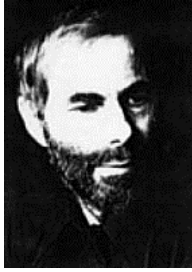


Spencer-Brown's Calculus Is Not What They Say It Is



I find myself in the difficult position of becoming an emissary for a mathematical theory — the non-numerical calculus of George Spencer-Brown — that was never, for me, more than a picture book of clever allegories, whose appeal was boosted by the fact that they were created independently by an expertise I would never fully access. My use, as a non-mathematician, was “pictorial.” Thanks to conversations with mathematicians such as Kay Kappraff, I felt I had not overstepped the visiting privileges accorded to outsiders. It was not until Niklas Luhmann became one of the heroes of autopoiesis and, later, of object oriented ontology that my casual relation to Spencer-Brown was pulled into relevance.

First, Luhmann and his followers seemed to be missing the key guiding inferences that Spencer-Brown suggested in comparisons of his calculus to a map of consciousness and, more ambitiously, cosmic creation. These new deployments strive not only to “secularize” the calculus but to remove questions of subjectivity entirely. Because humans become subjects primarily because they are mark-makers whose marks split up the world, their use of Spencer-Brown’s calculus is and must be radically perverse. Object oriented ontologists forbid subjectivity in the form of critical engagement about their own roles in constructing theory. In essence, they poison the well of subjectivity. Radically, they use a “subjective” calculus to eliminate subjectivity as a whole!

There are only two ideas in the calculus that are absolutely essential, the first is the coincidence of division and indication, the second is the status of the states of “marked” and “unmarked” that, with every consecutive introduction of new marks, must alternate, allowing consideration of the “medium” of mark-making as a part of the essential message. Both of these ideas are falsified in object oriented ontology; both are re-deployed as fundamental groundings of theory that runs contrary to Spencer-Brown’s topological and non-Boolean arithmetic. Yet, no one has yet challenged any of these misuses. And, when “experts” have stepped forward to act as referees in these appropriations (see comments on Schlitz below), even they make similar critical errors!

Anyone is free to read the original texts of Spencer-Brown to confirm my critique, and for an elaboration on the effects of these errors, the work of the mathematician Louis Kauffman is readily available. But, because the main principles of the calculus, (1) distinction \Rightarrow indication and (2) sequence alternation of polarity, are fundamental to theories of subjectivity and because the arts of all kinds but especially architecture involve, at the most elemental level possible, the making of distinctions that are primarily indications and the creation of concentricities, it is now essential that anyone who wishes to find a basis of subjectivity within the arts reclaim Spencer-Brown’s calculus from misuse and false claims. It is not enough to ask object oriented ontologists to cease and desist on this matter; they must be asked to remove their belongings.

George Spencer-Brown's calculus is foundational for such well-known contemporary ideas as autopoiesis (Verula and Maturana), topological sociology (Niklas Luhmann), and object oriented ontology (Quintin Meillassoux, Graham Harmon, Levi Bryant, and others). The question should be: what aspects of Spencer-Brown's calculus enable this centrality, and are the claims based on it justified?

Michael Schlitz, in his article, "Space is Place: The Laws of Form and Social Systems" (*Thesis Eleven*, 88: 8–30), does much of the work required to answer this question by reviewing Niklas Luhmann's original employment of the calculus, on which Bryant and others have depended. There are some serious problems with even this careful and perceptive study, however. Schlitz, like Bryant, seems familiar with Spencer-Brown's *Laws of Form*, yet he makes two critical errors in presenting that theory to his readers. These errors are inexplicable given Spencer-Brown's extremely clear statements and procedures; it is difficult to say just how Luhmann has been vindicated, along with all those who have followed him in giving Spencer-Brown a central position in their theories.

It is no use trying to determine just why or when the errors were made. Rather, I will try to show simply *how* and *why* they *are* errors, and what consequences follow from making them. I agree that Spencer-Brown's original calculus of indications is a strategic gold mine for re-orienting many philosophical and critical theory projects. Spencer-Brown's notational system also at times seems to map accurately the formations made in works of art. But, because of the persistent errors made by those who also claim it is foundational, rather the wrong kind of foundation is constructed. I would like to present the facts of the case in a way that any reader can, with *Laws of Form* in hand, supplemented perhaps by any of the mathematician Louis Kauffman's readily available studies, see the problem.

This may be a situation of the Emperor's New Clothes. I don't pretend to be the small child willing to break with the convention of holding on to "necessary fictions," but this is a case where broadly popular philosophical movements have specifically condemned the Lacanian-Freudian theory of subjectivity. The essence of this subjectivity, I believe (following Todd McGowan and others), is the central and defining position of the phenomenon known as the death drive. This theme is what drove most of Freud's followers to denounce at least this component of his theory; and precisely the element that Lacan sought to re-institute in his resuscitation of Freud from the 1950s onward. It is the phenomenon of self-aggression; the subject's own, often unconscious, love affair with negation.

My interest in Spencer-Brown's calculus is based on how this non-numerical, *non*-Boolean system (as against Schlitz's characterization that the calculus is a Boolean algebra) reveals the relation of the death drive to the gradual subsumption of auto-eroticism by the (Lacanian) Symbolic, *via* a "sliding mediator" of

Hysteria, both as symptom and discourse. I will play that out in brief at the end of this short review of Spencer-Brown's calculus fundamentals.

The Primaries: Distinction is Indication

The calculus begins with the idea of a mark that indicates a distinction, a division of space into two parts. Spencer-Brown is clever enough to "already be thinking about" the medium on which such a mark is made. Because this plays an important role later, it is important to say that, if a mark is made on a flat sheet of paper, we do not accept the literal flatness or actual size of the paper but extend the representational surface to a metaphorical if not metaphysical role, of "all space."

Without the mark, the representational surface, the piece of paper, is unmarked. After the mark is made, which indicates a division of space, the space is marked. Remarkably, *all of the commentators* who use Spencer-Brown as their foundational topology have failed to grasp this point. They universally claim that the marked surface is unmarked and that the space indicated "inside" the mark is marked. It is difficult to see how this confusion arose and has now become a canonical standard. I will try to show how this central error has caused the theorists who have made it to take a wrong turn from which their journey can never recover.

While it would seem to be clear that the inside of a distinguishing mark, for example a circle, free of any further marks, should be considered *unmarked*, and the page on which the mark appears clearly should be considered as *unmarked*, it has not been clear to Michael Schlitz or his subject, Niklas Luhmann, nor has it been clear to object oriented ontologists such as Levi Bryant who have misrepresented the calculus yet claimed it to be central to their theories. What does it matter? Isn't the binary marked/unmarked a convention more than a literal description? Couldn't we just as easily get along with "A" and "B" or "left" and "right"? Yes and no. The states of marked and unmarked have to do with consciousness and unconsciousness. We walk into a space and no longer think of the threshold we have crossed. We are in a new world, and if we see no more thresholds in front of us, this world is "unmarked" if, by marking we mean creating a threshold separating one space from another.

When we stand outside the room, we see the threshold and a bit of the space beyond. We are aware of the marking, and understand the consequences of moving across the threshold. We see the "mark" and thus our space contains the mark and *is* marked. I realize this sounds simplistic and even too obvious a point to make to any intelligent reader, but we are faced with the inexplicable situation of many otherwise intelligent readers of Spencer-Brown coming to the exact opposite conclusions! Standing outside the room so that we see a mark is a condition of a kind of consciousness of something, consciousness here being tied to perceptual experience, a kind of sense certainty. But, we will see how Spencer-Brown, like Hegel in his *Phenomenology of Spirit*, moves to deconstruct this certainty.

Within the unmarked space indicated by the threshold/mark, there could easily be another mark, another threshold. The space inside *this* interior mark would, until we discover anything to the contrary, be unmarked. Because nested spaces in Spencer-Brown's notation system alternate between marked and unmarked states, the whole series is inverted by this additional mark. We first had the series, marked>unmarked; now we have a series that must read unmarked>marked>unmarked. AB has become BAB. Our "conscious state" has somehow been robbed of its consciousness by the presence of a new mark that has reproduced its original state on the inside of what created its original state. In other words, *mirroring* has constructed a new kind of consciousness that has "seen itself seeing." The Hegelian moment of this is clear. A is not allowed a perpetual identity principle, $A=A$; it is forced to endure an oscillation between identity and obverse identity, where it "looks back at itself," $A\neq A$. While it is allowed to move between A and not-A in time, palintropically, its more fundamental and accurate essence is *palintonic*, i.e. simultaneous and immediately contradictory.

For Lacanian readers, it is tempting at this point to see the connections to the death drive's compulsive return to a "self-destructive" traumatic position. Just as the subject has been drawn forward by an illusory pleasure principle, a concealed gravitational force has pulled it into a circuit that is gapped at the point of (almost-) closure. That Lacan was able to name this gap, the *object-cause of desire*, is one of the major achievements of psychoanalysis, but also one of the most difficult to comprehend and the idea of Lacan's most often misinterpreted or avoided. This is why Spencer-Brown's calculus has so much to offer to the Freudian-Lacanian theory of the subject, in particular in its relation to the death drive.

The Simultaneity of Distinction and Indication

Spatially $A=A$, the principle of identity drawn from the fact of physical presence. Something that can be marked off and represented seems to be able to hold its own: it is itself. But, in the temporality of experience, where "everything flows" (*panta rei*, πάντα ῥεῖ, as Heraclitus claimed), "you cannot go home again." This is the world of movement, and the creation of any distinction is simultaneously an instruction to enter or exit, or rather both, since you can't enter one space without leaving another (i.e. every crossing is about *two spaces*). So, on a map, $A=A$; in a journal $A\neq A$. Just as $A=A$ and $A\neq A$ are "allowed" temporal alternation, a *palintropos* (where the house doesn't change every time you leave it and then go back home) in space but held to a *palintonic* rule by time, where you "can't go home again," Spencer-Brown considers that every mark is *simultaneously* a distinction (division, split, fracture, etc.) of a *space* and an indication to *leave* one space for another. In other words, not only is a binary created by a mark, the mark implies that the *interior* created by the split is the place we must enter. First there is nothing, no mark; then there is a mark and, at the same time, a mandate to cross that mark to an interior. This is significant on several counts. First, the instruction "tilts" the divided space as a representation of an exteriority and interiority. A series of containers, (((...))), moves *inward*, and asks us to leave the outermost, at-first-unmarked space,

for new unmarked spaces inside the first. As we move, the polarities of the consecutive spaces alternates from marked to unmarked and back again.

But, is *interiority* a fixed rule? In topology it makes no difference whether we are going inside or outside. In topology every representational surface is closed and curved — a circuit. Spencer-Brown, in the terminal chapters of *Laws of Form*, shows how we must take into account the paper on which we make our marks. The paper is flat and usually with four sides and four corners, but the marks we make on it presume that it is unlimited. We draw in “space itself” without presuming to know whether or not it is closed and curved or infinite and flat. In fact we seem to uphold both flatness and curvature “theories” with each mark. We use scale, for example, to suggest that “inside” is smaller because it is contained in a local situation. But, if the paper itself is a patch of a sphere, this smaller inside is only relative. It, as much as its “enclosures,” is an outside. The calculus has its own temporality in that the outermost space comes first and marks are made successively in the “interiors” of already-present marks. But, it would be just as easy to form expressions in the calculus by moving from the inside to an increasingly expanding outside. Either “convention” is a momentary attempt to stabilize the contradiction of $A=A$ and $A\neq A$. This can be shown with the analogy of the Möbius band.

The consequence of distinction and indication taking place simultaneously is that (((...))) is realized, topologically, as a Möbius-band structure, where the “innermost” space is a mirror condition of the original space’s unmarked status. As in the Möbius band, where we encounter our starting-point and realize we have “covered both sides” in exhausting the band’s entire length, we come to the end of the (((...))) series to reconnect. If we have twisted the band an odd number of times, we return to the original unmarked position; if we have twisted an even number of times we “will not have noticed any change.” In other words, Spencer-Brown’s concentric enclosures have a “chirality,” a left-right logic. There is no middle position between the states, so we can represent the palintropic shifting by a square wave. Two crosses create the three spaces we count to produce the “odd” that will convert the original outer-most space from marked to unmarked. Three, and all successive odd numbers of crosses, will return the marked state to a marked state. But, note that when we consider that we are also talking about marked/unmarked in terms of consciousness and unconsciousness, our “project of self-awareness” is generically given a chiralistic basis. It is more important, in this sense, to say that *consciousness itself* is a chiralistic, square-wave function or *functionality*. Just as it is impossible, on a Möbius band, to point to any spot to find the twist, the conversion/alternation of chirality is a portable function. It is a property that belongs to the whole; it resists localization, you cannot pin it down to a *locale*, and this is a key to its “ubiquity.”

Almost all those who have appropriated Spencer-Brown’s calculus in order to subtract the subject from an “ontological” world view have made the inexplicable critical error of avoiding the role of alternating states. How? Levi Bryant has allowed himself to resist turning palintropos to palintonos by

delaying the function of indication rather than accepting Spencer-Brown and Louis Kauffman's clear advice on the subject. Bryant claims that "[d]istinction, as it were, precedes indication." *As it were*???? What "as it were" can justify misreading Spencer-Brown's own statement on the matter: "We take as given the idea of a distinction and the idea of an indication, and that it is not possible to make an indication without drawing a distinction"? This is not a small misreading error. The issue of simultaneity will forever make it impossible for Bryant or his readers to see how the palintropic oscillation of polarity from marked to unmarked becomes the palintonic "Real" of consciousness as self-realizing through self-negating. As McGowan has argued, Hegel not Kant is the real enemy of object oriented ontology. Hegel's own use of the example of $A=A$ and $A\neq A$ show that Hegel and Spencer-Brown are on the same page.

I would like to borrow a clever argument from Slavoj Žižek. In order to show for once and for all how there is no "synthesis" in Hegel's dialectic, Žižek compares the nonetheless three-step process of dialectic to the joke form known as the *Witz*. In the *Witz*, the punch line is silent, but all the more effective. Here is an example of a *Witz*. Mrs. Goldberg attends her dying husband. In despair, she asks him what are his final wishes. "Marry Lieberman," he replies. "But, Lieberman was your worst enemy!" the anguished wife protests. "Yes, that's right," says the husband. The final line forces the listener, along with Mrs. Goldberg, to *reverse her model of reality*. The reversal is as sudden as it is revelational. What we had "thought all along" is not only flawed, it is obverse to the reality of the case. There is no synthesis proper here, no reconciliation of opposites, no *coincidentia oppositorum*. Instead, there is what Žižek calls "absolute recoil," *absoluter Gegenstoss*, where the subject "goes/falls to the ground" of the matter. The conclusion, that the wife had been a torture to the husband, "had been there all along" but lying in a nascent state. It took the shock of negation to bring out the "palintonic" Real through the palintropic back-and-forth of dialectic.

The palintonic Real of Spencer-Brown is informed by the *simultaneity* of indication and distinction. *No sooner* than we have been shown (a palintonic display, on a page in front of us) a division of space (or time) than we are asked to cross, *palintropically*, into the "unmarked" space it has drawn for us. We are not allowed to reflect on the situation; we are immediately instructed to cross. We are not first given a distinction and allowed to look at it without being at once told to cross into it. The spatiality of division engages the dynamics of movement. Our consciousness of the mark is not just simultaneous with consciousness but identical with it. Consciousness is the mark, the mark is consciousness. But with this consciousness comes with the necessity of cancelling consciousness! We must see that our mark necessitates and justifies further marks, and that these will, recursively, call into question our own status, our own $A\neq A$. This "call into question" is the binary as palintonos. We identify with our own non-identity. This is the death drive, and the surface on which Spencer-Brown draws his marks to create his non-

Boolean logic is analogous to the closed, curved circuit that, in the death drive, returns compulsively to the point where $A \neq A$ is both a place and not a place, a twist *here* but not a twist anywhere, but everywhere.

Louis Kauffman has focused on this recursive quality as central to the calculus. Comparing the concentric nesting of forms inside each other to the algebraic equation of the form $x = a + b/x$ (the basis of the recursive geometry of the Golden Rectangle and its mathematical irrational ration, ϕ , he shows how the square-wave oscillation between marked/unmarked relates to the coincidence of distinction and indication. We are instructed to cross as soon as there is a cross, and this coincidence involves the “contradiction” of entering into the form we have created precisely by not being a part of the form. Our “x” will undergo a “/x” sublation and, in the process, the twist will be represented palintopically as ϕ , a ratio that condenses the process into a single *irrational* entity. It is here that Spencer-Brown’s status as a non-Boolean logician is clear. The calculus no more fits within the Boolean standard of truth tables, where T/F is considered in its combinations, than the system of rational and irrational numbers can be reduced to a “flat” representational plane. Just as Louis Armand has argued that Lacan’s own logic is the both-and of non-Boolean logic rather than the either-or of strict true-false distinctions, Spencer-Brown’s calculus is radically non-Boolean, and it is hard to accept how such a close reader as Michael Schlitz has misread the situation. This may be because Spencer-Brown begins at the level of arithmetic. Schlitz has correctly emphasized that arithmetic is prior to Boolean algebra, but he has avoided Kauffman’s demonstration of how this arithmetic is capable of producing irrational numbers — including the ϕ of the Fibonacci series. Just as the addition of new rectangles to the original Golden Rectangle does not alter the ratio created by 1, 1, 2, 3, 5, 8 etc., the ϕ states this numerically, but the number itself involves recursion. This can be demonstrated in a parallel situation. If we consider that $1/9, 2/9, 3/9$, etc. create numbers that are an infinite series (.11111..., .22222..., .33333..., etc.) we reach the “impossible/Real” point of considering how $9/9$, which must surely be the $A=A$ of identity, the number 1, is both itself and not itself (.9999...). Each numerator “approaches itself” with the division by 9, just as in the Fibonacci series, the ratio is “achieved” only as an oscillation around an ideal limit.

Without the simultaneity of division and indication, this aspect of Spencer-Brown’s “irrationality” would not exist. We would have $9/9 = 1$, so to speak, not the series .9999... which is determined by the *form* of the series $x/9$, not the arithmetic Boolean condition of natural numbers. This means that there is an infinity *inside* each point we take to be simple and spatially self-identical, $A=A$. Each spatial division made by a mark, an instruction to *leave* one space for another (palintropos), is simultaneously a map of its own contradiction, $A \neq A$, palintonos. Recognizing this irrationality leads us to accept the calculus as a counterpart to and mathematical account of the Freudian-Lacanian death drive, the key to subjectivity. It does not in any way justify the project to eliminate subjectivity on behalf of an object oriented ontology.

Spencer-Brown's calculus is not simply a feature of object oriented ontology that can be critiqued from a Lacanian point of view. The calculus's key features — the simultaneity of distinction and indication and the topology that puts any mark into the “middle” of a finite marking space — also happen to reveal structural features of the center-most aspects of the Freudian-Lacanian subject. Of course, it is broadly accepted that Lacan's topological models are both non-Boolean and binary. His most famous “moment” of subjectivity, the Mirror Stage, divides a space and immediately pairs equal amounts of positive presentation (the ideal ego) with negative alienation (the “body-in-pieces,” *corps morcélé*). The retroaction by which the subject alienated by seeing its idealized image, firmly supported within the Symbolic of the Other, reveals the Hegelian aspect of this moment as well as its status as an act. The contingency within which the (pre-)subject had been unconscious of its lack in relation to its reflected Symbolic ideal becomes the basis of the Absolute of this moment, its truth as a sublated truth, what we might write as “/true.”

The /true of the act is also present in Spencer-Brown's coincidence of indication with distinction. The true does not “follow” from distinction but is shown to have been implicit within the unmarked condition. As soon as the mark is made, the unmarked state is “known” but known as a sublated “/truth.” It was present but we were not conscious of it before the mark was made. At this point, indication forces us to vacate the space of indication to consider the framed space as positive. This is equivalent to the lowering of house lights when the curtain of the theater stage is raised. We trade one space for another, and this trade is like a switch that exchanges equal amounts of energy-value, positive/negative, figure/ground. Because the exchange is equal, we consider the switch to be on a circuit that, no matter how quantitatively large it may be, will always be within one step of being balanced. Alternation between two states can be even or odd. An odd number will leave the system in a state reversed from the original; an even number will indicate a return. Spencer-Brown's marked/unmarked symbolism is like an alternating current electrical system that begins by being unmarked, then is marked with the presence of the first distinction, the unmarked if a mark appears within this first distinction.

The structure of the circuit that preserves equality of marked/unmarked no matter how many marks are made is the topological aspect of the calculus that makes interiority and exteriority indistinguishable. The circuit is analogous to a sphere. The space *on which* marks are made participates in the status of the system as a whole. There is no “meta-language” point of view exterior to the calculus, no “Other of the Other,” as Lacan would say. This is what is directly intuited with Lacan's theory of discourse, which simultaneously describes a system of exteriorization (communication, description, “reality factors,” etc.) as a system of circular *interiorization*. The Symbolic itself is what it is thanks to the gaps and

inconsistencies. We could write this principle as $/S2$, the counterpart of $/\text{truth}$. Specifically, this is the configuration of the discourse of the Hysteric, where $\$/a \rightarrow S1/S2$. The subject, “barred” by a binary system where Spencer-Brown’s “marked/unmarked” could be read as “conscious/unconscious,” distinguishes itself as the point of view of an opposite Other, the frame containing contents that are related in a symbolic way, $S2$. The other is a “master signifier” that organizes the content of $S2$, but also a “master” who serves as an ideal ego, active in relation to the passivity/receptiveness of $\$$.

How do Spencer-Brown’s central principles of (1) the coincidence of distinction and indication and (2) the closed-curved condition created by the convertibility and self-reference of the point of view, arising from inclusion of the medium of representation in the represented, constitute a “structure” of the Lacanian discourses? My purpose is to go further than to establish this point. Going further is necessary in fact to show just how the death drive, the “ultimate structure” of subjectivity, works in terms of distinction/indication coincidence and self-reference demonstrated by Spencer-Brown’s calculus. The calculus constitutes a kind of side-step, a detour required to make a connection essential for (1) demonstrating the position of Freudian-Lacanian psychoanalysis in reviving the project of subjectivity and (2) showing how the death drive is the *sine qua non* of this revival. Because the stakes of this demonstration of the importance of this side-step are so high, it is important to apply a variation of Occam’s Razor Methodology: i.e. to keep terms and illustrations to a minimum.

Lacan’s *mathemes* of discourse constitute a canonical program outlining the role of the Symbolic in constituting subjectivity. Both Freud and Lacan emphasized the distinction between the Symbolic subject and what is regarded as “generically” human. Subjectivity is a process, historically and in terms of the individual, of step-wise accession. The human lives in a world where signifiers and signifieds exchange in what could be called an intensely de-centralized way. For the individual child, words have power over things (“megalomania” was Freud’s term for this). For the cultural subject, evidence from pre-literate peoples suggests intensive symbolic relations that would, from any point of view, would outstrip any modern culture’s over-conceptualized views of the world. What Freud called “autoerotic” in relation to the child’s decentralization of “points of energy exchange” of the cosmicized libido might as easily be applied to the generic condition of the pre-Symbolic in the alternative worlds created by art, where “decentralization” is the principle that any object, act, or process can serve as a center of a meaningful exchange. Art’s “polymorphous perversity” is its ability to shift, at any moment and in any circumstances, from signifier to signified, viewed to viewer, origin to end.

The *mathemes* constitute a serial account of human development. One is tempted to start with the discourse of the Master as the primitive, followed by modernistic discourse of the University, assayed and critiqued by the discourse of Analysis. The outlier, Hysteria, holds the key. It is the modality by which “the human” becomes “the subjective,” but in a way that transcends a specifically historical moment in human



development. The Hysterical discourse differs significantly from the hysterical subject that arose historically in the last half of the 19c., with such force that one could say that, although hysteria is the oldest psychiatric symptom in medical science, hysteria gave birth to modern psychoanalysis and, in turn, to

the modern concept of the subject in general. Ancient hysteria was so named because of the notion that the womb could *move* about the body — in essence, that conception, gestation, and birth were “portable” within the general *matrix* of maternity. Independent from a specific location of sexual activity, this view of the feminine body corresponds to the idea of maximal decentralization associated with autoeroticism. One comparatively late example of hysteria is the tradition of the conception of Jesus through the ear of the Virgin, a complex metaphor related to the idea of the Word of God as *afflatus divinus*, an “acousmatic” conception. Mary’s traditional association with reading, as evidenced by the vast majority of paintings in the “annunciation” paradigm, reveals a clever algorithm. Pregnancy, in this view, *restores* virginity. Mary is “perpetually virginal” in that every conception and birth is originary. The sexual act is retroactively a function of conception. The hysteric is a virgin, the virgin is hysterical. This convertibility, hysteria \leftrightarrow virgin, lies at the heart of the notion of singularity: the ability of the act to serve as both figure, arising from contingent conditions, and ground, the basis of a new order. This, surely, is the essence of the reason why any theory of subjectivity must be based on a *non*-Boolean logic.

Where hysteria establishes a *portable* basis for the singular original in the autoerotic body of the virgin who is virginal with every conception, Hysteria as a discursive form is itself portable within the system of discourses. While it most evidently constitutes a theoretical basis for the one-time event of transition from human to subject in terms both of cultural and individual development, it is able to move about the three-part system of Master, University, and Analysis; also, it is able to change scale so that it is able to operate *inside* any single discourse.

Why is this so? Hysteria is structured by the same two principles that, in the calculus of George Spencer-Brown, provide a foundation for the division of Agency and Other and, subsequently, the integration of the *medium* of division within the formal system itself. Hysteria shows just how much Lacan’s mathemes follow the more widely recognized model of communications established in the 1950s by the communications engineers, Claude Shannon and Warren Weaver. In this often reproduced model, there is a *distinction* between two adjacent fields, that of the Sender and Receiver, as well as an implicit *indication* to cross from the field of the Sender to that of the Receiver in the process of sending a message.

This form, one should note, is the same for the Lacanian *mathemes*, where Agent and Other constitute the same division and left-to-right flow of energy. In the Shannon-Weaver model, the Signal (Lacan: “signifier”) competes with Noise, which is to say that the *medium* is, at any point, capable of being confused with (or integrated into) the message. What regulates this signal-to-noise ratio is the cooperative interactions of the contexts used by the Sender and Receiver. (In Lacan, this is the Symbolic’s deployment of ego ideals and ideal egos.) But, here, it is possible to note how, in a very Spencer-Brownian way, the medium as a material presence can constitute a destabilizing influence. Under specific symmetrical circumstances (one could say “super-symmetrical” circumstances), the medium can “speak for itself.” Such is the case with the widespread ethnological practice of divination, where natural phenomena and substances are used as sources of advice and predication. One could say that the information model moves horizontally to establish conventional relationships linking contingency and meaning but *diagonally* to let the “medium speak for itself,” and not just speak as a subject but as a “super subject,” in a subjectively superior way. Ethnographic history in fact demonstrates how authority that begins with a religious basis in practices of divination is the basis of later development of more secular laws. In no case does authenticity develop from “practical considerations.” Rather, these are a counter-force allowing the secularization and amelioration of the readings of auspices that, in early stages, allowed for no “consideration of circumstances” to soften judgments.

Hysteria opposes the barred subject, \$, to the Other as S1, a master signifier as well as a master in the literal sense. The indication is clear. The subject is barred — bound — by the “rule” implicit in the master signifier, the “god” who commands specific actions. However, Hysteria provides an antidote for this absolutist condition of autoeroticism. Beneath \$ is /a, the True considered as the Lacanian object-cause of desire, the flaw within the Symbolic, the purely negative condition that interrupts the flow connecting signifiers and signifieds. For Giambattista Vico, this interruption was simultaneously a part of the autoerotic condition of pure humanity and the radical moment converting humanity into subjectivity: the moment where the Thunder, in its loud *garbled* fright achieves its effective force through its *defect*, its radical lack/loss of meaning, casts doubt on the entire system of Symbolic interactions that had, in the word-to-thing correspondences of the autoerotic mentality, assured an S2 of effective interactions.

Where /a is in the position of the Truth in Lacan’s *matheme* of Hysteria, /S2 is its basis, as a “broken” or “defective” basis for Truth. Truth lies in the destructive methodology that, first formalized in the rituals of divination, was essentially a science of limits, a *liminal* knowledge: *kenosis*. Split/division (*tesseræ*), coincident with tension/turbulence (*clinamen*) springing from the figure-ground reversals arising from each new inside frame-within-a-frame, is historically and ethnologically demonstrated as the basis of /a, the authority of that-which-has-been-sublated, i.e. the *apophrades*, the “voice of the dead” that served divination practices as the Hades-based ancestral authority of all judgments and laws. What history

and ethnology teaches us is just how the structural relation of these ideas are independent of specific cultural and geographical contingencies. They seem to say not just that the *form* of distinction and indication are present from the first moment of human subjectivity, but that their *coincidence* is essential to this first moment's dynamically *developmental* nature. As frames emerge within frames, as cultural practices emerge from within established ritual actions, the idea of form transcends any idea of a fixed template regulating the forces of exchange. Rather, the exchange modeled by the *matheme* of the Hysteric is made portable by its location-independent and scale-independent ability to *deconstruct location* and *violate scale*. In the */a* lies the ability to sublimate the stable conditions set by any frame, any S2, to create a sublated *kenosis*, /S2. Here, the negative — the basis of the death drive — emerges as the primary energizing force. The Hysteric does not build, she *destroys*. Her discourse is not the patched-up attempt of the Master to make so with the respect of the Servant nor the ideological intimidation of the subject by knowledge booby-trapped in advance by masters working behind the scenes of University discourse. Hers is the portable function of conversion: grounds with figures, selves with others; insides with outsides, the low with the high — in other words, the “carnavalesque” inversions that insure, as all carnivals insure, a maximal autoerotic orgy of relations, what in literature is known as “Góngorism” and what in culture is associated with anarchy.

What Comes Next?

Where object oriented ontologists have turned what is essentially a consciousness-based theory of subjectivity into an unconsciousness-*dependent* theory of objects, they have done so by breaking two fundamental rules of the very (non-)Boolean theory they cite as central to their work. While critical theorists interested in the Freudian-Lacanian model of the subject might want to skip the seminar on Spencer-Brown, those who cite, specifically, the distinctive role played by the death drive cannot afford to. They must not only attend class; they must take notes and pass the exam with flying colors.

At the same time, theorists in the arts, literature, etc. might easily avoid *The Laws of Form* in their (mostly) phenomenological pursuits, they will not be able to do more than contrast their approaches with interests that place different weights on certain practices and topics. They will not find a *theoretical basis* for defining their criticism. And, in particular, architecture theorists — whose business it is to understand and account for the making of marks and the relations of marks to the *mediums* on which marks are made, including how conceptions of these mediums radically alter the status of the marks on them — will not be able to skip this class. They, too, must pass the exam with flying colors.

It could be argued that architectural theory can avoid entirely the matter of psychoanalysis or, if interested in some way, avoid the centrality of the death drive. I do not agree with this argument. Topology is central to Lacan, and for Lacan, this centrality matches up 1:1 with the centrality of the death drive. And,

just as topology lies beneath Lacan's ideas, not just in the examples of quilting, discourse, or extimacy (to list just a few), it is the well that supplies the water to the death drive and, hence, the Lacanian *essence*. To skip over any link with the calculus of Spencer-Brown would suggest careless neglect. It can be done, but it should not.

Those intent on contrasting phenomenological approaches with “instrumentality” continue to argue in a “pictorial” manner, comparing and contrasting the results of choosing one approach over another. This fails to go to the heart of the matter, a heart that object oriented ontologists have exposed by proposing, literally, that we — subjects! — and not just objects can do without subjectivity. This position has to be addressed directly, and not through characterizations but with head-to-head theoretical arguments. How can this be done? I have no advice for those who claim to be opposed to anti-subjectivism but use the very style of thinking that such anti-subjectivism employs. This kind of error is delusional and incurable. But, I would suggest to those who continually call into question the status and meaning of the marks artists, writers, and architects make *on paper* and the incontestable presence of distinctions that, though not on paper, presume mediums (representation-ality) with every use, that it is not only possible but necessary to join in a common effort.

This common effort does not involve a vindication and restoration of the literal theories of Spencer-Brown. The calculus is not a future Esperanto for critical theorists to speak at conferences. Rather, I recommend that the two rules that ground Spencer-Brown be elaborated in as many different ways as possible. These rules are (1) the simultaneity that binds the making of a mark dividing a space to the *instruction* to leave one space for another; and (2) the resulting alternating polarity/status of spaces with every new addition of “depth” — which could also be “height” — in a concentric system that requires neither naïve linear models of time nor naïve Cartesian objects, which conceal the points of view used to envision them.

These two principles can take many forms. They involve many “metaphysical” and “phenomenological” and also “ethnographical” conditions. We may span from Hegel's *Witz*-like dialectic to the construction of cosmological binaries in the rituals of aboriginal peoples. Spencer-Brown's calculus need not make an appearance on these stages, but it essential for his principles to find their place throughout. But, by far the most useful insight to be had from the calculus comes from its connection with the logical concept of sorites, the logic of “one grain more” or “one hair less,” i.e. the moment that a whole comes into being through a process of gradual accumulation or subtraction of parts. This process is the radical undoing of Boolean logic, as was well known by Lewis Carroll who, in his *Symbolic Logic*, developed a very Lacan-looking system (“the bilateral diagram”) for allowing the creation and subsequent solution of sorites puzzles.

Sorites

Grains of sand drop one by one, at at some point we realize there is a pile of sand. Hairs drop from a head one by one, and at some point the man realizes he is bald. The state of the “universal” (the pile, baldness) cannot be denied — they exist! But, the relation of these “wholes” to their “parts” is problematic if we try to describe them as a consistent logical relationship. The whole is based on a moment of recognition that cannot, even though it is a *moment*, pinpointed. We realize the universal at a point that is a point of *retroactive recognition*. The pile is “already there.” The man is “already bald.” Retracing the steps of addition or subtraction to find the exact point of becoming is useless. We get to a small number of grains or a full head of hair only to realize that the universal was already and always present in the “contingency” of the parts. It only took movement — a gain or a loss — to realize this universality embedded within the contingency. Sorites gets to the Hegelian point of how universality — the Absolute — *requires* contingency

Interpretative theorem 1

If the primary algebra is interpreted so that integral expressions are true, and if each of a number of class-inclusion premisses is sententially transcribed in it, and if variables representing the same sentence at odd and even levels are cancelled, what remains, when retranscribed, is the logical conclusion.

The proof is not difficult and may be left with the reader. The theorem itself, as a short cut to inference, is of considerable power. We may take Lewis Carroll’s last sorites to illustrate it.

The problem is to draw the conclusion from the following set of premisses.

- (1) The only animals in this house are cats;
- (2) Every animal is suitable for a pet, that loves to gaze at the moon;
- (3) When I detest an animal, I avoid it;
- (4) No animals are carnivorous, unless they prowl at night;
- (5) No cat fails to kill mice;
- (6) No animals ever take to me, except what are in this house;
- (7) Kangaroos are not suitable for pets;
- (8) None but carnivora kill mice;
- (9) I detest animals that do not take to me;
- (10) Animals, that prowl at night, always love to gaze at the moon.

The method employed hitherto to solve such a problem was to work it out by stages, but this can be quite time consuming. Using the theorem above, we simply adopt a distinct variable for each distinct (but not complementary) set, transcribe, cancel, and arrive at the answer practically instantaneously. Let us, then, proceed to adopt

h for *house, in this*
c for *cat*
p for *pet, suitable for*

and is not something we can isolate or oppose to “accident.”

Spencer-Brown’s calculus is not just a handy way of solving the sorites puzzles (the “Amos Judd” series is perhaps the most famous); it goes directly to the heart of sorites logic to reveal the Hegelian heart. As such, it proves the truth of what Todd McGowan has said about object oriented ontologists, i.e. that in opposing their theories to Kantian transcendentalism, they have “chosen the wrong enemy.” The true *bête noire* of object oriented ontology is Hegel; and the reason for this lies precisely in the “embeddedness” of the Absolute within complete contingency — something that can be revealed through the logic of the sorites, a logic that is best and most directly understood through Spencer-Brown’s calculus.

Lewis Carroll’s sorites puzzles are constructed by creating a number of paired terms to which is added two unpaired terms that, when combined, provide the “answer” to the puzzle. The paired

terms are broken up and paired with each other in a way that conceals their paired symmetries. The pairs are based on predication. Each pair is a term that serves as a predicating and predicated element. “Beloved

by me” is paired with “cats” to disguise the fact that both terms are to be found, inverted, in another statement. “Cats are beloved by me” is absorbed into two other statements, one where cats are the *predicator* and one where “beloved by me” is predicated, as in “All animals I love are house pets.” —Unless, of course, either “cats” or “beloved” by me are to be orphaned and aligned with another orphan to make the solution of the puzzle.

The process of solving the puzzle is simple, if one converts the statements using the calculus. Spencer-Brown substitutes, for each of the statements, a symbol that can be defined as a *predicating* or *predicated* term. When written out, it is easy to spot the pairs that have been separated and “cancel them out.” The two orphan terms remain and, when combined (one is a predicate and the other is predicated), provide the answer. The answer is never any brilliant revelational idea; rather, it is a remainder that is found by sweeping out all of the paired terms.

Lewis Carroll’s sorites puzzles are, on the face of it, simple-minded reductionistic exercises. But, their visual and progressive structure is the same as the *lambda* design used in chiasmus. I have shown how Edgar Allan Poe has used this structure in his experimental short story, “The Purloined Letter.” The story progresses by introducing “half-terms” that will find their matches in half-terms placed later in the story. The hinge point (the exchange of the reward money for Dupin’s recovery of the stolen letter) is the mid-point about which the narrative exchange takes place. The letter itself has occupied the middle, invisible ground about which the story revolves: a “card-rack” which, when reversed phonetically, is also a “kcardrac.” The discovery of chiasmus in Poe is recent. Amazingly, no Poe scholar had ever noticed that many of Poe’s short stories and his only novel were symmetrically designed using the *lambda*. Possibly there are other discoveries to be made with the use of sounds in his poems, or imagery, or some other element able to serve as a puzzle part. Poe’s genius with ciphers of all kinds was well known.

What the sorites means for us, however, is the idea of the mirroring that takes us back to the “super-coincidence” in Spencer-Brown of the division and the crossing functions. “Distinction is simultaneously indication” should be the motto we use to investigate the symmetries, concealments, pockets, invisibilities, miraculous re-appearances, and concealments/disguises used everywhere in art. Thanks to the sorites, we see how these “ethnographic” clues are related to the construction of consciousness that is simultaneously universal and collective.

The Death Drive, Reviewed

The subject’s compulsion, *as subject*, is to act against itself, through conscious and unconscious destructive and aggressive substitutions of pain and loss for the pleasure of gain. This substitution differentiates the subject from what would, as “human,” be barely distinguishable from other forms of animal life. Self-destruction is not unknown among non-humans, but it is the exception, the catastrophe, the response to

extremity. But, for humans, the so-called “death drive” is both fundamental and universal. It is what makes humans “tick” as subjects and what marks the emergence of subjects from their “basic humanity.” It is clear that the “autoerotic” characterizes both the decentralization of sexual functions in infancy as well as meaning functions in early human mental life. Just as the autoerotic child is gradually subsumed by the Symbolic, autoerotic *cultures* are gradually re-organized by social structures that could best be characterized as phallic: affiliations sustained by the single exception and resistant sites of the feminine “not-all” where phallic rule cannot completely reach.

Freud’s “autoerotic” was not the contemporary sense of self-arousal. Rather, it was a recognition that the child was able to “charge” the world with values that, arising out of the megalomania assumed by the child as unaware of other forms of agency, allowed wishes and things to penetrate each other. The optimal mingling of wish and resistance to wish arose out of this projection, but the word “projection” is misleading. Autoerotic investment in the world constructed distances that were simultaneously near and far. A subjectively imagined world is over-proximate in that even remote events and objects are intimately related to the subject (wishing on a star, for example). Distance must function as both a space of insulation and transaction. It is a trading space, a medium for appeal, negotiation, exchange.

Here, it is possible and possibly even necessary to compare the autoerotic world of the child to the Spencer-Brownian logic of silent trade, the cultural practice of leaving objects of value at a site to be collected by another party who, in turn, leaves objects of equivalent value. Norman O. Brown has described this process in detail in his study, *Hermes the Thief*, which explains why Hermes’ many godly attributes (messenger, undertaker, seducer, thief, etc.) arise from a single transactional logic. Silent trade is “autoerotic” in that it presumes itself to be a closed, curved system, which derives its stability through internal process rather than adjustment to external forces. It is this “ecology” of self-regulation that has made silent trade a durable ethnological practice that has survived since ancient times. The exchange of silent trade is Spencer-Brownian in its employment of two functions. First, “distinction implies indication”: the point of silent trade, inevitably a “crossroads,” becomes *by definition* a space where goods are transacted. It is not simply a spatial division; it implies and requires trade, just as Spencer-Brown’s mark implies and requires an indication that “moves” value from the ground to the figure.

The way that indication works reveals a key structural detail. Just as the mark on the page presumes the *prior* existence of the blank sheet of paper, the point of trade presumes a surface or space that, before the point (the herm) existed, was unmarked. But, this page, surface, or space *did not exist* before a mark/point/herm came into being. The ground, which logically precedes the figure, arises only *after* a figure/mark/herm is made. This over-under relationship is topological — necessarily so, but it arises out of the *contingency* of the mark. The mark is autoerotic in that it self-generates itself out of the “nothing” of a distinction/indication that is simultaneously contingent and necessary. The mark appears to



be “on top of” the medium but the medium is not a medium below it *until after* the mark is made, and so in a sense the paper is both on top of and beneath the graphic mark. Thanks to this “vertical exchange” a “horizontal” transaction can take place — i.e. silent trade. It is clear through ethnographic practices of silent trade that cultures have been keen to respect this relation between horizontal delayed exchange and vertical substitution of high and low. Hermes, in classical lore, was specifically identified as the god “in charge of” the relation of the ultimate model of highs and lows, the spheres of the planets; and it is his function as a keeper of secrets that the vertical substitution is maintained as a valuable truth.

This vertical secret, the conversion of contingency to necessity, was incorporated knowingly into Giulio Camillo’s theater of universal memory, allegedly constructed around 1550 and can be traced back to the “chiastic fable” of the invention of artificial memory by Simonides in the fifth century BCE. Just as a circuit implies a self-sufficient, self-regulating “autopoietic” or ecological system, meaning is “Edenic” rather than “derived.” That is, a transaction is not something that happens out of a contingent meeting of two agents, forces, or situations; rather the agents, forces, or situations are *generated* and *defined* out of the “autoerotic exchange” that required and generated a distinction and at the same time mandated a transaction across that distinction. This is an upside-down way of looking at things, but (as silent trade suggests) ultimately more durable. In essence, this “autoerotic” explanation has it that, before there is a *transaction* (let’s say “love”), there is no man or woman who “fall in love.” But, after the transaction, the man and woman are retroactively generated *out of the act of love*, but with the effect that makes them seem to be more substantial, more historically “valid,” and that they “fell in love” within a contingency of circumstances that led, almost inexplicably, to their mutual sense of fate and fortune (they feel they were destined to come together).

Of course, the autoerotic explanation is that the necessity had existed “all the time” but was not differentiated as such until the “mark was made.” At that point, necessity seemed to emerge magically out of the contingent meeting, just as in silent trade the lost-and-found objects at the site of trade appear “miraculously” to respond to the desire of the passer-by, and their appearance mandates a system of trade. In keeping with the miracle theme, the goods traded at hermetic crossroads are attributed not to other traders but to Hermes, who “emerges” as a god out of the act of exchange. Perhaps there is no clearer ethnological confirmation than this: that out of “horizontal” accident a miraculous “vertical” agency appears to connect traders to the source of all wealth, the crystalline underground treasury of Pluto. If anything, Pluto is the up-side of the death drive — the belief that, in forsaking the “horizontal” pursuits of pleasure with its immediate *quid pro quo*, that the *delay* implicit in the death drive, so evident in silent

trade's toleration of the lack of face-to-face interactions, the "vertical matters" of emergent gifts, aligned with the very realm of death, would compensate the negatives.

Delay is also an element in the other drives, if we move from the particularity of the objects of the drives (breast, shit, phallus) to the timing issues. In the oral drive, the mother controls response to the child's demands, and small delays in those responses constitute a kind of code embedded within the stimulus-response structure. In the anal drive, the child misinterprets the demand to produce the appropriate results as the demand for a gift, and misidentifies shit with that gift. Here, delay is misrecognition, with an element of symmetry. Symmetrical substitution is also present in the phallic drive's Oedipal desire to supplant the father (or mother), a delay that gives rise to the theme of rivalry. As Louis Kauffman says about the seemingly paradoxical entry of the Form into itself — the general issue of self-reference — catastrophe is averted as long as the opposed positions are allowed to alternate in time, a kind of day/night solution. I can love you or hate you but I have to do this in alternation, I cannot love and hate you at the same time. But, of course I can love and hate "at the same time" if we allow that both love and hate are hollow constructs whose innermost kernels are their opposite forms, that the essence of love is hate that is concealed but determinative, and that hate's essence is love, in the same structural position. This is the structure of "cross-inscription," where each of two binary terms enters into the form of the other, as its essence and core. In cross-inscription, what was required to alternate in time, "palintropically," becomes a timeless tension, a "palintonos."

Delay, a palintropic procedure, is the temporal materiality — the contingency — of a palintonic relationship. $A \neq A$, or $A = \sim A$, is a palintonic condition that, considered first from the left side of the equation then the right, allows us to "think through" the impossible situation of A being both itself and its negative opposite. Looking at the etymology of "equal" we find the concept of a level, a smooth surface. Louis Kauffman has compared this directly to the surface used by the calculus, the surface broken by the mark. Equality is the same as "can be confused with" — i.e. a question of recognition and misrecognition. It's clear that the drives employ a code where confusion and misrecognition serve as a negative basis for the ultimate mandate of the Symbolic: "In order to join into the Symbolic order of family, friends, and society, you will have to endure misrecognition; you will have to give up your identity." Identity, that is sacrificed, is the identity that is sustained as the a-temporal tension of the autoerotic, the closed circuit of energy flow where any point of the flow can be regarded as a +/-, a "switch," a conversion point where inside/outside, male/female, lover/beloved, good/evil, can be transacted within whatever materials lie at hand.

The point of this palintropic/palintonic look at the drives and their relation to the Symbolic is to see how the death drive is planted within all of the "standard" drives from the very beginning, and how desire and resistance to desire, played out in alternation of palintropic reversal, can be tolerated,

particularly when the “trauma” of palintonos is put into a fantasy form where the alternation is portrayed as a rivalry, a contest, an experience of being lost, disguised, or eclipsed. In fantasy, the happy ending involves being recognized after a confused period of lost identity. Victory goes to the subject — now a *real* subject — who is returned to his/her rightful place at last. But, the hidden message is that the identity the subject is awarded at the end of this happy story is one that has been *conferred* from the beginning by an Other, by the system of misidentification that is the Symbolic. The subject in fantasy readily accepts the victory of the Other’s commendation of a super-Symbolic identity, in the belief that this super-Symbolic identity will for once and for all, end the turmoil of misrecognition, loss, and lack.

This fantasy compensates part of the loss of the autoerotic, which was a form of life-in-death and death-in-life that can be understood only when the Symbolic finally gives way to extremes: i.e. the sublime, encountered not just in confrontations with wild nature but in art’s staging of the negative of tragedy, death, transformation, loss. Without access to these buffered stagings, the Symbolic subject would lose all connections with the autoerotic. But, in terms of the durability of art, without the autoerotic’s dark negational forces, art would have nothing of value to offer. The autoerotic, in all its contradiction and complexity, is the gravitational pull of art that constitutes its survival power, its ability to appeal to diverse audiences and material conditions not by giving pleasure but by constituting the means for reliving pain. In effect, the death drive’s cultural, public form, is art, in that art is able to stage pain, misrecognition, and contradiction as *something to be relived* rather than as representation.

Thus, *contra* Aristotle, the Greeks invented dramatic tragedy not to achieve a release from the negative tensions of everyday life, but to re-inhabit the force field of the death drive in its purified, formal essence. The pain of tragedy is also its pleasure, and the conversion from pain to pleasure is the central symptom of the hysteric. Where the death drive is taken into the public domain, we have a series of institutions beginning with the privations of “rites of passage” — initiation ceremonies that stage loss and return in order to kill and reform identity. While it is true that this loss and return is a palintropic sequence, and that the new identity conferred on the subject of initiation is more intensely Symbolic than his/her previous state, the law of cross-inscription is maintained. The king is always the crown, and loss of the crown makes it clear that the Symbol is superior to whoever uses it. The individual king is never “really” the king, but rather always someone who for whom misidentification as the king has been ritualized. (See the work of Eric Santner and others on “the king’s two bodies.”)

Thus, even in the well-trod territory of kingship, the social function of tragedy, and ethnological practices, we have the active functioning of Spencer-Brown’s primary idea of the coincidence of distinction and indication. Kauffman not only insists that distinction implies an *immediate* concurrence of indication (instruction, qualification); he goes further to suggest that, while there can be no mark without indication, it may be possible that indication “comes first,” and the result is a division of space and time. This might be

called the “annunciation variation” of the Laws of Form — how in saying something is so gives rise to the space in which existence follows instruction. Jesus is thus the immediate consequence of the Word, the indication that God has impregnated a Virgin. The palintonic “truth” behind palintropic alternation is in fact the literal picture of the pregnant Virgin, with a corresponding symmetrical reflection, a god who is, in a negative essence, the not-all, the Woman. The Annunciation, the instruction, in this way precedes the division of space that keeps invisible heaven at remove from visible mortality. The position of the womb is in fact problematic — hysteric — in this account. If the instruction has preceded the distinction, the binary, then the matrix/womb of this instruction — the necessary “passivity” opposite divine “activity” — arises *out of instruction/annunciation*. The autoerotic is the palintonic status, the cross-inscription, that mortifies God at the same time it immortalizes (re-virginifies) the vessel of God.



The thematic of the “perpetual virginity of Mary” is lost to us, a casualty of our alienation from the Medieval way of thinking. Its theology belongs, curiously, to the translator of the Vulgate, St. Jerome, who also held that nuns actually enjoyed the sexual pleasures of marriage to Christ. What seem to be laughable superstitions to us have a curious relationship to the “post-Boolean” aspect of the autoerotic. This is a way of magical thinking that is not a defective sideshow but rather a superior means of intellection, a “knowing without knowing,” that as *kenosis* characterized the nature of learning imparted to the initiate Jesus by John the Baptist. *Kenosis* is not fanciful thinking. It moves past the limitations of the Boolean TF binary, just as Louis Kauffman claims that Spencer-Brown’s Boolean algebra was capable of moving past standard arithmetic into the real of imaginary numbers, and the palintronic logic of self-inscription, historically symbolized by the uroboros, the self-consuming serpent.

What was more unthinkable? A virgin who is a virgin despite pregnancy or a god who must die? We could say that either condition is “unthinkable” unless we are able to access the realm of the autoerotic, but thought itself is a product of the Symbolic, so we must say that “thinking in the autoerotic” is something that must always put on the dark mask of the negative. Where language makes claims and pretends to authenticate them in thought, its claims on behalf of the autoerotic must not be made “metaphorically” in terms of pictorial thought that would claim that a framed content is adequate to demonstrate negation, but “metaleptically,” where negation is actively employed. Metalepsis is the wit of the *Witz*, the antithesis that contains the synthesis within it as a silent component; the contingency that contains within it the already-embodied Absolute.