

Jacques Lacan (1901-1981). Caricature by David Levine

Why (Not) Lacan

Despite a nearly fifty-year career of lecturing and practicing psychoanalysis, during which Jacques Lacan revised Freudian theory and made it a model for understanding subjectivity within a variety of disciplinary perspectives; despite the wide clinical acceptance of Lacanian psychoanalysis outside the U. S.; despite his twenty-seven published lectures and other major works, including the anthology of position-papers known as the Écrits; despite Lacan's extensive engagement with topology and projective geometry as a means of synthesizing the evidence of anthropology, architecture, visual arts, cinema, and literature; Lacan is little more than a minor, misunderstood figure in American-Canadian architectural scholarship. Why?

§1 / Information Is Not the Same as Discourse

Marco Frascari's famous slogan connecting the construction of construing and the construing of constructing was intended to get past the Positivist divide separating mind and body that continued to hobble architectural thinking with binary signifiers, even in its "phenomenological" projects. As a chiasmus, making and thinking were no longer simple opposites but dynamic and fugue–like. Rather, it was the *interplay* of thought with materiality that made human engagement with architecture radically subjective and resistant to formal analysis. Just as Russell and Gödel warned against a set that would "contain itself," the chiasmus of thinking and making, matter and mind, resisted the categorial reduction that attempted modeling it from an independent observer's point of view. There was no such ideal independent observer, for every *observation* was itself an instance of the very subjectivity it sought to explain.

Just as Frascari was completing his studies in Venice, Lacan was turning to the questions of discourse. In contrast with Claude Shannon and Warren Weaver's 1:1–style communications model, Lacan understood the necessity of and role for different kinds of *noise* in human interactions (interactions he grouped together under the heading of "the Symbolic," rather than "information"). Information is always an incomplete expression. Information is always "information *about*" something, *for* someone; but these extra terms are, on both the side of the speaker and the listener, suppressed. Lacan would have said to us that it is this suppression that is interesting, not the signs that seem to be passed back and forth in a presumed indexical way. Instead of communications, human subjects have *discourse*, and in the 1960s discourse was in a crisis. Riots in Paris had threatened to shut down the schools. Lacan explained to the students who were now outside the lecture halls and swarming in the streets that, despite their complaints

about universities being controlled by unacceptable "masters," they were asking for an even more ruthless, even more unacceptable Master in their very demand for liberation.

The point was not that Lacan wanted to put down the students or ignore their concerns, but that he maintained that, in protesting, they were reifying and re-introducing the very things they found objectionable. They were "barred subjects," hysterical in the way that, on the outside, they objected to "the system," while at the same time they were becoming even more obedient and passive to the same system in new clothes. Lacan was employing the Hegelian figure of the Master–Slave, which he had learned from the famous Russian lecturer Alexandr Kójève, alongside such intellectual giants as Claude Lévi-Strauss, Jean-Paul Sartre, Maurice Merleau-Ponty, Lacan, George Bataille, Louis Althusser, Raymond Queneau, and André Breton.

§2 / Lacan and the Arts, Literature, and Architecture

There can be no greater endorsement for Lacan as the thinker who is indispensable for any understanding of the arts than the fact that he developed a theory of metaphor that is central, and critical, to the operation of the human subject. At the same time he established metaphor as central, he radically and definitively made this astounding claim: "there is no such thing as literal meaning." What is unique about Lacan's theory of metaphor?¹ Specifically, it accounts for the operation of "latent signification," whose disappearance and re-appearance constitutes a dynamic process that shifts from the idea of metaphor as simple replacement to the enactive and often dramatic interactions associated with the reception process. This allows art to be defined in terms of the experience by which something — whatever it is — is *perceived* and *appreciated* as a work of art, independent of its origins, the intentions of the artist, or the modes of production. Shifting from static relationships to dynamic interaction, Lacan's metaphor rules out the idea that art can in any way be defined through efforts of interpretation. Art does not have meanings. It has "meaningfulness." This meaningfulness resists and eventually attempts interpretive attempts to "pin things down" as "having" specific meanings.

Although Lacan rejects any idea of literal meaning and interpretive captioning, he used examples of artworks and architecture as the means to explore otherwise impenetrable aspects of subjectivity. Just as Freud had found jokes and dreams as gateways to the operations of the unconscious, Lacan's references to art and architecture established "pivot points" to broad psychoanalytical thinking about desire, networks of symbolic relationships (i. e. "culture"), *jouissance* (the specific form of pleasure related to lack and desire), and the Other, which subjects construct as a principle of objective reality.

There is simply no competition to Lacan's concept of metaphor, except (I would argue) Giambattista Vico's theory of an "imaginative universal," a conceptual basis for mythic thought. Because almost no Lacanians have taken an interest in Vico, and even fewer Vichians have

¹ See Stephanie Swales, "Metaphor of the Subject," in Stijn Vanheule, Derek Hook, and Calum Neill, *Reading Lacan's* Écrits: *From 'Signification of the Phallus' to 'Metaphor of the Subject'* (New York and Abington, OX: Routledge, 2019), 308–321. Also, Dan Collins, "On Metaphor," (*Re*)-Turn: A Journal of Lacanian Studies 6 (Spring 2011): 149–158.

studied Lacan, I am virtually the only one to make this claim.² Where Vico and Lacan meet is in the work of James Joyce. Joyce was a keen student of Vico and one of the few to understand and deploy the imaginative universal directly in his work (mainly *Finnegans Wake*). Lacan was keenly interested in Joyce, but this occurred late in his life, when he turned from the Imaginary, to the Symbolic, to the Real, the three "domains" of subjectivity that he undertook in a systematic and historical sequence fashioned as the three rings of the Borromeo knot (Fig. 1). The Vico/Lacan overlap is an area for speculative, inventive theory, but the difficulty of both thinkers has deterred nearly everyone from attempting a hybrid theory. One could say that Vico is an 18c. version of Lacan. There are also grounds for saying that *only* Vico and Lacan have correctly understood the operation of metaphor and its relation to the subject and its history. The basis for this case is that metaphor is not a kind of analogy. Its process of replacement of one signifier for another is an originary and productive act, simultaneously inside and outside language, since it creates a phenomenal "world" and not just a response to or description of a world. Those architectural theorists who have attempted to co-opt Vico on behalf of phenomenology have done so only by distorting Vico's views (cf. Pérez-Gómez, Built upon Love). Others who have written about metaphor in relation to poetics and the arts (e. g. Richard Kearney) have distorted key ideas, such as Joyce's employment of the idea of epiphany. Typically, such theorists have seen metaphor as an exception to the "rules" of ordinary language and symbolic behavior, a "poetic option." Vico and Lacan, in contrast, see metaphor as central, foundational, and dynamic. Metaphor is a power that relates to the margin between the domains of perception, thought, and expression and, therefore, is indispensable to any study of the human subject.

Beyond metaphor, Jacques Lacan focused on themes in visual arts that were pivotal and exemplary. In Seminar VII, *The Ethics of Psychoanalysis*, he cited Hans Holbein's famous double portrait of *The Ambassadors* (1533) and Niceron's anamorphic murals at the Convent of the Minims in Paris to advance a general theory of anamorphosis. The importance of this move has been examined in detail by Mladen Dolar's essay, where he claims that anamorphosis can be extended to cover the full range of subjectivity.³ This essay places — correctly in my view — both ethnography of the uncanny and a "theory of art" in the center of psychoanalysis; and, in so doing, it stakes Lacan's claim to be the *first and only* thinker to have a comprehensive theory of art's subjectivity and subjectivity's *debt* to poetry and art. In my view, there are no competing theories, no approaches that come close to this ambitious project. Lacan has an interesting way of placing anamorphic art in the historical spectrum. "What," he asks, "must have been going on *before* (Jean-François Niceron's) painting of murals at the convent of the Minims?" The answer is, clearly, *forms in which anamorphosis was constructed in some other way, so that by the time of Holbein and Niceron, its principles would already have been known and operational.* The general

² Vichianism after Vico," *The International Encyclopedia of Human Geography*, ed. Rob Kitchin and Nigel Thrift (London: Elsevier, 2009). Giambatista Vico's Big Architectural Adventure," *Built Environment* 31, 1 (2005): 49-59. Giambattista Vico, *The New Science of Giambattista Vico*, trans. Thomas Goddard Bergin and Max Harold Fisch (Ithaca: Cornell, 1948).

³ Mladen Dolar, "Anamorphosis," S: Journal of the Circle for Lacanian Ideology Critique 8 (2015): 125-140.

category of these "prior forms" is — none other than the uncanny. This includes the rituals, beliefs, folk-lore, and magical practices that, including and following mythical thinking and "heroic" literature (Homeric sagas, etc.), preserved a mythic mentality in the form of practices and mental dispositions such as the cosmology held by the simple baker whose testimony before the Inquisition was documented by Carlo Ginsberg in *The Cheese and the Worms* (1976).

The technique of asking "what must X have been before it was *called* 'X'?" raises an interesting method of humanistic study. This follows Mario Praz's dictum, that (paraphrasing) "all things exist at all times, only in different proportions" (*The Romantic Agony*, 1933). Vico would approve of this claim, since in his own idea of an "ideal eternal history," three mentalities, to be unfolded temporally as three separate stages of cultural development (mythic, heroic, conceptual), existed simultaneously, as a "monad." This sheds light on a possible humanistic employment of the evolutionary principle of "exaptation," the sudden appearance of a critical adoptive trait from "out of nowhere." The explanation of course lies in the idea of latency. The trait had been there "all along," but until the time when the trait became critical for survival, it had not been measurably present.

Because Vico and Lacan's theories of metaphor allow for exaptation (evolutionary sudden emergence) and the historical significance of things like anamorphosis, we should immediately recognize the potential superiority of a "Lacanian–Vichian" approach to critical thinking in relation to the arts, literature, and architecture. Why have these thinkers not been recognized by architecture theory? The answer is quite simple. Few scholars are prepared for the difficulties of comprehending either Vico or Lacan, fewer still for tackling the issue of their relation. Lacan's over twenty-seven seminars, plus other major works, is compounded by his notoriously difficult writing and speaking style. Similarly, Vico's writings have been proclaimed to be unreadable or, at best, confused and fragmentary. If one decides to take on either or both of these thinkers, the road will undoubtedly be rocky. There will be a lot of reading to do, but in the case of Lacan one is in luck. In the past decade many new translations and commentaries have opened up difficult concepts. There are interpretive essays for many of the seminars and a three–part series devoted to his major work, the *Écrits*. There are groups, such as Žižek Studies, LACK, and *Écrits*, devoted to expanding psychoanalytic ideas into other fields while consolidating understanding within the literature.

Frascari's dyad of thinking and making was taken from Vico's dictum, *verum ipsum factum*.⁴ This has been mistranslated by nearly every (phenomenological) translator in architecture, reducing truth to a materialist account of making ("construction"). This misrepresents both *verum* (by reducing it to making without saying what, in construction, constitutes truth) and *factum* (which is not identical to a materialist ground). Vico said that the truth and making were "convertible," which is different. They are what Freud would say, in a later study of primal terms,

⁴ This dictum is found not in Vico's *New Science* but, rather, his *On the Most Ancient Wisdom of the Italians*, (1710), trans. Lucia Palmer (Ithaca, NY: Cornell, 1988).

the components of a single contronym, factum. Making is not material in an isolationist sense; but rather it is a semantic compound structure that communicates in a way not unlike Shannon-Weaver's classic model of information. Lacan's version of that model is the "L-schema," where he shows how the "content" of speech is crossed, or traversed, by the "act" of speech. In the "clinic" (therapeutic analysis), the event/act is the moment at which the patient ("Analysand") succeeds in a self-cure, a kind of "release" of signifiers that had been repressed by the unconscious and evident to the Analyst only through the Analysand's slips of the tongue or bungled explanations. The Lacanian Analyst does not interpret or explain; the Analysand's goal is not to understand. The Analysand's success is contained in an act that is a kind of escape or release. The L-schema shows how the Analyst and Analysand, sitting in a room where the Analysand talks ("blah blah blah") but occasionally makes mistakes, tells lies, fails to get things right. These errors and attempted misrepresentations cannot be directly called out by the Analyst, but only marked indirectly with a cough or "ahem!" (after the event) or encouraged by getting the Analysand to "go back to a topic." Psychoanalysis's dependence on a factum in order to arrive at a moment of verum is a version of Vico's principle, just as Vico had unknowingly anticipated Lacan's central method. And, because one could say that this "traverse" of the resistances (fantasies; constructs) constitutes a truth that cannot be paraphrased but only enacted, one could also say that Lacan has inadvertently got Vico right. The verum of Vico's New Science is identical to the verum of psychoanalysis, although Vico's advantage is that he can readily extend it to cultural operations, while Lacan's outreach to the arts is slightly more circuitous, involving the translation procedure of, for example, anamorphosis.

There is a retroactive benefit of settling the accounts of the *verum-factum* within the Lacanian "epsiteme": one can discover a full account of subjectivity, in all of its complexities and convolutions. This option is not available through the standard accounts offered by architectural phenomenology. Thanks to Paul Ricœur's inability to understand, and subsequent resistance to, what Lacan regarded as Freud's single–most important idea, the death drive, students of Ricœur would be subsequently immunized against the Freudian–Lacanian field as a whole. They would be unable to understand Merleau–Ponty's important affinities with Lacan in his last work, *The Visible and the Invisible*, or grasp the important esthetic transfers described by Mikel Dufrenne in *The Phenomenology of Aesthetic Perception*. And, in keeping with the Architectural Phenomenology Theory (APT), they would ignore entirely the one phenomenologist who, contrary to Heidegger's rejection of any chance of culture informing philosophy, would show how the *factum* of culture was, historically *and* psychologically, a full dynamic subjectivity in both collective and individual terms, Ernst Cassirer (*Philosophy of Symbolic Forms*). The failure of APT to recognize Cassirer and Dufrenne is nothing short of a scandal, just as the distortion of Vico's main tenets is nothing short of scholarly fraud.

Frascari ignored Lacan and failed to understand Vico fully, but he did no damage by developing ideas in parallel that would ultimately be sympathetic. If he did not succeed in developing them fully, he nonetheless made it possible for others to do so while still maintaining

their "Frascarian credentials." Even Frascari's later interest in neuroscience can be carried back to Freud's essay on "The Project for a Scientific Psychology" (1895), where he first confronted the impossibility of the pleasure principle as a monistic design for neural networks. Although Frascari held on to architecture's pretense of promising happiness, he equally valued contradiction and method. He did not have architects pouring concrete; rather he had them draw and related drawing to dreaming. He did not pretend that we can easily remember our dreams, or know our drawings. And, Frascari's most generous talent was to leave matters open for speculation.

§3 / Metaphor and Topology

Without a theory of metaphor, there can be no critical access to the phenomena of the arts, literature, or architecture. There can be no comprehension of what goes on in the enjoyment of theater, film, or music. Understanding of the poetic core of history and culture will be limited to captions, interpretations, and bungled explanations. In an important and telling sense, the scholar who does not understand metaphor as a dynamic operation will be like the Analysand in Lacan's clinic, forced to make up stories, hiccoughing, getting tongue-tied, and forgetting key names and events. In this sense, metaphor is the "unconscious" of an academic version of the attempts to comprehend the cultural artifacts of the arts. Metaphor has "locked up" art's secrets and only Analysis can allow these secrets to escape, "involuntarily," from the lips of those who claim to know Mnemosyne personally. It is possible to say that architecture "can be psychoanalyzed" because its unconscious, its factum (what architecture has made, in relation to and on behalf of the human subject) still resists being known. In Lacan's terms, attempts to explain architecture are, rather, fantasies constructed to paper over voids, gaps, inconsistencies, and contradictions. The Real of architecture always resists being paraphrased; it will therefore always be known only through our bungled explanations; but it will be a Real (actual) unconscious, something relating (only) to psychoanalysis.

Knowing that this unconscious will be a matter of metaphor helps, but what *is* metaphor? Lacan said that the unconscious was structured like a language. Metaphor is also structured like a language, and here we can attempt to try the most obvious explanation: that, "*like* a language" means that metaphor, like language and like the unconscious, is split between *acting* and *containment*, between indicating (pointing at) and the objects of that indication. Lacan followed the linguists Emanuel Benveniste and Roman Jakobson in their division of paradigm and syntagm: the "grammatical" forward motion of language in sentences, from beginning to end, with a metonymic connectivity, powered/enabled by the orthogonal, "vertical," presence of structures of metaphor, which stood in reserve, ready to replace any given signifier in the chain, or to remain latent. Even if a signifier does not replace another, that refusal is also significant, meaning that there are both positive and negative instances of metaphor. To take the first step in the right direction, one would say that metaphor is "effective" in both cases of presence and absence, it doesn't matter which. Whether you go to the party or don't go to the party, you and the

party have a relationship. This is called "idempotency," the "power of the same." Latency and virtual presence is as important — and sometimes more important — than actual substitution. And, even when a signifier is deleted without being replaced, this is also metaphorically important.

Cassirer approached the divide between language's forward-moving contiguity and its semblance-related replacement mechanism in terms of the "pathologies" discovered following studies of brain damage of veterans of World War I.5 Relying on the work of Gelb and Goldstein, Cassirer connected the study of lesions leading either to contiguity aphasia or semblance aphasia to the metonymy or metaphor of language's two "styles of assembly." This divide into two sets of symptoms, contiguity and semblance, was described vividly by Oliver Sachs in his popular book, The Man Who Mistook his Wife for a Hat. These real and neurological pathologies show that language and thought have direct correlates to what happens in the physical brain, but because many architecture commentators who have taken up neuroscience have limited "the brain" to te cells stuffed inside the cranium, they have turned phenomenology into phrenology and prevented any connection to the idea that a "neural circuit" extends not just to the tips of the fingers and skin but beyond, into the environment, where perception "preconditions" what we think we see and prepares us for our response. This is not just a matter of fight or flight, the options that aim to preserve our survival in the face of threats or advantages. Anxiety is related to the idea of extension. Human senses are, neurologically speaking, two-dimensional. The retina's flatness must be supplemented by feedback from the muscles that contract the lens, by learned behaviors interacting with things, and by motion's own time-space experiments. The third dimension is not just learned, it is continually updated. It is culturally variable. Individuals develop their own "depth styles." Fears and desires are annealed to the third dimension, classically in the form of acrophobia (fear of heights, vertigo) and agoraphobia, the fear of open spaces. Fear of confinement is associated with many folk-beliefs about premature burial, but the use of confinement as a defense is key to the idea of home. The ambiguity between imprisonment and protection make the uncanny (*Unheimlich*, literally the un-homey) a contronymic term where the home "slides" from something cozy to something frightening.

Again, the Architectural Phenomenology Theoretic, APT for short, has not explored the uncanny in ways that would connect it to anamorphosis or metaphor. Instead, our key expert, Anthony Vidler, has located the uncanny at the point where the French Revolution sought to rationalize knowledge and exile religion, giving rise to a "backlash" of Gothic Literature and modernistic anxiety. This is in keeping with another coincidental localization, APTs identification of the Enlightenment and rationality with reductionism and instrumentality. The result has been the production of a series of binary signifiers disconnecting poetry from science, matter from mind, and modern from pre-modern/traditional. The progressive demonization of rationality has obscured much of history and put science in a bind, a problem for scholars who must claim to be

⁵ Ernst Cassirer, *The Phenomenology of Knowledge, The Philosophy of Symbolic Forms* 3, trans. Ralph Manheim (New Haven, CT: Yale University, 1973), 105–278.

telling the truth rather than inventing stories; or, just as difficult, those who would wish to show how stories can also be telling a truth, or an architecture detail that would be "telling a tale" (one of Frascari's favorite themes).

The Lacanian (and Vichian) accounts point to important dividing lines, but they make entirely different kinds of claims. In Lacan's case, he looks at the anamorphic murals at the Convent of the Minims in Paris and at Holbein's 1533 painting of *The Ambassadors* and asks, *what must have been happening for this kind of thing to suddenly appear?* The answer to this, "the uncanny," forces us to look at rituals, customs, folk beliefs and practices, and mythic thinking in general in terms of what most would regard as an exclusively *visual* construct. However, understanding anamorphosis in a predominantly narrative domain requires a theory of metaphor where anamorphosis is a key active ingredient. Had Lacan turned to Vico, he would have found many more answers to his questions, and many answers he did find would have come more quickly. Had Vico been able to dream about Lacan (some say he did), he would have expanded, as did Cassirer, the idea of metaphor to cover neural conditions; or seen how discourse itself preserved the order he first articulated as the "ideal eternal history," a movement from mythic, to heroic, to properly modern human conceptual thinking. Instead of multiplying binary signifiers that simply repeat the same misrepresentation, a Vichian-Lacanian architecture theory would be fully subjective, fully historical.

Because anamorphosis involves a non-Euclidean understanding of space, perception, and temporality, APT in a Lacanian mode would turn to whatever was happening before Euclid that was "just as geometrical, perhaps *more so*." This would be a combination of the uncanny and geometry in the form of those self-intersecting surfaces (the Möbius band, Klein bottle, crosscap, etc.) that, unlike the surface of the sphere, produces non-orientation. We have direct proof that the pre-Euclidean mentality (which we all retain in some form, even today) exists; and that, hence, the pre-Euclidean geometry of projective surfaces actually exists. When Roman soldiers set up camp, the castra had to be oriented with respect to the cardus (north-south) and decumanus (east-west) lines, a center that allowed auspices made daily to have any authenticity. These lines recognized the properties of a sphere, of course; but they were re-established by religious custom, compulsively, to reduce the anxiety of being in a strange place at a strange time. Geomancy was a mechanical affair with a radical mytho-poetic agenda: the "intel" of the auspices, required by any army who wanted to protect itself from invisible external threats and plan their next moves. The same anxieties exist today, in suburbs where some houses have "panic rooms," where owners install security systems and monitoring devices, where locales are established to connect to what Lacan would call the "alethosphere" — a topological interconnectivity that allows for deformations ("locales") to be made that are simultaneously insulated from and connected to a universal system (which we call under various names, the most popular being the Internet). The Roman "agrimensor's practical gromon" device is the modern gadget, the "appliance point ground." Two APTs, same function, same anti-Eudlidean geometry.

The problem is that the phenomenological APT not only denies the historical significance of projective geometry, it denies its central role in the structuring of the human subject, in metaphor, and in anamorphosis. The phenomenological APT began its crusade against projective geometry officially with the dissertation of a Virginia-Tech professor, in fact. Mark Schneider's 1983 "Girard Desargues, the Architectural and Perspective Geometry: A Study of the Rationalization of the Figure" disclosed an amazing fact: that one of the key founders of projective geometry was an architect (the other was the philosopher Blaise Pascal). Together, Desargues and Pascal realized the earlier work of Pappus of Alexandria (300 a.d.) and elaborated theorems that demonstrated how projective geometry was logically "prior" to Euclid; how, in fact, Euclid could be derived from projective geometry but not the other way around.⁶ According to Schneider, "Desargues participated in the development of the mechanistic worldview which accompanied the emergence of experimental science and the renewed interest in mathematics and geometry as axiomatic, deductive systems." As a result, "Desargues was a mechanist at a time when there was no better way to make enemies. The life and work of Desargues can help us understand the birth of mechanism." For APT, this was not a good thing. It put projective geometry on the side of the enemies of the poetic architect who took refuge in Euclidean familiarity.

In contrast, Lacan's work is permeated with projective geometry. His interest in topology began, one could say, with the mirror stage, where the toddler suddenly realizes him/herself as an *image* perceived by the Other. Both Other and image have to be imagined; they do not technically "exist" but, rather, *persist* and, in Heidegger's term, ex-sist. They are established by subjectivity, in and through language and the unconscious's "structure like language," as a means of self-*mis*-recognition. The subject—as—misrecognized within networks of symbolic relationships was also the subject who could encounter versions of itself (self—intersection) that were, sometimes rudely, non-orientable (the Jekyl/Hyde double, foreshadowing, *déjà vu*, rivals, duplicities, *moiré*, etc.). The vertigo and fear of open spaces were impeached by projective topologies. Anxiety — and, hence, any understanding of the depth dimension and architecture's responses to it — could be understood *only* in the context of these topologies.

Lacan condensed his concerns in topology most notably in the "Borromeo knot," a set of three rings stacked on top of each other in a curious way. Unlike a stack where there is a bottom ring and a top ring, each ring "tucked under" the ring that had "preceded" it (Fig. 1). The tuck created a lock that could be described topologically but only with difficulty in two dimensional representations.

The Borromeo knot's mystery must be understood topologically rather than pictorially or perspectivally. Using a method known as "Gauss encoding," we can see how each ring identically

⁶ Thus it is misleading to refer the the geometries that flowered in the 19c., after Desargues had been misrepresented and forgotten for 150 years, as "non-Euclidean," as if Euclid were the basis and not the derivative. Through the work of mathematicians such as Plüker, Gauss, Riemann, Lobachevsky, and others, projective geometry flowered for a century, only to be forgotten in name by the 1900s, but its "legacy" continued under other names: Relativity and Quantum — fields that, without projective geometry, could never have developed.

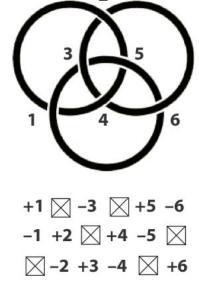


Figure 1. Rows (one for each ring) show each ring's overlap (+) or underlap (-) with the other two rings. Note that there are, for three rings, one + and one -, in columns that reveal a third case, a \boxtimes . Gauss coding shows how each of the three rings overlap as a stack but how the pattern of the whole structures the "blanks," ⊠, to reveal a "fourth ring," which Lacan associated with jouissance, a supplement that, in his clinical experience, bound the Symbolic to the Real. Because the Real was defined as "that which resists the Symbolic," this binding function converted impossibility to necessity. Topologically, however, the fourth ring becomes a second form of virtuality, structured by "chiasmus," a mirror defining an effectiveness that arises purely out of distinction (a "cut").

is *over* one ring and *below* the other. But, the arrangement has a twist. There is a *third* crossing that is missing, and only the Gauss code reveals this (Figure 1). Lacan used the rings to represent his three primary "domains" of the subject: the Imaginary, the Symbolic, and the Real. The fact that the rings lay on top of each other corresponded to the distinctive resistances each domain offered to the two others. But, the idea of a "fourth ring" virtually indicated by the original three suggested a kind of virtuality wholly different from the kind of virtuality native to Euclidean geometry, the virtuality implicit in the rules of perspective. This "second" virtuality, as the function of the Borromeo knot's cohesiveness shows, is a virtuality of effectiveness.⁷ It is the force of something that, by virtue of being absent, excluded, or deleted, nonetheless makes things possible, actual, and (usually) revelational. Secondary virtuality is indispensable for any thinking about art's principal result: astonishment. Astonishment locates the phenomena of self-intersection and non-orientation. It materializes them within the dynamic of the event.

Outside of the Žižek–Lacanian circle of critical theorists, this second virtuality is entirely unknown.⁸ Therefore, the full effectiveness of metaphor cannot be understood theoretically. Metaphor will continue to be understood as a supplement rather than foundation. APT will have foreclosed the very "poeticity" that it has set as its main goal. It is as if APT has not stopped at its failure to recognize the topology and projective geometry central to metaphor's operations, it has gone so far as to condemn and radically misrepresent historically impressive mathematical theories, without which Euclidean geometry itself could not exist. The enormity of this

⁷ The Gauss Code shows that the knot of the Borromeo knot is virtual, but it points to a far more interesting idea that connects the *jouissance* that Lacan cited as a "fourth ring" to the prospect of an independent functioning of the knot's virtuality in the "matrix" of polythetic relations among the "latent signifiers" present in any forward–moving signifying chain. Just as Vico had specified a reverse–proportional relation of (many) causes for (any single) effect, Lacan's theory of metaphor posits that the stack of signifiers metaphorically "above" each word in any utterance relates to adjacent stacks in terms of a resonance that temporalizes the field of stacks. Lateral resonance not only tolerates missing elements from stack to stack, it requires them, in the same way that the Borromeo knot requires a virtual fourth ring. If the polythetic set "resonates," it may be because, as a set, it has fractal resonance that makes it a version of the Mandelbrot cube, whose two infinities (completely solid, completely void) are like vanishing points on either side of a projective line. This may be as close as one gets to a physical model of the Unconscious.

⁸ Any thoughts on this? It occupies the domain of what most people would call "the fourth dimension," a kind of wacky extensions of Euclidean sensibility. But, the idea of an add–on to Euclidean reality is backwards. This "fourth" came first. It is like saying that the other dimensions of space come from depth perception.

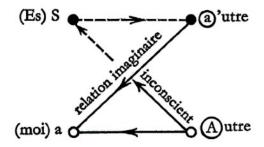


Figure 2. Lacan's L-schema, introduced in several of his Seminars. The line of the Imaginary relation between the Analyst (a') and Analysand (moi/a) was crossed by the channel connecting the Unconscious Autre (Other) with the S, or Es, the "it" where the Other "used to be in its form as an "it" or Id, if we relate Freud's dictum, "Where the 'it' was, there shall 'I' (my ego) be." The ego is the enemy of the unconscious, however, in that the Imaginary reality of the Analyst and Analysand in the same room, in Euclidean space and time, necessarily suppresses the Unconscious Other with its competitor, the Imaginary Other. The Analysand's speech both blocks and admits (through its gaps and errors) signifiers coming from the Unconscious.

foreclosure cannot be exaggerated.

§4 / The Two Faces of Instrumental Cause

Secondary virtuality and topology have been integrated into myth, folklore, literature, arts of all kinds, building practices, and the modern artforms, cinema and photography so extensively that it is impossible to explain what APT's theoretical exclusion and demonization have gained. Lacan has shown that no theory of the subject is possible without references to the two-dimensional projective plane and its features of non-orientation and self-intersection. Specifically Lacanian topics, such as the phallic signifier, the Other, extimacy (intimacy of the external object), the contrast between Speaking and Being, sexual difference, the symbolic-resistant Real, anamnesis, anamorphosis, the etiologies of neurosis (hysteria, compulsion), the function of psychoses (paranoia, obsession, etc.) are all put into the category of the "unwell" being who can be

cured by re-uniting with "natural" enrichments: successful sexual relations, orderly landscapes, beautiful architecture, therapeutic travel, thoughtfulness — a kind of "clean living" Hans Georg Gadamer specified in his book *The Enigma of Health: The Art of Healing in a Scientific Age* (1993). APT argues that correct study amount to thoughtful attentiveness and reflection; that there are no intrinsic difficulties beyond those created by the conflicts of modern life, inattention, and corruption by instrumentality.

On this last point in particular, instrumentality (as exploitation) has been conflated with "instrumental cause," the form of transmission invented specifically to cover the priest's neutrality in performing the sacred ritual of transubstantiation of the Host, the conversion of the wine and bread of holy communion into actual blood and flesh. How could a priest not contaminate this metamorphosis? The church invented specific formulas of insulation by which (using an electrical analogy) force would flow past the priest thanks to his "indifference." The priest was, effectively, an automaton "with no personal interests" in the transformation other than to serve as a working machine, adding nothing, subtracting nothing. The instrumental cause constitutes a problem for the phenomenological "caring" consciousness, which must if anything invest feeling and sincerity into acts to create "authenticity." In the case of Tibetan praying practices, what is the height of religious devotion seems, to the APT theorist, the extreme of hypocrisy. How could the devotee pray without investing feeling and sincerity? How could a prayer be inscribed and spun thoughtlessly around a mechanical axis? Curiously, the connection between spinning and praying in a "detached" manner is an ancient idea. Thaumatropes (disks with images on either side that

are merged when the disk is spun, holding it suspended on a cord) have been found in Magdalenian caves in France. The stone-age, it seems, had a grasp of how to use the same øphenomenon key to cinema to produce a *coincidentia oppositorum*. Examples include mergers of animals before and after the moment of death, where the hole in the thaumatrope corresponds to the penetration point of the spear.

What would APT have to say about this indifference, except to condemn it? Yet, how can history and religious tradition "be so wrong" about human nature? How can humans, so early in their history as artistic humans, have resorted so wrongly to instrumentalism, reductionism, and indifference? Modern anthropologists have not "liked" cannibalism but they have unflinchingly studied it as a "necessary" means to immortality practiced in some parts of the world and not, like moralistic missionaries, condemned the practice to bring it in line with modern sensibilities. The rejection of Desargues has effectively shut off access to the theorems that he and Pascal developed in the 1600s. These are about spatiality rather than space, about another form of concordance in contrast with the "bi-univocal concordance" of dictionary indexicality, the 1:1 scheme. Lacan showed how the signifier/signified relationship could never be bi-univocally concordant; how human language could not be indexical; how the search for definitions in a dictionary was inherently circular. But, rather than end with a defeat of indexicality (upon which APT and Peircian semiotics depend), Lacan introduced the idea of latency and connected it to the suppressive functions of the unconscious. Without topology, without automation and indifference, there can be no human subject.

What is the form of the L-schema by which Lacan located these interactions within the "clinic" of psychoanalysis, the Analytical session? The basic form of this diagram is that of a crisscross between an imaginary relation (the Analyst and Analysand sit in a room together and see each other as "egos," i. e. ordinary human selves with histories, interests, fears, desires, schedules, foibles, etc.) and a contrary vector crossing this "space" to connect the (A) with an S, specifically read as the letter "S," or "Es." This letter comes with a Freudian portfolio. The Es is the German Es, "it," the *id*. It is the famous *Es* of Freud's slogan, "Wo Es war, soll Ich werden" — Where "it" (the id?) was, there shall I be. The future moment where the I will arrive at this "where" is a precise where in the L-schema. It is upper left, a vector that has generated the alternative other (a) autre, the Analyst in this particular case, who sits opposite the Analysand "a (moi)" on the other side of the room. Their imaginary relationship (*relation imaginaire*) is the ordinary one, the everyday one. It's the space where we must introduce ourselves, become acquainted, ask after each other's health and families. It's the space where the Analysand will blah blah about anything and everything until ... until he or she has a slip of the tongue or bungles the attempt to explain something. At this point the (A) is trying to say something. This is

⁹ The French archaeologist Marc Azéma speculates that Magdalenian culture used thaumatropes to enchant, pray, and re-enact the moment of capture/killing: "Animation in Palæolithic Art: A Pre-echo of Cinema," *Antiquity* 86 (2012): 316-324; and Rossella Lorenzi, "Stoneage Artists Created Prehistoric Movies," *Seeker* (June 8, 2012), https://www.seeker.com/stoneage-artists-created-prehistoric-movies-1765822038.html. The spinning of the thaumatrope may be an early version of the Tibetan prayer–wheel.

the Unconscious, the Autre, the Big Other. that is not *inside the head* of the Analysand but, rather, has been pulsed into the Analysand's experiential world, in the *objects* that the Analysand has perceived, interacted with, desired, or feared. This use of the external world as a storage device for the Unconscious is the distinctive feature of Lacanian–Freudian psychoanalysis. "Reality is out there," as FBI Agent Muldur said in *The X-Files*. Unlike APT's model of an internal mind, with possibly some parts of it less accessible than others, but eventually giving way to thoughtful reflection on "one's state of mind," psychoanalytical consciousness is simultaneously a concealed unconscious which, Lacan insisted, was *mechanically* repressed, stored, and preserved through impersonal algorithms.

How else could it be? Lacan argues in his essay on Poe's short mystery story, "The Purloined Letter." Only in the "impersonal" form of a mechanical cipher could the unconscious accept any and all input, without regard to desires, fears, or other feelings that would force it to pre-judge its symbolic status, its relational value. By virtue of its uncaring inclusiveness, the Unconscious omits nothing; it preserves everything, the good, the bad, the ugly. Lacan demonstrated how a seemingly random series of numbers can spontaneously develop its own "memory," its own inner structure. The fact that everything is retained means that those things too traumatic to be assimilated by the Symbolic consciousness will create "symptoms," which are types of messages from the Unconscious. At the level of neurosis, these are annoying but not fatal: hysteria, obsession-compulsion, paranoia, ... they are the styles of being human, without which we would have no possible relation to the everyday world. Symptoms may impede us to the point of seeking therapy, but most of us endure. The point is that we endure as this or that neurotic, if we have access to a special signifier Lacan described as the paternal signifier: a response to the Father's interruption of our desire for our mother. Those who respond are neurotics, by definition. They have an Unconscious because they can use the Symbolic's refusal to accept trauma as a "marker" for what must be suppressed. The psychotic has no relation to the paternal signifier, and so there is no standard for forming an Unconscious, no motive for repression; no repression, no Unconscious. Everything, trauma and non-trauma alike, resides at the same level. The first job of the analyst is to determine whether the Analysand is a neurotic or psychotic. The treatment for one is the opposite of the treatment for the other, with disastrous results if a misdiagnosis is made.10

Just as disastrous is APT's assumption of a "natural" state of subjectivity, a core of "everydayness" to which all subjects who are subjects participate in some degree. The consequence of this center is a periphery graded in a series of steps based on distances from the core. As with any system of definitions based on *species et differens*, the core is unambiguous but difficult to define. What is the human "normal"? What is normal compared to that makes it normal? The alternatives appear quickly. One has either to ground the norm in something arbitrary and dogmatic, or the norm becomes ideological, in which case the grounding is still

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¹⁰ For further advice about this, see Bruce Fink, *The Lacanian Subject: Between Language and* Jouissance (Princeton, NJ: Princeton University Press, 1996) is a good starting reference for Lacanian clinical practice.

dogmatic but there is a hidden agenda. In either case, the question of the center upon which this whole theory of subjectivity is based is inaccessible. Theory cannot examine its own basis, its most important presupposition.

Psychoanalysis relates subjectivity to language and the varieties of relationships that actual human subjects can take with respect to language. While other animals have sign systems many of them more elaborate and "accurate" than human language — only humans deal in metaphor; only humans have latent signifiers; only humans have a paternal signifier (and, hence, a genealogical sense of time) which they may respect or deny. There is no confusion among Lacanians over the differences between animal communication and human language. Lacan began his work by "fixing" Saussurian semiology (Peirce invented semi-otics) so that the problem of what signifiers signified could be put on hold. When we point at something and say "Look at that!" we are never exactly sure what we are pointing at, or what the person we're talking to thinks we're pointing at. The failure of the indicative gesture involves "action at a distance," where issues of framing, virtual intentions, and relations with whatever else might be in the distance all figure in. The signified is an open book. Signifiers, on the other hand, have relationships with each other. They can form signifying chains; they can resonate with meanings of things that are not present.¹¹ They can strive to be literal (and fail, Lacan is always careful to note), or place themselves on one of the three other "planes" of rhetorical intent: moral, analogical, anagogical. 12 So "Look at that!" has no determinate reference points outside of the subjectivities involves, directly or virtually.

For those who may ask at this point "what has this got to do with architecture?" the real question is, what is architecture without subjects and their subjectivities? Architecture means nothing if it's not first and foremost a part of human subjectivity. Only speaking subjects articulate anxieties, desires, or plans for the future. Without language we would still have "building" in the sense of shelter and defense, but we would not be talking about it, and we would not have the "architecture" that relates specifically to our language—natures.

§5 / The Neck and the Squeeze: Boundary Logic in Lacan and Vico

In the L-schema, there is a narrow passageway opened up in the Analysand's blah blah by the Analyst, taking advantage of the Analysand's bungles and slips. The Analyst can indicate that s/he has "heard" this slip with a cough or an "mmhmm," a response after the fact, >; or s/he can, sensing that the Analysand's blah blah blah is nearing another potential slip-up, nudge it in that direction, an action take *before* the fact, <. The plan is that, between the < and > there can open a

¹¹ Ernst Cassirer correlated the neurological functions of semblance and contiguity to the gestures of imitation and indication, where pointing was an attenuation of the grasp. See *An Essay on Man: An Introduction to a Philosophy of Culture* (New Haven, CT: Yale University, 1944), 28–29. Cassirer credited mimesis as the logic of mythic thinking and (later) the arts, while indication was the hallmark of scientific/conceptual thinking.

¹² This four–tiered system was developed by Medieval preaching practices. See https://en.wikipedia.org/wiki/ Allegorical interpretation of the Bible. "Anagogy" corresponded to Vico's mythic mentality of metaphoric thinking. Moral interpretation developed with the "heroic" (Homeric) age; analogy was the accomplishment of the thoroughly modern consciousness, which tried to model itself as a pre-cursor to the exception of poetic metaphor, but Lacan vociferously opposed this. Instead, he pointed to metaphor's dependence on sublation and latency in contrast to referential meaning assignments.

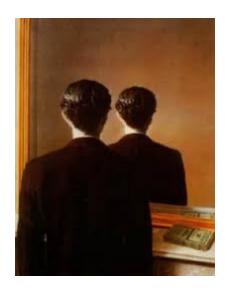


Figure 3. Wikipedia: Not to Be Reproduced is a painting by the Belgian surrealist René Magritte [in 1937]. It is currently owned by the Museum Boijmans Van Beuningen in Rotterdam. This painting was commissioned by poet and Magritte patron Edward James and is considered a portrait of James although James's face is not depicted.

gap large enough for the Unconscious, like a prisoner looking for the right opportunity, to escape. Through this narrow chink in the Imaginary discussion between the Analysand and Analyst as egos, the Unconscious can catch a glimpse of the *Es*, the place where "it," as an It, once was, and wishes again to be. This return will be like Magritte's painting, Not to Be Reproduced, the young man who sees his own reflection turn against him. This is the refusal of the virtuality of the mirror to obey Euclidean rules. Rather, it marks the place where the Unconscious once was, preserved as a time/temporality rather than a Euclidean virtuality. That Magritte himself knows about this is confirmed by the book the artist has placed on the sill of the mirror, a copy of Baudelaire's translation of Edgar Allan Poe's only novel, The Adventures of Arthur Gordon Pym, of Nantucket. This is a novel whose chiastic structure divides its two parts with its characters being sucked into an oceanic maelstrom — Poe's own way of signaling to us that "he knows what he is doing." The virtual space opened up within the linear series of signifiers is a void that both exists and doesn't. It is the Gauss code indicating a symmetrical/palindromic correspondence between two halves that, once sectioned, open

up a second kind of virtuality that is nonetheless primary to the virtuality of Euclidean perspective.¹³

We could say that Magritte's young man has arrived "too late" at an image that has left "too early," establishing the painting's credentials as a "traversal of the fantasy," the main event of psychoanalysis. What has rushed through this < > opening is the vertiginous Truth of the mirror, that it has captured us as we are from the position of that which we cannot see, and that in recovering this we have constructed an "impossible" circular voyage from the front of the reflected image to the back of the subject standing before the mirror. The impossibility of this image is the "Real" that cannot be absorbed by Euclidean virtuality. The image seems, like the Unconscious, to have "squeezed through" with a tricky twist, like that Poe depicts in his novel that sits on the mirror sill, a twist that is exactly what the mirror image does directly.

¹³ Consider that all mirrors were like the one painted by René Magritte in 1937. The mirrors' users would see where they had been rather than where they are. If the reflected man walked forward, he would travel around the spherical earth to stand at the position shown in the painting, in the front of the mirror. This would be a "time mirror," in contrast to the "space mirror" we are more familiar with. This is why the sphere is non–self–intersecting and orientable. A journey around it puts the traveler in exactly the same position as the one he left. The space–mirror, in contrast, is self–intersecting (we confront our image) and non-orienting (our reflection is "chiral," or reversed left to right). Mirror space posits a 360° world, whose 180° looks out at the real world in the same way our real world looks into it. The two 360° circles overlap, but not precisely. Non-orientation means that there is a small gap, one we can fill with the imagined temporality we lost with the spatial cut. This is a "720° problem," death by degrees.

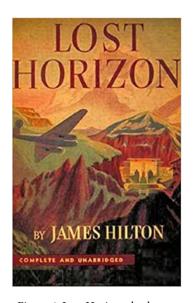


Figure 4. Lost Horizon, both a novel and a film, depicts a group of Westerners "at the end of their ropes," who find a narrow passage in the mountains leading to a concealed timeless Shangri-La, where no one ages and society is governed by voluntary submission to wisdom. Although the passage is in snowy mountains, the paradise just beyond is tropical, spacious, and open.

The narrow passageway is a common theme in literature, where characters "narrowly escape" or discover a passageway into a hidden chamber or even a lost paradise, as in the 1937 Frank Capra film, Lost Horizon. Such narrow slips echo the ancient katabasis, by which a living hero visits Hades and returns alive. Narrowness is indicative of the strict protocol required by any initiate who must pass a conditional boundary. It doesn't get any more "conditional" than between life and death, so all boundaries that configure this relation spatially take their cues from the meander of the Thesean labyrinth. The fact that the labyrinth is a meander rather than a maze is a demonstration of the strictures of psychoanalysis's L-schema rule of < >. These produce a "folded linearity" that is neither straight nor curved but "vibrating," a wave rather than a ray. The whole line of the labyrinth could be considered as the passage. With its oscillation between container and contained, it plays out the < and > as a selflocking, self-opening boundary. This allows the boundary to connect spaces that are, in Lacan's terms, "inside and outside each other" (extimité, extimacy, or "intimate externality").

Vico made the labyrinth his logic of discovery. *The New Science* meanders from topic to topic, seeming to repeat itself, veer away from then back toward appointed themes. One Vico scholar in fact has argued that *The New Science* literally employs a labyrinth writing design. ¹⁴ The aim of Vico's deployment of seemingly random digression and repetition may likely stem from his admiration of

Gongorism, or Culteranismo, a literary fashion for highly ornamented writing incorporating neologisms and circuitous descriptions. When the Córdoba poet Luis Góngora initiated this style, its opponents labeled it "Lutheranism" because it "heretically" refused the principle of *Conceptismo*, which was to use as few words as possible to express as many possible reasons. Vico, like Góngora, seems to have used as many words as possible to express several key ideas. But, Vico's "ornaments" had a philosophical basis in his idea of causality, demonstrated in the preface he wrote for the 1744 edition of his major work, *The New Science*. Where the science of the day, associated with the then–new philosophy of René Descartes, sought to find single causes responsible for as many possible effects, Vico sought *as many causes as possible* for any one effect. Vico saw that Góngorismo did the same in language and may have consciously copied it, or this may be a case of his own spontaneous re-discovery of the principle, in both writing and science, nearly one hundred years later.

¹⁴ Margherita Frankel, "The *Dipentura* and the Structure of Vico's 'New Science' as a Mirror of the World, *Vico: Past and Present*, ed. Giorgio Tagliacozzo (Atlantic Highlands, NJ: Humanities Press, 1981), 43–51.



Figure 5. UK artists Tim Noble and Sue Webster create an hour-glass out of the familiar figure-ground reversal of the faces/vases, here, showing the vase as positive and the faces as negatives. Reversing this reversal, we can complete the legacy of figuration as it applies to appearance in general, as the model of concordance shifts from an indexical to a metaphoric basis.

Finding as many causes possible for any one effect seems irrational, but this over–determination was key to Vico's discovery of the principle of mythic thought, which he compressed into an epithet for metaphor, the "imaginative universal." He put this idea into a fable about the first feral human pre-subjects, who, wandering in the ancient forests without any permanent settlements (and, hence, no actual architecture) had no view of the sky. They likely used gestures and verbal signs to communicate, but these would be now what we would call "bi-univocal concordances," where signifiers and signifieds had a 1:1 indexical relationship. This is a system of pointing at something and naming it, as St. Augustine explained in his *City of God*. This indexicality is fine for God and Adam, Vico reasoned, but it would not actually be language. An indexical world lives in a stasis of Being, but a true human Speech would draw off the power of that Being into a rhetorically charged field.¹⁵

Where would this Adamic energy go? If we imagine an hour–glass with two chambers, labeled Being and Speaking, Vico's pre-subjects would occupy the top chamber with Being, while the lower chamber would suddenly open up and fill with Speaking. The top had been filled with concordances between signs and things, assigned conventionally

but fixed in a 1:1 matrix of relations, signifiers to signifieds in the classic Saussurian expression, s/ S, a signified subscribed to and by a signifier, <code>%/</code> fire." Once the "neck" of the hour–glass opened up, concordances would flow into a new system, where metaphor allowed for a different kind of exchange, and a new system where meaningfulness would replace the system of 1:1 meanings. In metaphor, there can be no one "lock" placed by a signifier on a signified. A fire may "mean" multiple things, but when these meanings *converge* into the materiality of the fire, they bring their multiple causalities with them. The *material phenomenon* of the fire itself becomes a congeries of causes that *now* (with the newly acquired metaphoric unconscious) must be untangled. It is as if we, as newly made subjects, are now given a matrix, through which we must chart multiple pathways, multiple networks of associations, multiple orders and sequences. The idea of concordance, formerly 1:1, is now a matter of overlapping, fuzzy, and blurred multiple images and structure *requiring our intervention*.

¹⁵ This antithesis between Speaking and Being is one of the strongest links between Vico and Lacan, who also drew this contrast and emphasized that subjects, as *speaking* subjects, faced a "doubtful world" thanks to their loss of bi-univocal concordance; but what both Vico and Lacan claimed was gained was the Symbolic of culture, which charged perception by dividing appearance from the issue of meaningfulness. Where bi-univocal concordance can account for meanings in a dictionary sense of replacement of signifiers by other signifiers, it cannot account for meaningfulness, which is the result of metaphor and latent signification.

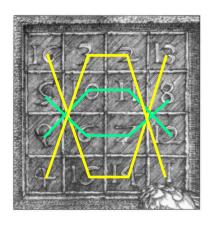


Figure 6. The "magic square" Albrecht Dürer used in his famous emblem for *Melencolia* §*I* gives some idea of how bi-univocal concordance, which would be simply a matrix of numbers in the standard sequence 1-16, is re-arranged into a numerical anagram as a "metaphor" that reveals "polythetic" relationships alternative patters and rearrangements allowing and even depending on gaps and repositionings. Polytheses destroys any possibility of 1:1 indexicality, but it makes a new requirement, that the perceiver be implicated by, and involved in, the object. The relation of the anagram to dance and ritual is quite obvious.

Vico's fable was simple but it can be corroborated by actual accounts of "primitive" people who live in forests, such as the Tasaday of the Southern Philippines. Wandering and unable to see the sky, the thunder constitutes a sometimes overwhelming terror. The combination of the overwhelming sound, the loud flash, and a strike starting a fire on the earth was a trauma in the collective consciousness (in the Vichian, not the Jungian sense) that led to the flip between a 1:1 idea of causes and effects to the idea of many causes converging into a single effect. This principle became Vico's "imaginative universality," that would now be transferable to all other effects. But, the case of the fire was significant, in that it localized the thunder and its power. The sites of fires were set and preserved, becoming the centers of ritual and divinatory procedures as well as the *loci* for funerals and wedding, which, Vico argued, were pretty much the same thing. Subjects who disappeared at death returned in the form of the veiled bride to be wed; but the bride's first obligation was to tend the hearth fire, a role the Romans formalized through the traditions of Hestia. The bride, as Fustel de Coulanges has argued in The Ancient City, was wedded first to the flame, then to the flame's proxy, the mortal husband who was simply the latest instance of the *name* of the family, more generally preserved in the names (often forbidden to pronounce) of the dead ancestors, the manes, later the household gods of the Lares and Penates.

With bi-univocal concordance (Adamic speech) replaced in the "metaphoric revolution of meaningfulness," Speaking sapped off its energy from Being through a process of "polythesis," the potential that every material phenomenon and experience could be the result of any number of causes. To stabilize this generic meaningfulness, religion came into being around the divinatory practices of the hearth. It was forbidden to move the hearth — the myth of Prometheus tells this story — and hence *localization* becomes the first strategy for stabilizing the new metaphoric "chaos," the system of meaningfulness that had replaced the system of 1:1 meanings.

The culture built around permanent settlement around the fixed hearths was itself absolute and unyielding. The "laws" divined at the hearth through auspices related to sacrifice and cooking did not allow for interpretation; they were applied ruthlessly. The result was a "cyclopean" clanbased culture, anti-social, immobile on account of the hearth's specific and absolute locality. These certainties were defenses against the new flux of appearances and their polythetic relationships, the capacity of any one thing or experience to mean almost anything. Certainty could be restored

only through divination procedures. Think of this in a Freudian way, of a stimulus—disturbance that has to be returned to a near—zero value. This in fact is the cultural origin of what Freud was later to call the "death drive," the mandate of any neural system to maintain a low energy level of circulation and resist both internal and external disturbances. This is, technically speaking, an "idempotency strategy," aiming to keep the organism immobilized, in place, stable, despite the attempts of any stimulus to "move it." Idempotency is most obvious in the experience of sleep, where the dream allows the sleeper to achieve the paralysis required by "non–rapid–eye–movement," or "stage 3 sleep" (NREM).

The analogy is more than a convenience. Early cyclopean cultures needed things to maintain their locality and fidelity to the flame of the hearth. A part of their insulation strategy was architecture, massive and cave-like, as the story of Odysseus and the Cyclops suggests. As a correlate to these structures of refuge (askesis, "ascetic") were the open clearings where the sky could be observed thanks to the swidden openings in the forest; where collective rituals and a collective hearth could be maintained uniting families into clan associations. Like the hour-glass, the dual of the interior and sky-exposed exterior constituted a Lacanian extimacy: the inside of an outside and the outside of an inside. The cyclopean domestic domain was literally an insideout positioning of the two "infinities" of the fires, which were conceptually the same fire, connected by a passage that, though geometrically linear, was projectively a circle. Going between the two antipodal fires, one relating to the earth the other to the heavens, was a journey from the same to the same, a *completing*, a *circuit* combining two circles. The process of finding pathways within the polythetic patterns of metaphoric potentialities, divination/auspices, was determinative in the face of the multiple causalities that led to singular effects. But, once determined, the process could take a reverse circular and outward effect: centripetal convergence, onto the two/one hearth system converted to centrifugal radiation.

I am possibly the only Vico scholar to get into the details of how cyclopean/Promethean early societies depended on the logic of metaphor to establish a unique and primary architecture. I am even more definitely the only scholar, of any kind, to talk about culture, perception, and psychoanalysis in terms of *idempotency*, the relation of disturbing stimuli to paralysis, locale, and architecture. Needless to say, my accounts, which focus and depend on Lacan's and Vico's theories of metaphor, are rarities. I do not wish to persuade you that this is the correct view, but rather encourage you to *think through the situation for yourself*, to follow Vico's advice given in *The New Science*, that his reader should meditate through what he called the "ideal eternal history" (the logically necessary sequence of events leading from bi-univocal concordance to metaphoric thinking) and use the "pleasure" of this experience, of "making the New Science for oneself," as proof. This is a particular kind of pleasure, a hysterical pleasure, and the ætiology of hysteria,

¹⁶ Vico, New Science, §345.

which Freud described as requiring a kind of archaeology (well before Foucault employed this idea) is apt. So, now we go into a "difficult" set of propositions.

§6 / Polythesis and Idempotency Reset Schemes

In his essay, "The Ætiology of Hysteria" (1896), Freud recounted his clinical experience with this neurotic disorder required treating earlier traumatic experiences something like inherited traits. Each had its own trigger in present experience, returning the hysteric to a memory that, upon retelling, did not seem to tell a full story. Part of the problem was that at the time the trauma was experienced, it did not affect the subject as a trauma. It was noticed only later, when triggered, and only then did the trigger result in a symptom–response. But, the problem was that the memory of the original traumatic event concealed more than it revealed. It was like an empty space, a place "held open" as a lure to the return of the hysteric's memory but offering little in return to that painful after–the–fact (aprés coup) effort. At the site of the trauma, there was something like a note on the refrigerator door, "gone elsewhere."

One empty spot led to another, then to another, and another and so on. At each level where the traumatic event was found, there were complete sequences of experiences, but the traumatic locale was empty or missing something. Digging deeper into these trauma *layers* was, Freud said, like an archeologist's exploration of a historical site. Layers tell a story, but in reverse; and each layer is missing key evidence. What is present allows for a structuring of vertical "columns" of categories: graves, monuments, public squares, private houses, etc. But, the *missing evidence* is actually more informative, since it involved the question central to trauma: motive, (missed) opportunity, and the *transgression* that the hysteric always felt implicated her or him as complicit in the violence of the trauma.

Freud's archeological analogy was intuitively appropriate. In Vico's logic of looking for as many causes as possible for any one effect, archeology is the first obvious case. Vertically, in the excavation's "column" of artifact classes, the digger can see a time series, of things that, despite their differences, played a similar "grammatical" function in the life that extended through the rest of the historical layer. Things that fell within a layer were synchronic in that they all existed at the same time, but it would be more accurate to say that they were *diachronic* in that they existed within a dynamic order. Like a sentence, the were parts of a single unit of meaning that unfolded in actions: customs, rituals, interactions, struggles, etc. In other ages, alternative ways of doing things are invented. In Cyclopean cultures, the family hearth presided over exclusively by women is antipodal to a communal fire built in relation to the open sky. In heroic (Homeric) cultures, the hearth is moved indoors, into a prætaneum that forbade entry to women. We are forced to see, thanks to the "verticality" of the hearth–function, an equivalence between inclusion and exclusion, around the idea of "exclusivity."

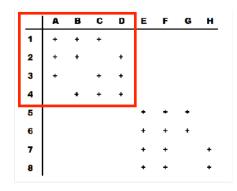


Figure 7. In the graph above, both groups of pluses and minuses have gaps in their horizontal sequences (A, B, C, ...) but in the top group (red square) there is a pattern of gaps that allows each gap to be "filled in" by the vertical sequence: A4, B3, C2, D1. Just as each of the Borromeo knot's rings lacked a connection between its position on the top of one sequence and the bottom of another, the "traumatic" missing codes demonstrated the effect of a knot thanks to "multiple causes." In archeological terms, this is not so much a matter of filling in accidental blanks as to incorporating, within a broader view of causality, the motive question of why something was missing (or concealed), how it was deleted (the "opportunity" component), and the ultimate issue of grammar, or Law: how was the motive related to the immanence of transgression.

Similarly, trauma in the memory of the hysteric creates voids around such contronymic antinomies. Inclusion vs. exclusion creates an extimate impossibility, an "include me out" idea, the obverse of which is being "excluded in," another way of saying "alienated." Moving from one impossibility to another and then another, Freud imagined a "polythetic set," something that actual archaeologists have used to decode strata of excavations. Polythesis allows for missing data. It uses the "columns" of synchronic (actually historically sequenced) replacements to "fill in the blanks." For this to make sense, you have to see each layer as synchronous to the archaeologist's day to day excavations but diachronous in relation to the period of time represented by any one level. The archeologist must theorize a vertical synchrony, a way that culture logic can be written by establishing a diachronic relationship by combining the vertical and hence "synchronous" developmental alternatives to "correct" each grammatical part of the logic.

Because metaphor is about the vertical synchrony used to construct cultural dynamics, we must acknowledge that metaphor is not just a principle used at the level of cultures' quotidian interactions but a *theoretical principle*, which is to say the idea of finding out "what people are up to" when they establish their behavioral norms, institutions, customs,

rituals, and so on at any given stage of history. When Vico constructed his "Chronological Table" in the preface of the 1744 edition of *The New Science*, he was copying the idea of the "Table of the Nations" in the Biblical *Genesis*, with the introduction of a geographical a-synchrony: some nations developed faster than others and began (and ended) at different times, although nearly side by side. The encounter of Odysseus with the Cyclops in Book IX of *The Odyssey* recounts just such an interaction, which could be considered as a theoretical testing of the polythetic matrix.

Because the matrix clearly relates to the Borromeo knot's pattern of "missed opportunities," which themselves, as *voids*, structured a virtual *fourth ring* holding the other three together, we can consider that the archaeology of actual historical ruins as well as the cultures they represent and the hysterical subject Freud related through analogy, might also have a polythetic "virtuality" that also possibly has a chiastic or folded structure. This points, again, to the 2d projective surface that, thanks to its self–intersection (cf. Socrates' advice, "know thyself") and non-orientation (folding, antithesis, contronymics, cycles, mirrored structures) comes back to the question of topology. The polythetic set is not just a technique for dealing with missing data. By opening up

the possibility that something is not simply missing but, rather, *concealed*, especially if this is done automatically as an operation of the unconscious, working collectively as well as individually, then the issues of motive, opportunity, and Law require us to consider the idea that the polythetic set is a map of metaphor, as it is drawn over human culture as a whole as well as individual cultures and individual within cultures. This would be the ultimate "meta-theoretic" position of a Lacanian-Vichian merger.

Polythesis, like the earth beneath every civilization's stage, accumulates garbage: fragments of fallen ruins, discarded junk, waste, whatever. The vertical section of the polythetic set, which shows how culture is structured, is fundamentally a refuse shoot from the apartments to cans in the basement. The collection seems to be undifferentiated, but there can be a structure with lots to tell. The simple fact of deletion, rejection, discarding, or cancelling puts the dejecta into the category of indifference. Being saved and valued means being saved for and valued for something, meaning that value and preservation are always motivated by an external cause. But, Freud noticed a peculiar coincidence between the technique of certifying an artworks authenticity and the unconscious. Between 1874 and 1876 Giovanni Morelli (also known as Ivan Lermolieff) wrote a series of essays in the German art history journal Zeitschrift für bildende Kunst outlining a method of authenticating paintings that is in use today, known as the "Morelli method." Rather than assessing the paintings salient features — the colors, subject matter, characteristic forms and proportions, Morelli advised looking "at minor details, especially those least significant in the style typical of the painter's own school: earlobes, fingernails, shapes of fingers and toes."17 In "The Moses of Michaelangelo" (1914), Freud wrote that Morelli's method coincided with that of the Unconscious, whose "authenticity" was also grounded in the unimportant, the indifferent, and the trivial. "It seems to me that his method of inquiry is closely related to the technique of psychoanalysis. It, too, is accustomed to divine secret and concealed things from despised or unnoticed features, from the rubbish-heap, as it were, of our observations." The Unconscious as a rubbish-heap goes further than saying that the Unconscious creates a perfect record of our experiences and thoughts. It sets the price of admission to the Unconscious on an inverse scale. Nothing *valuable* is admitted, only that which is declared worthless — or worse, despicable — is worthy of being preserved. This foreshadowed what Freud would later say about "Negation" (1925), that the unconscious, like the dream, is simply incapable of responding to the censorship of the "no." It's not a treasury, it's a dump.18

There is an important relation to polythesis here. The space indicated by the Gauss notation of the Borromeo knot is symmetrical, palindromic, and origami. It has been put to use in structuring some famous "chiastic" works of art, not the least of which is Edgar Allen Poe's short

¹⁷ Carlo Ginzburg, "Morelli, Freud and Sherlock Holmes: Clues and Scientific Method," *History Workshop Journal*, https://academic.oup.com/hwj/article/9/1/5/609389.

¹⁸ But, "what a dump!" One could compare the unconscious with *kenosis*, the idea that we don't know what we know, and that in special critical instances, this knowledge arrives "right on time." This can be fashioned into a popular culture idea, as we see in Alfred Hitchcock's famous *The Man Who Knew Too Much*, where the victim is killed because of some secret he knows but does not realize its importance.

story, "The Purloined Letter" (1845). There it defined a fold using pairs of points on a folded line in a "call-and-response" manner. A following part of a phrase "answered" to its predecessor. But, Poe went one step further. The story was *about* a virtuality, a space that existed *because it didn't exist*. The letter, as almost everyone knows, was hidden precisely because it was left out in the open. It *localized* concealment by negating it or, rather, *failing to negate a positive visibility on behalf of the intent to conceal*. It is important to word this correctly. Negation itself is at work because it has been neutralized, just as the dream abolishes differences between the living and the dead, the past and the present, pride and shame. The dream and this secondary virtuality know nothing of the binary that defines most things in terms of what they oppose.

Polythesis, a kind of trash dump, negates negation by accepting, in any of its virtual columns that "fall to the ground" the way a city might as it crumbles into ruin, is a rubble of optional signifiers from anywhere and everywhere. There appears to be no order, but in fact this congeries of potential causes, falling to a single location or effect, is ordered by its indifference to the kind of distinction process that defines the orderly meanings the flow from left to right of the sentence, or from the beginning to the end of the founding, development, and decline of an culture, a city, a life, or even just an idea. There is in polythesis the idea of emergence. The indifferent mush of meanings into non-meanings levels the playing field, immune to signification, a kind of beige background of formlessness. This is a ground *out of which* something genuinely new can emerge, tuned perfectly to the conditions that call it forth. In fact, this beige background is prerequisite for finding a perfect match to environmental challenges. Evolutionarily speaking, the polythetic set is not just strategy for studying cultures or human psyches; it mimics what cultures and psyches *actually do*. Polythesis is the meeting ground where Vico's theory of culture and Lacan's theory of the subject come together and define a revolutionary approach to the human scene.

§7 / The Two Faces of Instrumental Cause

In *Matter and Memory*, Henri Bergson argued against the thesis of Théodule Ribot, who produced evidence that memory could be found in specific locations in the physical brain. Bergson felt that such a reductionism betrayed memory's spiritual nature and countered with the idea that memory was a "prosthesis" for current action, supplementing present perceptions and plans with knowledge of the past. Yet, Bergson recognized that physical damage of the brain could limit memory, so a neurological basis for memory could not be ignored. Cassirer had, as I described above, a materialism that was simultaneously "spiritual," in that lesions in the brains of wounded veterans pointed to a primary duality contrasting continuity functions and semblance functions. Is the question of memory's materiality limited to the negative data of brain damage?

Possibly the limitation comes from thinking of memory as the passive recall of contents that are already fixed and archived, as books on a shelf or photos in an album. Yet, memory is never so inert. When we *call* on memories we revise them for the purpose of the call. When memories *appear on their own*, they come at a time when they engage other circumstances and thoughts; memories are not "packets" of sensations but more like structured relationships, associations. It

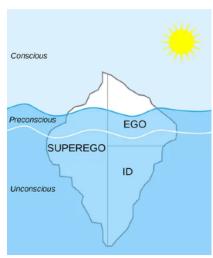


Figure 8. It's easy to forget how this widely popularized Freudian emblem of the psyche is a theory of specific–gravity shown in section. The vertical axis marks the extent of the Super-ego, the heritage of infancy-to-adulthood of parents, even when officially absent. This model shows how the infant in the womb can remember words of adults talking outside, even though the meanings won't be understood until after the child has acquired language, at which time he/she will puzzle over the source of mysteriously remembered messages.

might be more accurate to say that the content of a memory is the tip of an iceberg formed of conscious, semi-conscious, and unconscious linkages and circuits. This claim is easier to make if one accepts that memory, instead of being a physical *trace*, is a set of relationships that map onto the whole of the psyche. To make the first step in this direction, consider Freud's three-part schema, the Ego, Superego, and Id model. It is easy to assign these components to the "iceberg" model that Freud himself promoted. The Id is completely within the Unconscious, underwater, while the Ego spans Conscious, Preconscious, and Unconscious thought. Like the Superego it is a vertical function, but it hands over operations to the Id at a certain depth, preferring the daylight to the depths.

My take on this model is that it's too simplistic. As a map, it fails to capture the temporal dynamic, which is memory's main medium (to connect the present to the past). We might object also the Unconscious is a dynamic and temporal entity thanks to the *act* of suppression, which has its own temporal dimension. To think of something in terms of action and event, we have to account for process and relations. If we allow a map to take the place of these, we are missing some dynamic elements that are key to the operation of the whole, like looking at a map of a transportation system instead of the timetables. We cannot understand connectivity fully without

taking timings into account.

Ribot's thesis favored a map view of the brain, indeed as much of modern neuroscience, at least in its popular forms, seems to do. This kind of materialism can be easily rejected using Bergson's point, that memory's "spirituality" cannot be reduced to location without some reference to process. And, Cassirer's summation of Gelb and Goldstein's work is even more conclusive on this point. Memory cannot be an "image" or a "content" without reference to the circuits that are completed according to the two dynamic functions of the brain that are clearly evident in language, contiguity and semblence. Contiguity relates to the way sentences are completed, a flow of signifiers where beginning, middle, and end have distinctive roles to play. Semblance seems to work at a 90° angle from contiguity, reflecting metaphor's 90° independence from metonymy's logic of touch. While metonymy lends itself to mapping more easily (2d maps show things that are adjacent to each other, often in contrasting colors!) metaphor requires an action that cannot be easily imagined, yet we cannot deny its critical functioning.



Figure 9. Hans Holbein's famous 1533 double portrait The Ambassadors famously includes a blurred image that must be de-crypted by viewing the painting from an extreme oblique angle, whose vector connects to the painting's horizon at a 27° angle. The theme of threes is carried into the exact date Holbein records on the reverse side. April 11, 1533, 4 p.m. was the time on Good Friday, in a year of threes (3x500 + 3x11) when the sun was precisely 27° above the horizon. See John North, The Ambassadors' Secret (London: Hambledon and London, 2002). If we assign the minimal angle of view as ∂ , we can see that it is the same > that engages the <, "just short of or less than" the Apocalypse that Holbein, following the advice of the astrologer Fra Luca Pacioli.

Freud described the problem, again, as an archeological situation. In *Civilization and Its Discontents*, he wrote:

Now, let us make the fantastic assumption that Rome is not a place where people live, but a psychical entity with a similarly long, rich past, in which nothing that ever took shape has passed away, and in which all previous phases of development exist beside the most recent. For Rome this would mean that on the Palatine hill the imperial palaces and the Septizonium of Septimius Severus still rose to their original height, that the castle of San Angelo still bore on its battlements the fine statues that adorned it until the Gothic siege. Moreover, the temple of Jupiter Capitolinus would once more stand on the site of the Palazzo Caffarelli, without there being any need to dismantle the latter structure, and indeed the temple would be seen not only in its later form, which it assumed during the imperial age, but also in its earliest, when it still had Etruscan elements and was decorated with terracotta antefixes. And where the Coliseum now stands we could admire the vanished Domus Aurea of Nero; on the Piazza of the Pantheon we should find not only the present Pantheon, bequeathed by Hadrian, but the original structure of M. Agrippa; indeed, occupying the same ground would be the church of Maria sopra Minerva and the ancient temple over which it is built. *And the*

observer would perhaps need only to shift his gaze or his position in order to see the one or the other [Emphasis mine].

This thought–experiment asks us to superimpose image on image, to conceive of a dynamic "solid of time," just as the synchronic stack of potentialities of metaphor asks us, as Vico does, to imagine as many causes as possible for any one "effect" on the metonymic line of the sentence. Just imagining this situation requires us to see the figure–ground switches that must occur to convert the "temporal" movement of the sentence into a fixed 2-d "ground" while, from above, our stack of metaphoric potentialities is given a temporal, archaeological function. Archaeologists must do this switch all the time, so it is not surprising that Freud relies on the analogy of the stratum. At any one layer of an excavation, one is not looking at a spatial distribution but rather a set of clues about the dynamic relations that were the life that the stratum has "captured" in the same way a photo captures an action, a slice of *time* that is spatialized. The figure is dynamic, the ground is, in the repose of ruin, static. At the same time, the eternity of Eternal Rome involves the superimposition of one building on another. Freud involves a bit of magical realism with his

proposal that the observer can find a way to "shift his gaze or his position." Clearly, this is proof that a *primordial anamorphosis* is involved when memory applies itself to the memory of things that "it" does not "possess," but which is radically Other.

In the painting of *The Ambassadors*, Hans Holbein makes the same request! He asks us, on behalf of *localizing* the identity of the skull, its semblance, at a point only slightly above the material surface of the painting, the "zero degree" at which the painting's engagement of Euclidean viewing space, its pictorial exchange following the rules of perspective, ceases to exist. On the other "side" of this "slightly greater than zero" is another small degree, this one a temporal < as "just before" the moment of Apocalypse, a global material destruction. Note that matter here is not the "embodiment" of contemporary APT materiality. It is death. Given APT's fondness for Heidegger, that philosopher's emphasis on the being–toward–death of all Being, death does not feature in the assertion that embodiment is an incarnation into vivid, dynamic, living being. Proponents of embodiment rarely mention disease, decline, or death. But, Holbein's painterly dedication to death anamorphically refers to this necessary materiality by specifying its two limits: (1) the surface of the painting, which cuts orthographically across the viewer's cone of vision, and (2) the temporal limit specified by the Apocalypse.

Note that the < of the ∂ , the minimum angle to the canvas plane the viewer must take in order to see the skull, the *memento mori* or reminder of death, has its antipode at the >, the "just before zero" determined numerologically by the number 3. Holbein, with Plato, argues, against Plotinus and his neo-Platonic followers, that the < and > involve a kind of hyper-awareness of Truth with a capital "T." This is the "metaphoric" meaningfulness, as contrasted with the "truths of correspondence." We move from the 1:1 indexicality, related here to the representational protocols of painting lifelike portraits, to a metaphoric and anamorphic "anagram" re-ordering the contents of the painting in the same way, I argue, that the "contents" of memory are re-ordered in acts of recall that are strategic and hyper-conscious, "vertical" in order to call out the "latent" components of the strata of the archaeological layer.

Lacan wrote about Holbein's double portrait in reference to anamorphosis in his Seminar XI, The Fundamental Concepts of Psychoanalysis. He did not know about the "ambassadors' secrets" that John North would disclose in 2002. He thus missed the opportunity to connect anamorphosis's small "angles," the ∂ associated with the spatiality of the viewing angle as well as the temporality of the moment just before the Apocalypse, with his L-schema. Can we presumptuously complete Lacan's thoughts for him? The analogy invites us. Just as the painting sits in a Euclidean viewing space, the Analyst and Analysand enjoy each other's company in a room with furniture, presumably comfortable, where they view each other as egos, "real people" with jobs and appointments. Yet, the vectors connecting these two egos are perpendicular barriers to the one vector that must connect if analysis is to succeed in connecting the Unconscious Other with the *locale* that lay in the past but will now be the future of any success. The Analyst is a materialist. S/he looks for the ∂ that is "anamorphic" to the blah blah of the Analysand. S/he

has the option of coming in just after, >, something significant happens (a slip of the tongue or bungled explanation) or giving an equally ambiguous sign to provoke such an error just before, <. The "just" of just-before and just-after create a narrow opening, a neck, that is precisely dimensioned by the anamorphic ∂ , the minimal distance from material nothingness that, eclipsing all other "normal" perceptual awareness, allows the Unconscious to make its move. Critically, it rushes through at the right time, to the astonishment of the Analysand. Note that it is not the *content* of the escaping signifiers, or their interpretation, that is important but the *effect* of astonishment. This particular form of jouissance, a specialized pleasure associated uniquely with the discourse of Analysis, is true embodiment. It is an anamorphic, spectral Real within the Symbolic of the blah blah blah that resists and attempts to falsify or mask it. It is the skull, the memento mori. It is the materialization of memory, not as material itself but as a localization of material denoting its two edges. Death is on either end, as a viewing point and vanishing point, a graphic $\bullet - \bullet$. Connecting these two infinities is a line that is, more precisely, a circle, in that one end of the line must connect with the other, to acknowledge that the two infinities are actually the same: if $\infty - \infty$, then the — must be a \bigcirc , with the possibility that the peripheral infinities are also in the center: \odot .

We have ways of checking this thesis for historical accuracy. The sequence, -, \bigcirc , \bigcirc is a graphic summary of the literary principle of the *récit fort*, the "strong story," the rule that the ending must answer to the beginning. We also have depictions of the - as spiraling pyramids that represent their tops as an infinity in or beyond the clouds. In these, the liminal tip's association with wisdom is put in terms of a functional reversal of vision. Instead of the eye as a passive organ, wisdom empowers it to be "extromissive." Its rays extend out, actively converting what it sees. This is a marker, however, of the figure–ground reversal that has put what is outside at the dead center, the \bigcirc at \bigcirc . In the 1951 film, *The Day the Earth Stood Still*, a space robot, Gort, defends the ship that has landed on the Capitol Mall in Washington, D. C. His powerful gaze can melt weapons of the army units that surround the vessel, but it is a curiously selective gaze that can distinguish between hostile and hospitable intentions. If we consider that the space visitors say that they *represent* the confederation of galaxies that fear earth may destroy itself in a chain reaction that could take in the whole universe, then Gort's extromissive ray compresses the power of those peripheral stars into a central projective beam. Extromission is vision's radial and centrifugal function reversed, another figure–ground conversion.

We must sum up this reflection on the < and > of anamorphosis by returning to the maligned role of instrumental cause. There is a direct connection from the neutralization of the priest in his performance of the Mass's transformation of the host to the Analyst's passivity in his/her restriction to creating a space between temporalized < and >. The embodiment of Christ is analogous to the emancipation of the Analysand. Both are "materializations" that happen on the border of the death-zone. They both use inert matter to define a profile or edge and a ∂ (minimal

relation) so that a form that was *latent* can suddenly reveal itself. Instrumentality is also about the reverse effect of the tool on the tool–user. The one with the hammer, the saying goes, begins to see a world where everything is a nail. This is a variation on the French Marxist philosopher Louis Althusser's concept of interpellation. The policeman yells "Hey you!" and all the people in the street turn around thinking that they are guilty of something. The external provocation has connected to a void central in the subject, a place, a locale, of the Other. The subject constructs the Other as • — •, where the antipodal Others connect. But, they are voids, not solid objects or personalities: ∞ — ∞ . So, the Other is an infinite sphere, both \bigcirc and \bigcirc . Instrumental cause is a case of the extimity of the Other, because between the \bigcirc and \bigcirc condition there is no room for valuing, responding, or personalizing. It is a pure act, a pure effectiveness. The priest and the Analyst are present simply on account of their "awareness" that is simultaneously "unconscious." This allows the action of connecting ∞ — ∞ , of creating a projective space where there is self–intersection with non-orientation: an "alethosphere" as Lacan would call it in Seminar XVII, *The*

Other Side of Psychoanalysis.



Figure 10. Ed Sorel, The New Yorker, January 31, 2000. Can architecture be psychoanalyzed? This parallels the assumption that buildings can be interpreted, but with the extra Lacanian feature of the timed session that provokes anxiety in the building, which responds to this provocation by spilling the beans about its strategy of concealment. In an unguarded moment, the signifiers rush out: its true nature involves nonorientation (not recognizing itself) and self-intersection (the creation of a continuous surface of no escape, preserving the utility of the void and the lips of voids that, everywhere and always, conserve and manage architecture's capacity for suspense.

§8 / Idempotency and the Alethosphere in Day for Night

There are two ways of looking at paralysis. Before I explain this I should explain that, during sleep, dreams make it possible to insulate the sleeper from external and internal disturbances. The main strategy is that of replacement. The dream substitutes, for what would be the sleeper's annoying engagement with outside stimuli, a story, where the "negation" of negation" allows the dead to appear alive and other uncanny variations on everyday reality. The dream insulates. It defends against what in IT lingo is called a "denial of service" attack," when a bot orchestrates an attack on a web site by making simultaneous demands that overwhelm the server. The algorithms protecting the website use the general strategy of idempotency. They reverse the leading edge of the attack to immunize the system to further attacks. In a very similar way, the dream incorporates the leading edge of potential disturbances as dream material to resist further "calls" on the sleeper to awake. Mathematically, this is the function of "idempotency," which can be written as x+x+x... = x. We encounter idempotency every time we push an elevator button multiple times, knowing full well that the first push has already sent the system the request and that pushing it more times will not make a difference.

Idempotency can be represented on a surface that allows for

movement but denies that the mover will actually get anywhere. On a sphere, if motion is defined as movement away from a point (hard to deny this) but if that point is defined as the *center* of the surface, then movement is idempotent. Every point on a sphere is always surrounded by an equal amount of area, no matter where the point might be. Movement away from the *center* is perceptual (the mover experiences motion) but actually s/he has gone nowhere.

A circuit is analogous to a sphere, in that any point on it has equal amounts of "elsewhere" on either side. Idempotency is akin to the voltage of an electrical circuit. It is the charge that is distributed throughout the whole circuit. Amperage, the *flow* of energy, is imagined to happen, and can actually be measured by "amps," symbolized as "I." In relation to voltage and amperage, resistance can be determined by "watts." The formula I = V/R shows the tautological relation of the three terms, that (like the Borromeo knot) each aspect is just one different way of measuring and representing what's happening in a circuit. Voltage is the idempotent element, amperage is the imaginary movement of electrons, measurable as a velocity, and the resistance of the conduits or devices on the circuit is like hitting the brakes on this movement.

Lacan used many kinds of circuit analogies in his ideas of subjectivity. He employed knot theory, as the case of the Borromeo knot makes clear; he extended this to many configurations of the Borromeo knot as well as to 2d applications with the idea of the projective plane. The projective plane's two properties are easier to understand than their actual topographical principles. "Self–intersection" can be the theme of the double, self–realization, one's mirror image, ventriloquism, or the principle of the *récit fort* in story–telling. "Non-orientation," the second property of projective planes (like the twist of the Möbius band) is akin to the Jekyl/Hyde of doubles, the uncanny chiral reversal of mirrors, the impossibility of "going home again" (cf. Heraclitus's river that can't be stepped into twice), or the famous story of the ship of Theseus, which was preserved by replacing rotting parts one by one to the point where there were no more "original" parts left.¹⁹

With easy-to-understand examples of non-orientation and self-intersection ready at hand, projectivity is not difficult to accept as a consequence of our subjectivity's need to establish virtualities to complete our otherwise limited perceptual reach. From a point of view, we cannot see the other sides of objects, so we imagine free motion (and free will at the same time) to access the hidden sides *imaginarily*, without having to actually make the trip. This addition of a virtuality based on Euclidean constructs of here and there, up and down, inside and outside are most of what Lacan means in his term, the Imaginary. Because we add virtual spaces and times to actual ones, without having to check to see if these additions are warranted or correct, virtuality and the

¹⁹ Rabelais tells an equally amusing story about a kettle of soup that had been tended for over a hundred years. As the soup was ladled out to diners, new ingredients were added. The question was, "is this the same soup?" The authenticity of the ship of Theseus is equally in question. It is the same in the sense that repairs were made incrementally, and there is no one point at which the ship "flipped" from being the original ship to a duplicate. These anecdotes belong to a group of problems in logic called "sorites." Lewis Carroll described these with his amusing "Amos Judd" puzzles in his major work on logic. See *The Complete Works of Lewis Carroll* (New York: The Modern Library, 1984).

Imaginary must be written in the subjunctive tense. They are "what ifs," not facts, yet we take these additions to be the essence of what we experience as reality "out there." The fact that the what–if question can be answered by different cultures in different ways confirms that the Imaginary is hypothetical and variable, not a given. It is supported by the idea that the viewer is a *figure* free to move across a comparatively fixed *ground*.

Let's go back to the situation of the dream again. Sleep must restore the organism by allowing for a period of absolute paralysis. This is the non-REM (rapid eye movement) period of sleep where muscles and tissues relax. Lymph fluids are able to remove toxins and other waste products, and the organism is restored. Without this period of paralysis, the organism would perish. The dream's function is to keep the dreamer entertained so that this period of paralysis will not be terrifying. To get a measure of this terror, consider the widespread warning—tales of premature burial which sprang up in the 19c. when tuberculosis was common. The etiology of the disease and condition of the corpses of victims made it seem that some had not actually died but had been buried and then awoken inside their coffins. (Vampire literature arose at this same time.) In other words, any actual experience of paralysis is horrible, and the mind must defend itself at all costs by imagining itself continuing its figure—ground freedom of motion around a fixed field. But, like the sphere where a point is defined as a center, the dreamer is of course not actually moving. The dream must *move around the fixed dreamer*, reversing the figure—ground relationship, while the dreamer continues to imagine a representation of his/her Euclidean virtualities.

Figure–ground reversal *in itself* triggers the secondary virtuality that uses projective geometry's supplemental resources. This virtuality was already and always present within the subject's engagement with the "sensorium" of encounters with the world, but it was latent whenever Euclidean realism was the dominant paradigm, the "indexical" model of reality ("what you see is what you get" — i. e. literalism). When Lacan says that "there is no such thing as literal meaning," he directly addresses the shallow fragility of this paradigm and its 1:1 pretended indexical ties between body and mind. Although Positivism sought to extend this model by means of accounting for the exceptions and shortfalls (appearance is "nothing but"; thought is "nothing more than," etc.), Lacan's insistence on the Real's resistance to the Symbolic meant that there was no way to directly theorize the Real except in terms of gaps in the Symbolic where language, thought, and representation came up short, resorted to contradictions and evasions, or constructed fantasies to paper over its inconsistencies. In an importance sense, Lacan's "science" is precisely speaking a psychoanalysis of the Symbolic using the L-schema. It regards the Analysand's slips of tongues and bungled explanations in global terms, as the Symbolic's failed attempts to incorporate the Real.

If anything, the figure–ground reversal of the dream, to maintain idempotency by presenting the dreamer with a ground that moves across the paralyzed "figure," or perceiver, who continues to believe that it is moving freely across a fixed ground, calls forth the secondary virtuality that

compounds the dream's negation of negation and other uncanny effects, all of which indulge freely in themes of self-intersection and non-orientation. Just as memories are not "contents" that are dredged up for re-presentation, dreams are not contents that simply represent left-over themes and dreams of waking reality. They mark the edges of shapes that cannot be formed in Euclidean terms; they are able to feel in the dark, using a method of < and >, without being able to turn on the light that would dissolve them as viewpoints and merge them with their antipodal vanishing points, a light that comes from nowhere but rather is a quality of space itself, what in film production is called "day for night." A scene is shot in daytime through a filter that converts it to appear as if it was shot at night. Anamorphic day–for–night uses the ∂ , the short interval at both the perceiver's and the artwork's "edges" to foreshadow an impending doom. The viewer "sees" his/her own fate, as the motto normally accompanying skull images in paintings suggests: memento mori, "remember that you shall die." The impending doom is globalized and mathematically over-determined, with a network of lines and angles connecting the half-hidden crucifix at the top left corner of the painting with the viewer's position as Golgotha, the "place of the skull" in Aramaic. The angle of 27°, or 3x3x3, dominates. The astrologer's prediction of Apocalypse at 4 p.m. might have been belied by the fact of Holbein's inscription, which may have been produced more as a "by the time you will be reading this I will be dead," except in the case of an Apocalypse any and all readers would be dead. Predictions of the end of the world are often exaggerated.

There is a possibility that the Apocalypse actually happened and that we are simply not aware that we have "died." For almost six hundred years humanity has been trapped inside a secular death dream with anamorphosis as our only clue about what happened! This is not so preposterous as it sounds if we consider that the interval "between the two deaths" refers to both a nearly universal religious theme that, taken up by psychoanalysis, is the existential condition between a literal/naïve "naturalism" of the subject and a reckoning with the Symbolic. The "Judgment Day" of religion becomes the project of accounting for, and coming to terms with, the networks of symbolic relations as they concern sexuation, prohibition of the Real, construction of fantasy work-arounds to paper over the Real's exclusion, and the emancipatory potential of discourse. All of these are central Lacanian themes that suggest that the period of history between 1533 and today — the initiation of an "anamorphic awareness" dividing Euclidean virtuality (the representational portrait of the ambassadors) from secondary virtuality (the projective virtuality of effectiveness, with the reverse proportionality of many causes for any single effect) began its new chapter. What is this new chapter?

One could say that from the moment that anamorphosis showed itself to be primarily an *optical* effect, the idea that, behind this effect was a virtuality of polytheistic/metaphoric causes shifted gears. Just as McLuhan argued that visual culture arose out of the ashes of oral culture, the invention of the printing press and mass production of texts and images, affordable for a large audience, took hold by 1500. "By 1500, printing presses in operation throughout Western Europe

had already produced more than twenty million volumes," wrote Lucien Febvre.²⁰ Victor Hugo's famous prediction, *ceci tuerà celà* ("this will kill that") pitted aural/oral tradition against the visual. Holbein predicted where this might go, portraying two rich noblemen in the midst of the toys of navigation and the riches of international trade. They were tying into what Lacan would call the "alethosphere," the exchange network of goods, services, information, and knowledge that



Figure 11. Michael Redgrave in the 1945 British thriller, Dead of Night, The dummy/ventriloquist team illustrate the uncanny's age-old affiliation with projective geometry, in that the dummy gets the upper hand over the master, making self-intersection a case of nonorientation. Popular culture demonstrates that a mathematical idea can be difficult even for the expert but readily understood in literary-narrative terms. The acoustic voice of Euclidean timespace becomes the acous-matic voice of the Lacanian drive, involving a topology rather than a perspectival picturerelationship.

made, of the many worlds before the Renaissance, one world united by a "sphere" of mechanized information. The alethosphere was truly anonymous and machinic, a perfect instrumental cause, an automaton that, today, has reconfigured itself as the internet.²¹

§8 / Lacan — Why Not? A Travel Kit

There are several things anyone beginning to read Lacan should bear in mind. On the history side of things, it is important to keep in mind the size of Lacan's career *in toto*, about fifty years of considerable productivity, including annual seminars (1954–1980), which were transcribed and most published, I–XXVII; a major collection, *Écrits* ("writings") with principal essays drawn from various sources, special publications, *Television*, *L'Étourdie*, and other shorter works: addresses, position papers, essays, and the like — nearly fifty years of continuous output, accomplished while Lacan was practicing as a clinical psychoanalyst, mostly at St. Anne's Hospital in Paris. His seminars were famous; packed by some of France's most famous intellectuals. Stories of his

career can be read in the monumental book, Lacan & Co.

Lacan began his career in revolt against what he saw as a vast defection from Freud's legacy. This was not a question of obedience to the letter of the Freudian law, but rather a lack of imagination in correcting and extending Freud's theories. Lacan saw several ideas as critical: the three–part model of the psyche (ego, superego, id, which he converted into the domains of the

²⁰ Lucien Febvre and Henri-Jean Martin, "The Coming of the Book: The Impact of Printing 1450–1800" (London: New Left Books, 1976).

²¹ Lacan's references to this are minuscule but extremely important. Jacques Lacan, *The Other Side of Psychoanalysis*, Seminar XVII, trans. Russell Grigg (New York: W. W. Norton, 2007), 162, 182, 187. An "alethosphere" is an all–encompassing network accommodating flows of all kinds, with free–flowing transmission complicated by pockets, gaps, covens, maelstroms, ripples, dimples, tears, ridges, furrows, and all of the complex accommodations of any Symbolic system, where the contronymic term *hostes*, both hostile and hospitable is the rule. The global nature of the alethosphere is complemented by local applications, which Lacan called "lathouses," relating to the Greek word for being *ousia* — being, substance, essence. Any gadget qualifies as a lathouse: an iPhone, tape recorder, cash machine, camera, or even parking meter. In an expanded sense, the gadget is a subset of the idea of the con, or confidence scheme (sham, grift) where three principal figures dominate: a "con" who masterminds the trick and directs the action; the mark or victim who is kept in the dark while providing something of value; and the shill who is the con's assistant but, simultaneously, pretending to be sympathetic to the mark.

Symbolic, Imaginary, and Real), the idea of the unconscious (for neurotics but not psychotics) and its manner of producing symptoms; the concept of hysteria as not just a pathology but a form of discourse, the realization of a certain enjoyment of compulsion–repetition and revisiting the "Real" of trauma. Lacan took over Freud's concept of the drive (*Trieb*), which many English translations had misrepresented (with no justification) as "instinct." To Freud's three drives (oral, anal, phallic) Lacan added two, the scopic drive or gaze, and the voice, extended into the idea of the "acousmatic" or "off–stage" or "ventriloquistic" voice. Key to Lacan's idea of extimity (the "out there" of truth), the gaze and the voice originate from the external world. They are *thrown* out into object–land, just as the ventriloquist throws his/her voice. We are the dummy, the ventriloquist is our unconscious, but the gaze and voice are what we *react to*, the realism that charges the space around us.

Most important, however, was Freud's continual reworking of the idea of a "death drive" in opposition to the rather tautological idea of the pleasure principle and reality principle (avoidance of pain, postponement of reward), put forward in multiple forms but first in his 1895 essay, "On the Possibility of a Scientific Psychology." The death drive was a combination of pleasure and pain; both a desire for death as stasis and Nirvana *and* the sum total of resistances against death. The death drive became *the* drive for Lacan, taking charge of all the others. The death drive, like so many Lacanian ideas, involved a reversal of expectations. Hysterics "report" pain but feel pleasure. The gaze is an object looking *at* the subject, not (as Foucault would have it) the subject looking at other objects, particularly men looking at women. Traumas are experienced backwards, at a later time, often unnoticed at the actual time they happened. *Jouissance*, a kind of pleasure associated with sexual climax, is not so much us enjoying something as the something enjoying us. And, when we speak, language "enjoys us" by speaking us, and for the most part we are unaware of it.

Lacan's theory of metaphor is original, although it re-focused the theory that foreshadowed it, put forward by Vico in 1744. Set within the general linguistic frameworks set up by and Jakobson, where metaphor accounted for the "synchronic" capacities fueling the "diachronic" synthesis of sentences and other units of meaning, Lacan's metaphor was distilled into a *matheme* that distinguished metaphor — and, by extension, language in general — from other types of communication based on indexical concordance between signifiers and signifieds, or "words and their definitions." In a dictionary, "meanings" are given to define signifiers, but then more meanings are required to define the definitions. This circularity is obviated by metaphor, which relies on latency and emergence to create conditions of meaningfulness instead of semantic determination. Although Vico's account of metaphor, put in terms of the origin of human speech in the fright induced by thunder, is far more colorful and astounding, Lacan dots the i's and crosses the t's of Vico's idea. He *explains* how the transfer of implicit knowledge to the explicit domain of "subjectified objects" use extimacy and concealment to keep meaning open and extendable. Unlike theories that see metaphor as an extension of analogy (cf. Chaim Perelman), Lacan's metaphor extends into full narratives, discourses, and fields of signification, making it

more useful for the architecture theorist who needs to see metaphor as it materializes itself in dynamic form–making situations. I would make the claim that *only* Vico and Lacan have properly understood the centrality and relation to thought and culture of metaphor. Other theories are simply "colorful" in comparison.

Throughout his career, Lacan engaged mathematics in the form of knot theory, projective 2d surfaces, and combinatorial set theory (notably in his essay on "The Purloined Letter). He consulted with actual mathematicians to make sure he was "on the right track" (he was). His few mentions of architecture, in Seminar VII (*The Ethics of Psychoanalysis*) combine an interest in anamorphosis with the curious claim that architecture involves a "surface of pain," which he illustrated in the story of Apollo and Daphne. Here the connection to projective geometry is clear. Eros has shot Apollo with an arrow of love, Daphne with an arrow of hate. He pursues her but she flees (the very model of *dæmon/askesis*, terms I borrow from Harold Bloom). The logic of the demon and flight in search of sanctuary, the basis of so much architecture, is here in this brief story. Daphne cannot escape because she is on a surface that is self–intersecting and non-orientable: a real projective plane. Lacan later connects this plane to Baroque architecture and architecture's dependence on the idea of the void.

Lacan's central topology was, as Will Greenshields has argued, the Borromeo knot.²² Each ring stood for a "domain" in his system of three: the Imaginary, the Symbolic, and the Real. The Imaginary is, more or less, perceptual experience requiring concepts of space and time; a "real world"; an everyday. The Symbolic is mainly language, but it extends to networks of symbolic relationships, i. e. culture, which we might divide up as family, clan, friendships, societies, nations, and "humanity as a (communicative) whole." The three domains were related, but in a curious way. The relation between any two required the third, but not as a link but as a kind of presence—through—absence. The Real resisted being incorporated by the Imaginary, and this antagonism made Lacan attempt to describe a "fourth ring," associated with *jouissance*, holding these two rings together. The Borromeo knot topologically did not require this fourth ring, but the idea is that, in the set of three, there is a *virtual* fourth ring binding the set together. Žižek has developed this idea into what he calls the "virtuality of effectiveness," separate from the kind of virtuality that gives rise to the "virtual space" of computers. I extend the first virtuality to include Euclidean perspectivalism, and go into more detail in connecting Žižek's second virtuality to projective geometry and, hence, *jouissance* of the architectural "surface of pain."

There are further ideas useful to architecture that are barely recognized. Lacan retold a logical puzzle, the "Three Prisoners Dilemma," where a prison warden makes an offer to three prisoners. He will pin one of five dots on each of the three prisoners' backs. In the set, there are three white dots and two black ones. The prisoners cannot see the dots on their backs but can see those of the

²² Will Greenshields, *Writing the Structures of the Subject Lacan and Topology* (London: Springer International Publishing, 2017). Greenshields' dissertation is also available online. See also Will Greenshields, Relationality, Materiality And The Real In Lacan's Borromean Knot," S: *Journal of the Circle for Lacanian Ideology* Critique 9 (2016): 156-181. For more, see https://zju.academia.edu/WillGreenshields.

other two. The warden will grant freedom to whoever guesses correctly the color of the dot on his back. The solution is double-staged. The logic of the situation must be coupled with the reaction of the others as they try to reason their way to freedom. All prisoners come to the same conclusion at the same time and all three rush through the door together. Lacan used this anecdote to distinguish intersubjectivity from *trans*-subjectivity, a key distinction that psychology as such is incapable of making.²³

Lacan was unique in his move to a theory of discourses (four main ones) and metaphor. See Seminar XVII, The Other Side of Psychoanalysis, for details. Lacan's basic idea was very mechanical. There was a quadrant, Agent, Other, Product, and Truth; on top of this rotated a ring: the barred subject, \$, the master signifier (or master) \$1, signifiers, usually taken to mean knowledge, S2, and a mysterious force, the "small-a other" (autre) that Lacan wanted to leave undefined, except to say that it was the "object-cause of desire." This objet petit a was related to jouissance, making it all the more mysterious; but it locked in the idea that Lacan got from Freud, that the unconscious is "out there" in the world, not a mysterious storehouse inside the head. This is important when discussions turn to neural circuits. With Susan Buck-Morss, I emphasize that Lacan's "neural networks" extend beyond the brain, beyond the nervous system, out into the world, the "sensorium." ²⁴ A circuit is both subject and world. The senses, all based on 2-d arrays of receptors, must extend themselves, must define themselves, by means of a depth dimension that incorporates extension, as a virtuality, within the biological and neurological operations of the organism. This fact explains why so many animals depend on seeing other members of their species, in particular ways and with particular attributes, in order to procreate. Lacan was not a neuroscientist, but he did want to get past the material-ideal divide that made the mind-body problem into an insurmountable barrier (which it still is for psychology).

You may already know that psychoanalysis means, mainly, those theories stemming directly from Freud, and then to Lacan. There are various side-tracks (Winnecott, Klein, Pontallis, Laplanche, etc.) but in the main psychoanalysis means *Lacanian* psychoanalysis. Psychology sprang up after World War II, out of a line that had begun sixty years earlier with Hewlings Jackson and William James, brother of Henry James. The wartime government of the 1940s required many studies of behavior, and "behaviorism" (Skinner *et alia*) set the dominant theme. Psychology and its many variants are practiced mainly in the U. S. and Canada, Lacanian psychoanalysis is popular almost everywhere else.²⁵

²³ For a brilliant exposition of this experiment, see Derek Hook, "Towards a Lacanian group psychology: the prisoner's dilemma and the trans-subjective," *Journal for the Theory of Social Behaviour* 43 (2): 115–132.

²⁴ Susan Buck-Morrs, "Aesthetics and Anaesthetics, Part I: Walter Benjamin's Artwork Essay Reconsidered" (December 11, 2013); URL: http://susanbuckmorss.info/text/aesthetics-and-anaesthetics-part-i/.

²⁵ In Argentina, there is a story about a grandmother giving her grandson about to go to school in France extra money so that he could continue his (Lacanian) psychoanalytic sessions abroad. Like packing extra socks or a warm sweater, Analysis is considered a staple among urban Argentines.

Psychiatry is a division of physical medicine, but it has taken over in two key practices: the "sectioning" (involuntary hospitalization) of psychotics, deviants, and those declared to be a danger to themselves or others; and the use of pharmaceutical treatments for virtually every malady. Psychiatrists hate psychoanalysis and vilify it even more than psychologists. There are no drugs or drug experiments in Lacanian psychoanalysis. Lacan believed in Freud's idea of a "talking cure," although this puts the emphasis on neurotics rather than psychotics. Because of this, the psychoanalyst must make two guesses at the beginning of any treatment: (1) is the Analysand a neurotic or a psychotic; and (2) if neurotic, is the Analysand a man or a woman? In psychoanalysis, being a man or a woman is not determined by physiology or even sexual preference. A biological woman, gay or straight, still has the option of being a man or a woman, based on his/her relation to the phallic signifier. There is no obligation to identify with one's genital anatomy.

Men access existence by means of a contradictory situation. They must accede to a symbolic castration (subordination) to a "law" that is enforced by an Other who is not subject to, and often violates, the law. In other words, club members must obey what the president of the club does not have to obey. This is written as $\forall x \emptyset x$, "all x's (subjects) obey the phallic law, $\emptyset x$," while $\exists x \sim \emptyset x$, "there is one x ($\exists x$) who does not." Those who call themselves women neither do or don't accept this condition: ~∀xøx (not-all of x invests in the idea of a phallic law), and there are no exceptions to this not-all position for women ($\sim 3x \sim \phi x$). Rejecting the condition of "existence" the woman does not "exist" in Lacanian psychoanalysis and so woman is written as woman. This doesn't mean that women aren't real, just that they do not fully subscribe to the contradiction required to call oneself a man. They buy into the idea of symbolic castration, but from the angle that they must symbolically forfeit something they never had. So, the second big question of Analysis belongs to the Analysand, who must decide whether they are really a man or a woman, in relation to this (symbolic) relation to the main "signifier of signifiers," the phallic signifier, written -ø. The phallus is present only negatively. It is a signifier without a signified, a definition. It is the model for the Lacanian "master signifier," S₁, which has a problematic relationship to other signifiers, S₂s. If S₁ happened to be definable, we would not have metaphor, which puts a stop to the dictionary procedure of looking for meanings by substituting definitions in an endless process. Metaphor stops with meaning-fullness. Instead of substitution, it focuses on resonance and antagonism.

That the phallus is a signifier means that it is not a penis. Architecture Phenomenology does not distinguish between phallus and penis and so misses out on the entire cultural significance of this central signifier. Most AP theorists embrace Jung's monadism, the idea that subjects have conscious access to all of their thoughts and can "think their way through" to resolutions that inevitably involve unity of opposites. Unification is the axiomatic goal of Jungian analysis, which takes the idea of antinomy to be temporary. You might say that Jung is the opposite of Lacan, who insists that antinomy and antagonism are critical in the constitution of the subject, and that unification is always, by definition, a sham.

Jungians do not address Jung's psychosis, or the implications of monadism (it deletes the idea of an unconscious, or symptom). Because (symbolic) castration figures in nearly every cultural formation and practice, this means that *fundamentally* Architectural Phenomenology will be lacking a key type of evidence, a type essential to the effectiveness of works of art. I could argue further that, in order to understand how the phallic signifier works (in discourse, society, and in the formation of subjectivity) Lacanian theory is not just an option, it is absolutely essential. Positivism, behaviorism, cognitive psychology and its variants, Jungian psychology, and "hermeneutic" models derived from Gadamer *et alia* are unable to move past simple binary definitions of sexuation and confuse sex with gender and gender preferences. The popular category of "gendered spaces" in architecture theory are based on radical misconceptions of the question of sex as related to signification, neurosis, and the unconscious.

AP is popular because it appeals to the aspirational "ego-psychology" that Lacan sought to correct. Followers of Freud who escaped from Germany and Austria during World War II realized that, to appeal to a North American clientele, they would have to be positive and assertive. They themselves would have to embody the idea of the "healthy subject" whose sheer ego could power through all difficulties. Nothing could be further from the Freudian legacy, or more disastrous for psychoanalysis. It was a business decision. Why is the ego the enemy of psychoanalysis? The ego is the product of the Symbolic (the signifier-basis of our social-cultural relationships). Our social networks present an "offer we can't refuse." To belong to our families, groups of friends, social groups, worker networks, etc. we must hand over control of our identity and way of living. We live on borrowed roles and assigned duties. Our ideas of who "we are" begin with the fiction that we must "be" something to begin with, even though the concept of identity is radically selfcontradictory. To turn down this offer means the foreclosure of the Symbolic, with the consequence of psychosis. Most of us wisely decline this option and choose to remain, misidentified, within the Symbolic and suffer various neurotic symptoms.²⁶ There is no cure for this, because the "disease" is the Symbolic itself, which makes impossible demands yet is filled with gaps, contradictions, and failures, all the while putting the blame on the subject.

Anyone perusing the self-help shelves of a bookstore will know that ego-psychology is big business. We are shown how to find our destinies, re-make ourselves, control our circumstances. The backside of these offers is that it is *our* responsibility to take charge of the bad situations life has handed us, and that only by strengthening the ego, the very part of our subjectivity that is trained to lie, to govern our whole being. Lacanian psychoanalysis rejects this offer, by constructing a method by which we are able to find, within the unconscious, our own resistance to this idea. Analysis works, although it can take time and be expensive. The Analysand is the one who authenticates this success because *the experience of "traversing the fantasy"* (i. e. the attempts of the Symbolic to paper over its inconsistencies) is felt by the Analysand and no one else. There is no interpretation or explanation of "what went wrong," only the experience of release and the

²⁶ Think of the example of the library book that has been mis-shelved. It is "in" the library but only on the condition that it cannot be "found to be in" the library. It is on the shelf, next to books it has no real relation to.

accompanying recognition of the significance of the release. Psychology in contrast focuses on "self–awareness" and hermeneutics–style de-codings of personal problems. When this is put in terms of meditation, it can work; but the norm is the counselor–therapist who interrogates the client and offers helpful suggestions. The axis connecting the therapist and client as two egos in the same physical room is never overcome.

Lacan was methodical in his theory of the subject. His over-arching aim was to be consistent, to speak the truth, the *same* truth. He admitted that, following Gödel's example (set-theory incompleteness), he could tell the truth as long as everyone accepted that he could not tell *all* of it. This choice was ironically echoed in Lacan's first famous public-relations success, the theory of the Mirror Stage, the key event in the young child's life when the social significance of the Other's view is understood. The mirror itself presents an "authentic" image that is by definition incomplete, a split of space into 180° halves. Each half, however, claims to be a whole, a 360° "realm." The truth of the situation is that each theory of halves is simultaneously self-contradictory. *If* it's true that the mirror splits 360° space into two parts, *then* it does this by creating two 360° domains; *but*, if it does this then the subtraction of the mirror results in a 720° domain.²⁷ The image in the mirror benefits by seeming to be more masterful and whole; the subject who is the source of the image loses by realizing its comparative inferiority, it's status as a "body in pieces" (*corps morcélé*). Lose a little, gain a little. Although to be accurate, Lacan is more a case of "lose a little, then lose more."

The Mirror Stage is often portrayed as the beginning of Lacan's "project of the Imaginary," but in fact it focuses on the breach between the Imaginary and the Symbolic. The subject learns that "life" will be a matter of assimilation within a network of symbolic relations, where he/she (for now "he/she" will even have to be sexuated in a symbolic way) will accept the cost of misrecognition. The "self" that will come to identify the subject will be assigned, not just by empirical others (family, clan, friends, bosses, etc.) but by a subjectively constructed "Other" controlling the "master signifiers" — open programs where no definition (a substitution of new signifiers for given signifiers) will complete the project of meaning. The Symbolic is naturally tilted toward the paternal, the role of the father, or, rather, the *name* of the father. In fact, all neurotics are neurotic because they accept the role of the "name of the father" (le nom du père, which in French sounds like le non du père), the laws of denial and prohibition. The Ten Commandments are, thus, all "thou shalt nots." There are two groups who escape this idea of Law. The psychotic does not have a paternal signifier and thus psychotic speech is indexical, manifest, self-assured (but typically "raving"). The neurotic woman is also off the hook, but only partly. Those who wish to call themselves woman do not submit to the either-or conditions of masculinity but are "not-all." They identify not with the (metonymical) severe divide imposed on

²⁷ Or, in the case of Alice, who goes *through* the mirror, the result is a domain whose 720° involves 360° of Alice's expectations overlain by 360° of Wonderland rules. The VEL, or intersection, between Alice and Wonderland is a void where the "lip" (the story) circulates between the true-false of one position to the false-true of the other. You can be consistent but only at any one (incomplete) position.

those who would call themselves men, the binary signifier, but rather with the division, the cut, the gap, the idea of inconsistency itself. Women are the Geminis of subjectivity, unwilling to commit not because they can't make up their minds, but because they think such commitment doesn't really make much sense.

It is easy to draw some conclusions from these Lacanian situations. Possibly, one could say that it would be hard to fight wars if women were in charge, as long as they did not opt to call themselves men, as did Margaret Thatcher. National boundaries would not be as important, and certainly not worth defending to the death. No need for passports. All armies would have the same uniforms, and no weapons since the idea of shooting someone to determine an outcome of a war simply would make no sense. This might be balanced off by the idea that killing on behalf of love is a virtual necessity (Medea). There is aggression on the side of the feminine, almost exclusively from the gap between alternatives, where relational options are at stake. Both positions, man and woman, have access to the full range of subjectivity within the Symbolic, but because of the relation to the phallic signifier, where men obsess over *having* a phallus, those who call themselves woman obsess over *being* a phallus. Possessing and being have strikingly different outcomes but, in their means to an end look remarkably similar. Welcome to Lacanian psychoanalysis, *Ladies and Gentlemen!*

The final bit of advice to the Lacanian newcomer is, stick to the books. For the most part, those in architecture education who say things about Lacan are not just misreporting, they are intentionally misrepresenting. This is true particularly of those in AP. There are perhaps as few as six "somewhat reliable" writers who bridge between Lacan and Architecture. Rather than rely on any of them, however, my advice is to stick to good translations and reliable secondary sources. In the past fifteen years, new translations have come to replace old horrible ones. Bruce Fink, Russell Grigg, Dany Nobus, Sylvana Tomiselli, Jacques-Alain Miller (Lacan's son-in-law), and several others have superseded the really bad ones, mainly by Alan Sheridan. Bruce Fink's teaching (formerly at Duquesne University in Pittsburgh) produced a number of young practitioners whose writings are reliable, and Fink himself continues to produce useful guides, not the least of which is his early guide, *The Lacanian Subject*.

In France, Jacques-Alain Miller guides the *École de la Cause freudienne* as well as the World Association of Psychoanalysis, devoted to Lacanian principles. There are many web resources: lacan.com, nosubject.com, and the on-line journal, *S: Journal of the Circle for Lacanian Ideology Critique*. In the U. S. and Canada, organizations such as LACK, *Écrits*, the Association for the Psychoanalysis of Culture and Society, the Affiliated Psychoanalytic Workgroups, Lacan Toronto, the geography group at Simon Fraser, "Lacan Salon," and others are active and productive. There are on-line seminars, annual events (in non-pandemic times, at least), and linked resources. The Association for Psychoanalysis and Psychotherapy, in Ireland, offers research members access to the PEP-web, an online resource that includes almost every publication in digital form. Most universities, dominated by psychologists, do not subscribe to this useful service. There is also a

nascent Architecture-Lacan group that originated in Dundee, Scotland. Compared to architecture's relative paucity of publication/presentation options (ACSA, AHRA, SAH, Frascari Symposia), Lacanian psychoanalysis offers much more, even to newcomers; and since architects are rare, they are usually given a nice welcome. Just don't try to join without knowing a few things about the *objet petit a* or being able to write down the *mathemes* of the four discourses or the L-schema.

There are associated fields of study that are so closely connected to Lacan that there are "scholarly" alternatives to the more clinical resources cited above. Center among these is the Slovenian group based around the University of Ljubljana, where Slavoj Žižek did his dissertation. The writings of Mladen Dolar and Alenka Zupančič take Lacan on adventure trips. I follow the advice of the Brazilian psychoanalyst/writer, Gabriél Tupinambá, that Lacan is not holy script but rather, the starting point for thinking that must extend his ideas, putting them to the test both theoretically and clinically. The Slovenian group has taken Lacan to the greatest and most challenging territory: Hegel, Nietzsche, opera, film, comedy. Mladen Dolar has said that all of Lacanian subjectivity can be studied through the phenomenon of anamorphosis — a challenge particularly attractive to architecture theory.

There are scholars coming from other fields who have contributed enormously. Joan Copjec (do not fail to read her incredible book, *Read my Desire*) is the most challenging yet at the same time insightful Lacanian in the U. S., in my view. Her husband, sadly struck down by the Covid-19 virus, was Michael Sorkin, educator and architecture critic for *The Village Voice*.

Architecture is one of several domains offering the most challenges, first because architecture theorists are in general ignorant of and hostile to psychoanalysis. At the same time, architecture theory, especially AP, is insular and self-referential. Phenomenology has taken a beating at the hands of principal figures, regarded as experts in the field. Primary sources (Maurice Merleau-Ponty, Edmund Husserl) are supplanted by Paul Ricœur, Martin Heidegger (who was never really a phenomenologist), and Hans-Georg Gadamer. Pseudo-phenomenologists, Juhanni Pallasmaa and Christian Norberg-Schulz are given equal weight as Dalibor Vesely and Nadir El-Bizri, whose works are always worth considering. The famously phenomenological program at McGill inexplicably promotes Pallasmaa but discounts Hegel, whose work was foundational for Lacan. Alberto Pérez-Gómez's re-fashioning Vico as a hermeneutical phenomenologist is based on significant misreadings of main texts, which commenters have failed to notice and publishers have failed to restrain. Yet, some graduates of this program, notably Indra Kagis McEwen, have produced non-psychoanalytical work that has functioned as a brilliant critical supplement.

The WAAC tradition, formed primarily by Marco Frascari and extended by present faculty, has diversified while remaining constant in its central interests in the imagination, however defined. It is one of the few programs where students are free to choose their own unique scholarly paths. Occasionally they even invite known Lacanians to lecture and teach. But, any student interested in psychoanalysis should take the practical advice, that local resources are, in

the end, more productive than imports with high tariffs. Lacan, perhaps more than any other thinker, requires one to put aside considerable time for reading and writing. There are no shortcuts, but neither is there any limit on alternative routes. The "freedom" comes at a cost of serious hard study.

I cannot go without mentioning, with the highest admiration, the work of Nadir Lahiji, formerly an architecture educator and now an independent scholar who has written on politics, critical theory (particularly French thought), Lacan, the Baroque, Benjamin, Žižek, Badiou, intellectual history of the Weimar Republic, and many other topics. Lahiji has dedicated himself to full–time study and writing. Although not associated directly with Frascari, his disciplined thinking and writing is essential for anyone in architecture interested in Lacan.

The architecture student interested in the psychoanalytical legacy of Jacques Lacan must come up with an original and challenging approach that goes past "siphoning off" ideas here and there. Any useful work must place Lacan in the center, but reach past the standard topical limits. Lacan connects to IT and technology issues as usefully as to sociology, geography, and politics. His topology interests can be extended to resuscitate architecture's missed opportunities with respect to projective geometry, where the fact that one of its founding thinkers, Gerard Desargues, was in fact an architect. As Todd McGowan and Slavoj Žižek have demonstrated, psychoanalysis is perhaps the only truly useful means of exploring film, media, and popular culture. Freud set the tone originally, showing how the inner workings of the psyche are often best understood in the humblest situations, such as the joke, the dream, and forgetfulness. In this, psychoanalysis comes to the conclusion that Vico made a century and half before Freud: that the highest truths are to be found in the lowest, even stupidest, details. Do not connect the high and the low with an elaborate system of categories, as did C. S. Peirce. Make the leap by assuming that one extreme has been inside the other all along. This is "interpretation by the cut."

Is there a methodology for doing this? I would look to Lacan's theory of metaphor and its employment of the polythetic set as a system of "latent signifiers," where Vico's principle of many causes for any one effect gives us a cultural palindrome that, in a nutshell, uses Lacan's theory of subjectivity at its full range. Here's a test. If you don't get the joke you probably wouldn't benefit from studying Lacan. This is a joke Žižek liked to tell: A little girl (in the UK) says, "My mother was from Leeds, my father from Manchester, and I was born in London. When you think about it, it's amazing how we all got together." Many people who hear the joke don't understand it or think it funny. Those who do understand it have less trouble getting into Lacan or, I would speculate, Vico.²⁸

§9 / Lacan — Why Not: Parting Advice

²⁸ On the importance of "getting it" in education, see Dan Collins, "Psychoanalysis and Education," *Lacunæ* 17 (December 2018): 84–94.

I am not optimistic about Lacanian psychoanalysis or even Lacan's idea of the subject (vs. the "human being" of humanism) ever establishing itself or even being recognized in architecture theory, at least not in the U. S. and Canada. The short sad story of theory has been that large architectural firms, in need of trained interns with high skills-levels willing to accept law wages, have passed on much of the training obligations they used to accept as a part of the deal to the schools, which are now burdened with training graduates to be proficient in digital representation and project management. Less expense for industry, more benefit in the form of a technologically proficient, low-wage workforce. What the profession has one, the schools have lost, in the form of humanities courses, theory and history, and emphasis on the architect as an artist-designerthinker. This situation shows no signs of changing, and everywhere new faculty have enthusiastically pushed out theory courses and emphasized functionalism, fabrication expertise, and industrial/material research. What theory course are taught stick to a party line and are more "history of theory" than about theorizing. In this context, the question of how to situate the psychoanalytical *subject* within architectural concerns is out of the question. Not only will any student be faced with an enormous amount of reading that will have to be done in isolation (what architecture faculty have managed to gain expertise in this area, on top of their other assignments?), but there will be no one to talk to, and colleagues going the "industry" route will be winning out. And, after graduation, options are reduced to teaching or independent research. I can see no reason to take up theory, let alone theory aligned with psychoanalysis, to survive in the architectural program of today.

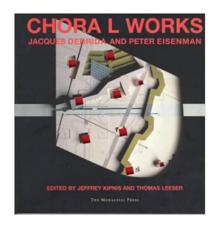


Figure 12. For reading that does not venture beyond polemic and propaganda, this book is essential reading. Architecture theory seems unable to decide whether it is philosophy–friendly or antiphilosophy. In their early alignment with semiology, Eisenman & Co. could not see the signifier in any metaphoric function; only metonymically.

To make things worse, Peter Eisenman and Jeff Kipness began, in the 1970s, an ambitious project to conform *all* architecture theorizing around their brand of "deconstructivism," which they tried, unsuccessfully, to tie to Derrida's theorizing. Derrida refused, in a famous rebuke. Nonetheless, through publications such as *Oppositions*, this enterprise continued for over two decades. Douglas Spencer has documented this amazing takeover in his *The Architecture of Neo-Liberalism* (2020). My advice to all would-be architecture theorists is: "Do nothing until you have read Spencer's book.

Why would anyone in architecture undertake the challenges of extensive reading and innate difficulties of Lacanian psychoanalysis? This would have to be a personal choice, strategically considered. On the side of support from the side of psychoanalysis, there are many resources. Groups such as LACK, the APPI in Ireland, Toronto-Lacan, the APW, the APCS, Lacan Salon, and others (sorry for not writing out the full names) welcome architecture outsiders and are interested in what they have to say, at whatever stage of their development. In these

groups, the "practitioners" are clinicians who test theories on a daily basis but keep notes and can often offer the best advice. They do not separate, as architecture education does, theory and practice. They "practice their theory."

But, even in such visits to alien planets, there are so few architecture educators interested in Lacan that it is difficult to build confidence in connecting the two fields. Publishing in architecture means overcoming reviewers with little or no expertise in psychoanalysis and, more often, active prejudice. Pretending (typically) to "know" about the mirror stage, journal reviewers will give bogus reasons for rejecting your work. But, psychoanalysis is not about opinion or interpretation, it is about the creative extension of an original complex legacy into new situations, development of hypotheses and experiments to test them, and the acceptance of negative as well as positive results. I have contrived a methodology specific to these extensions, borrowed from mathematics, called "ersatz conjecture." In short, it is the creation of hypotheses that seem at first unlikely or even impossible; the application of the hypotheses to a variety of situations; and a harvest of (mostly) failed results. Within the negative data is, almost always, a new idea about the shape of the problem, key to the formation of a second round of hypotheses. By "trying to fail," the ersatz conjecture employs science's most rigorous standard: the negative hypothesis, with Popper's falsifiability rule, the *modus tolens*. If something can't be disproved, it can't be science. Lacan felt that the modus tolens could not be met, on the grounds that it was a false standard; but he held that psychoanalysis was a science, just not a human science. Rather, it was a science of the human as subject, and subjectivity as a whole. The heart of this definition is the idea of the radical distinction of the subject, what puts the / across the S to make \$. Then \$ is put into relation to fantasy, $\$\lozenge a$, where a is the object–cause of desire: an *object* that always keeps itself just out of reach, perpetuating desire for its own sake. Without the idea of this inner distinction (i. e. with a Jungian model of overcoming binaries such as man/woman, worker/boss, self/other), there can be no subject or study of the subject. It is the basis of the idea of the hypokeimenon, the material grounding and *sub-stance* of subjectivity, the idea that something is *beneath*, as an origin, and also after, as something to which subjectivity is obliged to return, "to answer to." Fortunately, this obligation is carried over into art as one of its founding principles, the récit fort — the requirement that the "end" of art respond to its "beginning," the construct of the round or circuit. This is not a theory of the whole, because this return/response preserves the paradox that the beginning cannot be known until the end has been reached, but the end is not a "secret meaning" but a construction of a circuit that completes itself retroactively, preserving the idea of a gap or twist.

Why Lacan? I advise, "not" over "why not." Don't study Lacan. *Not worth the trouble* — for most people anyway. But (my conscience is starting to make noises), why study human beings and the objects they create if your model of subjectivity is flawed or missing entirely? What can you possibly discover of value? What point is there in seeing architecture, trying to make it, or live in it, without knowing *for whom* this architecture is architecture? In my view, subjectivity is essential to any kind of understanding of, or dealings with, the human world. And, this

subjectivity is simply — I cannot water this down in any way to make it sound any better — a psychoanalytical subjectivity that, thanks to Freud and Lacan's rehabilitation of Freud, the *only* path. So, why *not* Lacan? Be your own judge. For the most part, I don't advise it, but if you prefer the truth over convenient work–arounds, you have no choice. Or, if you like to think for the sheer pleasure of the experience, you won't be disappointed.

Don Kunze Boalsburg, Pennsylvania January 10, 2021