

## Spooky Poché

—There are three kinds of people in the world, those who can count and those who can't.

*I wrote this in response to the editor's comments about my contribution to a collection of "Lacanian" essays critiquing "speculative realism," also known as object-oriented ontology. My essay had pointed out that, although some speculative realists have used George Spencer-Brown's "calculus of indications," they have made two serious errors. First, they have claimed that the innermost mark of any expression is "marked," while the outermost space containing the expression is "unmarked." Spencer-Brown and mathematicians who have been most active in interpreting and extending the calculus have said the reverse. The other error has been to deny or remodel the principle of regarding the mark, the only symbol of the calculus, as entailing a coincidence of distinction and indication. This coincidence is affirmed and emphasized, again, by mathematicians, Louis Kauffman in particular, who has shown the significance of this coincidence, its centrality and logical necessity. Still, it remained to be shown why these two errors had any significance for Lacan, especially in his relation to speculative realism. My point was to show how Lacan's theory requires a topological and pre-Boolean stance in all of its major concerns, particularly in the idea of extimacy (extimité), where "the exterior is present in the interior." There are other indications for the obverse of this, the intimacy or over-proximity of the external world, particularly in Lacan's notion of anxiety.*

*The editors did not feel that the example of Lacan's essay on Poe's "The Purloined Letter" was as relevant to this matter as to secondary texts that treated Lacan's topological analogies — the Möbius band, cross-cap, Klein bottle, etc. — specifically. While I was happy to cite these studies, I feel that situating Lacan's extimate further inside topology and mathematics allows many readers to see it as marginal. My point is that the extimate is central, and that Spencer-Brown's calculus — and the essence of the calculus in these two principles that are misrepresented by speculative realists — directly addresses the nature of the extimate and even allows Lacanians to extend the idea further. Lacan's analysis of "The Purloined Letter" is central because, like the weird examples of "audio-active decay" and "EigenForms," Poe's story is about two levels of sign-flows and how a collapse can open up a (non-existent) space of concealment immune from the Symbolic but available to a clever detective who reverse-engineers the issue of accessibility-as-Symbolic.*

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*Audio-active Decay: Collapsing the Planes of Content and Act in the "Look and Say" Sequence*

"Audio-active" decay is the shifting between two registers that are combined ("made simultaneous") in a palintonic way, suggesting that the two registers of communication and invoking (the Cretan Paradox) can be seen simultaneously. 1, 11, 21, 1211, 111221 ... can be extended indefinitely once the trick is learned: *pronounce* what is shown at the same time it is written. 1 is pronounced "one 1" and written out "11." What seems at first to be the number 11, is really "two 1's," or "21." Then, 21 is really "one 2 and one 1," or 1211. This has been called the "look-and-say sequence," because saying a number and looking at it as a symbol of numerical value are two different things (hence contronymic), and when we erase that distinction we discover, rather than nonsense, curiously regular mathematical properties, what we will later associate with "EigenForms" — forms that contain their own negation.

The interesting feature of the look-and-say *palintonic* (and contronymic) series is that it tends to reveal an algebraic constant, which is the *Morris Number* or (John) *Conway constant*, a "real positive real

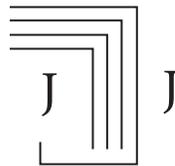
root” of the polynomial shown in the array below. Ouch! Numerically this is 1.303577269.... The point is

$$\begin{array}{cccccccc}
 x^{71} & & -x^{69} & -2x^{68} & -x^{67} & +2x^{66} & +2x^{65} & +x^{64} & -x^{63} \\
 -x^{62} & -x^{61} & -x^{60} & -x^{59} & +2x^{58} & +5x^{57} & +3x^{56} & -2x^{55} & -10x^{54} \\
 -3x^{53} & -2x^{52} & +6x^{51} & +6x^{50} & +x^{49} & +9x^{48} & -3x^{47} & -7x^{46} & -8x^{45} \\
 -8x^{44} & +10x^{43} & +6x^{42} & +8x^{41} & -5x^{40} & -12x^{39} & +7x^{38} & -7x^{37} & +7x^{36} \\
 +x^{35} & -3x^{34} & +10x^{33} & +x^{32} & -6x^{31} & -2x^{30} & -10x^{29} & -3x^{28} & +2x^{27} \\
 +9x^{26} & -3x^{25} & +14x^{24} & -8x^{23} & & -7x^{21} & +9x^{20} & +3x^{19} & -4x^{18} \\
 -10x^{17} & -7x^{16} & +12x^{15} & +7x^{14} & +2x^{13} & -12x^{12} & -4x^{11} & -2x^{10} & +5x^9 \\
 +x^7 & -7x^6 & +7x^5 & -4x^4 & +12x^3 & -6x^2 & +3x & -6 & 
 \end{array}$$

that the look-and-say sequence is a contronymic composition that combines two different ways of representing numbers, and that it is the *combination* that leads to the *mathematical pattern*, which seems, like the EigenForm, indestructable. This is like taking the main principle of the unconscious, its autoerotic admission of both positive and negative forms of things (and consequent negation of negation and time), and finding it also to be central to the theory of number. What’s even spookier is that this EigenForm is also the basis of the “Majorana fermion,” which Kauffman defines as “a particle that is its own anti-particle and interacts with itself, either to annihilate itself or to produce itself.” Ettore Majorana posited the existence of a particle that contains its own negative. Neutrinos are either Dirac (not their own anti-particles) or Majorana fermions (which are their own anti-particles).

Kauffman compares the Majorana contronym to Spencer-Brown’s *mark*, which combines the functions of distinction and indication. That is, the graphic sign that separates an interior from an exterior is “concave” in that is between an interior finitude and an exterior infinity. This is not to confuse finitude with “marked.” The interior of the mark is unmarked. The exterior contains the mark and is thus marked. But, the exterior does not extend in a linear spatial or temporal way “out” to an indefinite infinity. It, like the space of Relativity, is closed and curved, that is, it is unbounded but finite: it curves in on itself. Kauffman writes this as the “mark that re-enters itself,” and the spaces of the calculus *as spaces* are self-constructing/de-constructing.

The EigenForm of the mark is:



The (marked) exterior re-inscribes itself into its own (unmarked) interior, making the marked J equivalent to the unmarked J. Our conclusion is that, like the Cretan Liar, the J has two “registers” that, if combined (re-inscribed), produce a constant, a unique EigenForm that, like the unconscious and the autoerotic, are “durable” — nothing they contain can be destroyed or lost, they are the “traumatic-Real.” We can describe them topologically but not in Boolean terms.

We may use our own J=~J principle by employing a rule of Commutation. We say “the calculus is autoerotic”; then (using Commutation) it’s also true that we are saying that “autoeroticism is a calculus.” This is the essence of “reverse predication.” The particular and universal lose their scale, by which one term is subordinate to or “smaller than” the other, which symbolically contains it. “The sky is blue,” a trivial

statement on a cloudless day, becomes the poetic assertion, “Blue is sky.” Any such reversal involves negation, in that a “normal” reading involves scale-subordination of one thing “made smaller” by the more general or more extensive thing. Reverse predication is an inside-outside conversion.

Commutation does not neutralize this scale relation as much as it forces a crisscross inviting us to imagine a topology that allows the condition through *circulation*. The contained term becomes the container. This is the “circuit” of the autoerotic: a crisscross that is characteristic of the entire circuit, which “happens at any location” and is thus “non-local” in the quantum physics sense of this expression, just as the twist of the Möbius band has no specific location but is general throughout the entire length of the band. This is a logic that is “all perimeter.” Everything happens at a circular “edge” where sense meets sensation, where the hand touching meets the hand touched, in Merleau-Ponty’s terms. This “flesh of the world” is objective in that the impasse of  $J=\sim J$  is the logic of the Thing, the Freudian Thing. In contrast with the Kantian thing-in-itself, the Freudian thing is un-projectable. It is invisible to the Symbolic. This Thing, paradoxically, is found at the interior of the Other *subject*. It is the “exterior” within the interior and interiority of the subject as Other and subjectivity as a whole (hole).

“Spooky action at a distance” calls for just such non-locality and circuitry of autoerotic exchange, which is what makes it spooky, or uncanny, in relation to our Boolean consciousness, dependent on stabilized spaces and times to support the (ideological) operation of causality, hierarchy, status, identity, power, etc. The non-local is as scary to the conscious mind as revolution is scary to the party in power. Commutation, the “study method” by which theory extends itself to questions of self-reference, is also as spooky to the kind of theory that prefers established temporalities and local effects: art history, when done in a boring way.

*The Calculus of Indication*

The point emphasized by Louis Kauffman in relation to Spencer-Brown’s Calculus of Indication, is that a mark is seen as a distinction that *simultaneously* makes an indication. Indication is the distinction between the finite interior of the mark and the *in*-finite (unbounded) character of the outside of the mark. The outside that contains the mark is “marked,” the interior is “unmarked.” Yet, we will see that the axioms of the calculus correspond to a principle of contronymics. The first axiom is treats the mark as a “call” (there is no further “empirical” comparison, although language is suggested): a call and another call have the value of a single call. The second axiom treats the mark as a “cross” that *indicates* a movement from an exterior to an interior space, an infinite space to a finite space bounded by the equivalent of a Jordan Curve (a simple circle or square represents this).

The axiom about crossing is: “a cross and a cross again are equivalent to no cross.” This seems to be the simple principle involved with walking into a room and walking out again, but it is more complex. The temporal element, “again,” is a counterpart of the *linguistic* theme implied by the call in the first axiom. The “again” could indicate either a movement back across the same mark, or the creation of a new mark so that motion can continue in the same direction, into a deeper space. This second option is confirmed by the notion of depth in the extended expressions of the calculus,



where the “interior” is (above) the first (from the left) A covered by a mark and the outermost space is occupied by C (on the right) with a covered A. Being covered by a mark means “being on the inside.” The deepest mark must be empty and, hence, “unmarked.” The outermost space by definition is marked, since it contains all of the marks that deepen the representational space. When Kauffman asserts that the “form implicitly re-enters itself” and duplicates the actions of the Majorana fermion, as “containing its own negation within it,” he means that this outermost marked space,  $\sim J$ , connects directly to the innermost unmarked space,  $J$ .  $J = \sim J$ . This connection may be separated by as many concentric containments — akin to the way the “look-and-say” sequence can continue indefinitely. But, like the extension of the Golden Rectangle or Golden Triangle, this infinite sequence is “grounded” by an EigenForm, the ratio that maintains self-similarity. In the case of the Golden Rectangle, this is a ratio of the length of the sides, in the case of the Golden Triangle, it is the maintenance of constant angle relationships,  $36^\circ$ ,  $72^\circ$ , and  $108^\circ$ .

The mark, in other words, is *inherently* contronymic.  $J = \sim J$  is implied by the simultaneous “interiority” and distinction (division) of the mark. Inside and outside are “convertible” with any mark that divides a space (Lacan’s principle of *éxtimité*). Our study method rule of Commutation means that consciousness begins with distinction, and that consciousness is implicitly the awareness of distinction. The interior of that distinction, the unmarked and unconscious interior, has the capacity for preservation, at the cost of negating distinctions (it is, as unmarked, the negation of negations — the contronymic function). As the calculus demonstrates, there is always an unconscious, always an unmarked space. This is what speculative realists have missed by calling the innermost space marked and misrepresenting the coincidence of distinction and indication (the issue of depth).

#### *Indication — What’s That?*

The indication function of the mark, the contronymic mark, involves creating a hidden space, a *poché*. Where does this space “exist”? Lacan, answering other versions of this question would quickly say, “nowhere.” The *poché* does not exist, it ex-sists — that is, it is present without being a part of the Symbolic; it is a remainder, a gap, a *container able to accumulate*. The *poché* is therefore not visible on any field of demonstration; rather, it lies *in between* the changing states of alternative representations. It is the gap between the predicate and reverse predicate. While predication alternates between two possible positions, the *poché* is the EigenForm that does not vary. Yet, like a investment funds manager who collects a fee whether her client is making or losing money, the *poché* continues to preserve through this cancellation process (from one predicate relation to the other).

This is why Lacan’s most famous theorizing about the *poché* as a decisive “place that is no place,” is fundamental to any discussion of the contronymics of the unconscious, and the relation of Spencer-Brown’s calculus of indications to that contronymics. Just as the “look-and-say” numeric sequence combines what Lacan would denote as *énoncé* (contents) and *énonciation* (the communication act as such), the *poché* between the concealment strategy of the Minister and the Queen’s secret police exists because these two forces are in a palintropic contest. This is a temporalized conflict tensed by the Queen’s anxiety about what the Minister might do with the letter in his possession. Lacan himself emphasizes the meaning of “purloined,” as “that which runs alongside, in parallel.” Just as the two levels the Cretan Liar occupies to maintain his paradoxical self-contradiction, and just as the two registers of enunciated and enunciating are required by any speech act, the channel of action constitutes not an alternative to the contents of communication but, rather, a permanent in-between, a kind of freezer-locker where things

may be left, preserved, and recovered later. That this action channel exists without existing, without being accessible to the Symbolic, Dupin is able to reverse-engineer the non-accessibility issue to identify the card-rack as the letter's hiding place. Like a true Lacanian, he realizes that the card-rack is the "place of action" of the letters waiting to be read. The *enonciation* of the card-rack is invisible to the Symbolic of the letters. With equal capability and ease, it holds letters that are flattering and insulting, scented or plain, square or oblong. The card-rack does not care what's inside the letter; it is only about the actions of

receiving, collecting, and making ready the letters that arrive to be read. In contrast to the back-and-forth implied by letters that are sent and received, the card-rack is *palintonic*. The amazing

card-rack  $\iff$  kcar-drac

thing is that Poe himself recognized this "Lacanian capability" and used, as the name for this functional repository, a (phonetic) palindrome that is the same pronounced forwards or backwards: kcar-drac. Lacan's mastery of the idea of purloined did not extend to this trick of Poe's, nor did he realize the extent to which Poe had employed chiasmus, another contronymic management method, to create a lambda-shaped design pairing texts from the first part of the story ("left") to statements that completed or turned the meanings on the last part ("right"). This was researched by the Poe scholar Richard Kopley in 2008. Chirality in literature does what chirality does in chemistry. It "opens up" space in the literal text to the utility of a non-place place, a *poché*, that, like the card-rack, preserves meanings that resist Symbolic overwriting and exposure. Poe's point seems to be that such a non-space space is the consequence of *any* act of writing, just as Spencer-Brown's insistence on the coincidence of distinction and indication is directed to any mark whatsoever. Like the Majorana fermion, the mark is implicitly contronymic, implicitly self-negating. This is why, from the beginning, there is no Boolean division of spaces without the option of "re-entry into the form," the  $J=\sim J$  *palintonic* condition, the EigenForm. This is Lacan's extimate, grounded and extended to penetrate his centermost ideas about the Symbolic, the Imaginary, and the Real.

## References

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