

Comments on Figure 9 Transforming into figures 3 and 4; that is, a Triadic Set of Relations Transforming into a SIGN

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1. INTRODUCTION

Peirce developed an analysis of reality that defined reality – all forms of reality, whether chemical, biological or social as existing in Signs. A sign is a spatiotemporal reality, material or conceptual, that exists in relations with other signs, as in “I use the word “Sign” in the widest sense for any medium for the communication or extension of a From (or feature). Being medium, it is determined by something, called its Object, and determines something, called its Interpretant or Interpretand” (Peirce 1977:196). This establishes the nature of the sign as a triad of interactions or relations.

He provided a framework and analysis of ten basic signs (CP 2.227-309; CP 8.327-379), which he defined as ten basic classes (2.238); however, “these ten classes will have certain subdivisions according as the existent correlates are individual subjects or individual facts, and according as the correlates that are laws are general subjects, general modes of fact, or general modes of law” (2.238). These ten basic classes can be understood as a Set, and can be subdivided into subsets of both 28 and 66 (Peirce 1977: 84; Letter to Lady Welby, Dec. 23, 1908 and see Lieb’s analysis, Appendix B, 1977, pp. 160-166).

If we take Peirce’s basic axiom, that all reality exists as signs, then, we can analyze the sign as a morphological reality; that is, as an entity, whether material or conceptual, that exists in space and time. There are four spatial (internal, external, local, global) and three temporal (present, perfect, progressive) measurements and three modal measurements (possible, actual, necessary) (Taborsky 2005, 2006). A spatial, temporal and modal measurement operates as a Relation, a primitive dyadic morphology (Taborsky 2005). The morphological architecture of the sign is a triad, comprised of three relations that interact as a function. The Object is mediated by the Representamen and

produces the Interpretant. We can also use the terms Input, Mediation and Output. This triad is not a linear movement from Object to Mediation to Interpretant, or Input–Mediation-Output. It is an irreducible Function, an act that transforms the raw data of the Input to the interpreted information of the Output.

Peirce defined ten basic classes of Signs, which we can understand as a Set, and 28 and 66 subclasses or subsets. Essentially, this means that there are ten basic morphologies, but, within these ten morphologies, there are nuances of interpretation that, even though they do not change the morphological form, permit different types of relations with other morphologies. This means that the Sign can interpret the same raw data through a functional mediation process which is open to the niche specific values of different environmental requirements. This ability of Nature to enable a common morphology (the ten classes), with all the stability that suggests, and yet, provide that architecture with a flexible capacity (of 28 and 66 variations) to adapt to environmental stimuli, enables our universe to operate as a complex reality capable of both gradual and rapid adaptive evolution.

Tables below show the Six Relations and the Ten Basic Signs, and then, we proceed to an analysis of the 28 signs generated from a second-level collaboration of the Relations.

2. THE SIX RELATIONS

There are Six Relations that can be used to form a SIGN. A Sign is made up of three Relations that interact as a Function where $f(x)=y$. This is a triadic interaction, where the input data, known as X, is transformed by mediation, f, into a singular informational output Y. This triad, which can also be called the Object-Mediation/Representamen-Interpretant in Peircean terms, is irreducible. A sign always operates as a function made up of three Relations which operate as a triadic processing of data to information within the operational format of: input-mediation-output.

The six relations, analyzed by Peirce as ‘genuine’ or ‘degenerate’ (CP 2.227-242), with degenerate understood to mean a mixed modality, are described in Table 1 by name, spatial, temporal and modal measurements:

1-1 Firstness as Firstness	Internal Local	Present Time	Possible
2-2 Secondness as Secondness	External Local	Perfect Time	Discrete Actual
2-1 Secondness as Firstness	Borderline Interface	Perfect-Present Time	Attractor Phase
3-1 Thirdness as Firstness	External Global	Progressive-present Time	Statistical Average

3-2	Thirdness as Secondness	Internal Global	Progressive-perfect Time	Networked Propensity
3-3	Thirdness as Thirdness	Aspatial	Atemporal	Imaginary, pure reason

• **TABLE 1: THE SIX RELATIONS**

A relation is a primitive dyadic morpheme. It cannot exist as that dyad on its own. Existence, or spatiotemporal reality, is always triadic. Therefore, three relations must interact to form a sign. When these measurements interact as a function, their data and informational content interact according to the role they play in that function (input, mediation, output). The data and informational content of the Relation, that primitive dyadic morpheme, will transform to establish the morphological triadic reality that we can experience as a sign.

Output	Input	Mediation	Full Code	Name and Example
1	1	1	1-1-1	<i>Qualisign</i> A feeling of 'redness', a local and internal non-interpreted individual state
1	1	2	1-1-2	<i>Iconic Sinsign</i> An individual diagram, an unclear and incomplete articulation of a sensation
1	1	3	1-1-3	<i>Iconic Legisign</i> An abstraction from individual data, an expression in general terms
1	2	2	1-2-2	<i>Rhematic Indexical Sinsign</i> A spontaneous cry, a local, non-intentional or mechanical reaction to a local and direct stimuli
1	2	3	1-2-3	<i>Rhematic Indexical Legisign</i> A demonstrative pronoun, an individual interpretation of local stimuli as referenced to a general rule
2	2	2	2-2-2	<i>Dicent Sinsign</i> A weathervane, a mechanism that randomly reacts to local and direct stimuli- not according to a law
2	2	3	2-2-3	<i>Dicent Indexical Legisign</i> A regular yet mechanical, i.e., externally induced interaction; a clock ticking, automatic on/off of motor
2	3	3	2-3-3	<i>Dicent Symbol</i> A minor premise, a particular characteristic, proposition, attribute of a law
1	3	3	1-3-3	<i>Rhematic Symbol</i> An iconic image of a universal, a common noun
3	3	3	3-3-3	<i>Argument</i> A syllogism, an aspatial and atemporal universal

- **TABLE 2: PEIRCE’S TEN SIGNS**

Notes:

- Output is equivalent to Peirce’s Interpretant
- Input is equivalent to Peirce’s Object
- Mediation is equivalent to Peirce’s Representamen

3. THE 28 SIGNS

We will now consider the Set and Subsets of the ten ‘pure’ or basic signs. What happens if we change the data/information content of one or more of the Relations within the Triad? We end up morphologically with the same sign, but informationally, that sign has different capacities because of those different Relations. Again, this provides a basic capacity-to-adapt, while maintaining the robustness derived from the commonality of the morphology of the basic sign. The first example in the sets will be the basic or pure Sign. The ontology refers to the morphology, the epistemology refers to the knowledge base.

QUALISIGN 1-1-1 Rhematic Iconic Qualisign

Ontologically internal, epistemologically local. Present time. Mode is possibility. An internal, non-described, non-interpreted or transformed ‘packet of energy’. Rapidly dissipated unless linked to another Relation/Sign.

Interpretant	Object	Representamen	SIGN
1-1	1-1	1-1	1-1-1 rhematic iconic qualisign

A completely internal or self-originated and unanalyzed and unconscious feeling.

Interpretant	Object	Representamen	SIGN
1-1	2-1	1-1	1-1-1 rhematic iconic qualisign

A feeling, i.e., an internal sensation, induced by an immediate external physical stimuli (2-1 relation)

Interpretant	Object	Representamen	SIGN
1-1	3-1	1-1	1-1-1 rhematic iconic qualisign

A feeling induced by external peer pressure. Peer Pressure is an external 3-1 Relation, a relation of a statistical majority of actualities.

NOTES: Note how this sign can be morphologically and informationally completely internal due to random (internal) chance, but informationally experienced as internal but induced by an immediate indexical external stimuli or by the peer pressure of an actualized external collective.

ICONIC SINSIGN 1-1-2 Rhematic Iconic Sinsign

Ontologically internal, i.e., it has no separate existence because it is physically bonded to its stimuli according to a mechanical act; epistemologically local. Present time interpretation of a perfect time causal force. Mode is a dependent actual.

Interpretant	Object	Representamen	SIGN
1-1	2-2	1-1	1-1-2 an iconic feeling, notion or sensation of an external physical stimulus

Since 1-1 is the mediate relation, reacting to an external 2-2 Input Relation, the sign is an iconic representation of that external Relation. *Mechanical reproduction; an echo; mirror; an indexical replication of the local stimuli.*

Interpretant	Object	Representamen	SIGN
1-1	2-2	2-1	1-1-2 an iconic feeling, notion or sensation of an external physical stimulus (2-2)

Since 2-1 is the mediate relation, it moves the Sign out of a pure iconic replication requirement and into a qualitative but indexically linked external mode. *A chameleon.*

Interpretant	Object	Representamen	SIGN
1-1	3-2	1-1	1-1-2 an iconic feeling, notion or sensation of a hypothetical or unconscious set of options (3-2)

Since 1-1 is the mediate relation, it moves the Sign to a qualitative internal mode. *A 'feeling' of choices available to the system.*

Interpretant	Object	Representamen	SIGN
1-1	3-2	2-1	1-1-2 an iconic feeling, notion or sensation of a hypothetical or unconscious set of options

Since 2-1 is the mediate relation, it moves the Sign to a qualitative external mode of existence. *A feeling of the certainty of a particular choice available to the system.*

NOTES: Compare the 1-1-2 sign with the 1-1-1 sign. The 1-1-2 sign has moved out of the unconscious and unanalyzed internal and into an unanalyzed but experienced external mode. Note how the Mediate Relation of either 1-1 or 2-1 renders the resultant Sign unanalyzed; it lacks any capacity for Thirdness or Reason.

RHEMATIC INDEXICAL SINSIGN 1-2-2

Ontologically internal in present time but a result of an external perfect time mechanical force; effect of an indexical external stimuli. Not self-organized but mechanical. Mode is dependent actual.

Interpretant	Object	Representamen	SIGN
1-1	2-2	2-2	1-2-2 an indexical or mechanical emotive reaction to an external physical stimuli.

Since 2-2 is the mediate relation, the Sign is expressed as external even if its nature is linked to an internal reality. *A bruise when hit by a piece of wood.*

Interpretant	Object	Representamen	SIGN
1-1	3-2	2-2	1-2-2 an indexical or mechanical emotive reaction to an external physical stimuli;

Since 2-2 is the mediate, the Sign is external. *A sudden 'Eureka' reaction to an unconscious thought process (3-2).*

Interpretant	Object	Representamen	SIGN
2-1	2-2	2-2	1-2-2 an indexical or mechanical emotive reaction to an external physical stimuli;

The Sign is external and its content is expressed in its external morphology (2-1 is the output). *A cry when hit by a piece of wood.*

Interpretant	Object	Representamen	SIGN
2-1	3-2	2-2	1-2-2 an indexical or mechanical internal reaction to an internal unconscious hypothesis/network, set of options

The Sign is external and affects the physical. *The growing of dense fur by animals in cold weather.*

NOTES: Note how this sign has moved out of the qualitative nature of 1-1-2 and into a quantitative mode where it is expressed within the external morphology of the Sign.

DICENT SINSIGN 2-2-2

Discrete effect of another discrete entity, according to physical indexical force.. In perfect time; no internalization of the causality. Mode is dependent actual.

Interpretant	Object	Representamen	SIGN
2-2	2-2	2-2	2-2-2 an indexical or mechanical physical reaction to an external physical stimuli

The Sign is external and purely physical. *A windmill blown in the wind, a tree growing bent in the wind, brush fire, lightning fire, flood, a natural effect according to accident not law.*

Interpretant	Object	Representamen	SIGN
2-2	3-2	2-2	2-2-2 an indexical or mechanical physical reaction to an unconscious/innate/genetic stimuli

The Sign is external and purely physical. *An hereditary (3-2) causality, induced by a particular environmental situation. Without that environmental situation acting as mediator (2-2) the output (2-2) would not occur.*

NOTES: The difference between these two can be found in the causes. The first sign is a completely externally induced mechanical and physical interaction. The second sign is equally indexically reactive but is caused not by external forces but by the internal force (3-2), which is then expressed by the inducement of the external mediation of 2-2.

DICENT INDEXICAL LEGISIGN 2-2-3

Ontologically external in perfect time; a result of a law. Physical effect of a physical cause.

Interpretant	Object	Representamen	SIGN
2-2	3-3	2-2	2-2-3 an indexical or mechanical physical reaction operating in a habitual, standardized manner

The Sign is external and physical. *The ticking of a clock.*

Interpretant	Object	Representamen	SIGN
2-2	3-3	3-2	2-2-3 an indexical or mechanical physical reaction operating in a habitual, standardized manner

The Sign is expressed externally but mediated internally. *A heartbeat*

DICENT SYMBOL 2-3-3

Ontologically external and both local and non-local. Perfect time, actual.

Interpretant	Object	Representamen	SIGN
2-2	3-3	3-3	2-3-3 an articulated hypothesis based on pure reason

The Sign is expressed externally in physical form (ie speech); *minor premise, single instance of a law, a deductive step.*

Interpretant	Object	Representamen	SIGN
3-2	3-3	3-3	2-3-3 an articulated probable hypothesis, based on pure reason

The Sign is 'felt' internally and expressed externally; *an abductive action.*

ARGUMENT 3-3-3

Interpretant	Object	Representamen	SIGN
3-3	3-3	3-3	3-3-3 pure reason

The Sign is a process of reasoning not a particular existential entity.

RHEMATIC SYMBOL 1-3-3

Ontologically internal icon of a law. No actuality in perfect time and local space;
Important – non-actualized.

Interpretant	Object	Representamen	SIGN
3-1	3-3	3-3	1-3-3 a general idea, belief

The Sign is a qualitative correlation of 'what is normal' according to the normative reasons of an existent collective; a general abstract noun; a common term

Interpretant	Object	Representamen	SIGN
1-1	3-3	3-3	1-3-3 a general idea, belief

The Sign is an internally maintained belief; *opinion based on pure reason.*

Interpretant	Object	Representamen	SIGN
2-1	3-3	3-3	1-3-3 an innovative general idea, belief

The Sign is a new hypothesis, based on pure reason, at the cusp of empirical reality and intuition.

RHEMATIC INDEXICAL LEGISIGN 1-2-3

1-2-3: 'thisness' or haecceity; the effect of a facticity operating according to a law. Natural, biological and chemical reality.

NOTE: there is something wrong with this set. The first or basic sign in this class ought to be:

Interpretant	Object	Representamen	SIGN
1-1	2-2	3-3	1-2-3

This is an important sign, the basic morphological reality, made up of a physical stimuli, transformed by a law, into a dependent interpretant. I can't find this triad in Figure 9.

Interpretant	Object	Representamen	SIGN
2-1	3-3	3-2	1-2-3 an individual concept based on pure reason, as mediated by a set of hypotheses; the Sign is innovative and individual

Interpretant	Object	Representamen	SIGN
2-1	3-3	2-2	1-2-3 an individual concept based on pure reason, as mediated by external experience; the Sign is innovative and individual

Interpretant	Object	Representamen	SIGN
1-1	3-3	3-2	1-2-3 an individual concept based on pure reason, as mediated by a set of hypotheses; the Sign is an internal emotional experience

Interpretant	Object	Representamen	SIGN
1-1	3-3	2-2	1-2-3 an individual concept based on pure reason, as mediated by external experience; the Sign is an internal emotional experience

ICONIC LEGISIGN 1-1-3

Ontologically internal; i.e., no separate existence for it is symbolically bonded to its stimuli according to a law. Saussurian sign. Mode is dependent necessary.

Interpretant	Object	Representamen	SIGN
1-1	3-3	3-1	1-1-3 an abstract iconic generality; the Sign is an internal concept, based on pure reason, as mediated by an external commonality

Interpretant	Object	Representamen	SIGN
1-1	3-3	1-1	1-1-3 an abstract iconic generality; the Sign is an internal concept, based on pure reason, as mediated by an internal intuition.

Interpretant	Object	Representamen	SIGN
1-1	3-3	2-1	1-1-3 an abstract iconic generality; the Sign is an innovative concept, based on pure reason, mediated by emotive experience.

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