## THIRDNESS IN NATURE

## TERCERIDAD EN LA NATURALEZA

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Resumen: Este artículo examina el papel de las relaciones triádicas, propias de la acción del signo, tal como actúan en la naturaleza física anterior e independiente de la vida biológica. La idea de Peirce de "ser en futuro" es presentada como suficiente para una noción de Interpretante que abre el camino a una comprensión semiótica de la evolución física del universo: cuando un Interpretante que es una situación física, surge indirectamente de una interacción diádica directa que cambia la relación del universo en la dirección de estar más cerca de ser capaz de mantener la vida, esta nueva situación debe ser considerada como una Terceridad en comparación con la supuesta Segundidad.

Palabras clave: "ser en futuro", genuino, resultado indirecto, in-fluencia del futuro (vis a prospecto), interpretante, vida, fisiosemiosis, segundidad, relación triádica.

Abstract: This paper examines the role of triadic relations, in which sign action consists, as occurring in physical nature prior to and independent-

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ly of biological life. Peirce's idea of "being in future" as sufficient for the notion of Interpretant opens the way to semiotic understanding of the universe's physical evolution: when an *Interpretant*, as a physical situation, results indirectly from a direct dyadic interaction that changes the relation of the universe in the direction of being closer to being able to sustain life, that new situation must be regarded as a *Thirdness* in comparison with the presupposed *Secondness*.

*Keywords*: "being in future", genuine, indirect result, influence of the future ("vis a prospecto"), *Interpretant*, life, physiosemiosis, pregenerate, Secondness, triadic relation

"I, a person of the strongest possible physicistic prejudices," Peirce tells us, (c. 1909, *CP* 6.322), "as the result of forty years of questioning," – "since the beginning of the year 1867", to be more precise¹ – "have been brought to the deep conviction that there is some essentially and irreducibly other element in the universe than pure dynamism", something more than the mere Secondness exhibited in "brute force".

That was "on the one hand". On the other hand, Peirce was convinced that this "essentially and irreducibly other" element in the universe could only consist in "a genuine triadic relation" which, since it had to be an element that *preceded* both human life and every other biological form, could neither be "an intellectual relation" nor "a relation concerned with ... phenomena of life" (Peirce, c. 1909, *CP* 6.322), (i.e., life in the biological sense). Thus Peirce held the opinion that "the problem of how genuine triadic relationships first arose in the world is a better, because more definite, formulation of the problem of how life first came about."

<sup>&</sup>lt;sup>2</sup> Peirce distinguishes "genuine" triadic relations (those in symbols) from triadic relations "degenerate" in either the first degree (those in indices) or second degree (those in icons). However, this distinction he derives from mathematics, and I have some question as to the fulness of its applicability to the problem at hand, inasmuch as to understand semiosis as at work in the physical universe prior to life we have to suppose that "degenerate" precedes "genuine" thirdness, which is a bit odd, since "degeneracy" in the physical sense would more easily be conceived as *following* or *consequent upon* an authentic state. However, this is not a question I aim to discuss here, save to remark that, in physiosemiosis, we should perhaps speak rather of *pre*generacy ("pregenerate Thirdness") than of *de*generacy.



<sup>&</sup>lt;sup>1</sup> The manuscript from which the quote is taken the scholars date "c.1909"; depending on how literal the "forty years" here is to be taken, it might be as early as 1907.

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I suggest that key to solving this problem is Peirce's proposition that "nothing can be more futile than to attempt to form a conception of the universe which shall overlook the power of representations to cause real facts" (Peirce, c. 1904, *EP* 2.322). "The life of symbols" in Peirce's sense, 3 rather than "the life of organisms" in the biological sense, provides us means to realize that semiosis involves an influence of the future ("*vis a prospecto*", changing relevance of past circumstances to present situations) at work not only in the lifeworld but in the universe as a whole – including the physical dimension of the universe as "environment" both preceding and surrounding biological life.

Now Peirce was among the early figures to see unmistakably that the universe of human experience not only occurs within a much larger physical universe which is, as physical, indifferent to species-specific variations in the life-world of plants and animals (the sun emits its heat and light indifferent to the existence of bats or earthworms, corn or sunflowers, or anything else on or below earth's surface), but to see also that this "larger physical universe" is an *evolutionary* universe which did not contain life at its beginning.

Irreducibly triadic relations are easy to verify in the living world, and more easily the higher we ascend the evolutionary ladder of life. They are, as Peirce recognized, the very essence of semiosis, i.e., of the action of signs upon which living beings have been proven to depend for "nourishment and flourishment".

But a semiosis in nature prior to and independent of life, a "physiosemiosis"? How could that be?

The better question, perhaps, is: Once we have discovered the evolutionary nature of the universe *as a whole*, how could such a semiosis *not* be?

Consider. "Brute Secondness", physical interaction, requires actual existence here and now of the interactants. Not so action of signs. Semiosis is the only form of action which does not presuppose the actual here-and-now existence of the "individuals" involved in the interaction. Peirce was of the opinion that it is "untenable doctrine" to say "that the future does not influence the present" (Peirce, c. 1902, *CP* 2.86)<sup>4</sup>.



<sup>&</sup>lt;sup>3</sup> Peirce, c. 1904, *EP* 2.324, "there can be no reality which has not the life of a symbol". *Cfr.* Houser 2013.

<sup>&</sup>lt;sup>4</sup> From Chapter 1 of the uncompleted *Minute Logic*.

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Well, if this is so, then an "influence of the future" upon the present –a "vis a prospecto", as Hoffmeyer called it<sup>5</sup>– re-organizing relevance of past events to what is occurring now, may be said to be the most distinctive feature of the action of signs! In order to know "what has been", we depend upon the action of signs. In order to know "what is going on now", we depend upon the action of signs. In order to know "what will be", we depend upon the action of signs. Indeed, precisely because the action of signs, unlike all other actions, does not depend upon the actual existence here and now of the participants in the action, our knowledge both of what has been and what will be (and even of what is now) turns out all too often to be wrong.

In Peirce's notion of synechism, "reality" consists not only of what is but as well of what could and will be. The action of signs, in principle, is a process that goes on "ad infinitum". But in fact "brute secondness" and chance events often interrupt, so that the semiosis series is "broken off". In such a case, Peirce notes, the sign "falls short of the perfect significant character", but that is not the same as to say it falls short of *reality*, for "it is not necessary that the Interpretant should actually exist. A being *in futuro* will suffice."

So search for "genuine Thirdness" in nature prior to advent of life seems to me to require that we be guided by this notion of "being *in futuro*" as *momentarily* realized each time the physical interactions of finite beings ('brute Secondness') result in an *indirect consequence* which moves the universe in some part closer to ability to sustain biological life. "Genuine Thirdness" in Peirce's mathematical sense requires simultaneous existence of the three terms of the triadic relation, such that the Third has the same relation to the Second as does the First. However, when an Interpretant as a physical situation results indirectly from a direct dyadic interaction that *changes the relation* of the universe in the direction

<sup>&</sup>lt;sup>7</sup> Again, keep in mind that my use of "genuine" in this context cannot simply be reduced to the mathematical sense of Peirce's contrast between "genuine" and "degenerate": see note above.



<sup>&</sup>lt;sup>5</sup> Hoffmeyer 2008: 939. Cfr. Broden 2008: xxiv; Deely 2008: lxxiii, lxxxi.

<sup>&</sup>lt;sup>6</sup> "Genuine mediation is the character of a Sign. A Sign is anything which is related to a Second thing, its Object, in respect to a Quality, in such a way as to bring a Third thing, its Interpretant, into relation to the same Object, and that in such a way as to bring a Fourth into relation to that Object in the same form, ad infinitum. If the series is broken off, the Sign, in so far, falls short of the perfect significant character. It is not necessary that the Interpretant should actually exist. A being in futuro will suffice." (Peirce, c. 1902, *CP* 2.92).

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of being closer to being able to sustain life, that *new situation* must be regarded as a Thirdness in comparison with the brute Secondness from which it resulted.

There is no "Thirdness" in Hume's example of billiard balls interacting: the situation starts with contact between billiard balls moving, and ends with billiard balls moving affected only as to their direction of movement. That is a classic illustration of "pure Secondness". But that is not at all what we have occurring in the evolutionary trajectory the universe has taken from its biologically lifeless beginning to regions where biological life has become actual.

Of course, many physical interactions result in "nothing really new" (as in Hume's billiard ball analogy); others result in a (physically) degenerate "new condition or state" (of a "Thirdness" "degenerate" in a physical rather than mathematical sense) detrimental to life, as in the hypothesis that collision between earth and a comet or asteroid wrought extinction of the dinosaurs.<sup>8</sup>

But the Thirdness I am speaking of occurs when dyadic interactions bring about existence of a *new condition or state* which (by definition) does not *reduce* to dyadic interaction(s), yet *results nonetheless* precisely *from* dyadic interaction: for were there no such occurrence as this, then no evolution of the universe would be possible in the first place, let alone the evolution which led a lifeless universe to a universe both capable of and actually supporting life in local environments – localities which had no actual existence at the very beginning yet came about gradually as indirect accumulation of *sic et non* novelties not directly predictable from the physical interactions of "brute Secondness" which, indeed, only *sometimes* (and far from always) bring about such indirect consequences changing the physical environment in relation to a "living future".

Thus, while the universe does not consist exclusively of signs, it is yet perfused by Thirdness as the action of signs, beginning as a "physiosemiosis", and only culminating much later (as far as we are concerned!) as "anthroposemiosis".

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<sup>&</sup>lt;sup>8</sup> E.g., cfr. <a href="http://www.pbs.org/wgbh/evolution/extinction/dinosaurs/asteroid.html">http://www.pbs.org/wgbh/evolution/extinction/dinosaurs/asteroid.html</a>.



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