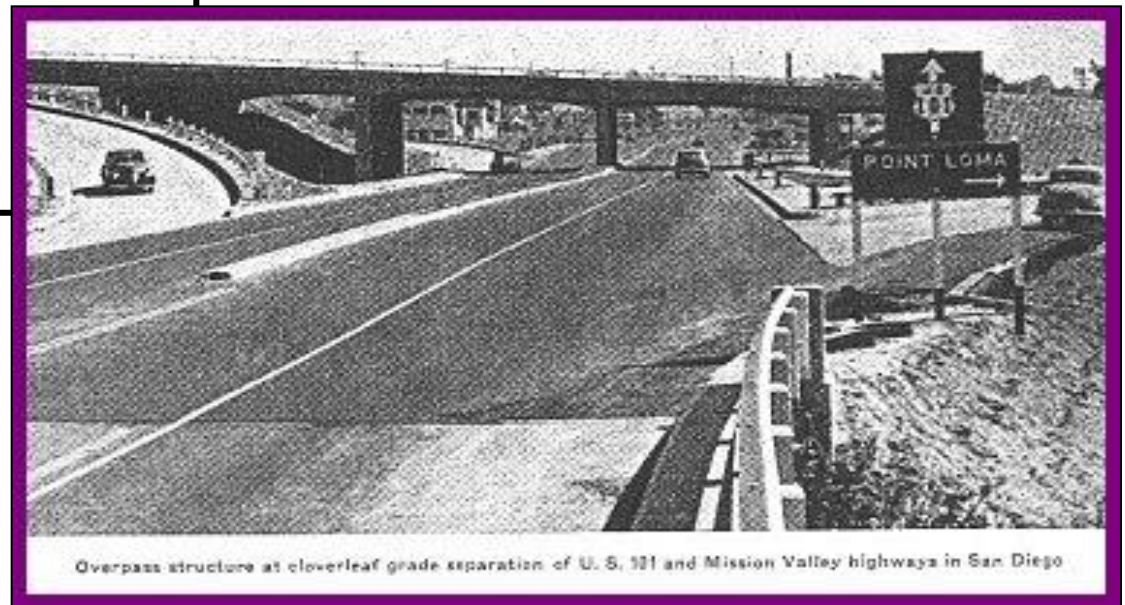
- General Economy
- Meta-system
- International waters
- Lawlessness of the high seas
- Piracy, reflagging ships, contraband and smuggling
- Restricted Economy
- System
- Nation states control what is within their borders, ideally
- Really the state is a meta-system inside = black and grey markets, barter and gift



# Highway example

<b>Boundary</b> Sides of road	<b>Source</b> entry from streets
<b>Origin and destination</b> on ramp and off ramp	<b>Arena</b> lanes

System = automobile  
Meta-system = highways



# Highway example



## **Clover-leaf**

- crossing without stopping
- Non-stop driving on

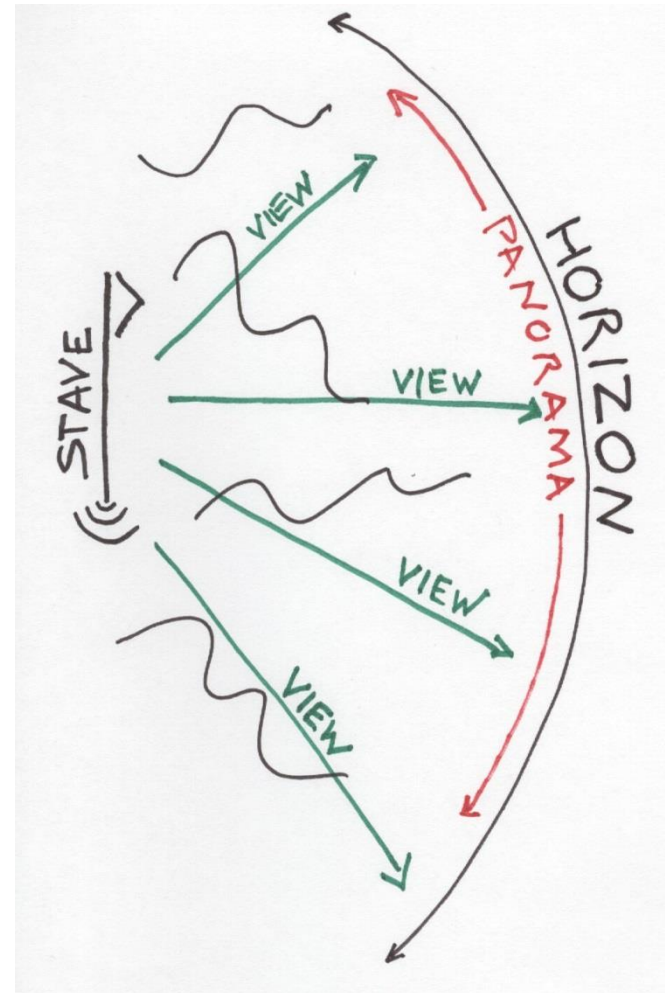
Freeways



# META-SYSTEM SCHEMA 4D-5D

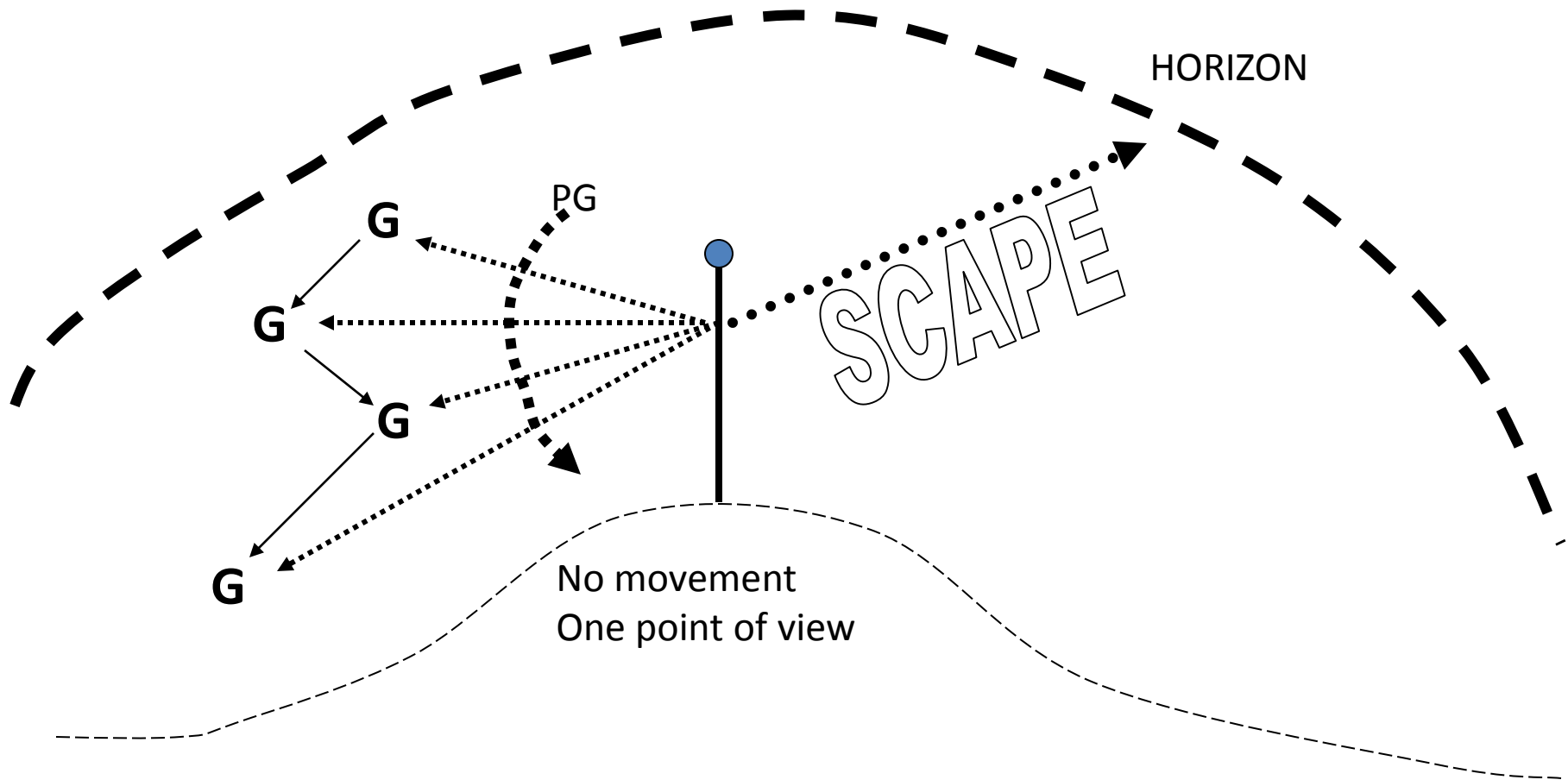
Context, Environment, Ecology, Media, Substance

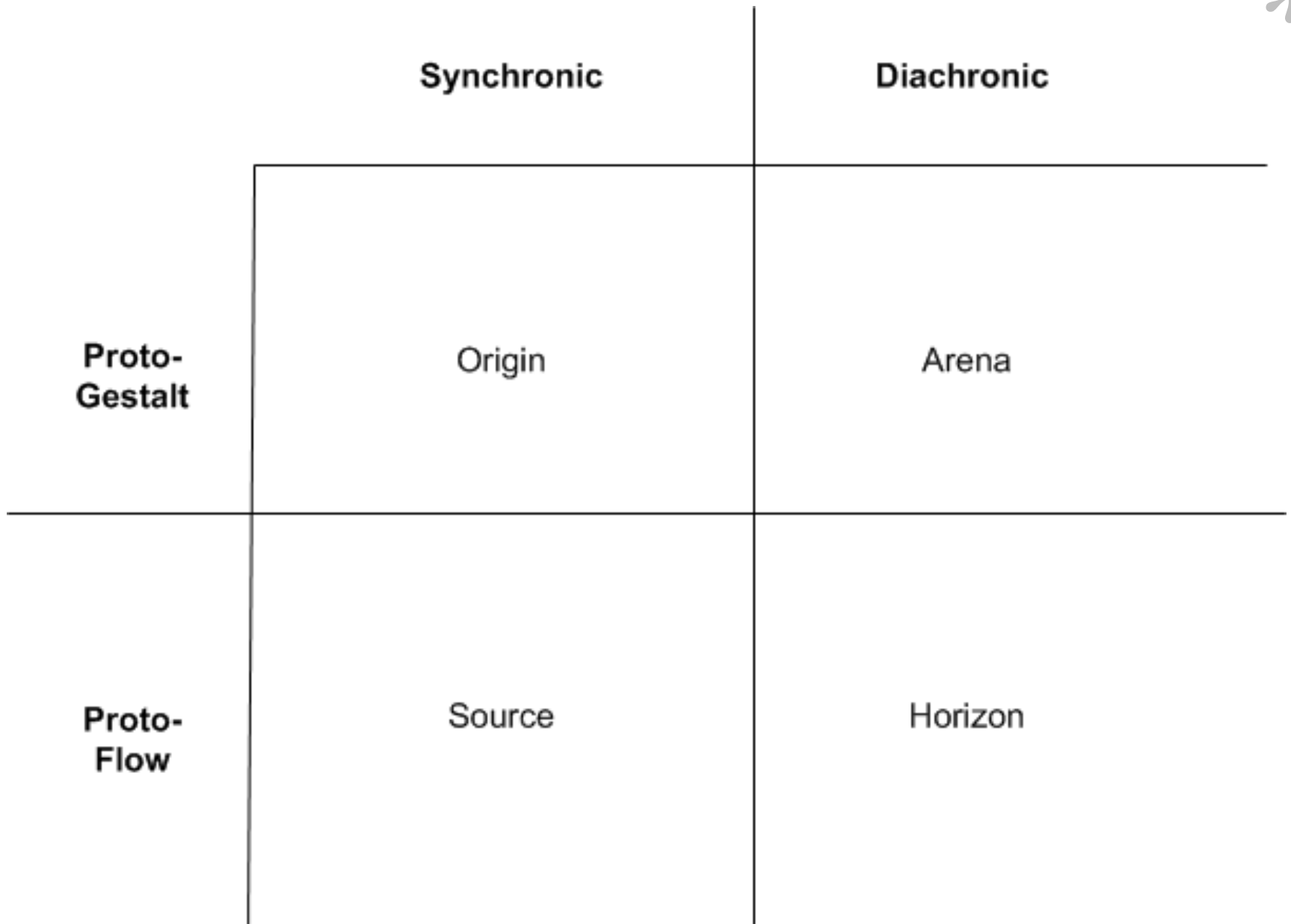
SET	NET
Particulars	of Places
MASS	Field
Instance	of View
WHOLE	SCAPE
Part	
MULTIPLE	UNIQUE
Ipsity	ORIGIN
	(Stave)



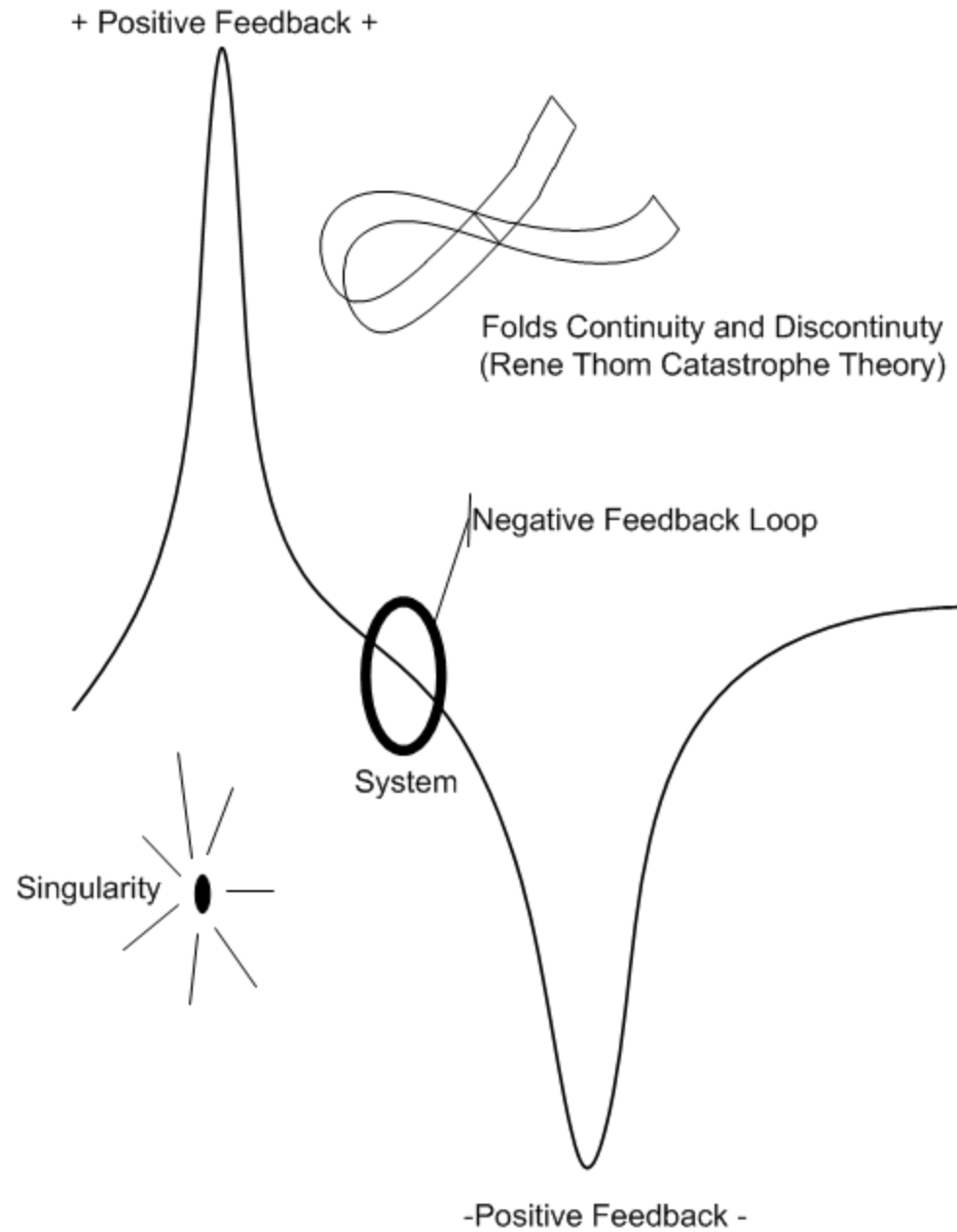


# Open-Scape



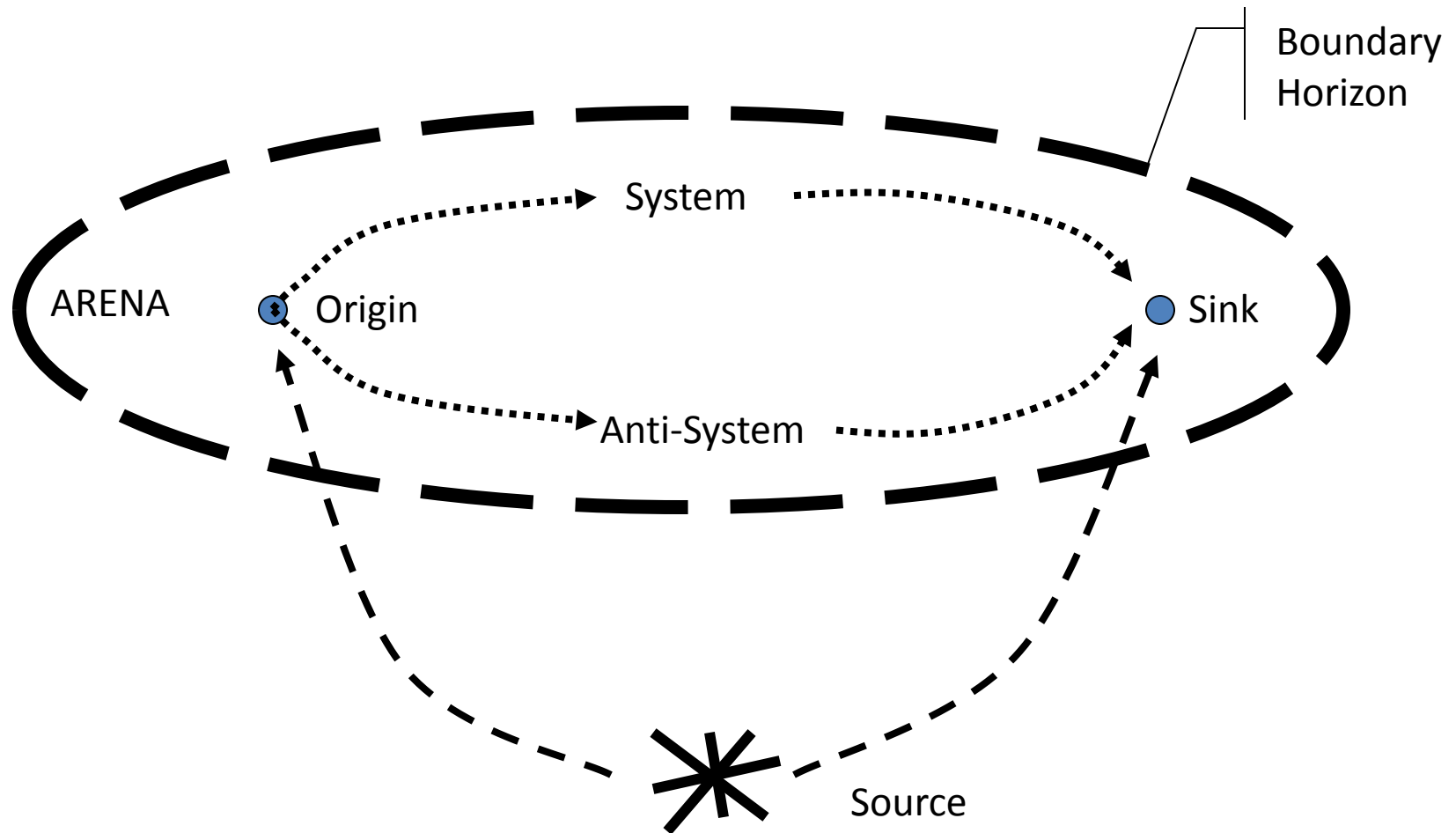




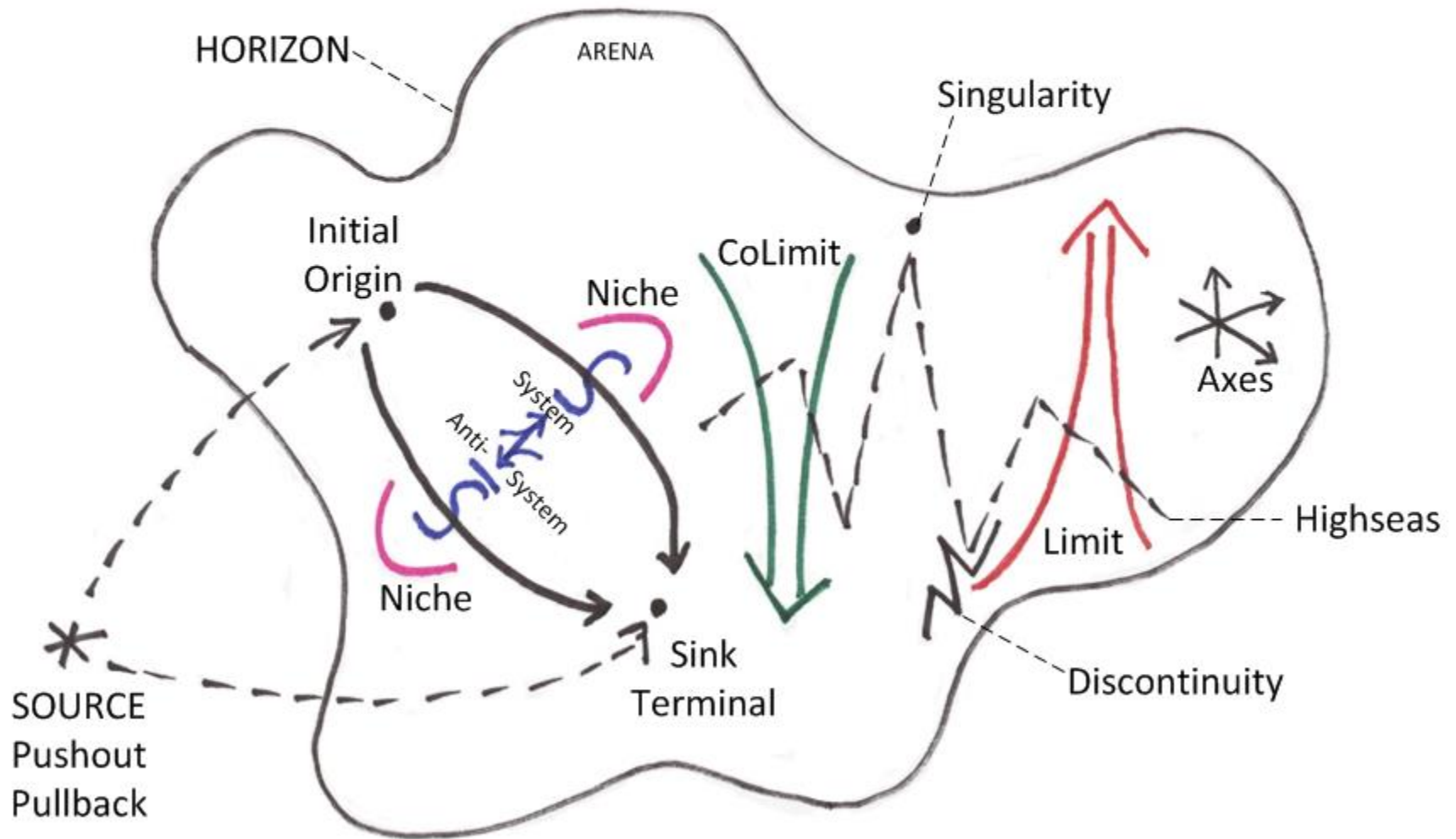


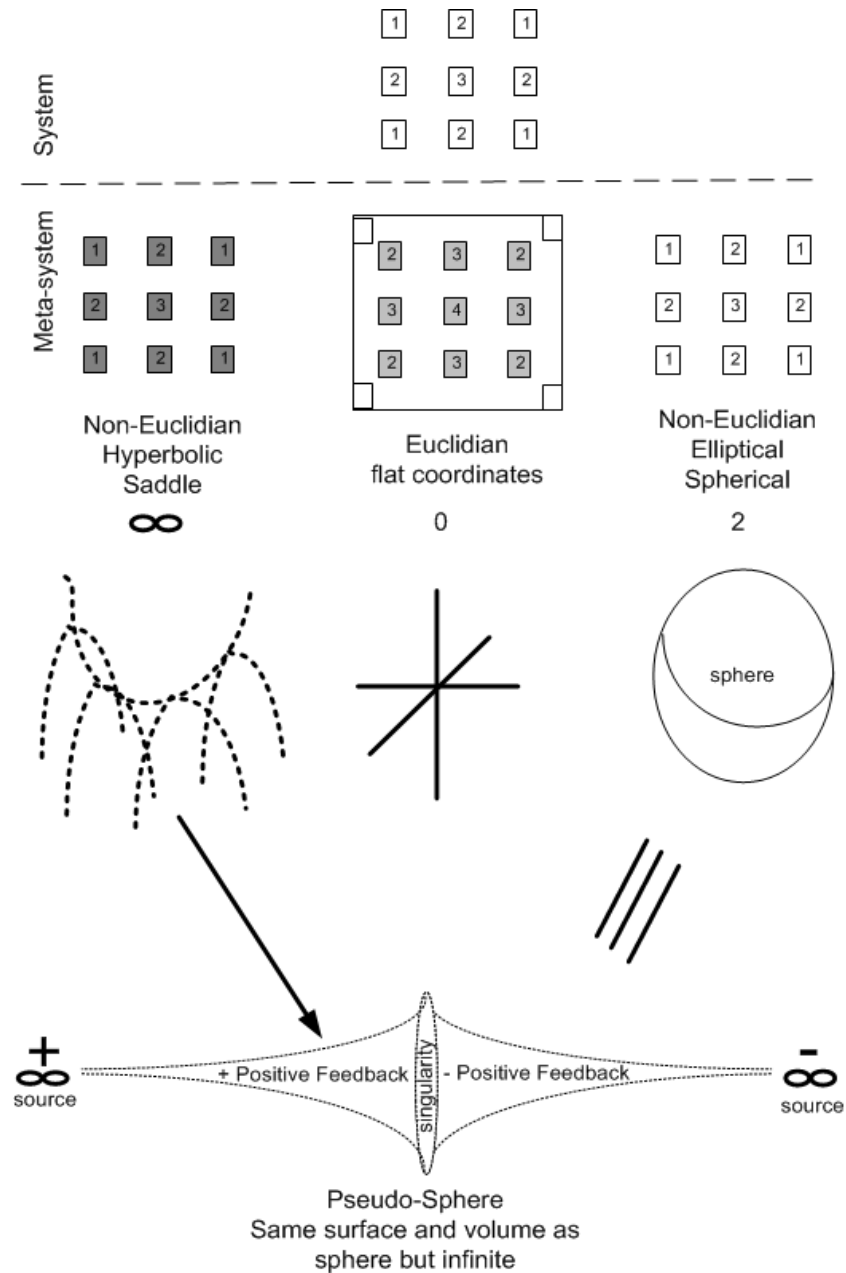


# Meta-System Partitions



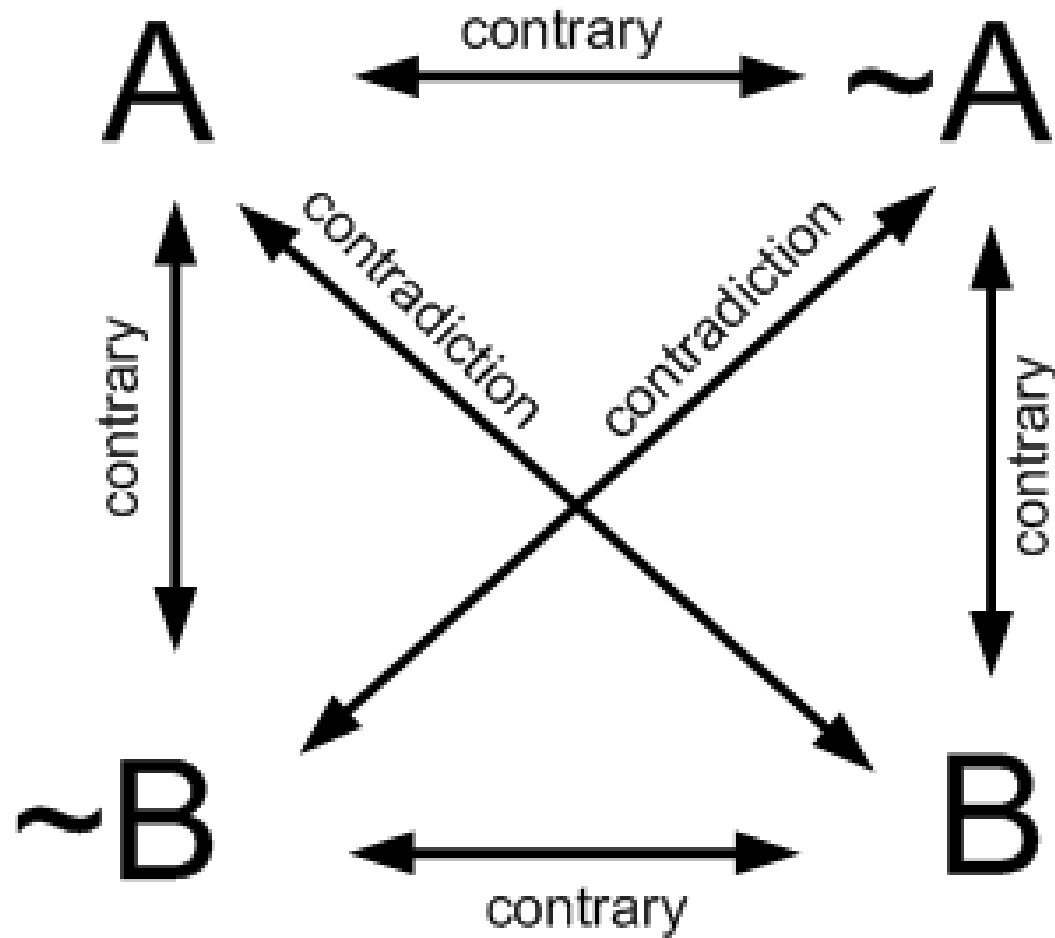
# MetaSystem OpenScape





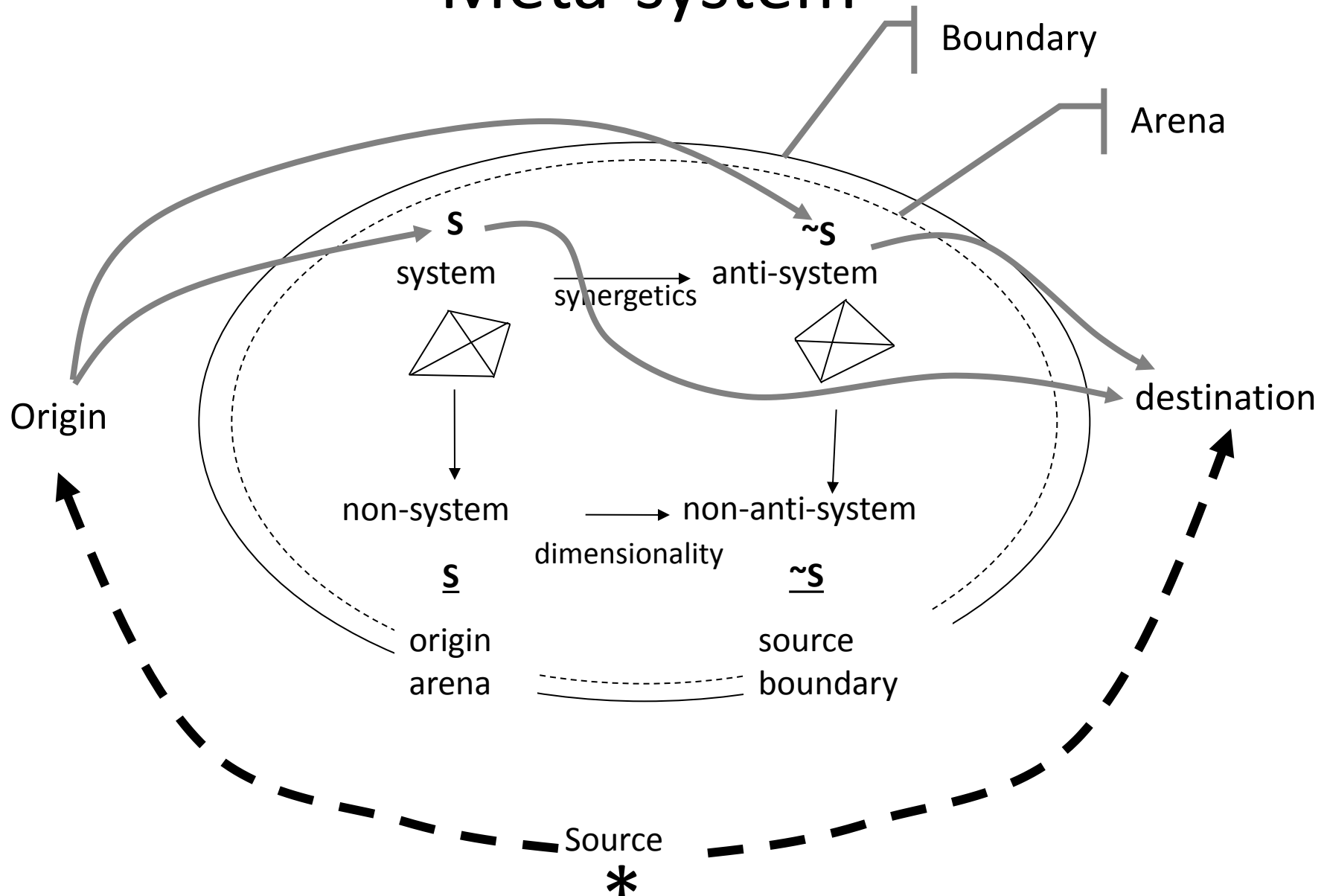


## Greimas Square

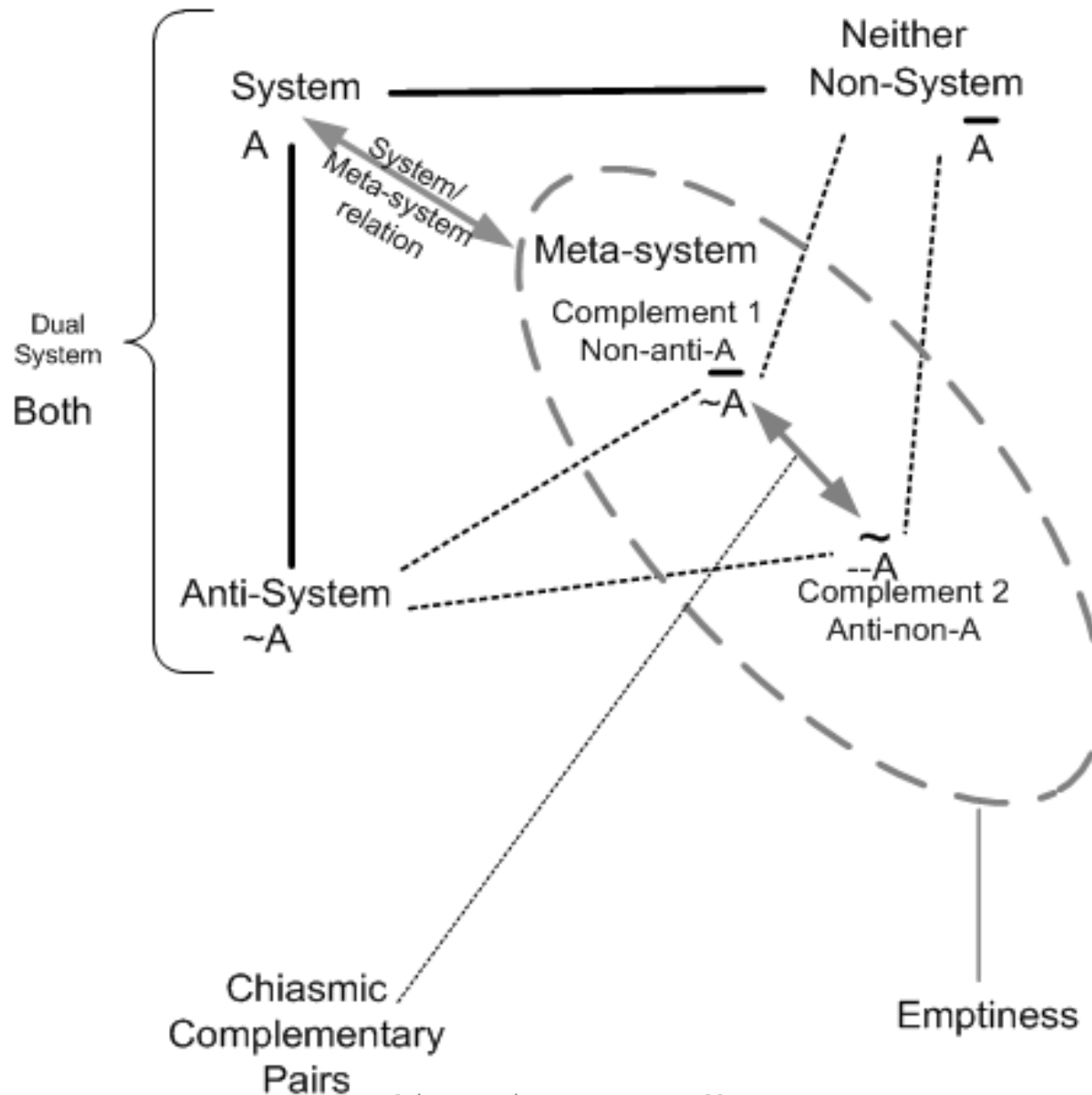




# Meta-system



# Tetralemma in Greimas Square



## DOMAIN SCHEMA 5D-6D

SET

Particulars

Subjects

MASS

Instance

Viewpoints

WHOLE

Part

Discipline

Rigor

MULTIPLE

Ipsity

Scholars

opinions

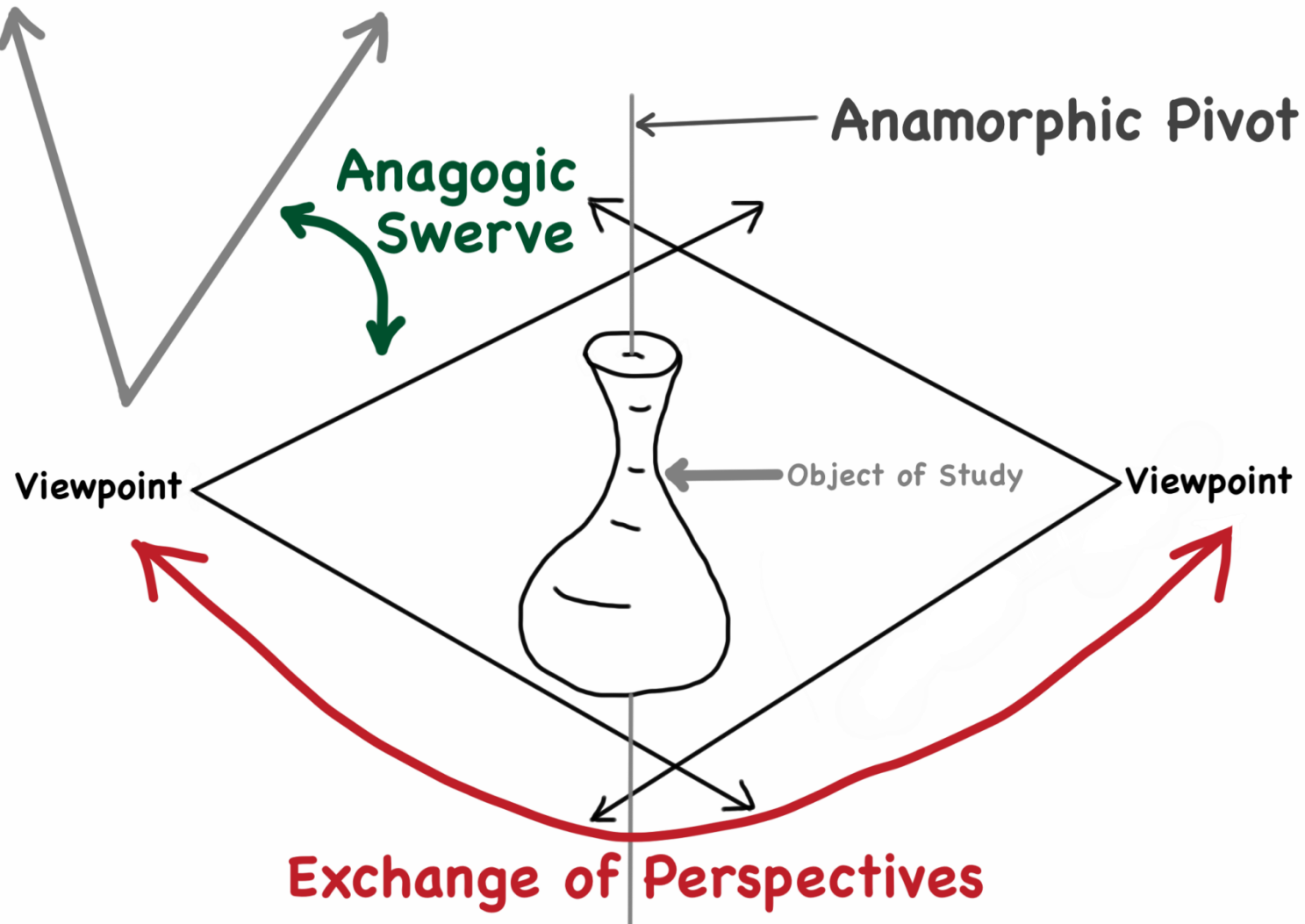


# DOMAIN

## Realm

- Problematic
- Map/Territory
- Rigor
- Discipline
- Peer Review
- Replication
- Fact
- Theory
- Paradigm
- Episteme
- Ontos
- Universe of Discourse
- Dialectic
- Domain Specific Languages (Jargon)
- Objectivity
- Intersubjectivity (Socius)
- Commonality
- Perspective
- Parallax View
- Foundations

# Domain

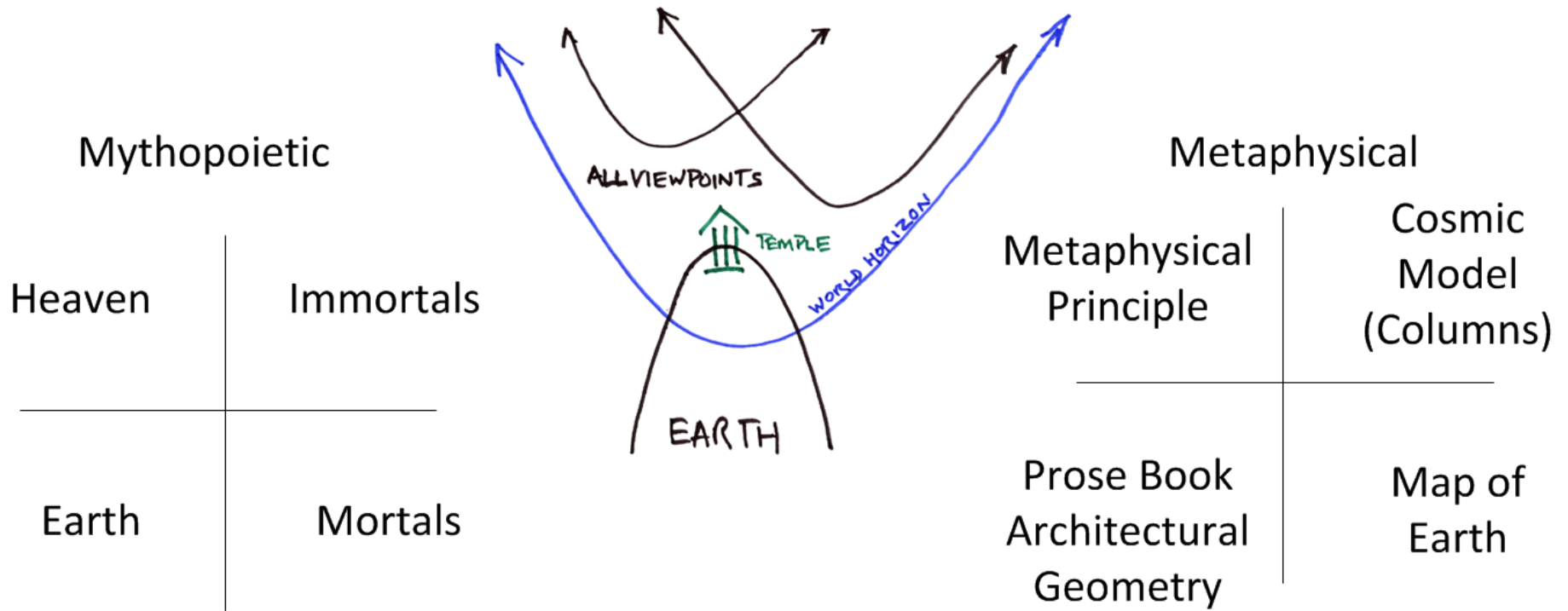


# WORLD SCHEMA 6D-7D

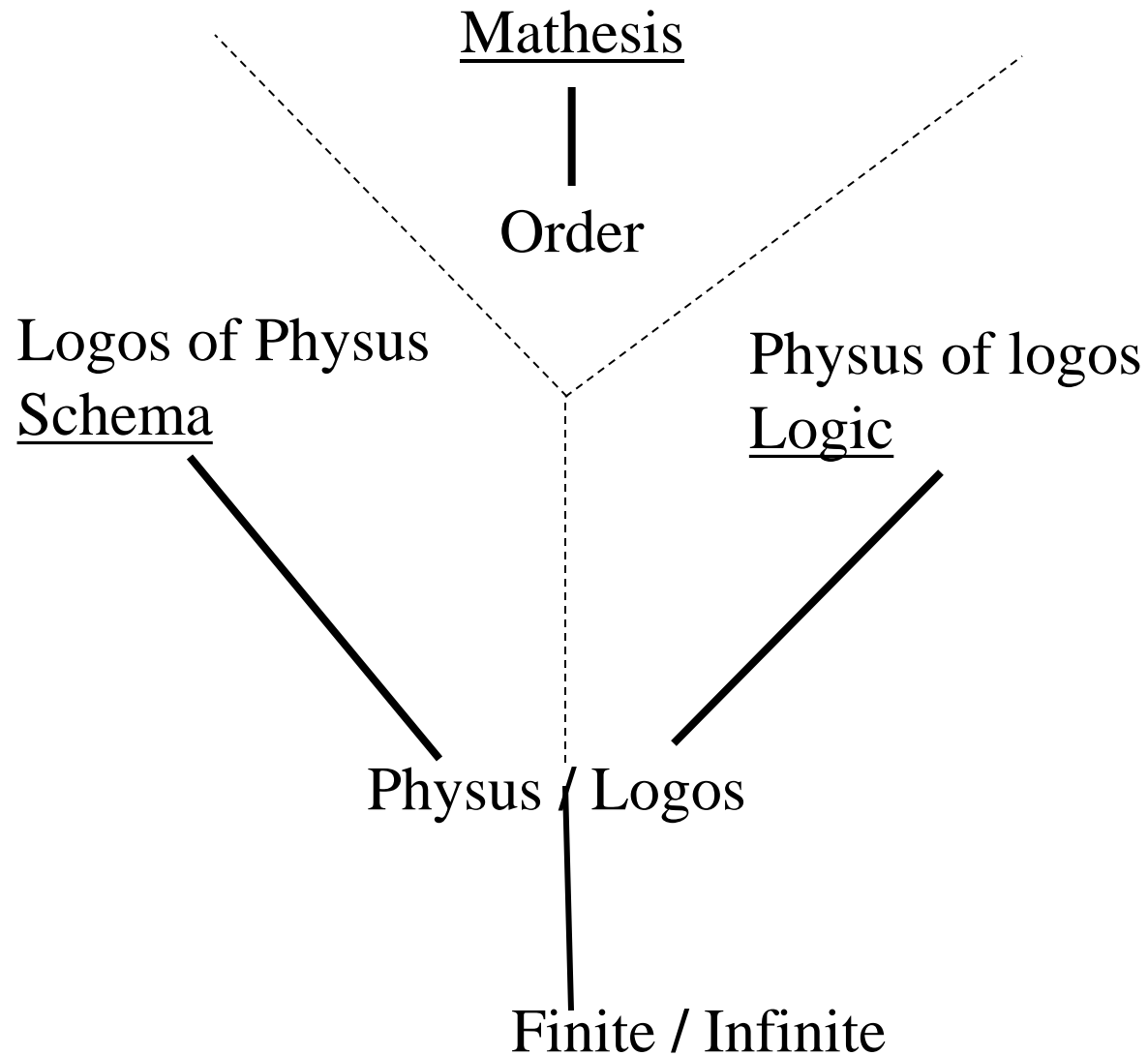
Ultimate Experience-able Human Horizon

SET Particulars	Ground	Abyss
MASS Instance	Light	Dark
WHOLE Part	Order	Chaos
MULTIPLE Ipsity	Uncover	Cover

# World

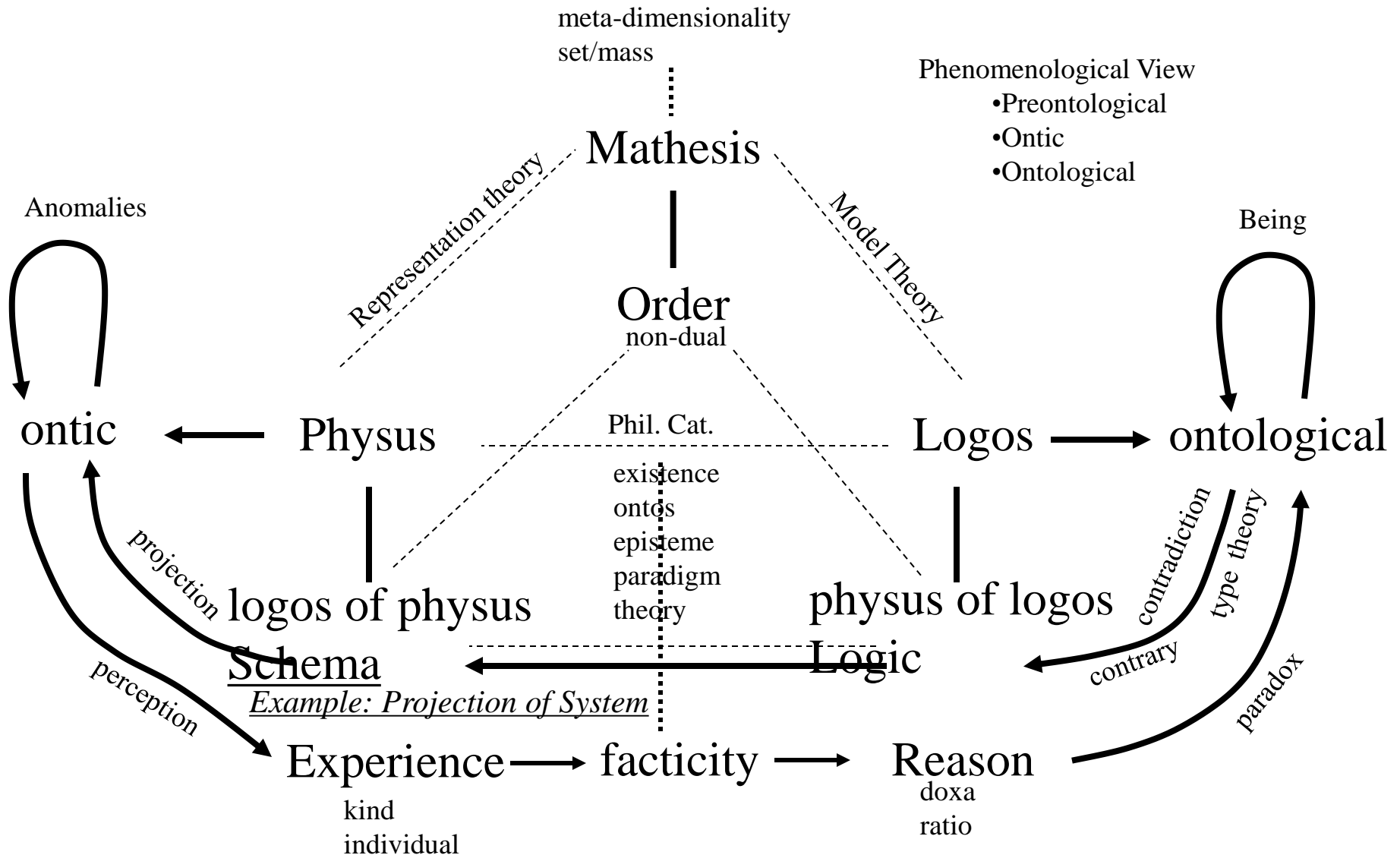


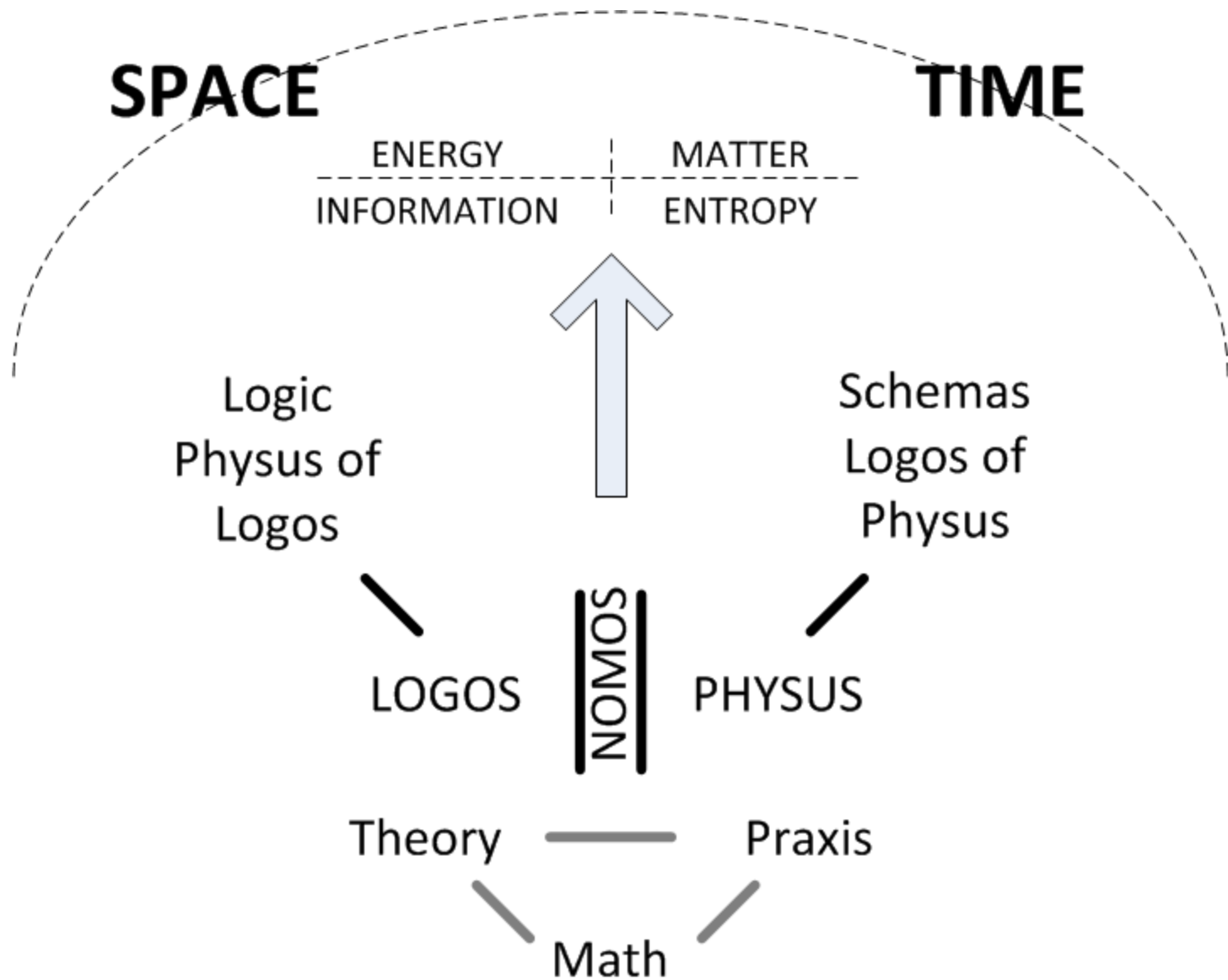
Anaximander





# Circulation of Projection





# What is a World?



Mythopoietic answer

Socrates



# Can we have a Mathematical model of the Worldview?

- Concept of Meta-Dimensions has not been developed
- What completion of the series? -1-2-3-4-7-10
- Fibered Rational Knots = 1-1-1-2-3-4-7-10-16...
- Like the definition of Rational Animal from Aristotle
- Gives us a sketch of the *Transcendences* of the worldview as headlands above the world



Meta-dimensions  
Finitudes

## Hypothetical Structure of the Worldview

Meta-dimensions of Transcendence

Finite Positive Meta-dimensions of Finitudes

7 1 nondual Void

6 1 nondual Manifestation

5 1 nondual Emptiness

4 2 Two Limits (supra-rational and paradoxical)

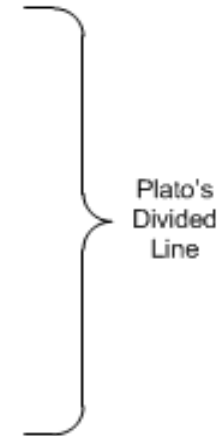
3 3 External Regions (other three 3d regions of 4d space)

2 4 Aspects (identity, presence, truth, reality)

1 7 Standings (5 kinds of Being, Existence, Manifest, Amanifest)

0 10 Schemas (Facets to Pluriverse)

-1 16 Arche ( structure of archetypes, see Jung's 'Quaternio' in Aion)



Plato's  
Divided  
Line

Infinite Negative Meta-dimensions of Finitudes

# Meta-dimensional Transcendences

7	1	}	TRINITY	WORLDVIEW Meta-Dimensions Based on Fibered Rational Knots	
6	1				
5	1				
4	2	}	WORLDSOUL		
3	3				
2	4		ASPECT	W-prime Hypothesis	
1	7		STANDING		
0	10		SCHEMAS		
-1	16		ARCHE		

# SHELL

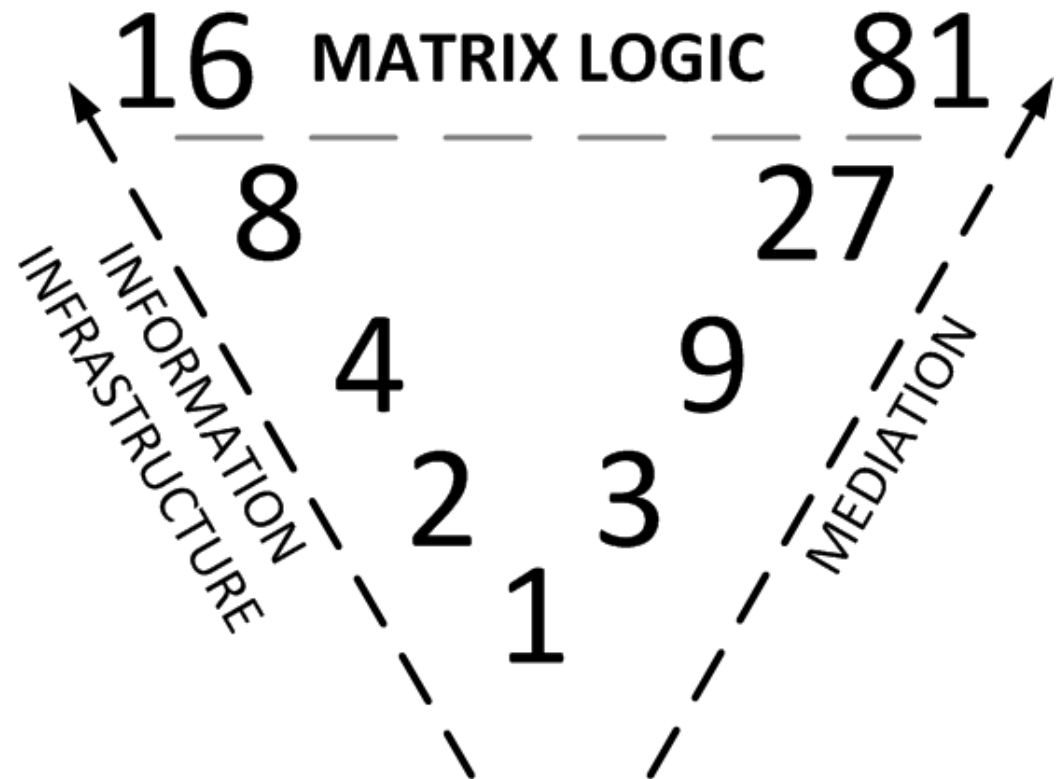
## Organization of Worldview

2	4	ASPECT	Operationalization of Principles
1	7	STANDING	Level of Being, Existence, Manifest
0	10	SCHEMAS	Scopes of Intelligibility
-1	16	ARCHE	Origin

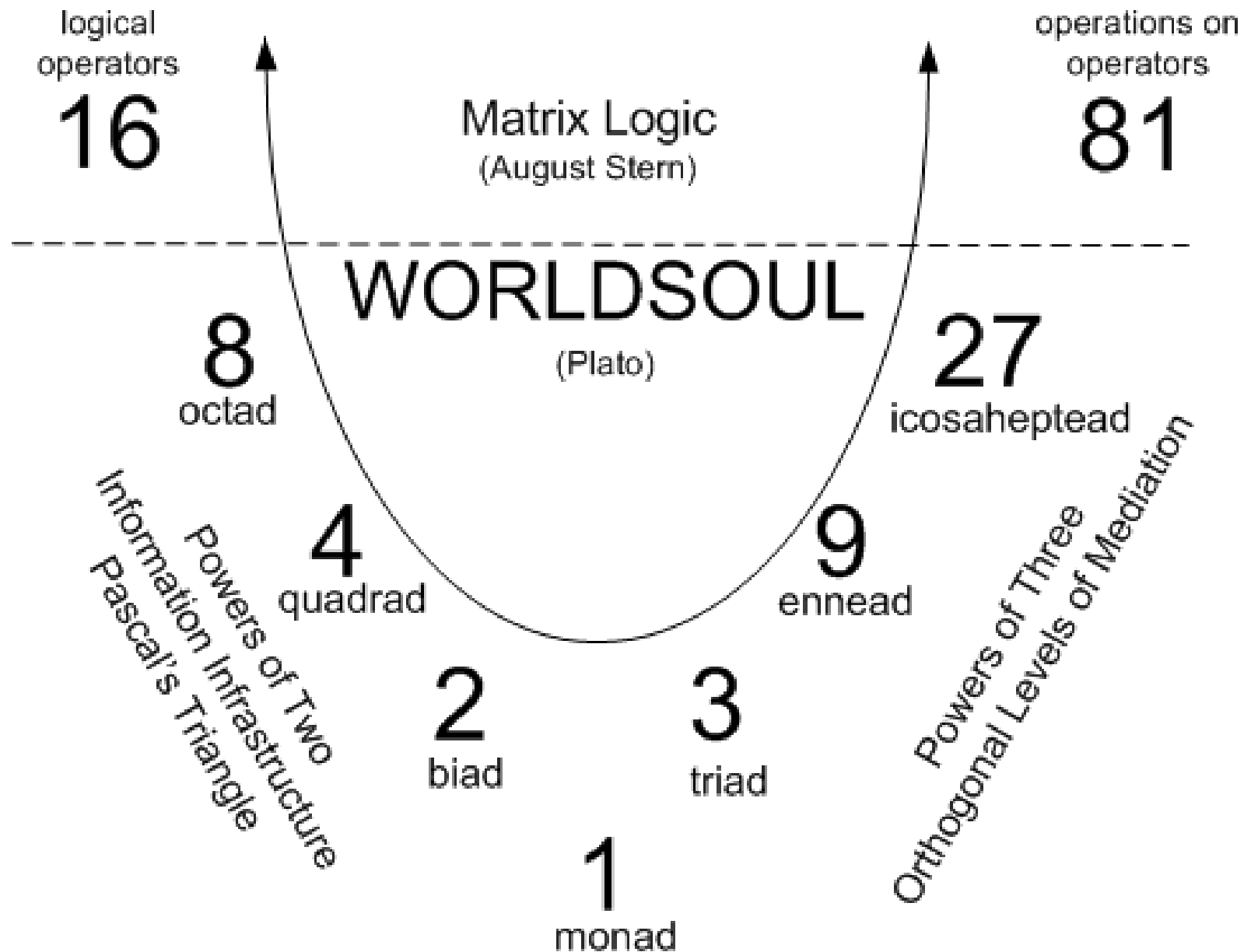
# CORE

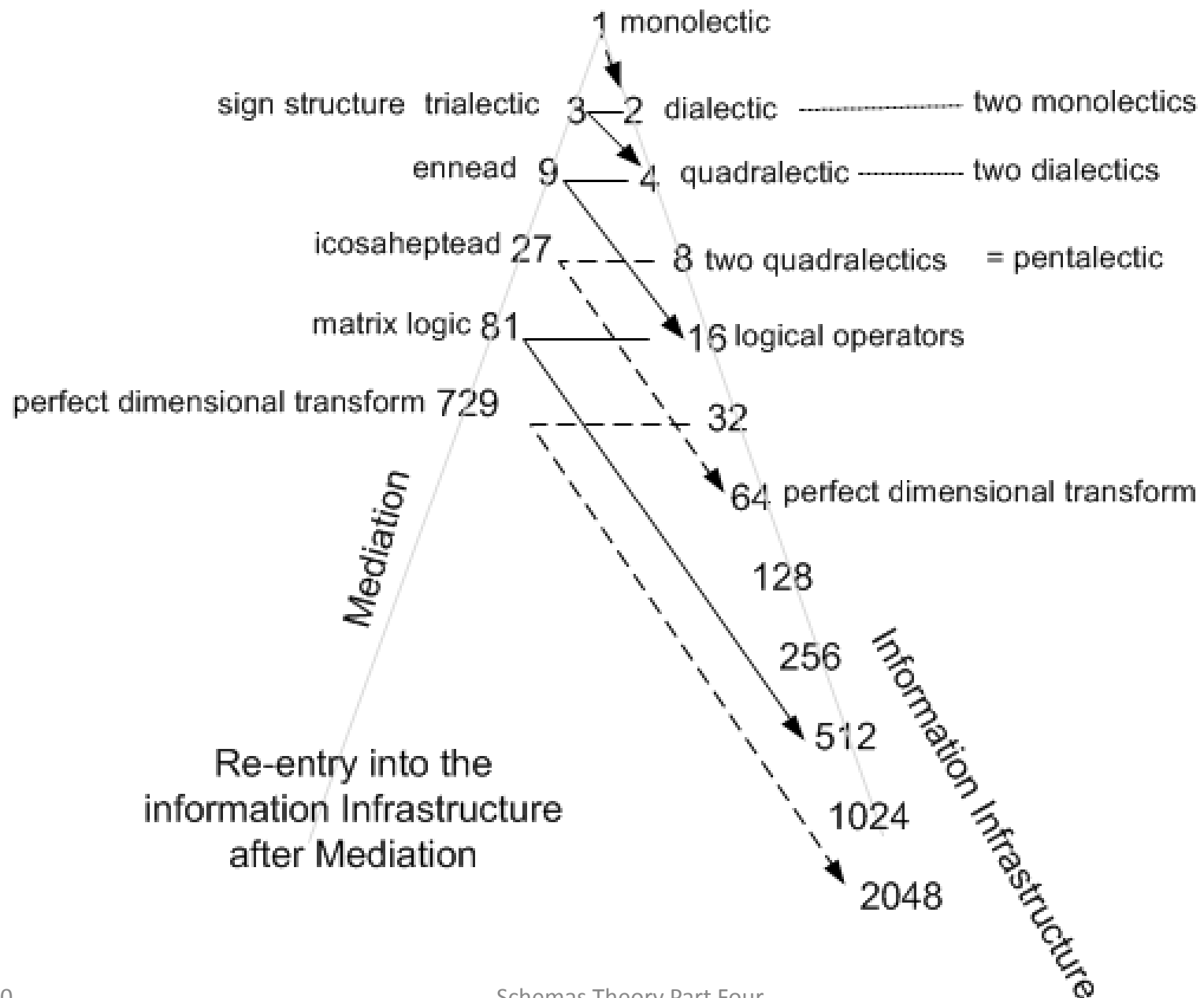
“Moving Image  
of Eternity”

“Change and  
Changelessness at the  
Same Time”



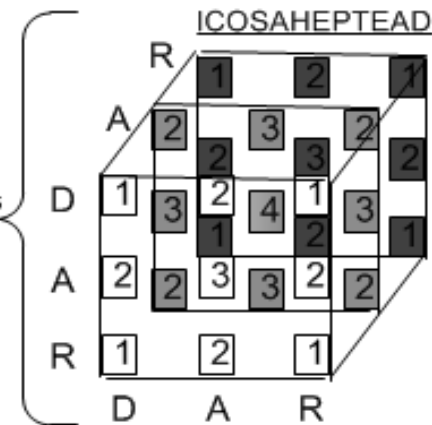
4 2 } WORLD  
3 3 } SOUL







Three  
Dimensional  
Cartesian Cross  
of Special  
Systems

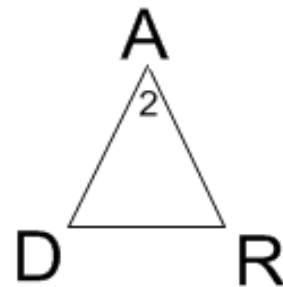


Two  
Dimensional  
Cartesian Cross  
of Special  
Systems

ENNEAD



Special  
Systems



System



Meta-system

Special Systems

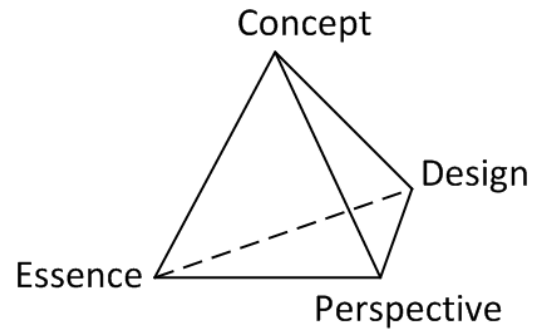
D = Dissipative Ordering  
A = Autopoietic Symbiotic  
R = Reflexive Social



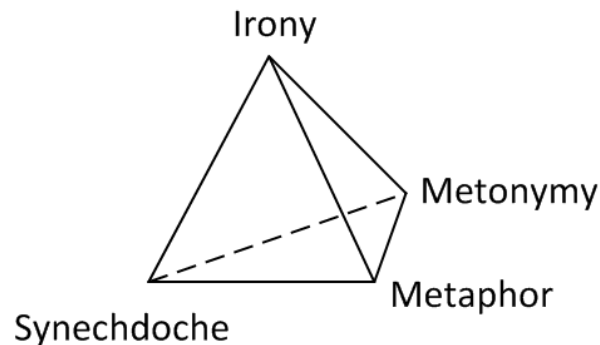
# Tetrahedral Lattice

## 1-4-6-4-1

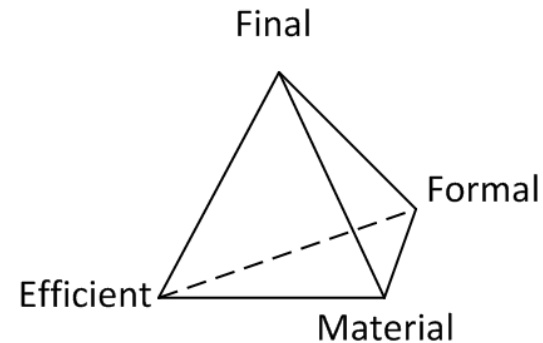
Quadralectic



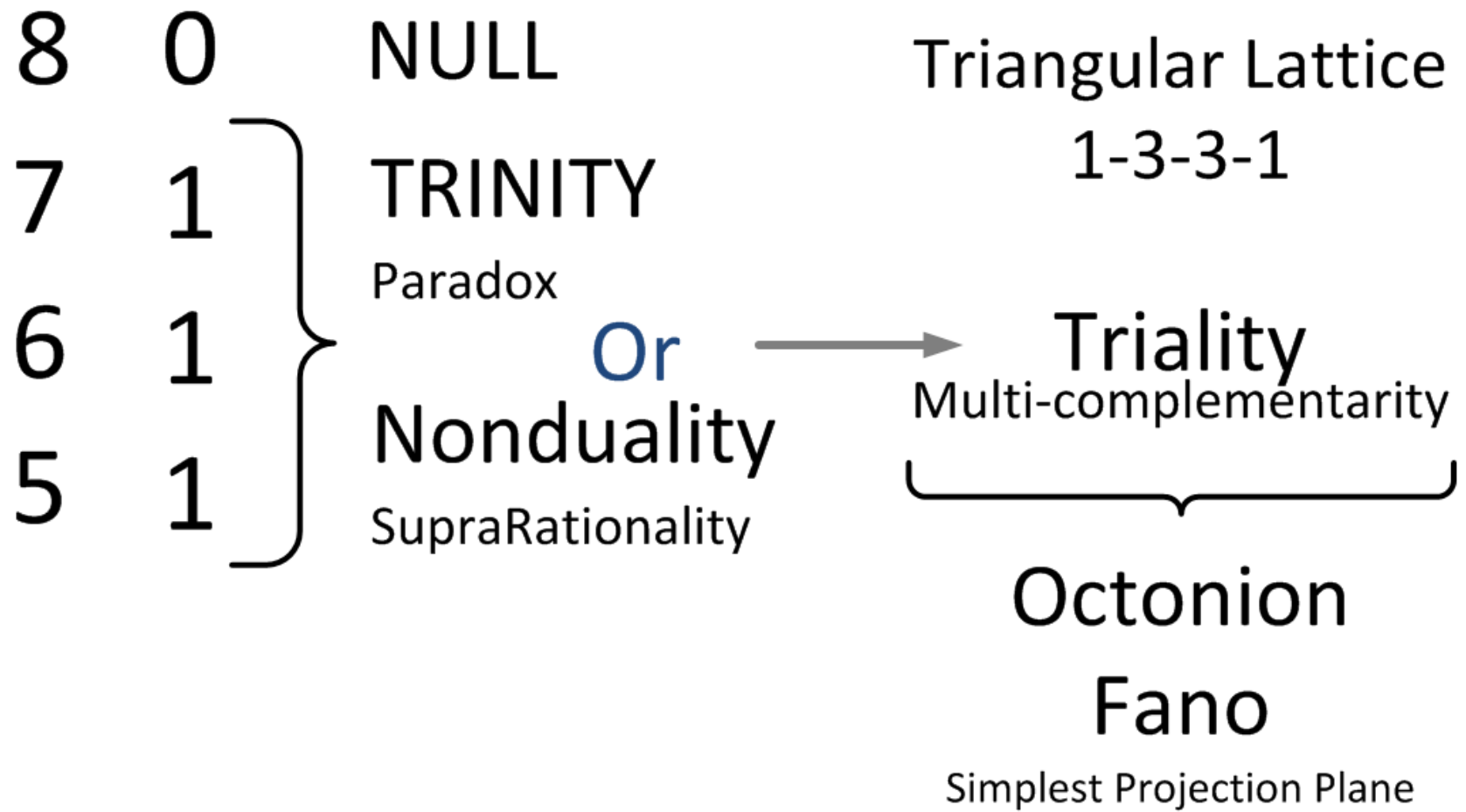
Four Tropes -- LOGOS



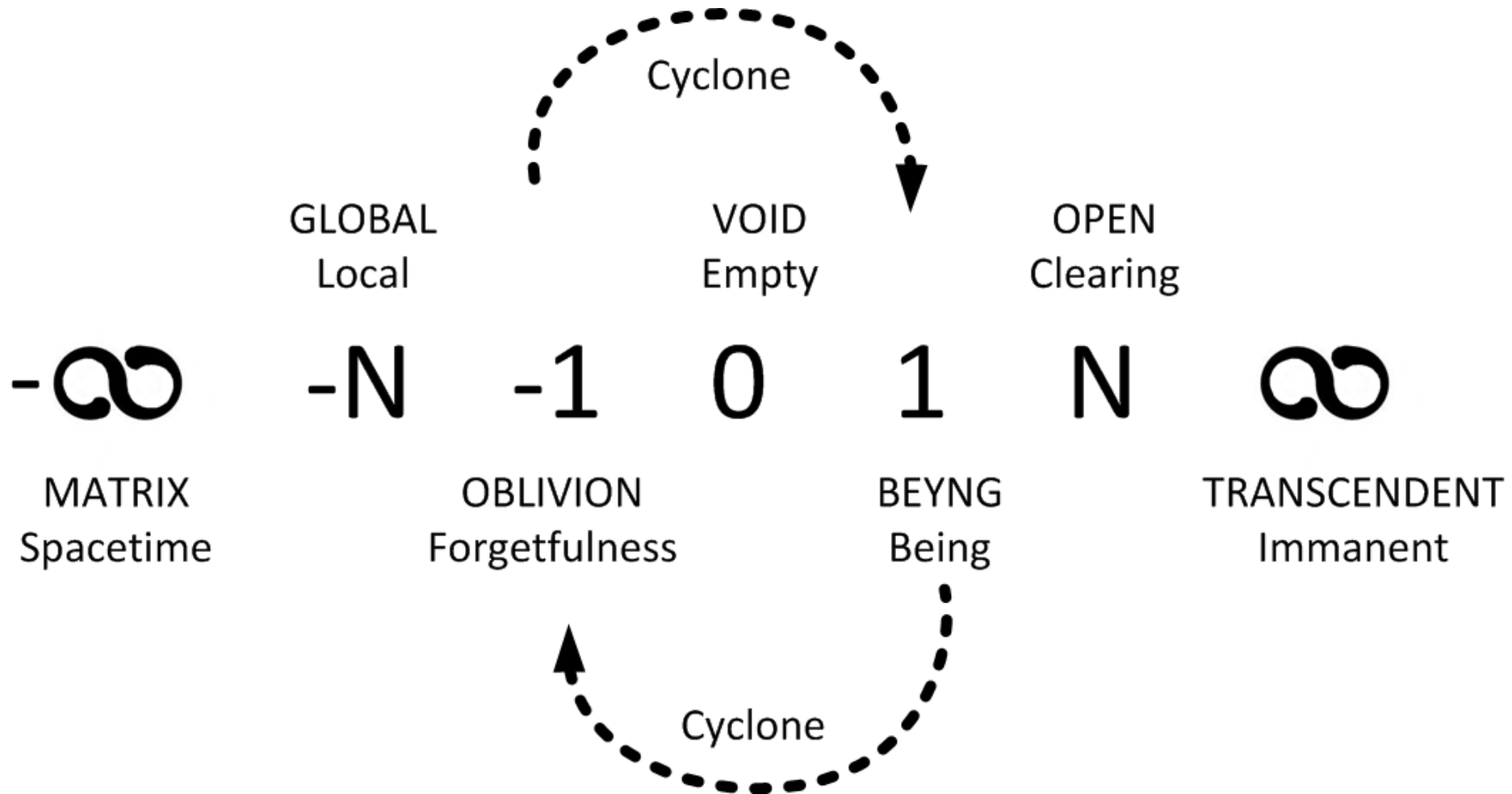
Four Causes – PHYSIS

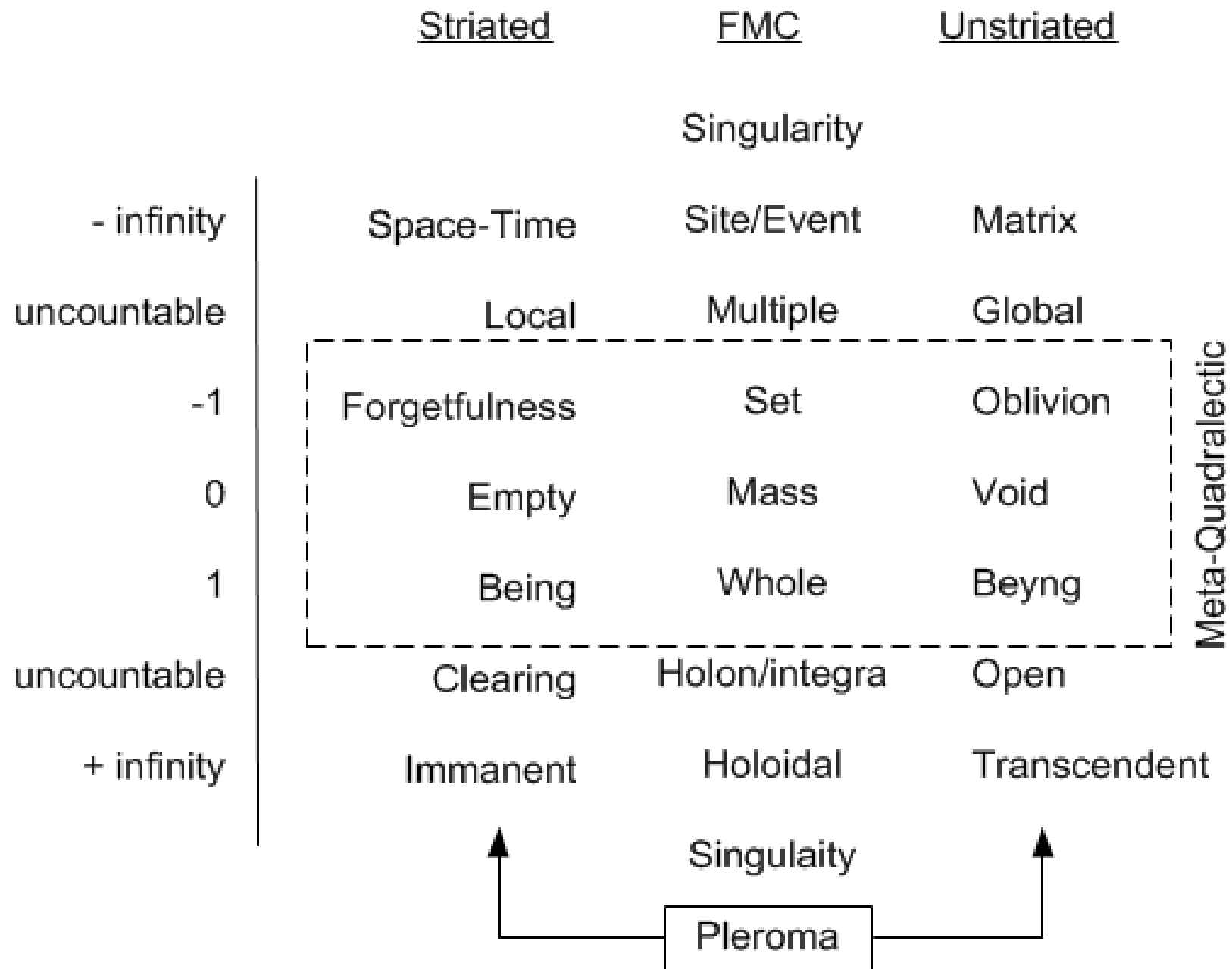


# Kernel



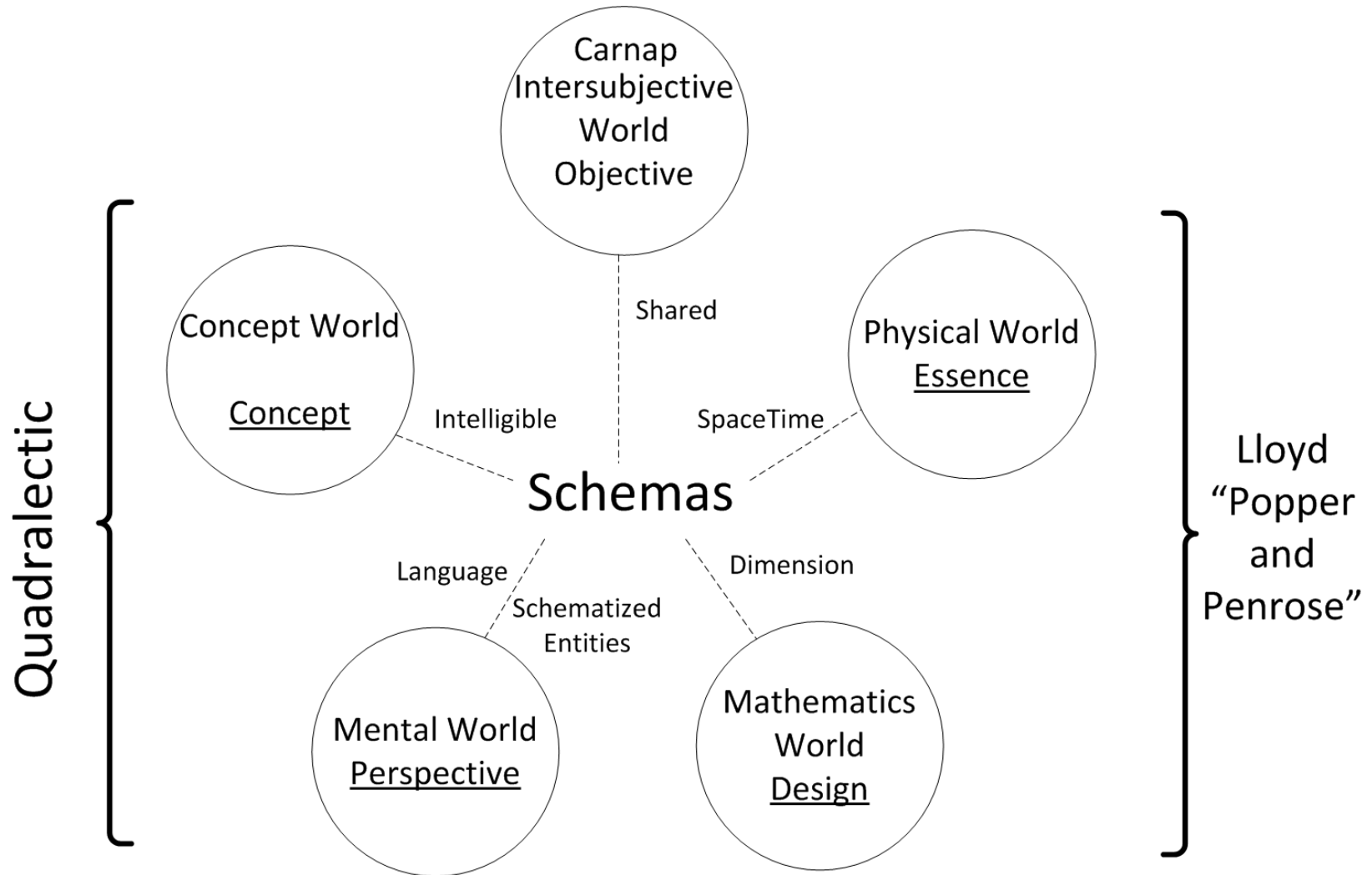
# PLEROMA





# S-Prime Hypothesis

## Links the Worlds



# Emergence of the Metaphysical

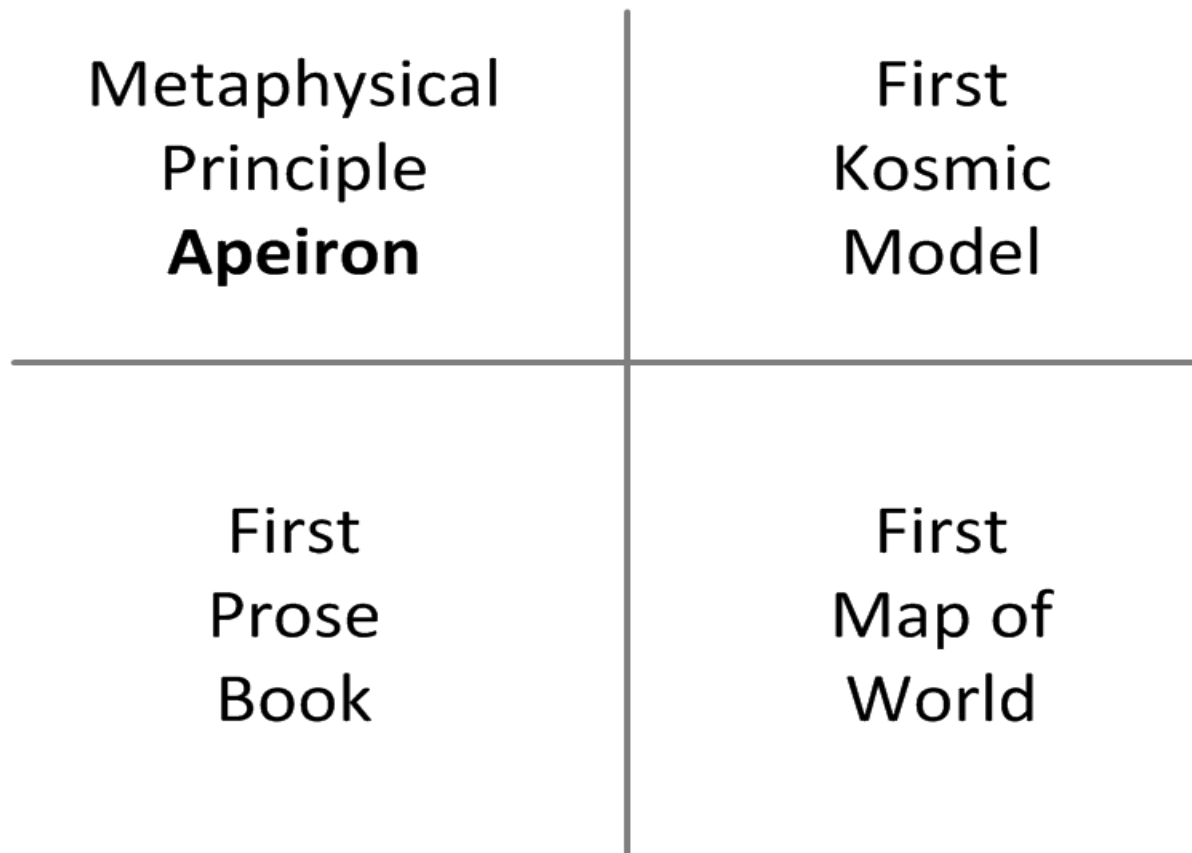
Kosmos  
Representative  
Metaphysical  
(Thales)

Mythos  
Expressive  
Mythopoietic  
(Homer)

Emergent Event

# Quick Tour of the Metaphysical Era

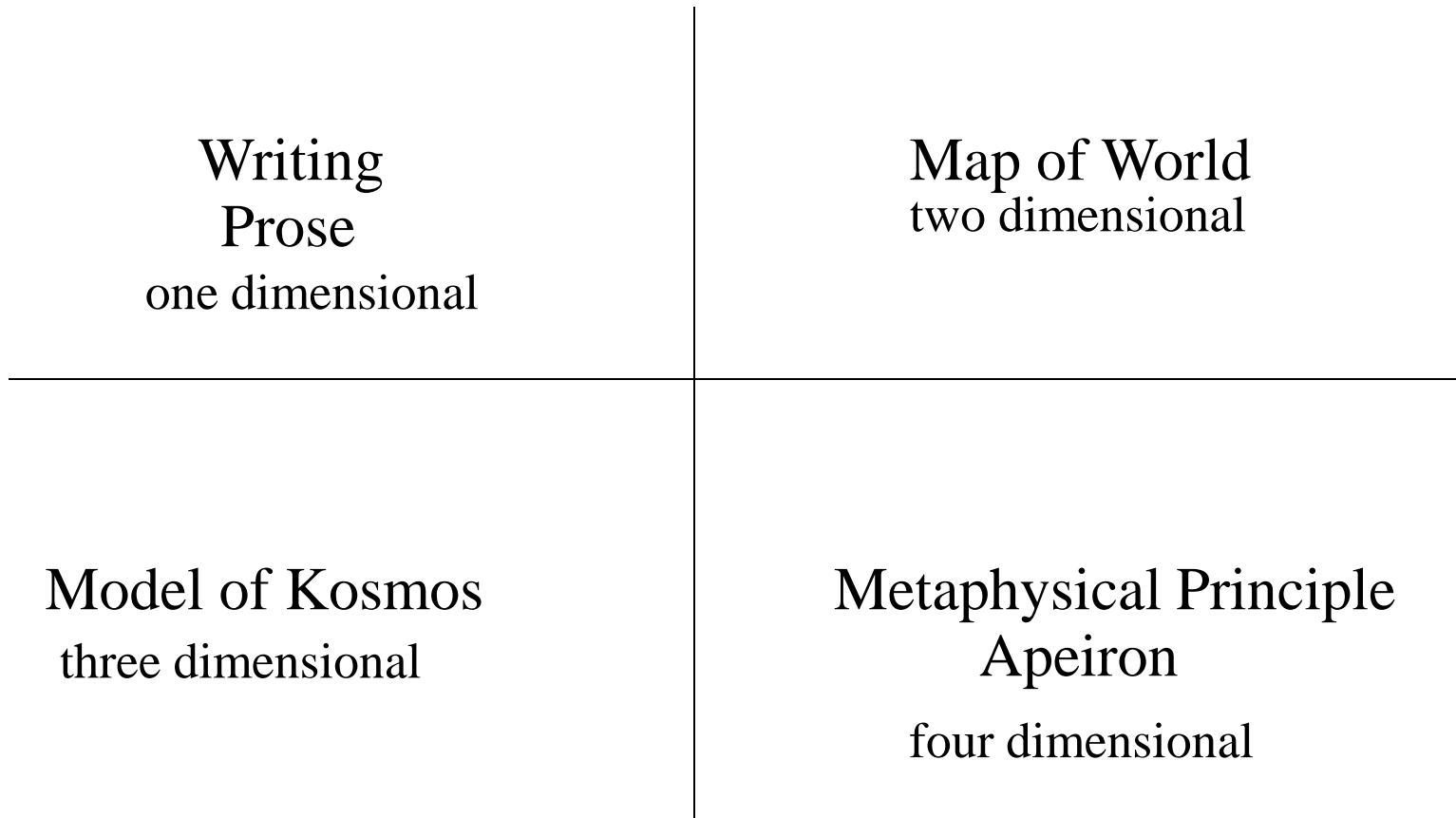
## Anaximander





# Anaximander

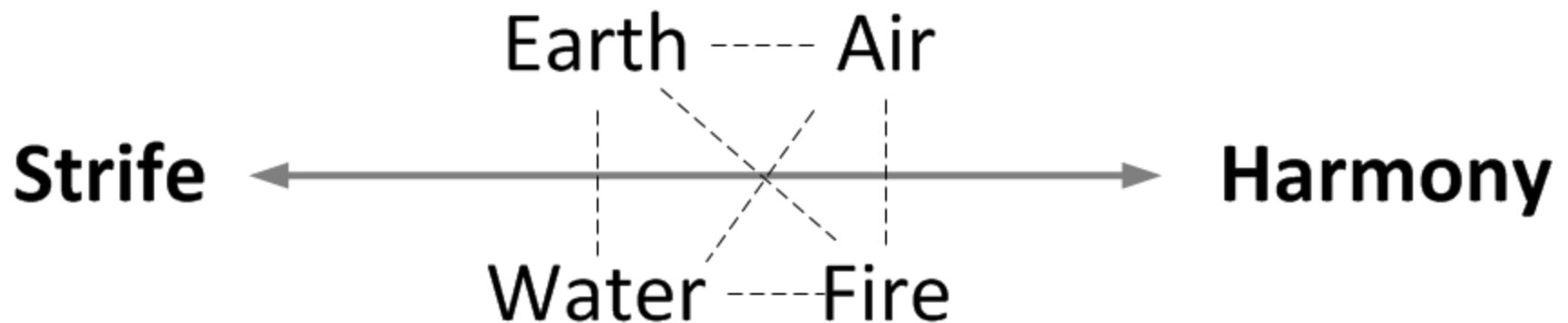
Advent of Metaphysical





# First Metaphysical Synthesis

## Empedocles



# Turn Toward Man

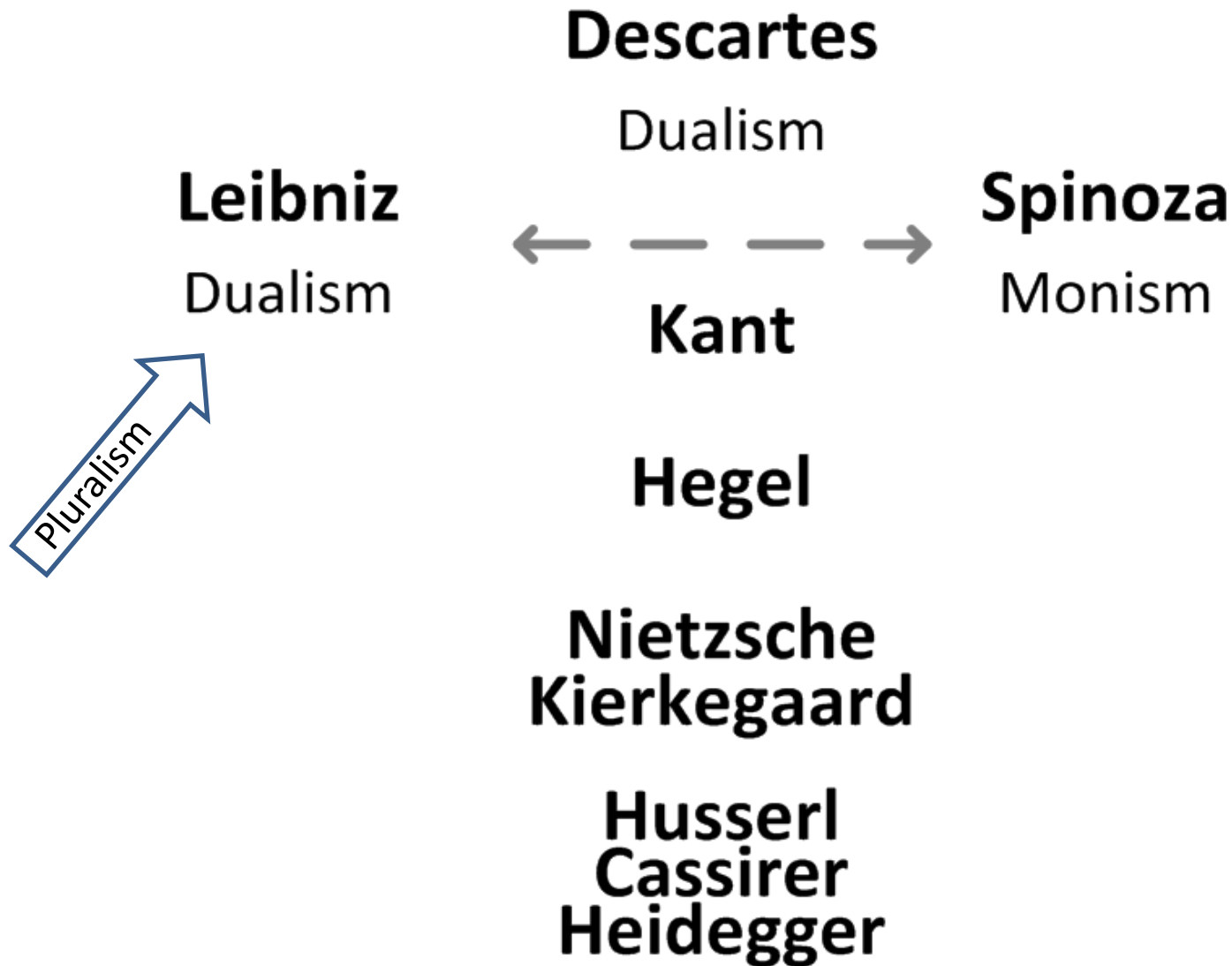
**(Socrates)**

Laws  
For  
City

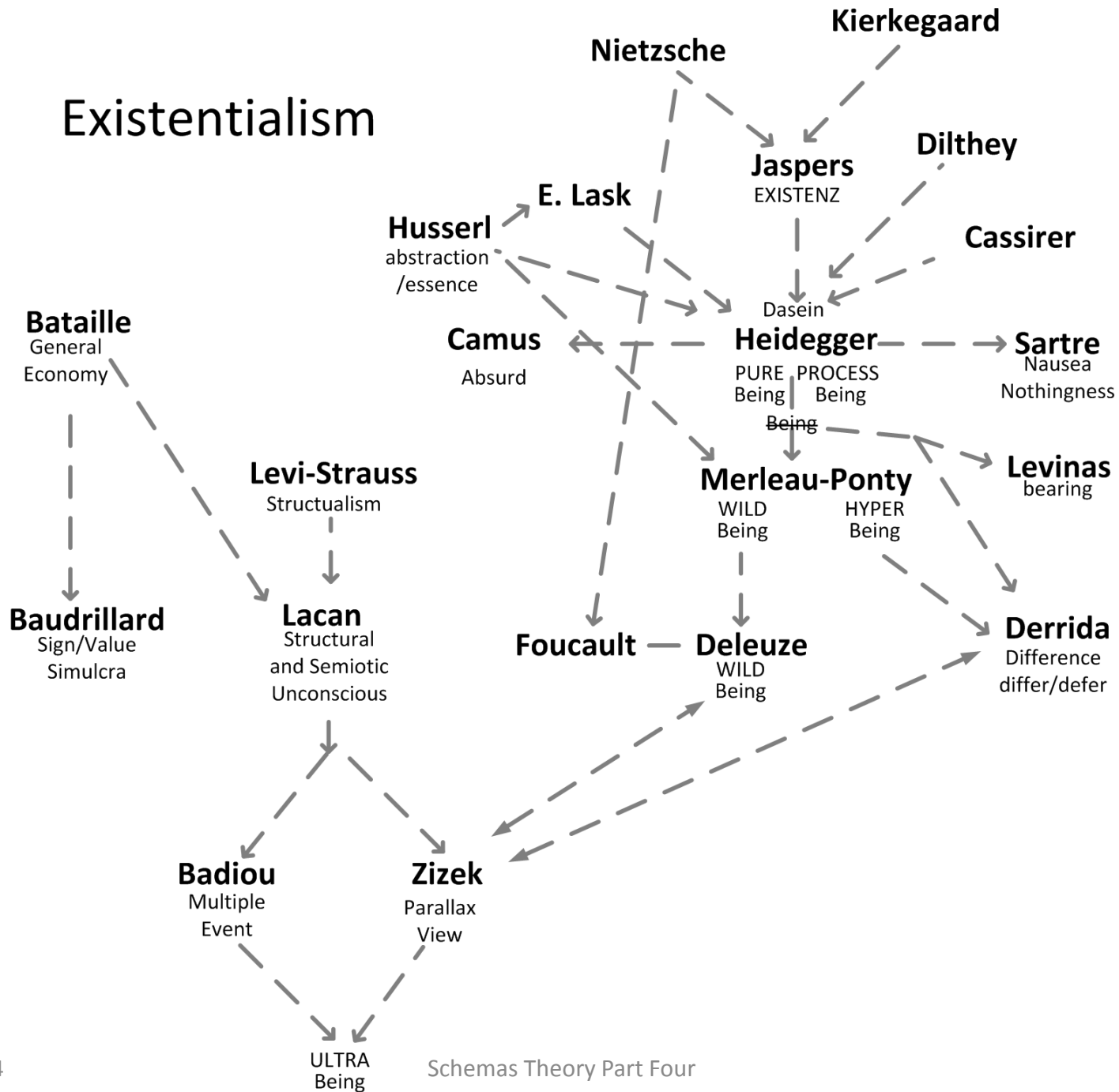


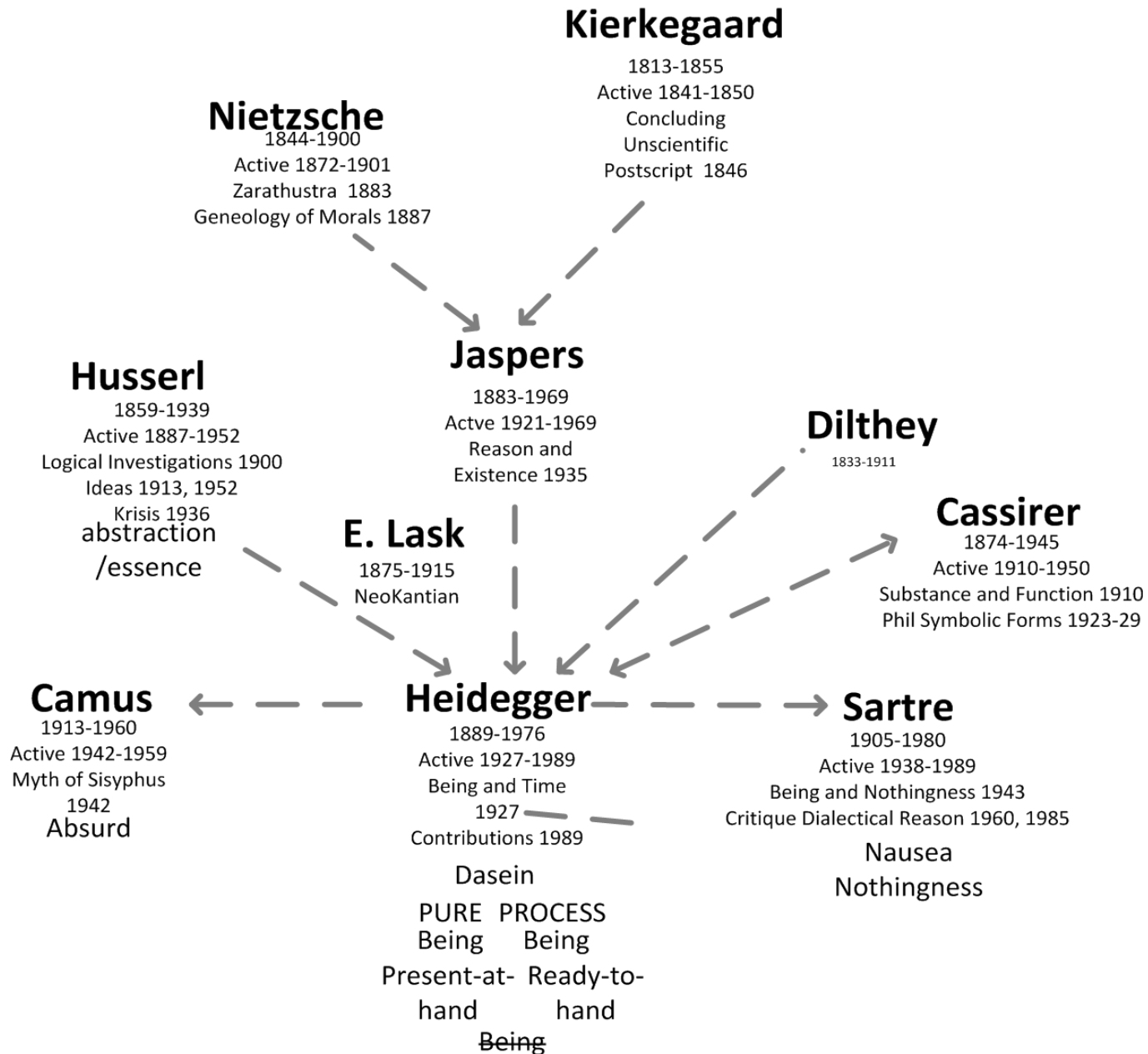
Divided  
Line

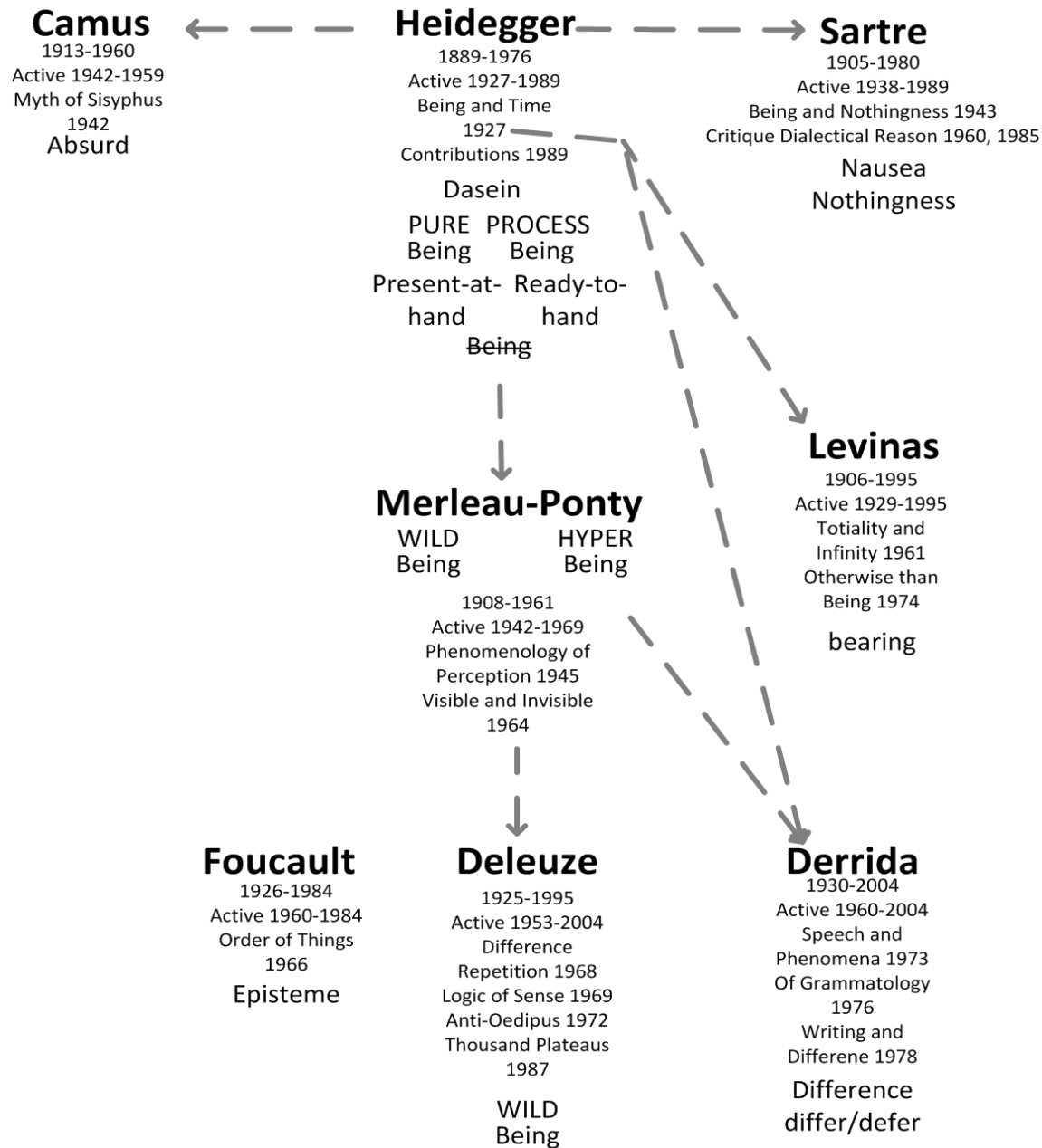
# Modernism

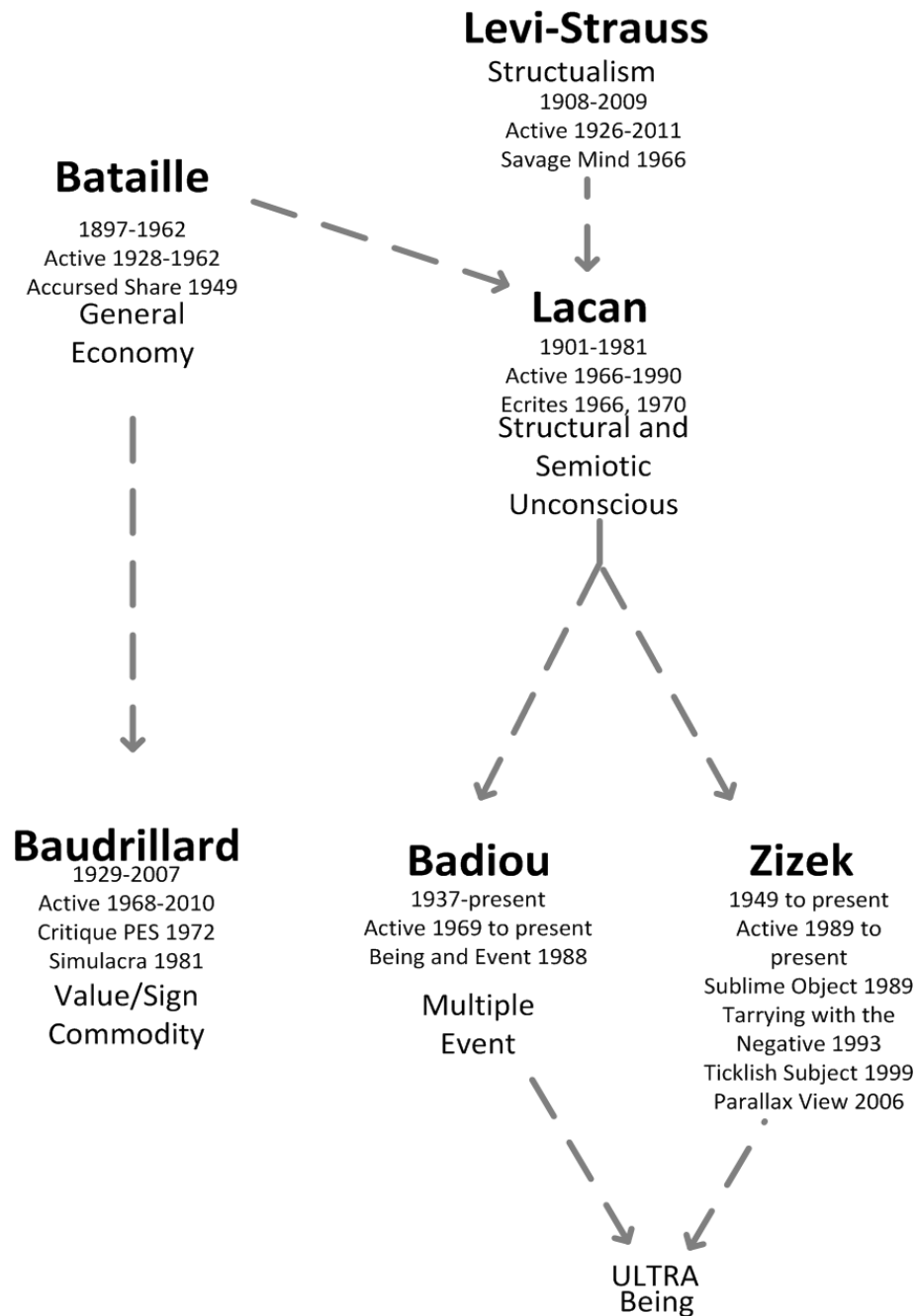


# Existentialism

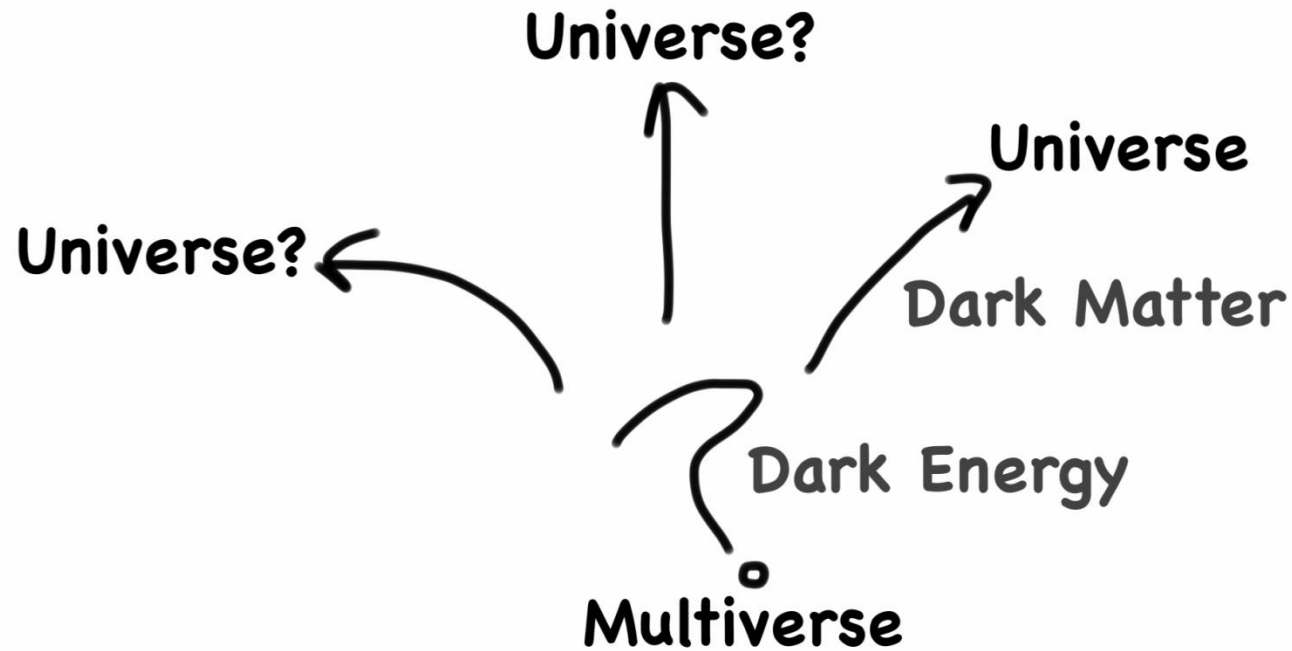






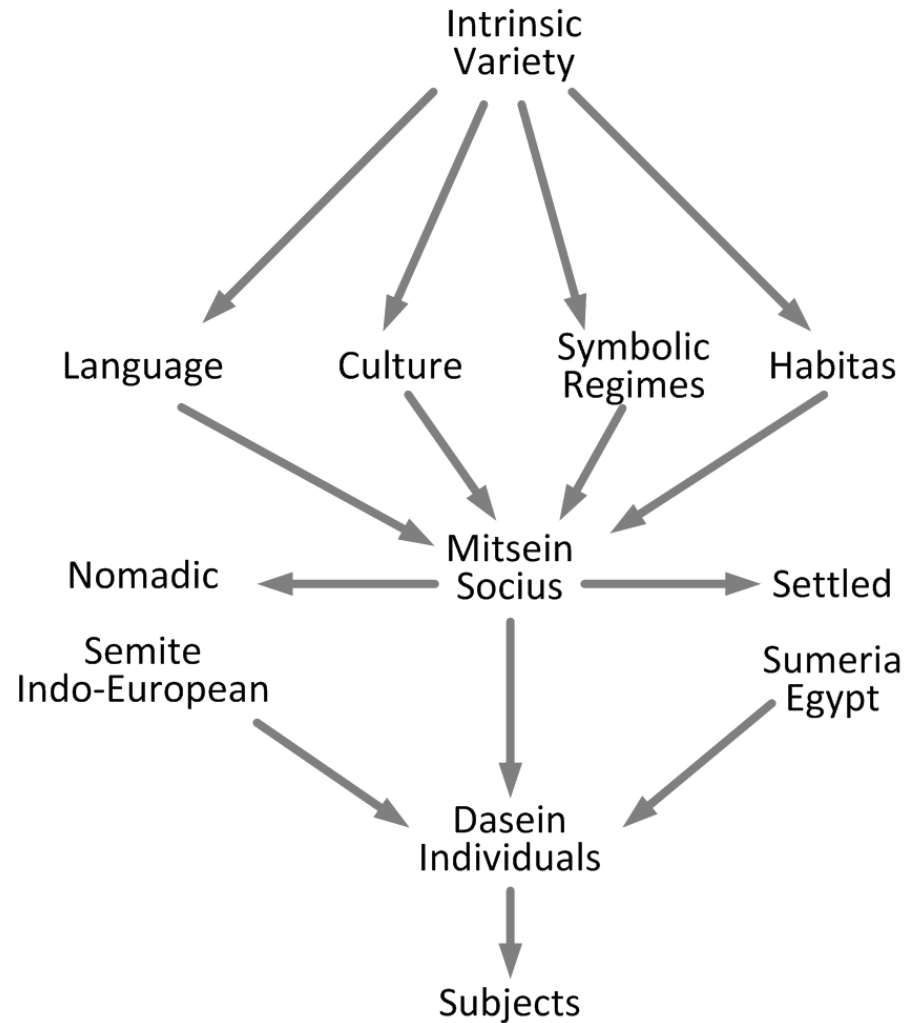


# Pluriverse





# Pluriverse before the Metaphysical Era



# Deleuze Guattari

## **Machination**

Desiring – Avoiding

Disseminating -- Absorbing  
Practices

*Body without Organs*

**Individual  
organism**

*Rhizome*

**Socius**

Dissipative Ordering

Autopoietic Symbiotic

Reflexive Social

Anti-Oedipus – Thousand Plateaus

# Key Questions

- When is the Metaphysical Era Over?
- What is next?

# Heterochronic

- F Theory
  - Orthogonal Timelines
- Dunne
  - Multi-dimensional Time
- Heidegger
  - Asymmetrical mapping of Existentials to Time

# Emergent Meta-Schemas

- Starting Point 1 - 4
- Order View Hierarchy 5 - 8
- Dagger Alignment 9
- Emergent Meta-system 10 -18
- Monad 19 - 20
- Pattern 21 - 25
- Schematic Bifurcation 26
- Form 27 - 31
- System 32 - 40
- Meta-system 41 - 64
- Domain 65 - 67
- World 66 - 73
- Worldview 74 - 83
- Pleroma 84 -85
- Schemas and Worlds 86
- Metaphysical Era 87 - 91
- Modernism 91 - 96
- Pluriverse 97 -98
- Deleuze Guattari 99
- Beyond Metaphysics 100 -101