

Peirce Chase'ing Pythagoras

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Abstract. Despite the common knowledge that there is something “Pythagorean” about Charles Peirce’s phenomenology and classification of signs there is a manifest lack of inquiries into the matter. Perhaps there is too little to go on, as Pythagoras himself did not leave us any writings to consult. Nevertheless, much of ancient Greek philosophy bears an unmistakable Pythagorean stamp, and Iamblichus’ biography of Pythagoras provides us with enough to get such inquiries started. This paper examines the development of triads, beginning with the Pythagorean one (body, soul, and intellect) and proceeds to those of Immanuel Kant (Experience, Understanding, and Reason) and Peirce’s compatriot and family acquaintance Pliny Earle Chase (Motivity, Spontaneity, and Rationality). The article concludes with an examination of the various triads in Peirce’s early writings, especially around the time of his discovery of Chase’s “Intellectual symbolism”.

Keywords: Pythagoras; Iamblichus; Kant; Chase; Peirce; body; soul; intellect; triads

Introduction

Imagine yourself facing a stretch of bog. Behind you lies the dark realm of ancient Greek philosophy with its pre-Socratic fragments and Pythagoras (c. 570 – c. 495 B.C.), the first philosopher known for his triadic conception of the soul and a theorem to solve the angles of a triangle. On the other side of the bog awaits Charles Peirce and his triadic semiotics and *cenopythagorean* phenomenology. There are tufts of grassy patches of earth, capable of supporting our weight, interspersed here and there. There are so many of these, in fact, that many different paths could be chosen to go across. The history of Western thought has been crossing this bog and sowing those supportive patches.

In this paper, we are going to attempt to cross the bog, picking a path that can get us across it in the quickest and safest way, without getting our feet wet or drowning in any particular system of thought and extraneous detail. We shall start with what little we know of Pythagoras and Pythagoreans, beginning with

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Iamblichus (c. 242 – c. 325); thereafter take a mighty leap up to Immanuel Kant, and then proceed to Pliny Earle Chase (1820–1886), a henceforth unknown figure in the Peircean quarters. We could just as well take wholly different paths, say, via Plato, Aristotle, Plotinus, Hegel, Brentano, Hodgson, or any number of well- or lesser-known philosophers throughout the ages. So why this particular path, and not another which could be equally safe and perhaps even quicker? As a path to avoid, we can point to an otherwise admirable attempt to cross this figurative bog made by Stocks (1915), who wished to cross from Plato to what for him was “modern psychology”. However, somewhere along the way, unable to find supportive ground in the intermediary works of philosophy, he concluded that the two are not mutually compatible – he drowned.

The impetus to take this specific route comes from a neglected work, which might be described as crypto-semiotic, by one Pliny Earle Chase, who was tutored in mathematics by Benjamin Peirce, and whose “Intellectual symbolism” (Chase 1863) inspired young Charles Peirce to such a degree, that he felt compelled to contact the author (cf. W 1: 115–116). This book has received a passing mention in connection with Peirce only in the publications of Alessandro Topa (2012; 2018), who focused on Peirce’s letter and ignored the book that inspired it. For our purposes, it is invaluable for illuminating the way from Pythagoras to Kant, and for operating with the triad in a manner that will be immediately recognizable to every Peircean.

Throughout the book, Chase proved himself a “triadomaniac” equal to Peirce, gathering together all the mutually compatible triads throughout the history of Western philosophy. In a footnote on the earliest manifestation of the triplicity in question he mentioned “Pythagoras, who recognized in the soul three elements, Reason (*νοῦς*), Intelligence (*φρόνην*), and Passion (*θυμός*)” (Chase 1863: 469). This he derived from Gale’s *Opusculis Mythologicis*. Another notable moment comes after a lengthy enumeration of triplicities in the works of various philosophers that quotes extensively from Albert Schwegler’s (1856[1846]) handbook on the history of philosophy, when Chase reaches Kant and sets the philosopher’s famous trilogy of critiques into a triadic frame: *Critique of Pure Reason* deals with “the principles of knowledge itself”, *Critique of Practical Reason* with “the principles of desire and action”, and *Critique of Judgment* with “the principles which regulate the feelings of pleasure and pain” (cf. Chase 1863: 543). To put it in Kant’s own words, at the end of the first of these: “(1) What can I know?; (2) What ought I to do?; [and] (3) What may I hope?” (cf. Kant 1855: 488).

Body, soul, and intellect

A distinctive characteristic of Pythagorean thought is complementarity of opposites. There are always two things, and “the third is a medium between the other two” (Iamblichus 1818: 70). Thus, the primary Pythagorean triad is best summarized like this: “The union of soul and body cannot be scientifically explained for man is, as it were, a third substance formed out of two heterogeneous substances” (Arnett 1904: 173–174). To be more specific, man is an *intelligent animal*, as the third and most consistent item in all subsequent triads is the *intellect* (*νοῦς*). This line of thinking is manifest in many extant fragments of the Pythagoreans, but will only make sense in light of the following anecdote:

It is also said, that Pythagoras was the first who called himself a philosopher; this not being a new name, but previously instructing us in a useful manner in a thing appropriate to the name. For he said that the entrance of men into the present life, resembled the progression of a crowd to some public spectacle. For there men of every description assemble with different views; one hastening to sell his wares for the sake of money and gain; but another that he may acquire renown by exhibiting the strength of his body; and there is also a third class of men, and those the most liberal, who assemble for the sake of surveying the places, the beautiful works of art, the specimens of valor, and the literary productions which are usually exhibited on such occasions. Thus also in the present life, men of all-various pursuits are collected together in one and the same place. For some are influenced by the desire of riches and luxury; others by the love of power and dominion; and others are possessed with an insane ambition for glory. But the most pure and unadulterated character, is that of the man who gives himself to the contemplation of the most beautiful things, and whom it is proper to call a philosopher. (Iamblichus 1818: 28)

One of the most eminent Pythagoreans, Archytas (c. 428 – c. 347 B.C.), rendered us an invaluable service by connecting these two triads, reiterating that “man is not soul alone, but is likewise body” and “the animal which consists of both, and that which is constituted from things of this kind is man” (Archytas 1818: 156–157), followed by the “goods” of each: (1) “the good of the body is beauty, health, a good corporeal habit, and excellence of sensation”; (2) “the good of the soul is prudence, fortitude, justice, and temperance”; and (3) “the good of man, indeed, is felicity” (Archytas 1818: 156–157). In subsequent ethical fragments of the Pythagoreans, these three go by *prosperity*, *virtue*, and *felicity*, with the attendant formula that “felicity is the use of virtue in prosperity” (Archytas 1818: 159).

The important thing to notice here is the *ordered* nature of the sequence, or what in the Peircean realm is called the “the protocol of degeneracy” (Deledalle

2000: 123), which we will meet again in Kant: “The less, also, are ministrant to the greater goods” (Archytas 1818: 156–157). Thus, while Pythagoras reportedly taught his followers “to have an unstudied contempt of, and hostility to glory, wealth, and the like” (Iamblichus 1818: 36), his followers called these “externals”, these being “wealth, glory, and nobility”: “Thus friendship, glory, and wealth, are ministrant both to the body and the soul; but health, strength, and excellence of sensation, are subservient to the soul; and prudence [i.e. wisdom] and justice are ministrant to the intellect of the soul” (Archytas 1818: 156–157).

Another aspect to take into consideration is the role of *free will*, which is tied to the second item of the triad (soul) – as it is a given that no-one can choose the body or the (family) wealth he or she is born into, while one has “deliberate choice” over one’s own conduct in life. Thus, Hippodamus of Miletus (c. 498 – c. 408 B.C.) informs us that the body and fortune are up to “providential care”, “predication of beautitude”, “divine destiny”, or “mortal allotment”, but the virtues of one’s soul are up to discipline and learning (cf. Hippodamus 1818: 144). Another variation of the triad, in the lost Pythagorean book titled *Triagmos* by Ion of Chios (c. 490 – c. 420 B.C.), consists of *luck*, *strength*, and *intelligence* (cf. Stapleton 1958: 50). Strength, in this case, should be understood as fortitude or strength of will, as in the Pythagorean symbol recorded by Stobæus (fl. 5th-century A.D.), “choose rather to be strong in the soul than in body” (Stobæus 1818: 186).

Thus far we have interconnected two triads, which may be called the elemental (body, soul, and intellect) and the ethical (prosperity, virtue, and felicity). For the moment, there is but one more, which may be called the psychological, reported by Theages (dates unknown): “The order of the soul subsists in such a way, that one part of it is the reasoning power, another is anger, and another is desire”, so that “the reasoning power, indeed, has dominion over knowledge; anger over impetus; and desire intrepidly rules over the appetitions of the soul” (Theages 1818: 161). This is effectively the Platonic tripartite division of the soul, in our preferred order: temper (*θυμός*), desire (*ἐπιθυμία*), and calculation (*λογισμός*) (Stocks 1915: 209).

In sum, all of these triads, as well as the ones we are going to look at next, have one stable element: the intelligent, intellectual, rational, reasonable, calculating *third* is a constant. The other two vary more, but in nearly every instance they boil down to ‘materialistic and spiritual’, ‘body and soul’, ‘wealth and renown’, etc. *Much* could be added, as the Pythagorean fragments juggle with these triads in a systematic fashion, but we have to make it across the bog, so let us next skip to Kant.

Experience, understanding, and reason

While the introduction indicated that Kant's famous trilogy of critiques itself is triadic, this very same triadicity can be found throughout his first critique. In it, he delineates three faculties of cognition: experience, understanding, and reason. The third, as we have seen, is constant and unproblematical. The real crux of the matter stems from the first two, which are, according to Kant, *sense* and *understanding*: "Our knowledge springs from two main sources in the mind, the first of which is the faculty or power of receiving representations (receptivity for impressions); the second is the power of cognizing by means of these representations (spontaneity in the production of conceptions)" (Kant 1855: 45).

Naturally, we experience sense impressions through the *body*, connecting understanding to *soul* is much more problematic, however. According to Kant, through sense, "objects are *given* to us", through understanding, objects are "thought" (Kant 1855: 18). Something along the lines of an explanation will be found in the following: "*I*, as thinking, am an object of the internal sense, and am called soul" and "that which is an object of the external senses is called body" (Kant 1855: 237). In the *internal sense*, *I* know myself only through "this conception *I*, in so far as it appears in all thought" (Kant 1855: 237).

The helpful key to Kant's rather voluminous vocabulary of philosophical terms is given in "a graduated list" of "every mode of representation" (cf. Kant 1855: 224). The three termini which interest us at the moment are perception, conception, and idea. *Perceptions* can be either subjective (*sensations*) or objective (*cognitions*). The latter, cognition, can relate to an object immediately, as something singular or individual, in which case it is an *intuition*, or mediately, "by means of a characteristic mark which may be common to several things" (Kant 1855: 225), in which case it is a *conception*. Conceptions, further, can be empirical or pure, a pure conception being a *notion*, which "has its origin in the understanding alone" (Kant 1855: 225). And lastly, an *idea* is a conception formed of notions and "transcends the possibility of experience" (note the reflexivity of ideas being conceptions formed of pure conceptions, which would place intuition, conception, and idea on the same level, as in Unity, Plurality, and Totality).

Much like the Pythagorean *soul*, which generates *desires* out of some obscure recess within, Kant's *understanding* is "the faculty of spontaneously producing representations, or the spontaneity of cognition" (Kant 1855: 45). That is, understanding is that faculty which automatically categorizes single and individual sense perceptions into something we can understand, and produces notions that are not related to objective reality. It is also absolutely necessary for determining the content of perceptions, making the progress from intuition to conception

to reason follow the protocol of degeneracy, the lower forms of cognition being *ministrant* to the higher:

Reason never has an immediate relation to an object; it relates immediately to the understanding alone. It is only through the understanding that it can be employed in the field of experience. It does not *form* conceptions of objects, it merely *arranges* them and gives to them that unity which they are capable of possessing when the sphere of their application has been extended as widely as possible. Reason avails itself of the conceptions of the understanding for the sole purpose of producing totality in the different series. This totality the understanding does not concern itself with; its only occupation is the connection of experiences, by which series of conditions in accordance with conceptions are established. The object of reason is therefore the understanding and its proper destination. As the latter brings unity into the diversity of objects by means of its conceptions, so the former brings unity into the diversity of conceptions by means of ideas; as it sets the final aim of a collective unity to the operations of the understanding, which without this occupies itself with a distributive unity alone. (Kant 1855: 394–395)

As summarized more succinctly, “all human cognition begins with intuitions, proceeds from thence to conceptions, and ends with ideas” (Kant 1855: 429); and “reason will not follow the order of things presented by experience, but, with perfect spontaneity, rearranges them according to ideas, with which it compels empirical conditions to agree” (Kant 1855: 339). As we have seen, it is the faculty of understanding that gives reason that *perfect spontaneity*. Reason itself is relegated to a rather modest role, being the “ability to give an account of all our conceptions, opinions, and assertions” (Kant 1855: 377). Our main effort here has been spent in laying bare the crux of Kant’s *understanding* because its *spontaneity* is what is emphasized by Chase.

Motivity, spontaneity, and rationality

Despite gathering together a veritable exhibition of triplicities throughout Western thought, Chase built his own system of intellectual symbolism upon Kant “because Kant and his successors of the modern German school have recognized a prevailing triplicity, to which they have been empirically led through the rational duality of the subjective and objective” (Chase 1863: 541). Although this does not easily show in Kant’s own writings, the logic which Chase attributes to him and his successors is clear:

In the Objective-Subjective relation, the impulse commencing externally and terminating in Consciousness, our attention is aroused, and we are induced to exercise our activity in various ways. To this form of Consciousness, which corresponds very nearly to the Passion (*θυμός*) of Pythagoras, the name of Passivity or Receptivity might be given, to designate the condition of the mind as the recipient of an impulse not originating in itself. But as the simplest exercise of Consciousness involves some degree of activity, and as the aroused attention tends to incite increased activity, the term Motivity seems more appropriate.

In the Subjective-Subjective relation, the impulse begins and ends with Consciousness, which is said to act “of its own accord,” or “spontaneously.” I propose to designate this form of the subjective by the term Spontaneity.

In the Subjective-Objective relation, we are subjectively conscious of an effort commencing in our own minds, but tending towards the objective, an effort to perceive, know, understand, the nature of an object, or the proper mode of using it to accomplish some particular end that we have in view. This is especially an Intellectual or Rational effort, and the term Rationality seems peculiarly fit for the form of Consciousness in which this effort originates. (Chase 1863: 518)

Once again, receptivity to the objective reality commences through the body, and there is something *spontaneous*, acting on its own accord, like the *soul*, and reason or intellect is, of course, a constant. Chase (1863: 518) invites us to “Behold the three guides to knowledge, – the only three that we can possibly employ”: “Sense, the guide to a knowledge of the outward world; Self-consciousness, the observer of the inward workings of our own minds; Reason, the teacher of abstract and general truth, and the judge to whose tribunal is our ultimate appeal in all questions of doubt” (1863: 518). Something like this, in outline, we could have found from the many earlier instances Chase himself catalogued, not to mention numerous later attempts to fine-tune or finish Kant’s philosophical system, e.g. by Brentano or Hodgson. What should really get Peircean bells ringing is what Chase does with these three categories in Chapter 2.

Instead of merely instituting the protocol of degeneracy or ministration as Kant or the Pythagoreans did, Chase *multiplied* these categories with each other, yielding exponentially larger tables of states of consciousness, all operating according to the same protocol. Thus, in the first table he has nine terms - MM, MS, MR, SM, SS, SR, RM, RS, and RR. In the second, he adds another letter, yielding 27 new triads (MMM, MSM, MRM, etc.), and in the last one, each of these is supplemented by a further triad, adding 81 more. This kind of multiplication does not have to end there, as “the principle of trichotomy may be extended as far as the needs of science may require” (Chase 1863: 494).

In essence, this is the exact operation Peirce undertook with his endless categorization of signs, only with numbers instead of arbitrary letters. It is also

the case that instead of signs, Chase's *intellectual symbols* pertain to "faculties" of consciousness and/or mental states. The really impressive part is that he found verbal labels, mostly multisyllabic and partly archaic (what would we, for example, make of "alacrity"?) to designate each one of these. Here is where Chase's true idiosyncrasy is showing: he was very fond of dictionaries and even published several papers on comparative lexicography, searching for similarities between languages. In his tables, though, he professes to using "some of the prominent terms that philosophers have employed, to designate mental states that they have specially observed" (Chase 1863: 476).

All 120 of Chase's symbols are given in Table 1. There is a clear logic to each and every one of his 31 triads that calls out to be examined, appreciated, and developed by great minds. Yet the size of the table is also immobilizing – where should one begin? Would working out the details of his table be worth the effort? And if so, for what purpose? Thus, first and foremost, presenting it here is a call to action, an attempt to draw Peirceans to look into one of Peirce's most curious predecessors.

Table 1. Composite table of Chase's intellectual symbols

Motivity (M)																																							
Propensity (MM)						Sentiment (MR)																																	
Proclivity (MMMM)	Appetence (MMS)			Attachment (MMR)			Selfishness (MSM)			Desire (MS)																													
	Amativeness (MMMR)			Adhesiveness (MMRR)			Approbateness (MSMR)			Curiosity (MISS)																													
	Combativeness (MMMS)			Affection (MMRS)			Cupidity (MSMS)			Eagerness (MSSR)																													
	Vitativeness (MMMM)			Self-Esteem (MRRM)			Envy (MSMM)			Marvelousness (MSSM)			Confidence (MSRM)			Emulation (MSRR)			Sympathy (MRMR)			Admiration (MRSM)			Esteem (MRSS)			Taste (MRRS)			Generosity (MRRM)			Veneration (MRRS)			Conscientiousness (MRRR)		
Spontaneity (S)																																							
Instinct (SM)				Will (SS)				Energy (SR)																															
Cautiousness (SMMM)				Constructiveness (SMR)				Attention (SSM)				Direction (SSS)				Resolution (SSR)				Vivacity (SRM)				Concentrativeness (SRS)				Decision (SRR)											
				Order (SMRR)				Tact (SSMR)				Positiveness (SSSR)				Self-Reliance (SSRR)				Constancy (SRMR)				Inflexibility (SRSR)				Determination (SRRR)											
				Device (SMRS)				Scrutiny (SSMS)				Management (SSSS)				Pertinacity (SSRS)				Alacrity (SRMS)				Perseverance (SRSS)				Courage (SRRS)											
				Imitation (SMRM)				Observation (SSMM)				Activity (SSSM)				Intrepidity (SSRM)				Frankness (SRMM)				Patience (SRSM)				Dexterity (SRRM)											
				Self-Denial (SMSR)																																			
				Providence (SMSS)																																			
				Frugality (SMSM)																																			
				Circumspection (SMMR)																																			
				Vigilance (SMMS)																																			
				Solicitude (SMMM)																																			
Rationality (R)																																							
Perception (RM)				Judgment (RS)				Understanding (RR)																															
Sense (RMMM)				Discernment (RSM)				Deliberation (RSS)				Discursiveness (RSR)				Conception (RRM)				Abstraction (RRS)				Comprehension (RRR)															
				Imagination (RSMR)				Calculation (RSSR)				Elucidation (RSRR)				Appreciation (RRMR)				Generalization (RRSR)				Classification (RRRR)															
				Reflection (RSM)				Comparison (RSSS)				Causality (RSSR)				Cognition (RRMS)				Synthesis (RRSS)				Sagacity (RRRS)															
				Contemplation (RSMM)				Meditation (RSSM)				Discrimination (RSRM)				Individuality (RRMM)				Analysis (RRSM)				Insight (RRRM)															
				Affirmation (RMRR)																																			
				Ideality (RMRS)																																			
				Penetration (RMRM)																																			
				Retention (RMSR)																																			
				Recollection (RMSS)																																			
				Suggestion (RMSM)																																			
				Apperception (RMMR)																																			
				Self-Consciousness (RMMS)																																			
				Sensation (RMMM)																																			

Matter, mind, and God

Yet can we *actually* count Chase among Peirce's predecessors? Presently only three connections between them are manifest: (1) Chase received special instruction in higher mathematics from Benjamin Peirce at Harvard (cf. Garrett 1887: 288); (2) Charles Peirce reminisced about Chase's textbook on arithmetic co-authored with Horace Mann, writing that he "wrote the best introduction to the art I ever saw; from which I learned to cipher as a boy" and "studied [it] in school at my father's dictation [...] but I still often refer to the arithmetic of Pliny Earle Chase and Horace Mann" (CP 4.458); and (3) "Letter draft, Peirce to Pliny Earle Chase", dated April 4 1864 (W 1: 115–116), which he wrote the day he first saw "Intellectual symbolism", with special reference to Chase's "2nd circle", meaning the diagram titled "Elementary forms of objective being" (cf. Chase 1863: 569).

The letter to Chase itself is not very informative. For one, we do not know if it was even delivered, or if Chase replied to it. Also, its content is by and large a repetition of what Peirce had already written in an earlier manuscript, "A treatise on metaphysics", dated 1861–1862, specifically the part dealing with the distinctions between philosophy, psychology, and metaphysics (cf. W 1: 62). This moment might be relevant otherwise, as it manifests an early orientation towards semiotics, being in the main based on the distinction between immediate consciousness (sense presentations) and representations, but this will have to be examined elsewhere (Peirce's reasons for writing to Chase, and the similarity he saw between his own diagram and Chase's deserve further investigation).

The crux of the matter is that during that period (the early 1860s), Peirce was theorizing on the categories in terms of I, THOU, and It (Intellect, Heart, and Sense), in exactly that order (cf. W 1: 15). According to Topa, Peirce's "Diagram of the IT", dated June 1, 1859 (cf. W 1: 530) represents the first, and his letter to Chase the last "evidence for Peirce's commitment to this theoretical framework" (Topa 2018: 168; fn 25). A closer reading of Peirce's early writings paints a different picture, one of continual experimentation and development. Notably, Peirce forms the IT, I, and THOU into a triad conformable to our foregoing series of triads in the following year, in 1865. Whether this is a coincidence or not will be left for the reader to decide.

In the first instance, Peirce enumerates the elements that compose the "inward nature" of the soul: "(1) The Intellect &c. or that which says I; (2) The Heart &c. or that which says THOU; [and] (3) The sense &c. or that which says IT" (W 1: 15). In the second, he writes that "Though they cannot be expressed in terms of each other, yet they have a relation to each other, for THOU is an IT in which there is another I"; "I looks in, It looks out, Thou looks through, out and in again",

and “I outwells, It inflows, Thou commingles” (W 1: 45). At this stage the order is not what we would like it to be, but Peirce gives us a helpful clue: “The IT of the I contains nothing which either the I of the I contains, nor which the THOU of the I contains” and “Nor have these anything in common with each other” (W 1: 46).

In the third instance, they are combined with the Kantian categories of Unity, Plurality, and Totality in the form of “three Celestial Worlds”: “1 that whose heaven is a speck, or the manifold of sense, 2 that whose heaven is of extensive manifestation or the world of consciousness, 3 that whose heaven is of immense manifestation or the world of abstraction” (W 1: 47). If the manifold of sense amounts to IT, the world of consciousness to I, and the world of abstraction to THOU, we are already halfway up the hill – the order is already that of Experience (sense), Understanding (consciousness), and Reason (abstraction).

In the fourth, in “A treatise on metaphysics”, these are expanded into philosophical outlooks: Materialism, Idealism, and Realistic Pantheism. Significantly: “Here then we have three worlds [...] mutually excluding and including each other, as I showed was possible in one of my letters” (W 1: 83). Matter (IT), Mind (I), and God (THOU) constitute these three mutually excluding “Celestial Worlds”. Note the change of order: I, THOU, IT → IT, I, THOU. Before proceeding, we’ll have to refer back to another combination of Unity, Plurality, and Totality, this time applied on “three immense manifestations”: (1) “That whose immensity is a Unitary Shape or Time”; (2) “That whose immensity is of plural shape or space”; and (3) “That whose immensity is of total shape or Heaven” (W 1: 49). Let us remember this order – Time, Space, and Heaven – because these, too, will be reordered.

Between these instances and his letter to Chase, Peirce once more manages to revert back to a different order. Treating of revelation in “The place of our age in the history of civilization”, dated November 1863, he puts forth neologisms that signify phases of Revelation: (1) *egoistical* or revelation “by an inward self-developing” (I); (2) *idistical* or revelation “by seeing it about us” (IT); and (3) *tuistical* or revelation “by a personal communication from the Most High” (THOU) (cf. W 1: 113).

These variations finally come to an end in his first Harvard lecture “On the logic of science”. Here we are finally treated with a reasoning as to the order of the division. It is given within a broader chain of arguments for preferring an unpsychological class of logic. The earlier theoretical framework is not abandoned, but expanded: “[Logical] Form is as much determined by the *subject* or *I* as it is by the *object* or *IT*” (W 1: 165). Moreover, we once again meet the *mutually exclusive* nature of IT, I, and THOU: “The inner and the outer worlds as represented in common opinion and even sometimes by philosophers are two completely

separated experiences, as distinct as two chambers; but this representation is a metaphysical fiction" (W 1: 167).

Almost as if to pardon his earlier attempts with different orders, Peirce writes on the same page: "We first draw a distinction and draw it badly; then the only way is to push on our analysis and draw it well" (W 1: 167). This is immediately followed by the sentence "In the present instance it becomes important to distinguish two kinds of self-knowledge – two selves, if you please, one known immediately and the other mediately" (W 1: 167). With these we are already familiar: "I, as thinking, am an object of the internal sense, and am called soul" and "That which is an object of the external senses is called body" (Kant 1855: 237). The object of the outer world as well as one's own body is known mediately, the subjective or inner world of the soul is known immediately. Furthermore, matter and body are in *space*, and Peirce gives his reasoning as to why the inner world is the world of memory and the world of *time*, which is too lengthy to repeat here in its entirety. For our purposes, the significant part is the following:

Taking it for granted, then, that the inner and outer worlds are superposed throughout, without possibility of separation, let us now proceed to another point. There is a third world, besides the inner and the outer; and all three are coëxtensive and contain every experience. Suppose that we have an experience. That experience has three determinations – three different references to a substratum or substrata, lying behind it and determining it. In the first place, it is a determination of an object external to ourselves – we feel that it is so because it is extended in space. Thereby it is in the external world. In the the second place, it is a determination of our own soul, it is *our* experience; we feel that it is so because it lasts in time. Were it a flash of sensation, there for less than an instant, and then utterly gone from memory, we should not have time to think it ours. But while it lasts, and we reflect upon it, it enters into the internal world. We have now considered that experience as a determination of the modifying object and of the modified soul; now, I say, it may be and is naturally regarded as also a determination of an idea of the Universal Mind; a preëxistent, archetypal Idea. Arithmetic, the law of number, *was* before anything to be numbered or any mind to number had been created. It *was* though it did not *exist*. It was not *a fact* nor a thought, but it was an unuttered word. [...] We feel an experience to be a determination of such an archetypal LOGOS, by virtue of its [logical intension], and thereby it is in the logical world. (W 1: 168–169)

Here, we have finally arrived back to our Pythagorean triad of body, soul, and intellect – now in the form of an *outer world* of matter and bodies (IT), the inner world of the soul (I), and the logical world of *logos*, of intellectual abstractions existing *through* space and time in a Universal Mind (THOU). An obstinate reader may now reply that this is all fine, yet inquire what this has to do with

semiotics. Isn't this just metaphysics, or, even some form of theology (i.e. "Realistic Pantheism")? In reply, we can connect this final order of the "metaphysical" triad with the earliest iteration of Peirce's most famous "semiotic" triad of icon, index, and symbol. In that very same "Treatise on metaphysics" Peirce first laid out the triad that became the basis of this triad in his discussion of truth: *verisimilitude*, *veracity*, and *verity*.

"True", writes Peirce, "is an adjective applicable solely to representations and things considered as representations" and "implies the agreement of the representation with its object" (W 1: 79). On two remarkable pages he outlines three kinds of agreements between a representation and an object. The first, *verisimilitude* (the appearance of being true), concerns the resemblance between a representation (as a *copy* of its object) and its object, consisting of *likeness* or "a sameness of predicates" (W 1: 79), i.e. that the very same could be said of both the original and the copy. Note that this likeness consists primarily of spatial elements, the illustration being a portrait.

The second kind of agreement is without essential resemblance, this type of representation being a *sign*. The *veracity* (truthfulness) of a sign "consists in a constant connection between the sign and the thing" (W 1: 80). Emphasis should be placed upon this *constancy*, which is an aspect of *time*: "a sign cannot exist as such the first time it is presented, because it must *become* a sign" (W 1: 80). For example, "the sign sometimes goes without the thing [and] the thing goes without the sign" (W 1: 80), but if their going together is constant, it can be considered a true sign characterized by *veracity*.

The explanation of the third kind is more complex, *verity* (the state of being true) or "perfect veracity is of a distinct character from cognizable veracity" (W 1: 80). In this, the agreement between a representation and its object is "founded [...] upon the very nature of things" and "an invariable connection" (W 1: 80). Not dependent upon either relations of space or time, but the *perfection* of each, this kind of representation is called a *type*. As if communicated from the Most High or having gained universal assent, the type is "a preëxistent, archetypal Idea" in the Universal Mind: "The word *horse*, is thought of as being a word though it be unwritten, unsaid, and unthought" (W 1: 169).

In the final analysis, we can see the all-embracing logic of this scheme, the perfect spontaneity of understanding and how ideas (types) rearrange experience as if there was a perfect, invariable connection between representations and objects in the following: "[...] we do not have to reflect upon the word as a sign but that it comes to affect the intellect as though it had that quality which it connotes" (W 1: 172). In other words, we understand words as if they were determined for us before there was something to be said or somebody to utter a sound. There is

much that could be added to this, concerning the *growth of signs*, and the progression from space to time to perfection, yet space now precludes us from going any further.

In order to check our progress, if we have reached our aim, and crossed that figurative bog without having to pour bog water out of our boots, let us finish with an aggregate table of all the triads that have been mentioned, with Peirce's numerous attempts rearranged according to the final order he settled down with in his Harvard lectures:

Table 2. All the triads presented in this paper in consolidated order

Pythagoras (Chase 1863: 469)	Passion (<i>θυμός</i>)	Intelligence (<i>φρήν</i>)	Reason (<i>νοῦς</i>)
Kant (1855: 488)	"What may I hope?"	"What ought I to do?"	"What can I know?"
Arnett (1904: 173–174); Archytas (1818: 156–157)	body	Soul	man [intelligent animal]
Iamblichus (1818: 28)	"to sell his wares for the sake of money and gain"	"[to] acquire renown by exhibiting the strength of his body"	"[to survey] the places, the beautiful works of art, the specimens of valor, and the literary productions"
Archytas (1818: 156–157)	beauty, health, good corporeal habit, and excellence of sensation	prudence, fortitude, justice, and temperance	felicity
Archytas (1818: 159)	prosperity	Virtue	felicity
Archytas (1818: 156–157)	wealth	glory	nobility
Hippodamus (1818: 144)	providential care	deliberate choice	discipline and learning
Ion of Chios (Stapleton 1958: 50)	luck	strength	intelligence
Theages (1818: 161)	anger	desire	reasoning power
Theages (<i>ibid</i> , 161)	impetus	appetitions	knowledge
Plato (Stocks 1915: 209)	temper (<i>θυμός</i>)	desire (<i>ἐπιθυμία</i>)	calculation (<i>λογισμός</i>)
Kant (1855: 45)	sense, "the faculty or power of receiving representations"	understanding, "the power of cognizing by means of these representations"	-
Kant (1855: 237)	body, "an object of the external senses"	soul, "an object of the internal sense"	-
Kant (1855: 224–225)	intuition	conception	idea
Kant (1855: 394–395)	Experience	Understanding	Reason
Chase (1863: 518)	Objective-Subjective	Subjective-Subjective	Subjective-Objective
Chase (<i>ibid</i> , 518)	Motivity	Spontaneity	Rationality
Chase (<i>ibid</i> , 518)	Sense	Self-Consciousness	Reason

Peirce (W 1: 15)	IT	I	THOU
Peirce (<i>ibid</i> , 15)	Sense	Intellect	Heart
Peirce (W 1: 45)	It looks out	I looks in	Thou looks through, out and in again
Peirce (<i>ibid</i> , 45)	It inflows	I outwells	Thou commingles
Peirce (W 1: 47)	a speck	extensive manifestation	immensive manifestation
Peirce (<i>ibid</i> , 47)	the manifold of sense	the world of consciousness	the world of abstraction
Peirce (W 1: 83)	Materialism	Idealism	Realistic Pantheism
Peirce (<i>ibid</i> , 83)	Matter	Mind	God
Peirce (W 1: 49)	a plural shape or Space	a unitary shape or Time	a total shape or Heaven
Peirce (W 1: 113)	idistical	egoistical	tuistical
Peirce (W 1: 165)	object or IT	subject or I	logical Form
Peirce (W 1: 167; 169)	outer world	inner world	logical world
Peirce (W 1: 168–169)	determination of an object	determination of our own soul	determination of an idea of the Universal Mind
Peirce (<i>ibid</i> , 169)	anything to be numbered	any mind to number	the law of number
Peirce (W 1: 79–80)	verisimilitude	veracity	verity
Peirce (<i>ibid</i> , 79–80)	copy	sign	type
Peirce (<i>ibid</i> , 79–80)	likeness	constancy	perfection

Conclusion

It is difficult to presume that a well-read person would have had absolutely no contact with triadic thinking. It is so pervasive that, e.g., being acquainted with modern psychology will attest to the classification of Feeling, Desire, and Thought, or Affection, Conation, and Cognition (cf. Stocks 1915: 216). At the end of the 19th century, the psychologists of the Aristotelian Society held a symposium on the subject: “Is the distinction of feeling, cognition, and conation valid as an ultimate distinction of the mental functions?” (Stout, Brough, Bain 1889). Even persons completely unread in philosophy or psychology cannot escape the ever-present, if more euphonically ordered, sequence of *mind*, *body*, and *soul*.

So, too, in semiotics more broadly we meet this distinction everywhere we look. In the continental sphere, it is best known through Karl Bühler’s distinction between expression (*Ausdruck*), appeal (*Appell*), and representation (*Darstellung*) (2011[1934]: 35), and even more widely through Roman Jakobson’s (1981[1960]) distinction between the emotive, conative, and referential functions of language. (Structural) linguistics, too, can be considered to be thoroughly pervaded by

triadic thinking, the reason for which has been laid bare in this paper. Linguists and psychologists need not consult ancient Greek or early modern German philosophies, but that is where we find the triad in the clearest terms. This paper's focus is limited to the line of influence between Pythagoras and Peirce, with Kant and Chase put at the forefront to explain Peirce's unique use of it.

One could of course reach even further back, into the Chaldean mysteries with the attendant triad of Father, Power, and Intellect (cf. Majercik 2001: 266), or the Zoroastrian division of the soul, which reportedly consisted of (1) The *feroher* or principle of sensation; (2) *rouan* or the principle of practical judgment, imagination, and volition; and (3) *boo* or principle of intelligence (cf. Arnett 1904: 147). Knowing that Pythagoras was the one who introduced this division into ancient Greek philosophy from his studies in Egypt and captivity in Persia is sufficient to begin such a study with him.

This paper serves as a first step towards clarifying why exactly Peirce called his phenomenology *ceno-pythagorean*. This question still lacks a satisfying answer but hopefully our short and selective excursion into the history of philosophy, over a rather narrow strip of that figurative bog, has given the community of inquirers a fairly well defined picture of where to look and what to look for.

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Пифагор Пирса-Чейза

Несмотря на общеизвестность факта, что в феноменологии Чарльза Пирса и в его классификации знаков просвечивается что-то «пифагорейское», до сих пор вопрос этот не изучался. Возможно, причина в том, что Пифагор не оставил после себя письменного наследия. Тем не менее, большая часть древнегреческой философии носит на себе печать пифагореизма, а биография Пифагора от Ямвлиха предлагает достаточно материала, чтобы начать расследование. В настоящей статье изучается развитие триад, двигаясь с пифагорейской (тело, душа и интеллект) к Иммануилу Канту (опыт, понимание и разум) и соотечественнику и семейному знакомому Пирса, Плинию Эрлу Чейзу (мотивированность, спонтанность и рациональность). В заключение рассматриваются различные триады в ранних работах Пирса, особенно во время его открытия «интеллектуальной символики» Чейза.

Peirce'i ja Chase'i Pythagoras

Vaatamata üldtuntud töigale, et Charles Peirce'i fenomenoloogias ja selle märgiklassifikatsioonis on midagi pütaagorlikku, ei ole seda asjaolu silmnähtavalt uuritud. Võib-olla on liiga vähe materjali, millest lähtuda, sest Pythagoras ise ei jätnud maha kirjutisi, millega tutvuda. Ent suur osa antiikkreeka filosoofiast kannab eksimatult pütaagorlikku pitsarit ning Iamblichose Pythagorase elulugu pakub meile piisavalt selleks, et seesuguste küsimusepüstitustega algust teha. Käesolevas artiklis vaadeldakse kolmikute väljakujunemist alates pütaagorlikust (keha, hing ja mõistus) ning liigutakse edasi Immanuel Kanti (kogemus, teadmine ja mõistus) ning Peirce'i kaasmaalase ja perekonnatuttava Pliny Earle Chase'i (motiivsus, spontaansus ja ratsionaalsus) juurde. Artikkel lõpeb Peirce'i varastes kirjutistes esinevate mitmesuguste kolmikute vaatlemisega, eriti mis puutub aega, mil ta avastas Chase'i "intellektuaalse sümbolismi".