Psychoanalysis, the Uncanny, and Projective Geometry

Don Kunze



Figure 1. Reading left to right, David Levine caricatures of Jacques Lacan, Carl Jung, and Sigmund Freud. Freud was an MD intent on proving psychoanalysis's status as a science, connected to neurobiology as well as to cultural behavior. He hoped that Jung would bring in evidence of history and cultural practices that would show how humans responded to psychic laws culturally. Instead, Jung regarded all evidence in relation to metaphors of reunion and harmony, while Freud, and later Lacan, would emphasize the central role of division, negation, and disharmony. Jung's cultural examples morphed into personal, utopian desires for wholeness, while Freud saw culture as one of many sources of delusional thinking and mis-recognition.

When psychoanalysis was being developed by Sigmund Freud in the late 19c. and early 20c., the idea was to include the young Swiss analyst, Carl Jung, in the team because of his keen interest in historical, ethnological (folk), and religious materials. In effect, Jung would provide a cultural history for the effects that Freud had isolated in subjects who could be found at any and all periods of history, any and all cultures and types of society. Jung would fill out the picture, would make the biological and psychological subject into a dynamic being found at all stages of human development. This idea didn't work out. Jung, it turned out, had little interest in staying on the same page with Freud and his colleagues. And, it turned out that he himself was a psychotic, something not fully appreciated until this decade. Freud's hope to have two parallel tracks, an "insider/clinical track" for professional colleagues and a more digestible public track with

anecdotes drawn from other cultures and periods of history, did not happen.

When the French psychoanalyst Jacques Lacan began his intensive theoretical career with his famous idea of the mirror stage — that we are not on the path to being subjects until after we recognize our images in the mirror, he simultaneously realized the need to address his discipline's drift away from Freud's actual ideas. He reformulated such concepts as the drive, compulsion, sexuation, and retroaction (*Nachträglichkeit, aprés coup*), as well as ideas with more obvious cultural implications and relations to everyday life: the pleasure principle, the role of religion, dreams. To pull things together, Lacan devised many truly original ideas. He added two drives to Freud's standard list (oral, anal, phallic, *gaze* and *voice*) and re-centered them around the death drive. (This misleading title actually designates the sum total of efforts subjects make to avoid the inevitability of death.)

But, Lacan's truly original idea had to do with the way the space of subjectivity turned itself inside out. With this new notion, named "externity" (*extimité*) to indicate an intimate externality, the French psychoanalyst gave those interested in culture something to work with. Thanks to extimity, Lacan's entire theory can be seen in terms of topology (geometry without any scale measures of distances and angles):

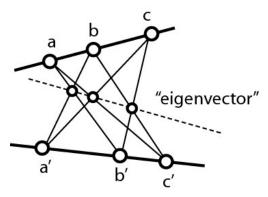


Figure 2. Pappus's Theorem, showing that six intersecting "zig-zag" lines connecting sets of points on two lines will produce co-linear points. The result is a third line that mysteriously emerges as a "ruling line" that belongs (hence, "eigen" or "own — a term I provide) as a vector to the other two. Determinacy arises from contingency. The third line doesn't depend on the placement or order of the points on the first two lines. It is indifferent to distance measures or angles. It is a "pure projective line" in an original sense of this expression.

not just the kind of stretchy "rubber–sheet" mathematics but a specific brand of topology known as projective geometry. This is a geometry that is logically prior to Euclid, although the first to develop it (Pappus of Alexandria) appeared only in the fourth century CE, and the next mathematicians to take up the cause (Girard Desargues and Blaise Pascal) worked in the mid–17th century (but were misunderstood and quickly forgotten). The renaissance for projective geometry was the 19c., when to be a geometer actually meant, specifically, to be interested in projective geometry.

While you can derive Euclid from projective geometry, making projective geometry logically prior, you can't find specific *mathematical* examples of it before Euclid. But — and this is the main thesis of this three–part lesson — does projective geometry exist in some other form? Specifically, doesn't something happen when the spaces and times human beings perceive as "natural" come with the same

kind of twists and turns Lacan described in his idea of extimity? This includes experiences of $d\acute{e}j\grave{a}$ vu, weird coincidences, sudden triggered memories of long–forgotten events in the past. Artists and poets, of course, mine the effects of projective geometry for their own special effects and some types of art are completely characterized by them: cubism, dada-ism, vorticism, surrealism Painting, literature, and cinema in particular harvested the surplus wealth left over from the 19c.'s wild romance with projective geometry, but by this time it had come to be known under the name of one of its sub-categories, "non-Euclidean" geometry. The two are not the same. The term "non-Euclidean" gives the impression that Euclid came first and projective geometry was derived from it, as a kind of exception to the basic intuitive rules of Euclid. The point of this lesson is that what is logically prior *should have* some kind of historical priority as well, even though that priority may have come in forms that were not realized as such and forgotten as soon as the new way of thinking was established.

When we, with our modern mentalities, look at the output of early cultures — myths, folk-tales, ritual practices, and so on — we notice an obvious common feature. They all have elements of what we would call "the uncanny." These "magical" components justify us dismissing them as superstition. We say that the human mind is just trying to "fill in the picture," because it needs to explain how things work when scientific knowledge is yet unavailable. This presumes that the pre-modern mentality puts the same emphasis on explanation and understanding that we do. We prefer what philosophers call "truths of correspondence" — a full account of the linkages, chains of cause—and—effect, correlations, and correspondences. We want to know how things are connected in order to work functionally, and how we can control those linkages to make them work better and more efficiently. Pre-modern thinking, from what we know of it (because it is antithetical to our thinking), seemed to tune into *coherences* rather than correspondences. It respected the idea of things being in tune, but not necessarily in a static harmony. The ex-

pression "what goes around comes around," summarizes much of the ancient desire to connect the largest and most important things to the smallest and most insignificant details. The trivial was thought to be essential, and in early cultures laws were originally derived from randomization procedures built into the rituals of divination. If the world was really a world, these early humans thought, then everything at any given moment would be synchronized, and to test the truth of things, the best answers could be found through chance (aleatory) methodologies of augury.

What seems most alien to the modern mind is the uncanny's deployment of negation. While logically we see that opposites negate each other because they have broken all relations, so to speak, the myth–oriented mind saw that opposites, such as (or especially) life and death, interpenetrated each other. Though obviously polar, each term conditioned the other by its very exclusion. Freud had noted that, in dreams (and, hence, very probably for the unconscious as a whole), negation didn't seem to work very well. Acquaintances who were died nonetheless appeared, looking whole and happy. Logical distinctions were blurred. Bad things appeared as good, and good things were bad. This is not exactly a matter of unplugging a negation machine and letting things mix together. It was an even more exacting procedure of defining things as duals or dyads.

Light and dark, wrote the philosopher Ernst Cassirer, conditioned each other. Day "waited for night" and night did the same for day. Night creatures feared the dawn, like vampires, and day creatures (humans included) saw night as a time for evil and disruption. But, the sunlight creates shadows, and in shadows the night appears in daytime, in miniature. Shadows, for the mythic mind, had a far more durable existence than their literal form. They could be drawn away from their objects, cursed, or seduced. What happened to your shadow would eventually happen to you, and probably at night. In sum, night and day retained their opposite natures but their interactions were much more complex for the mythic mind than for the modern. A kind of "cross-inscription" logic planted a miniature version of each in the other. It was able to survive thanks to a series of negational forms: disguise, secrecy, masquerade, imposture, lying, codes and ciphers, losses, and denials. The way to have something, in this logic, is to lose it. One does not even have to have had something originally to imagine that has been lost — a family's wealth or power, a past romance, a favorite toy. Desire sustains itself by means of this "presence of absence," for as soon as we get what we want, we are stopped from desiring it, but secretly it was the desire we wanted, and not the object that kept desire ever on the move. Possessing and losing were, in this way, defined by a circle. You lose something, you desire to possess it; but if you find it, you lose your desire, which was what made possessing such a satisfying idea in the first place. This could be put enigmatically as "desire desires desire," but another way of writing this would be P_L/L_P — "Possession can't exist without the possibility of Loss (which negates possession), in the same way that Loss can't exist without the desire to (re-)Possess.

Each side of the expression requires a subjunctive tense, a "what if." A commonplace use of this logic has survived into modernity: the feeling that no matter how far away from home we are, we have a minimal sense of being at home, and no matter how secure we feel at home, there is a small element of being

¹ Ernst Cassirer, *Philosophie der symbolischen Formen. Zweiter Teil: Das mythische Denken* (Berlin: Bruno Cassirer. Translated as The Philosophy of Symbolic Forms. Volume Two: Mythical Thought. New Haven: Yale University Press, 1955.

unsettled, not at home. Freud found this to be the central telling aspect of the phenomenon of the uncanny, which in German directly involves ideas of the home, Heim (die Unheimlich, the "un-homey"). His research on the etymology of *Unheimlich* uncovered something that was, itself, uncanny — "homey" has in its etymology its very opposite, the possibility that something that should have been concealed has gotten loose. When etymology of a term already involves the idea that the term describes, we say that it is "doubly inflected." It is "turned in on itself" so that its interior becomes an exterior and vice versa. This is the essence of Lacan's idea of extimity. Already we are close to crossing the bridge that leads to projective geometry, where inside and outside cannot be fully separated (= "non-orientable" surfaces, or "manifolds"). But, it is too soon. Understanding projective geometry from a mathematical point of view is beyond the scope of this lesson. We will borrow only a few essentials, such as a convention for representing "local conditions" that describe how one constructs a projective surface topologically, as a medium of movement. An example would be to say that a sphere is a two-dimensional surface (i. e. not a solid globe) where we may travel in any direction for as far as we want without encountering an edge, and that when we circle back to our starting-point, our left-right status has not changed — which means that the sphere is orientable. A Möbius band is, in contrast, not orientable. When we travel along its surface, the twist will take us back to our starting point with left and right intact, but on the other side of the strip the situation is opposite. At any one point, recto and verso tell a different story.

The story of projective geometry as such begins officially with Pappus of Alexandria, whose famous theorem showed that two lines on a plane, set at any angle, could be fit with pairs of points that, when connected, would determine a third line, no matter where the points were placed. The method of coupling the points involved a *twist* (for example, connecting AB and ab as Ab/Ba), suggesting that there was a space within (or without) a space present "inside" (or outside) the plane hosting the two lines.

When Girard Desargues and Blaise Pascal revived Pappus's work in the 17c., they discovered a full range of new phenomena that were not intuitive for the Euclidean imagination. "Projectivity" came to stand for a domain where laws emerged that regulated ordinary appearances, where the vanishing point where parallel lines seemed to meet on the infinitely distant horizon could be materialized and mathematically manipulated. Their work bridged the gap between the world as we see it, a perspective picture where depth and apparent size of objects are encircled by a horizon between the visible and whatever might be beyond, and a "truth of those pictorial truths," where parallel lines actually do meet, and where fronts and backs, lefts and rights, ups and downs lose their conventional meanings but gain back an expanded and eternal significance.

We cannot review their work here. It is rich and complex, misunderstood in its own day but perhaps misunderstood even more in the 20th and 21st centuries. Instead, we will treat the issue of how projective geometry's logical priority might be found in a historical priority: the uncanny. The twist of Possession and Loss as a way of understanding the psychoanalytic function of desire and other twist examples will take us on a parallel path. Of course, in projective geometry, all parallel lines actually *do* meet, just as Pappus's any–two–lines have a third common regulated/regulating line.

The Uncanny's Four "Literary" Forms

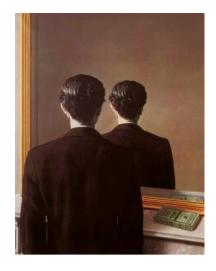


Figure 3. René Magritte, "Not to Be Reproduced" (1937), Boijmans Van Beuningen Museum, Rotterdam. The painting, commissioned by the poet Edward James is considered a portrait of James although James's face is not depicted (Wikipedia). The book lying on the mirror's shelf is Edgar Allan Poe's only novel, The Narrative of Arthur Gordon Pym, of Nantucket (1838). The novel is a "chiasmus," divided into two parts centered around a ship caught in a maelstrom.

The most important deployment of this crisscross "negation dynamic" is not surprising: life and death. Freud found that an earlier scholar, Ernst Jentsch, had already put the matter succinctly.2 Despite its wealth of varied examples, the uncanny boiled down to two primary conditions, two "atoms" that summed things up, or more accurately an atom with two nuclei, around which electrons spun in a kind of figure 8. Each atom made sense in that it summed up a large collection of motifs and specific cases. But, clearly, the two together had more than a mirror relationship. They were more like a sphere where, when one arrived back at the starting point, one faced not just a reflection, but a reflection with its back turned. This is the situation shown accurately by the Belgian painter, René Magritte (Fig. 3). Here, non-orientability is, quite clearly, involved in the uncanny. There is a double inflection: not just the usual left-right reversal one sees in one's own reflection, but the image itself, like a shadow with a mind of its own, has reversed. The man in the painting is doubly dispossessed. He cannot even have his own reflection, although he could say that the reflection has at least shown up to work, even though it refuses to do its job.

The uncanny's dynamic separating and at the same time linking life and death follows Pappus's protocol of Ab/Ba. It also metaphorically follows Pappus with the idea that death and life might be "forms of each other," but only in a way that requires time and space to zig-zag or twist. This is not a twist of the element but of the medium itself. Whatever happens in

the "projectivity" of life/death is "twisted in advance." As soon as it emerges, it take on an uncanny form.

For Jentsch, the first of the two "atoms" was a common motif found in the literatures of every language: the theme of the person who has died but, somehow, continues to live, forgetting or ignoring the fact that he/she is actually dead. The ancient form of this would be the basis for the idea of the eternal soul, surviving literal death. At first, the soul is cast into a limbo, where it must wander. In most cases, it endures trials, is assigned quests, or suffers humiliating abuse. It does not notice that in fact it is dead; it still has work to do. The context for this period is a labyrinth where the sense direction is maddeningly confusing even though there seem to be sufficient signs and structures. Lacan called this the "interval between the two deaths," the first literal death and a second symbolic death. In fact, all cultures have some version of this idea and use the interval to define the period of mourning. Originally, it was correlated to the time it took for a body placed in a sarcophagus ("eater of flesh") to desiccate fully. But, other cultures employ different methodologies of desiccation.

The second atom of Jentsch's uncanny was the theme of the modern re-telling of "The Appointment in Samara," where a servant encounters Death walking in the market place and quickly flees, stopping by

² Ernst Jentsch, "Zur Psychologie des Unheimlichen." *Psychiatrisch-Neurologische Wochenschrift* 8, 22 (August 26, 1906): 195–98; and 8, 23 (September 1, 1906): 203–05. Cited in Sigmund Freud, Hugh Haughton, and David McLintock, *The Uncanny* (Brantford, ON: W. Ross MacDonald School Resource Services Library, 2013).

to tell his master that he must run away to Samara, because Death is seeking him. When he arrives at his destination, it is Death however who answers the knock to the door, saying that the servant has been very punctual, and has honored their agreement to meet in Samara. Other versions of this theme are not as succinct. In Jorge Luis Borges' short story, "The Garden of the Forking Paths," where a victim and his assassin have a conversation about fate just before the final moment: "

The Garden of Forking Paths is an enormous guessing game, or parable, in which the subject is time. The rules of the game forbid the use of the word itself. To eliminate a word completely, to refer to it by means of inept phrases and obvious paraphrases, is perhaps the best way of drawing attention to it. This, then, is the tortuous method of approach preferred by the oblique Ts'ui Pen in every meandering of his interminable novel. I have gone over hundreds of manuscripts, I have corrected errors introduced by careless copyists, I have worked out the plan from this chaos, I have restored, or believe I have restored, the original. I have translated the whole work. I can state categorically that not once has the word time been used in the whole book.

The explanation is obvious. The Garden of Forking Paths is a picture, incomplete yet not false, of the universe such as Ts'ui Pen conceived it to be. Differing from Newton and Schopenhauer, your ancestor did not think of time as absolute and uniform. He believed in an infinite series of times, in a dizzily growing, ever spreading network of diverging, converging and parallel times. This web of time — the strands of which approach one another, bifurcate, intersect or ignore each other through the centuries — embraces every possibility. We do not exist in most of them. In some you exist and not I, while in others I do, and you do not, and in yet others both of us exist. In this one, in which chance has favored me, you have come to my gate. In another, you, crossing the garden, have found me dead. In yet another, I say these very same words, but am an error, a phantom.³

If we were to draw this story (and it is possible), we would superimpose two trees, reversed and superimposed. The leaves of one tree would be "truth," the other would be "the truth of truth." In other words, what we think is branching outwards, offering us choices that we must make, each affected by promising or unpromising circumstances (contingencies), have a shadow structure that uses contingencies as the fuel for a powerful magnetic force field of the other tree, which draws all chance into a single, unavoidable terminus. This is the lesson of Jentsch's second "atom" (or rather the half–nucleus of his single atom with electrons spinning in a figure 8): that running away is simultaneously running *toward*, that what we want most is what we fear most. The branches of the tree create a *moiré* effect: patterns that, like the colors of the rainbow, both exist and don't exist. Or, using a more sophisticated term, we could say that the truth of truth is inscribed as an "anamorph," a blur, or defect, within the appearances we take to be reality.

Taking the dual–nucleus atom of Jentsch as a model, we have conclusive evidence that projective geometry, which appears to be contradictory when its surfaces are pulled into the 3-space of Euclidian appearances, has its primary analog in the phenomena of the uncanny. The crisscross Pappus used to ex-

³ Jorge Luis Borges, "El jardín de senderos que se bifurcan" (1941), republished in the collection *Ficciones* (Buenos Aires: Editorial Sur, 1944). This translation by Anthony Kerrigan, published by Grove Press in 1962.

pose a second space lying both inside and outside the plane of any two accidentally placed lines, related by points also accidentally placed, once we discover the formula of the crisscross, Ab/Ba. The uncanny also, according to Jentsch, shows its logic through a crisscross, whether as desire's Possession and Loss or the more fundamental A_D/D_A of the alive person fleeing death or the dead person who has forgotten to die. But, having the atom in our hands is just the first step. We need to use this "ethnological projectivity" to construct molecules whose short or sometimes long chains allow any culture, at any stage of development, to carry forward its earliest constructs of mythic thinking into the logic–guarded precincts of modern rationalism. The uncanny is human thought's *clavis universalis*, able to open the doors of enigma into projective spaces where we find the truth of truth. So, what are some of these molecules?

The Four Fantastics

The lesson's "three parts" are not parts in the usual sense. They do not mark the first, middle, and final sections of writing. The are sliding layers that continue through the whole lesson, a second slipping across the first as the lesson moves on, then a third over the first two, but the count of one, two, and three is also the deepening of the lesson, as 1, 12, 123 or, more accurately, 1, 21, 321, where each new number is contextualized by its predecessors, revealing both a forward and reverse order. Why did psychoanalysis develop a connection with projective geometry? The answer keeps changing when we add other questions. Standing by itself, the answer might have to do with the psyche itself, its natural uncanniness that provoked Freud in the construction of all of his working models — the three–part Ego ("I"), Id ("it"), and Superego ("other"); the back–flip model of retroactive and compulsive return to a traumatic incident in early life; the "neurone" Freud hoped would show how the brain was structured like the mind. The psyche always eludes being pressed flat into a diagram or map. Like Pappus's two lines, it is always concealing a third line, ever more determined because its origins are indeterminate. Like Desargues' and Pascal's theorems, it is a body whose shadow is also a twin, an ominous night inside day.

As soon as we add the second question, the first answers acquire new depth and meaning. If we say "yes" to the second question — "Did projective geometry exist in culture, but in the disguised form of 'the uncanny' (later, the genre of the fantastic in literature)?" — and, if we fill out the specifications for this genre of the fantastic, we retroactively revise our ideas of the psychoanalytical psyche. The Ego, Id, and Superego play new roles. The compulsion to return rather than flee trauma looks a lot like the servant in "The Appointment in Samara." The neurones's tree—structure looks a lot like the superimposed tree—structure in the Garden of the Forking Paths.

We are not yet to the third question, but we might see how it will be foreshadowed in the second. As we describe the molecules of Jentsch's atom–dual, with its figure–8 electrons, we will begin to need a way to more abstractly represent how viewers relate to representations through "screens" analogous to the movie screen or the proscenium arch that separates the audience from the stage in an auditorium. This abstraction will not please any mathematician. It will not expose projective geometry to the intricate precision of axioms, postulates, and proofs. We will keep it on the side of the uncanny as an expression of popular culture forms: paintings, films, stories, rituals, myths, rumors, jokes. We will keep one foot in the water of the artists and poets who, using projective geometry without knowing it, or knowing anything about it, embed uncanny effects within selected centers of everyday experience. The abstract account of

what happens at the surface where subjects looking at representations experience the representations returning their look will be useful in explaining everyday experience, but they will not surprise geometers. Their surprises and uncanny epiphanies happen when theory structures encounters of "the extremely improbable" with "the absolutely necessary." This is the *jouisssance* (the Lacanian term for a mixture of pain and pleasure, like that experienced during sex) of mathematics. The *copula* of the theorem is not a perfect union, but the continual reforming of a discontinuity, folded in on itself, to the point where, from the truths of disunion, a truth of the truth emerges — a truth that is about the process of emergence itself.

So, the final and most abstract part of the lesson will also be the most uncanny, the most primitive, the most mythological. It will also, from two sides, explain *how* projective geometry appeared with the first truly human, mythic formation, and how even with the first thought, the last and most abstract concepts were already present.



Figure 4. Michael Redgrave plays Maxwell Frere, a ventriloquist whose dummy begins to assert an independent identity. The performance pair constitutes a zero–sum (and therefore libidinal) economy, where what one partner gains, the other must lose. This is the essence of the double's rivalry function. "This town is not big enough for the both of us," is the theme of many Western films, where the arrival of a stranger leads to a directed challenge to the one who is most similar or different. Frere's dummy fantasizes a life without his current boring master and dreams of the day when he can pick his own partner.

The Double

There are "four fantastics," according to Borges' commentators, who note that the Argentine master of the short story employed this economic bag of tricks to create has vast repertoire of uncanny stories. Far from being fantastic in any magical or supernatural sense, Borges' characters were fully modern, fully rational in our own contemporary expectations that pigs do not fly and there are no genies in bottles. Borges' fantastic did not even operate with the standard mechanism of the genre, which has something appear to be fantastic only because we lack the logical explanation, which is supplied at the end of the story. Borges' four fantastics are durably fantastic in the sense that the uncanny is unavoidable; it's a consequence of, and not an exception to, our rational natures. As logical as we would want to be, we not only fail to avoid the uncanny in these four forms, it is as if

the more logical we try to be, the more inevitably we construct their precise anti–logic. This seems to suggest that the uncanny's logic is a kind of "super–logic," something that lies inside logic itself.

This idea has already occurred to a number of thinkers. Giambattista Vico was undoubtedly the first to develop it fully, in his 1744 edition of *The New Science*, an account of thought's three stages (plus a return stage, a *ricorso*) as played out in cultures everywhere and every period, and evidenced even in the micro–histories of individuals and possibly particular experiences and moments.⁴ This "ideal eternal history" layered the distinctive logics of myths, heroes, and ordinary rational (non-superstitious) humans. Each succeeding stage did not fully erase its predecessor; rather, it suppressed and preserved it. Myth

⁴ Giambattista Vico, *The New Science of Giambattista Vico*, trans. Thomas Goddard Bergin and Max Harold Fisch (Ithaca, NY: Cornell University, 1968).

was present as a particular kind of absence in heroic (representational) thinking, and both myth and the heroic were present—thanks—to—negation in modern thought. The difficulty of this idea is in how to understand the machinery of negation. The four forms of the fantastic (the molecules of the uncanny) are one way of mapping this machinery.

The double could be the best candidate for the number one position in this list. It actually names the structure of the uncanny's atom, a double with crisscross ties, the P_L/L_P of desire and the A_D/D_A of life and death. The Greek myth of Castor and Pollux (the "Dioscuri") is instructive. Castor's father was mortal, so he was, too. Pollux's divine father Zeus immunized him from death. When Castor died, the griefstricken Pollux struck a deal with Hades, so that the brothers could take turns in the underworld. Remember that ancient cultures were sensitive to the "crises" of identity, substitution and rivalry that twins represented, as any fan of René Girard will know.⁵ Twins condense the logic of desire. Each wants (to be) the other but each is in a sense already the other. Desire lacks the difference it needs, so each is in effect orphaned by wanting what it already has through semblance but lacks through difference and, as exemplified by Castor and Pollux's fate, distance. In terms of the binary atom of the uncanny, negation comes with the idea that a unity (twinship) involves separation, a two rather than one. When Castor was killed, he was doubly "inflected." His orphan status as a twin was compounded by the status of death. In the original Greek, the word "hero" meant, simply, a dead man. As it came to be applied to "someone who has forgotten he is dead," the hero became an intermediary, able to travel between the realm of the gods and the human realm. He could visit Hades ("the invisible") and return. Being a hero was like having a passport to travel between life and death — the principle represented by the figure–8 in the uncanny's formula atom.

When Pollux complained to the gods about losing Castor, they granted him a partial solution. The twins could never again be together, but Pollux could take Castor's place in Hades, allowing Castor an equal time "above" in the domain of the living. The twins were like antipodes on a circle. Set 180° opposite each other, they rotated seasonally. As Castor was resurrected, it was thanks to Pollux's temporary death. Then, Pollux was brought back to life and Castor was again required to die. Their twinship, and their orphan status, was materialized in this geometric relationship.

Doubles could be said to be versions of the Castor–Pollux myth. Each instance may have some traits of the original model, dropping out others. If we stacked up all the cases of doubles in literature and art, we would have what is called a "polythetic set." No one example has a full set of traits, but collectively the cases show a consistent pattern. Doubles can be twins, but they can also be rivals. Any time someone is threatened by someone who "wants to take their place," the rule of Castor and Pollux is brought to bear: only one can occupy a given place at a given time. The rival forces a move; a "fight to the death."

Lacan realized this feature in his construction of the "discourse of the Master," drawn from Hegel's parable of the Master and Servant. The master desires recognition, but the only kind of recognition worth its name is that coming from another master — i. e. a rival. By definition there cannot be two master, so they must fight to the death to determine who dominates. The servant opts out of this win–or–lose logic. Because the twinship/rivalry is inherently destructive, the servant's position as a parasite (literally, a "ly-

⁵ See, for example, René Girard's classic work on semblance and rivalry, La Violence et le Sacré (Paris: Grasset, 1972).

ing beside"), allows the servant to outlive the master. The master is replaceable, as evident in the expression used at the death of a king: "The King is dead, long live the King." Of course, this means long live the *new* king, the rival. The servants/subjects don't have to go through this catastrophic replacement process; they serve one master, then the next.

Hegel's parable became a central feature of Marx's definition of class struggle. Servants become the stewards of knowledge because masters, being masters, "care not to know" of how things are made and delivered to satisfy their appetites. Masters, being stupid by definition, rely on honor as the basis of their claims of dominance. Masters, in *suppressing* servants, politically and by denying their access to "honorable" (noble) identity, actually *preserve them*, and at the same time the knowledge and skills that servants uniquely possess. The self–sacrifice of the Masters is of course selfish in the sense that they wish to preserve a sense of self that is entirely symbolic. They are, as Lacan would put it, interpolated by the "name of the father," whose regalia has more reality than those who display it. A king without a crown is not a king; whoever has the crown deposes his rival. More generally speaking, this is the way that the "regalia" of the speaking human subject — language and other systems of symbolic relations — are not tools of subjects but rather the subjects are tools for the systems, a "delivery system" for the Symbolic. We don't use the Symbolic, the Symbolic uses us!

This flip—flop of our ordinary view of things brings up an important issue. Whenever we point to something, we simultaneously *characterize* it and *distinguish* it. It is separated from us, put at a distance, just far enough that the spatial distinction can be used as a frame, and the frame is always a frame *of* something ... some quality or character of what is being framed. But, how do we know *what* quality or character. "Just look at that!" doesn't mean anything if you don't already know what is intended. This knowledge is grounded in convention. As Lacan put it, language usage requires speakers to "belong to the same church," i. e. to share some base—line convictions about how things are structured and what they mean. The indicative gesture that points out something has to have its target set up in advance. An act in the present moment refers to something already in place, *waiting* to be pointed out. There seems to be a collusion between the present act of indication and a prior structure of meaning, at least for those who belong to the same church.

When a space is divided, the logic is like that of an off/on switch. You leave one space to go into another. Castor lives for a half–season, then he dies; his brother does the same, but on an opposite schedule. The fact that they are not allowed ever to meet is also the principle of the binary switch. You don't have an off–on state. But, because the state of off is what it is because on is what it is, we could re-write the binary switch as C_D/D_C , using "charge" and "discharge" instead of "off" and "on" because both of the latter pair start with the same letter. By the same formula, we realize that Castor and Pollux hold each other in place because of their off/on relationship, a geometry that holds them apart as 180° antipodal points on a revolving pathway: C_P/P_C . The doubles are all cases of this binary crisscross logic. Something can be off (discharges) only in relation to what it means to be on (charged), a relation of polar opposition. On/off/on/off etc. ... returns the system to its original state, whichever side is designated as original (doesn't matter). Like day and night, odds and evens, life and death, the binary wheel keeps turning thanks to the negation of its two terms.

But, what if there is another frame inside the first frame? A space is created and the gesture of indication forces us to travel in. But, this is a space inside a space. We have satisfied the binary injunction, to keep crossing a boundary/frame, but instead of returning to the exterior, the starting point, we have moved deeper. How might this happen? How might a "depth of a 'beyond'" develop out of a simple oscillation between two binary states?

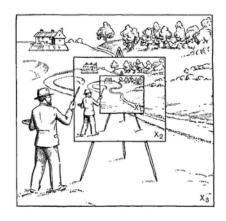


Figure 5. A painter wishing to correct the "problem" of leaving himself out of the picture he had attempted to make of "all of reality" immediately encounters the issue of the bad infinity. Source: John W. Dunne, *A Serial Universe*.

The element of cross-inscription holds the key. With every move into a space designated by a frame, an indication, there is an accompanying out of movement. Going-to and leaving-from are two sides of the same coin, a surface that has by definition only one side, suddenly develops a fictional obverse. This is most obvious in the case of the non-orientable surface, the Möbius band. In the 3space of our looking at things we can hold in our hand, the band obviously has two sides. It's only when we draw a continuous line that covers both sides as it returns to the origin point that we are forced to admit that it is a single side. In terms of projectivity, the band is a surface. In terms of the immersion of that surface into our everyday looking-space, it has two. The second can be shown to be fictional, but it opens the way for the "beyond" of the surface, it's employment as a surface like a window, through which we can see a scene beyond; or a surface like a screen or canvas, whose image allows us to imagine a space within and beyond.

As soon as this fiction is allowed, a contradiction is born. As in the case cited by John Donne in his speculative account of time, A Serial Universe (1938), a painter paints a scene that excludes 180° of his view, because the flat plane of representation has cut the 3-space of the fully dimensional world. The scene beyond this plane is brought to the surface using dabs of paint (Fig. 5). But, the artist wants more. He wants not just to represent the depth, the "beyond," accurately using perspective. He wants to show the complete story of his painting the painting, so he paints a second canvas showing him in the act of painting the original scene. But, he realizes that this, too, is not enough. He must paint a third scene showing himself painting the painting of him painting the painting. This becomes an infinite regress that cannot complete itself. The picture plane's function of division, it's 180° method of dividing the painter from the painted, has, thanks to the crisscross references inside the painting (the marks of the artist's genius or lack thereof, his ways of painting this or that kind of tree, his signature) and outside (he's dressed like an artist, carrying his easel and paintbox out into the fields) make each act of painting not as simple as splitting the world into painter and painted. A little bit of the painter is inside the painting (quite a lot, actually) and the painting is "inside the painter," not just in his appearance but in the idea that the painter "had something in mind" that made his painting differ from that of any other artist. We are justified in writing a new formula for the Artist and the Painting: A_P/P_A .

The binary 180° division has, thanks to cross–inscription, created another kind of perspective, a depth of the *relationship* of the painter to the painted that, as in the question of the Symbolic in general, opens up the unexpected question of who is painting whom. Just as language is said to speak the speaker, rather

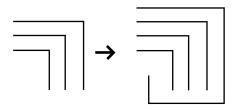


Figure 6. Binary exchange gives rise to a parallel process of creating a "depth" that pretends to move beyond the picture plane. Dividing the world into representing/represented, as the demand for the painting to have realistic, perspectival depth shows, both fictional and actual. This F_A/A_F crisscross acts as a depth function for the whole binary, meaning that the double aspect of the uncanny — as well as the double as an example of the uncanny — doubles itself, as a binary producing an interior, a surface that "magically" produces a space in which it can twist, fold, laminate, intersect, etc., in effect creating an "origami" situation.

than the other way around, the painting reverses the predication by which it is the possession, the creation, of the painter. This unstable situation adds a depth to the entire operation of the binary (Fig. 6). This goes beyond the search for a "historical primacy" to complete the claim that projective geometry is logically prior to Euclidean geometry. This suggests that projective geometry's natural state is that of "the fictional." To the rule that a surface has only one side, we must add the fiction of "another side," a thickness or depth rule that allows the surface, to fold, twist, and laminate; to intersect itself; to create conditions, such as the Möbius band's twist or the Klein bottle's self-intrusions, that contradict our Euclidean sensibilities. This is the property of nonorientation of projective shapes, but it is also the addition of the idea of origami — the inclusion of the medium with the message — that brings projective geometry fully into the ethnographic realm.

The double has not only served as an example of the uncanny, as one of the four types of the fantastic, it has shown that it is (at least one aspect of) the logic of the uncanny. In this turn—around, the motif of the double has required a geometric *fiction* — the idea that a surface can fold in a dimension denied by the 2–space logic required of all surfaces. The surface has to fold, twist, and self—intersect *somewhere*, and that somewhere is the beyond of the 2–space that, as Lacan says, is the dimension of all sensation, from the skin we use to touch, the drum of the ear, the retina of the eye, the tightness or slackness of muscles. Out of the binary, thanks to cross—inscription, we get depth. The difference of parallax vision is explained by the double of Castor and Pollux. We have come quite a way along the journey inside the problem of how Projectivity may "inform" the uncanny but how also the uncanny can inform Projectivity. The two, we might say on the basis of the cross—inscribed binary, are doubles.



Figure 7. Woody Allen's *Midnight in Paris* (2011) follows the time–travel of Gil (Owen Wilson), who is invited by a tipsy F. Scott Fitzgerald to ride in his 20s limousine to a party of the Café Society (also the name of another Woody Allen film), the group of writers, artists, performers, and film directors that made Paris the epicenter of intellectual life between the two world wars. Gil finds his artistic heroes remarkably receptive and encouraging when he asks for their advice. He's convinced that genius was simply more available in this epoch, and that if he could live in the time he, too, would be (or have been) a famous author.

Travel through Time

Modern examples of travel through time seem more adventurous, possibly because the idea that time is linear is by far more compelling today than in any previous age. The 20c. paradigm of time travel appeared just as the century was turning: H. G. Wells' The Time Machine (1895). The idea of a crazy machine purporting to transport its occupants to different time periods came at a time when loud, cantankerous contraptions were doing the same thing in the case of space travel, competing with horse power. Ridicule of the automobile seemed somehow to open the way to make a time vehicle thinkable. We are probably more familiar with the more recent examples: Arnold Swartzeneggar as The Terminator (1984), an assassin sent from a future technocracy to kill the woman whose child threatens to grow up to be an effective crusader against machines; The Adjustment Bureau (2011), about a team of black-suited angels who

manipulate the paths of lovers so that they assure critical future outcomes; and of course the better known Woody Allen film, *Midnight in Paris* (2011), where a dreamy writer visiting Paris with his fiancée is invited to join the café society of the 20s, where he meets Hemingway, Buñuel, Picasso, the Fitzgeralds, Gertrude Stein, and others.

The catchiness of time travel has made some films, such as *Groundhog Day*, a generic term for getting caught in a repetitive loop of hellishly futile actions. In fact, such loop traps are derived from images of Hades. This is evident in the Netflix series, *Russian Dolls* (2019), whose protagonist is forced to endure a succession of deaths trying to "get things right." As in the signature time–travel film, *The Terminator*, intervention into the linear order of time aims at correction. Using the model of the forward branching tree of paths to choose, the only way to change the future is to intervene in the past. In some cases (Chris Marker's famous art–house film, *La Jetée*, 1962) horrors of a future dystopia warns those living in the present to "take action now, or else!" The linear time model is required by such fantasies, and the "or else" ultimatum emphasizes the logical relationship between causality and succession.

But, this modern idea of time makes almost any small violation of linear causality into a felony offense. Such was not always the case. Time "defects" — gaps, circles, spirals, and especially concurrent timelines — are commonplace in pre-modern thought. Holidays are a traditional way of re-centering. The year, and *time itself*, is renewed and refreshed. The same songs are sung, the same rituals re-enacted. Some holidays suspend rules of behavior to indicate that time itself is suspended. The Roman holiday, Saturnalia, inverted the social order during a gap regarded as a kind of time limbo. Even simple birthday and anniversary celebrations are local ways of acknowledging the ability to return to a re-set state. A quick survey of the uses to which these exceptions to linearity were put reveals something significant. A gap or fold or twist in the time line is equivalent to the thickening of the surface of projectivity. It creates a *portal*,

a point of access into a "beyond" that is "unassigned" in the sense that all meanings are tied to linearity, and when linearity stops, so does meaning. The *mind*, to the degree that it is structured by the Symbolic, is put on hold or, more accurately, *taken to the edge*. What does this mean? Why do cultures invent ways for the timeline to fail? What is the point of taking meaning to the breaking point?

The uncanny clearly knows how to mess with linear time. Its crisscross duality and reverse predication, as in the case of the Servant who "deepens his/her relation to knowledge and materials" while the Master is stuck in the binary of winning/losing, honor/shame, life/death, knows all about inversion. In terms of the surface of topological shapes, this amounts to a thickening of what by definition is infra-thin. Or, more accurately, the surface itself becomes a portal, a place of passage, albeit a *liminal*, or conditional, passage. Customs dealing with time anomalies also involve imagined travel, visits from magical beings, or a generic connecting with an "elsewhere." From Jacob's ladder to All Souls Day to the Certain times of year offer connections between worlds, allowing the dead a chance to "forget that they are dead" and walk among the living. Liminal passage reveals that the relation to time and the uncanny is critical. Passage/connection is not automatic; ritual is required. The aim is purification. Just as the dead person must still go through trials, the path is also a filtration process. Conditions must be met, questions must be answered, passwords given.

Portals do not admit the unprepared, nor do they accept the proud. Humiliation is the rule of purification in the re-adjustment of time to synch with its "eternal" corrective mechanism. Here is the uncanny's clearest demonstration of a connection to Lacan's project of correcting misconceptions of Freud. The majority of Freudians, especially those practicing in the U. S., had adopted the model of the strong ego. The analyst would him/herself serve as an ideal, encouraging the analysand to become more confident and self–assured. Nothing could be more disastrous, Lacan warned, given that the ego, in order to gloss over the gaps and defects of the Symbolic by which it defined itself, was inherently delusional. The ego was actually the enemy of the unconscious's attempt to communicate its enigmatic treasure. In this respect, Lacanian psychoanalysis adopts a method of the uncanny, not to directly humiliate the analysand but rather to look at the analysand's most trivial speech, the "blahblahblah" whose details are the low–security prison of secret lore.

Just as the Master's discourse contrasts the binary of the Master's ego-driven demand for recognition with the Servant's deepening relationship with knowledge, psychoanalysis converts the analysand's free associations to a blahblahblah that, thanks to its triviality, is able to sink into the thickness of the unconscious. The binary returns to the same value; it circles back. The depth function goes deeper and deeper, or, in a space where inside and outside are convertible, further out into space. A circular movement combined with a depth function creates a spiral, important geometrically as a self–generating form. The something–from–nothing autopoiesis of the uncanny comes close to defining the structure–from–randomness of the unconscious, where the psyche performs its most impressive time–travel tricks, annihilating time's rigid causal line altogether. Freud had puzzled over why shell–shock victims of World War I continually sought to re-live their traumatic experiences and formed his first ideas of a "death drive" from this repetition compulsion. Lacan realized that it was repetition compulsion in general, the need to cycle back to an original position or state, that not only generated but was *generated by* a "depth function," a drive that was central to all of the drives, a "death" drive in the appropriate way that the unconscious

is, for subjectivity, a Hades in the primal sense: both *invisible* and *original*. Like Persephone, the subject must return to death, return to a position of re-starting, re-forming, re-birth. The Freudian idea of retroaction, *Nachträglichkeit*, he realized, was nothing less than an inner force within the Symbolic, manifest through its very folds, twists, rips, and tears — forms of negation peculiar especially to fabrics, whose function in human culture was akin to the function of the surface in topology, an exterior whose interior must be fictionalized as something else than just the inside seams of a garment.

Lacan speculated that this retroaction was built into language's temporality. His radical insight was that every sentence is a form of time travel. The first words in the grammatical sequence are not knowable until the end is reached. At that point, the "unit" of the sentence is realized as such, but the unit does not exist in space. It exists in the fold of retroaction over the forward push of intention. The fold sometimes exceeds or revises, as in the case of the rhetorical figure of anacoluthon, the sentence's "surprise ending." Sometimes it betrays the imposture of the speaker, as when it forecloses meanings it had proposed just words before. Whatever the conclusion of each sentence's mystery–in–miniature, the structure of uncanny travel through time is present as another atomic dual of first and last, F_L/L_F . And, within the partnering of the binary with depth, the spiral becomes the emblem of death, and the drive to find, like the hero's quest, the center between two cones.



Figure 8. Antonio Manetti ,*Dialogo di Antonio Manetti cittadino fiorentino circa al sito, forma, et misure dello inferno di Dante Alighieri poeta excellentissimo* [Florence: F. Giunta, 1510?]. Source: *Wikipedia*, https://en.wikipedia.org/wiki/Inferno_(Dante). "Return+depth = spiral" was the geometric paradigm for Dante's descent into Hades, a Freudian death drive in the correct sense of rebirth. Dante's verse form, the *terza rima*, a-b-a, b-c-b, alternates between a "contained" position followed by a doubling to make a "container," a kind of closed/open alternation. At the same time, the verse's meaning advances and deepens.

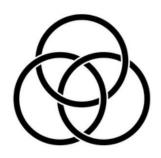


Figure 9. The Borromeo knot, essentially rings stacked on top of each other, hold together thanks not to any rings' link but to the circularity of the stack by which any ring, which can be considered "on the top" appears to tuck under the next ring in the counterclockwise sequence.

The Story in the Story

We have seen how the second theme of the fantastic, "travel through time," includes and in some sense surpasses the theme of the double. Retroaction, the key psychoanalytical idea of *Nachträglichkeit*, shows how the death drive is temporalized and how time travel is also a fold of the causal chain. This elevates the passive effect into a kind of secondary cause. It can stand alone, a cause—in—effect, what Lacan might have called a "part—object." The Aristotelian idea of Efficient Cause does not cover this elevation. But, if we can see "effect" as "effect-*ive*," then we can re-tool the passive idea of efficiency into an active force: "whatever makes things work," an effect with a mind of its own. This was behind Slavoj Žižek's inversion of the boring notion of virtual reality into the idea that there is a "reality of the virtual." The Slovenian philosopher—psychoanalyst applied his thesis to the Borromean knot of Lacanian domains: the Imaginary, Symbolic, and Real. The knot structure is significant here, because it explains how binaries (front/back, over/under, near/far), constructed in the "pictorial field" of our subjective

Euclidean locality, are held together by something that is not present in that locality — the infinities of projective geometry. Just as any two rings of the Borromeo knot hold together because there is a third that counts as both the bottom and top of the stack, Euclid's two dimensions, its screens of representation and retinas and skins of perception, rely on something that those two dimensions deny: a *third*, a depth that constitutes the "beyond."

The idea of an effect becoming a cause is not at all alien to the uncanny modalities of pre-modern thought. The shadow always has the upper hand, and because shadows are projective we can imagine reexamining examples of the uncanny in terms of projective geometry. Try this thought experiment:

Subjectivity comes with the identification with a "point of view" within the spatial and temporal fields, which is both a factor of access and isolation. Perception of distance from this point involves anxiety; how near or far are objects and other subjects that attract or repulse. "Fight or flight" responses are processed at such a deep level within our nervous, endocrine, and muscular systems, that issues of distance are engrained as well as highly conditioned by culture. Without the ties binding distance to anxiety, humans simply would never have survived evolution. Our perceptual field is a combination of direct and virtual estimates of threats *versus* advantages. The idea of a "point" of view is thus highly complex. It is a cyclopian point in that depth perception must be added to the function of position and both are tempered by anxiety. We cannot, as some have done, contrast a "cyclopian" cultural mentality with a "binocular" mentality and reject the

⁶ Slavoj Žižek, "The Reality of the Virtual" (podcast), dir. Ben Wright, 2004.

⁷ According to 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) "The Borromean knot represented the final phase of Lacan's effort to produce a psychoanalytic topology — a project that explicitly began in 1953 with his first reference to a torus or 'ring' which was accompanied by the provocative contention that such a reference constituted 'more than a metaphor — it manifests a structure.' Greenshields' quote comes from Jacques Lacan, *Écrits*, 263.

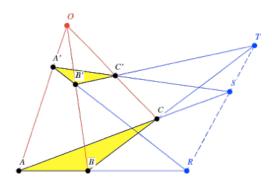


Figure 10. Desargues' Theorem, *Wolfram Mathworld*. The fixed point 'o' creates a perspectivity (the guide lines, o–A'–A; o–B'–B; o–C'–C) where the triangle A'B'C' casts a shadow that "forgives" any triangle behind it to assume any tilt within the guides. Despite this forgiveness, the sides of any two triangles will meet at three points (*T*, *S*, *R*) that will always be co-linear.

latter in favor of the former. The tension between the point and depth concerns is ongoing; at no time may the point as such be transcended; at no time can we allow it to be theoretically forsaken. The point, the *punctum*, of subjectivity is the idea of its spatio-temporal contingency, its relational balance of fear and desire.

From any one point of view, objects in the field of the visible become "profiles" that cast shadows of invisibility — shadows created by our own looking at things — behind them. The shadow's profile *exactly matches* the profile of the object we look at because, despite our binocularity, (1) we have compressed the 3–d object in our view to a 2–d profile *on behalf of this function of shadowing*, and (2) the profile has retroactively compressed our binocularity into a zero–dimension station point. Effectively, we are made into a cyclops by the fact of the shadow.

What gives the shadow, an effect of our looking, the upper hand? The answer is quite astounding. The shift from passive to active, from a secondary to a primary position, comes from effectiveness, the Žižekian "reality of the virtual." Secondary virtuality overcomes the primary virtuality, the picture aspect, of our looking, because the shadow's perfect edge—to—edge correspondence comes with a freedom of movement we attribute to everything that falls within the shadow generated by our own looking.

In the early days of projective geometry (1636–1662 — an estimate based on Girard Desargues' first writings on perspective and the death of Blaise Pascal), Desargues constructed a theorem that duplicated this situation.⁹ A triangle in relation to a fixed point has three radiating lines, *into which* other triangles can be drawn that match, from the fixed viewing point, edge for edge, vertex for vertex. Desargues discovered that, *no matter how* the "shadowed" triangles were oriented, lines extended from their sides would

⁸ Jonathan Crary(*Techniques of the Observer: On Vision and Modernity in the Nineteenth Century*, 1990), for example, argues that the "cyclopean eye" is the consequence of Cartesian thinking, and as such must be surpassed by anti-Enlightenment, anti-rationalistic, binocularity, as if "the choice is ours to make." Citing Descartes' comparison, in the *Dioptric*, of the eye to a *camera obscura*, he notes that "for Descartes the images observed within the camera obscura are formed by means of a cyclopean eye, detached from the observer, possibly not even a human eye" (47). This does not stop Crary from employing the Cartesian mind–body dualism to offer his reader the choice between an "abstract, instrumental monocular vision" and a binocular, embodied sensual presence. This transfer of responsibility to the reader who must "do the right thing" by rejecting abstraction and embracing binocular embodiment is a bit of a forced choice, given his heavily weighted characterization of geometry. The choice between "having a body" and using geometry to understand subjectivity is a false one, in that subjects may "have" their own bodies only in a very complex combination of virtual with immediate experiences; and this complex combination cannot be understood without considering the role of the point and its relationship to surfaces and what is conceived to lie beyond them. For an extended review of this issue, see Joan Copjec, "The Strut of Vision: Seeing's Somatic Support," *Qui Parle* 9, 2, Special Issue on Lacan (Spring/Summer 1996): 1–30.

⁹ Girard Desargues, "Universal Method for Putting Real Objects or Objects for Which Specifications Are Available into Perspective, Such That Their Proportions, Measurements, and Distancing Are Correct, without Respect to any Point outside the Field in Question," 1636.

meet at points, and these points would all lie on a single line (Fig. 10). ¹⁰ Like Pappus's theorem, *random* placement results in a *determinative* form. The passive effects, lines here or there and points at whatever spacing, become the *causes* of something "projective." Projective geometry has captured the essence of the secondary virtuality, the *real* of the virtual. It is as if the dotted line in Figure 10 gives us a picture of how the shadow operates for the mythic mentality. The shadow, not the object, has the power of determinacy.

At the same time, this geometrical demonstration of how effects work as causes connects to the ethnographical uncanny's elevation of effects, such as shadows (the metonymy of contagious magic, as differentiated by the mythographer, Sir James Frazer), into causes. ¹¹ Harming an object stolen from someone has the same effect as harming that person directly, according to the magical logic of contagion. Semblance magic, acting on an effigy or image of the victim, is just as effective, possibly because the efficient cause is the *way someone appears*. A person's *image* rather than themselves literally is what constructs their material presence for others. This is the practice of shadow magic, the effect-iveness of the effect as a cause.

The confirmation of Desargues' and Pappus's points lying along a single distant line suggests an interesting extension of this idea. The points a-lign. Alignment is linearity, most obviously, but also consecutive order ("consecution"); one thing after another; sequence, succession. When the Master (of Hegel's Parable of the Master and Servant) challenges another Master for recognition and supremacy, it's because there is only one place, a place that cannot be shared, but two Masters strive to fill it. Consecution is the problem of the double. The gods grant Pollux that Castor may live again, but he can live only in succession, the twins taking turns in Hades. Succession, however, has one particular advantage. The painter painting himself into the painting in Fig. 5 is reacting to a binary, the 180° separation of viewer from viewed. He wants to paint the whole situation, the scene beyond the canvas and his action of painting. But, inadvertently, he creates another kind depth condition (bad infinity) in addition to but in some ways similar to the perspective techniques he used represent distance in his painting. He cannot incorporate himself into the picture without creating another 180° space where he is — again — invisible. At first he does not accept the obvious consequence and produces a succession of paintings-within-paintings that, like storieswithin–stories, creates a mise–en–abîme. He has produced a series of failures, of missed encounters, that have not succeeded in bringing his compulsion to any conclusion. He is headed to the abîme without the aide of a psychoanalytic insight.

¹⁰ This "no matter how" introduces an aleatory element into projective geometry. It's what distinguishes it from Euclidean concerns for precisely calculated distances and angles, and what connects it to the randomizing logic of divination.

¹¹ Sir James George Frazer, *The Magic Art and the Evolution of Kings* 1 (London: Macmillan & Co.; New York: St. Martin's Press, 1955), 52–54. Frazer regards both contagion and similarity to relate to the primitive mind's mistake of association, first by assuming that things in contact have causal associations, second, by assuming that resemblance also has causal association. Thanks to primitive thought's lack of the "scientific" dimension of self–awareness (accountability), it assumes these relations naturally, as "the way things are." Thus, both images and direct connections, effects that are secondary, are elevated to the status of the primary, or causes. But, Frazer does not treat the root cause of this, that the secondary *as such* is causal because it is — precisely — secondary. The diminution of appearance and the small, usually thoughtlessly shed items (Frazer: "parings of nails, hair, eyebrows, spittle, and so forth") are valuable as *attenuations* of the function of possession. Small and useless, these discards *are all the more* effective because they are meaningless; and, in being meaningless, they are all the more receptive to re-contextualization by magic. The same may be said of appearances/semblances, which *by virtue of its contingent and evanescent quality*, are all the more available to the "aleatory" resettlement within the domain of synchronicity.

Is there a way of putting this in terms of projective geometry? What we see in Fig. 6 is a "servant function" operating in the background behind the attempt to overcome the binary impasse. While the painter ends up only digging a deeper hole by extending his paradox, there is a feature that ends the compulsive repetition of failure to overcome the binary. This is the loop connecting the innermost with the outermost spaces of distinction. What does this mean? In the parallel paradox of the Cretan Liar, who claims that "All Cretans are liars," the Euclidean locality of the Cretan is the face value of his claim. As the circular self-contradiction stretches out to its (bad) infinity, the act of the statement competes with the content. Once these two levels are recognized, however, an original motive steps forward: the necessity, for claims of this kind, for paradox to present itself. How must it to do this? The presentation must find some way to acknowledge its materiality. It must assert a solidarity with its medium. At the same time it must open up a new dimension. The Cretan Liar employs what we might call "silent" or "mute speech." This is not any particular aspect of his claim but, rather, what makes the claim effective as such. According to Vico, it is a kind of act or thing. 12 In its assertion of rationality, the Cretan's claim is circular. Its aim is to fail, its circularity is its compulsion to fail. But, there is a (projective) option. The Cretan has established presence in two forms, that of a speaker acting but at the same time someone identical with the claim, the content, of his message. Yet, he paradoxically fails to occupy the same point at the same time. He is unable to establish a consecutive order on the side of the claim, so he compulsively cycles between the two options of lying and telling the truth. Act and content cannot be sorted out.

The enthymeme is a form of rhetorical syllogism whose "middle term" (which connects the major premise with the minor premise but does not appear in the conclusion) glues together elements, thanks to its own binary transformation, self–negation, and disappearance. In the major premise, it acts like a container, a frame ("Socrates is a man"). In the minor premise, it is contained/framed ("All men are mortal"). What is both container and contained is graphically represented in Fig. 6 by the frame that loops around to enter (re-enter?) the space it has framed. The loop acts as a short circuit between the inner-most and outer-most. This rhetorical crisscross is the basis of Lacan's idea of extimity¹³. For our purposes, it is the structure that moves beyond the directional mandate of cause and effect. In effect, there is no top, no bottom, no inner no outer. There is only the (negative) connection. In the enthymeme, the Cretan Liar not only falls silence, he *embodies himself as silence*. ¹⁴

The materiality of the middle term, added to its self–negation, can mean only one thing: anamorphosis, released from its restrictive service as an optical trick of slanted picture planes and cylindrical mirrors. Mladen Dolar has done us the service of preparing anamorphosis's discharge papers to "give it a more emphatic range. This would be an ontological status, as it were, a structure which has far-reaching conse-

¹² Vico called myth, whose etymology involves *mutus*, silence, a mute speech: "... [T]he first language in the first mute times of the nations must have begun with signs, whether gestures or physical objects, which had natural relations to the ideas [to be expressed]. For this reason logos or 'word' meant also 'deed' to the Hebrews and 'thing' to the Greeks" (*New Science*, §401).

¹³ For the official definition of Lacan's concept of *extimité*, see Jacques-Alain Miller, "Eximity," *The Symptom 9*, lacan.com. https://www.lacan.com/symptom/extimity.html

 $^{^{14}}$ The silence of the silent middle term of the enthymeme is established by the self–negation of its function as, alternatively, a set and a member of a set (predicator/predicated). The three terms could be written as what the speaker says (A–C) and what the audience thinks, silently (–B–). The audience conclusion, B, arises from the way B "negates itself" as B/ \sim B. In the standard syllogism, the middle term does not appear in the conclusion.

quences for the major questions ... of subjectivity and being. I wish to formulate from the outset a simple philosophical thesis, namely, that the subject can be grasped as an anamorphosis of being."¹⁵ How is anamorphosis enthymemic? By distilling the practices of hiding images visible only from specific viewing points or with optical devices, Dolar himself proves the case of how a negative materiality may address the problem of infinite regress and, by extension, the central issue of compulsive repetition. Dolar's "embodiment" contrasts radically with Jonathan Crary's, for example. First, its materialism is thoroughly constructivist. In the classic Lacanian example of Hans Holbein's famous portrait incorporating an



Figure 11. Hans Holbein, the Younger, *The Ambassadors*, April 11, 1533. The National Gallery, London. Jean de Dinteville, pictured on the left, commissioned the double portrait. The blurred image running diagonally at the bottom of the image is an anamorph of a skull. Its angle forms a part of a triangular construction connecting the horizon, the skull, the half-concealed crucifix at the upper left, and the viewing point, in the position of Golgotha. See John North, *The Ambassadors' Secret: Holbein and the World of the Renaissance*, 2002.

anamorphic skull, the blurred image not only interrupts the placid perspective that settles the two human subjects and their paraphernalia comfortably on the square plane of representation, it mocks it. The standard role of a skull is such situations is that of a memento mori, a reminder of death. Mortality in the middle of such a display of personal status and finery is anamorphic in both a visual and a rhetorical sense. It is silent by being blurred; it is effective in that the discovery of its form trumps the entire visual wealth of the main scene by providing an alternative measure of depth. Only an action on and to a surface can do this; the surface is marred. But, at the same time the appearances of the subjects and the painting have been injured. This is not the artist's revenge on his patron, but rather a service traditionally added, to protect anyone who would boast from the retribution of the evil eye, the panoptical reverse gaze of envy, able to magically reclaim the surplus that is put on public display. To this extent, Holbein's painting of the anamorphic skull could be considered as a prophylaxis, an apotrope to turn away the evil eye, a pharmakon. All of these medical precautions have the structure of the rhetorical enthymeme. Each is a self-reversing binary, a middle term that affords, in this case, looking at the painting's wealth and the wealth's public display. Marring the painting at the basic level, the

level of its materiality, its surface, was rhetorically and magically necessary.

Anamorphosis shows the enthymeme working in the visual domain, but the enthymeme no less significantly shows anamorphosis at the level of speech. Blurring and silence are employed as acts of turning, materializations of the generic idea of the poetic trope and the even more general rituals of encirclement: charming and *curse*-ing, singing and ringing. Just as the middle term turns from containing to being contained, the apotrope turns the gaze that is itself a turn, a 360° envelopment that nonetheless comes with a single vector able to connect any "local" (Euclidean) surplus to a universal and infinite lack, a kind of cosmic "line of desire."

The realist, Lacan observes, is the imbecile who fails to observe that there is nothing shoved so deeply into the bowels of the earth that cannot be retrieved by another hand. One hand shoving, another retriev-

¹⁵ Mladen Dolar, "Anamorphosis," S: Journal of the Circle for Lacanian Ideology Critique 8 (2015): 125-140

ing. This is a remarkable use of the idea of chirality in relation to the depth problem, and one that compels us to return to the anamorphic enthymeme to adjust the labeling of the middle term as a *turn*, first (in the major premise) to the left to collect the first term, and then (in the minor premise) to the right to be collected *by* the third. Lacan adds to his observation on handedness of concealment to say: "what is hidden is never but what is *not* in its place [manque à sa place], as a call slip says of a volume mislaid in a library." What better definition can we find that says precisely how projective geometry is a science of concealment, of what is, although it has been placed (on a surface) is nonetheless *never* in its place; radically and permanently "not at home" (*unheimlich*)? To have a place is to have a point, and one who has a point can also lose that point. Desargues' Theorem, like the enthymeme, can be re-labeled. To miss the point is to slip free of the determinative conditions by which flattening and alignment of appearances with the shadows they construct. Missing the point is avoiding the causality of the shadow, by which any king may be killed.

The shadows have flattened appearance and made us into cyclops, stuck in place like Prometheus.¹⁷ The story of missing/losing our point is already famous. It is the story of Odysseus's famous visit to the cave of the one-eyed giant. Alignment (a line, meant) and consecution are key elements. Just as the single entry of the cave traps the Argives, the single eye of the cannibal host can be destroyed without another eye coming to its aid.¹⁸ Getting out after the blinding is, however, a matter of retroaction, of relying on a critical element that had to be previously installed. The beginning of Odysseus's sentence cannot be known until the end, when the end will revise the meaning of the start. "Tell everyone that Nohbdy has blinded you" will result, when the Cyclops yells to his neighbors for help, in buying the Argives enough time to reach their ships. In and out; victim and victor; outwitted and outwitting; Odysseus uses the endpoint of projective shadowing to construct an anamorphic reminder for the Cyclops, lest he forget the Greeks' visit. Odysseus mocks him by marring the surface of his selfishness (failed hospitality) with an anamorphic ("acousmatic") pronoun–name. The correct viewing point for seeing this image pop into view is a boat in full sail, having enjoyed the vector connecting cave with beach, a line of desire if there ever was one!

¹⁶ Jacques Lacan, "Seminar on 'The Purloined Letter'," Écrits: The First Complete Edition in English, trans. Bruce Fink in collaboration with Héloïse Fink and Russell Grigg (New York: W. W. Norton & Co., 2002), 17.

¹⁷ The deep background on this point has to do with the historical role of the "cyclopean" period of individual family worship centered on the household hearth. Family spirits (*manes*) forbade abandonment or defection, on pain of their eternal curse. Here, the shadow was literally the *shades* of the deceased, whose mandates (super–)imposed their will by serving as the sole source for divinatory judgments. See the dated but continually insightful reference, Numa Denis Fustel de Coulanges, The Ancient City: A Study on the Religion, Laws and Institutions of Greece and Rome (Garden City, N.Y.: Doubleday, 1956).

¹⁸ The human subject in the cyclopian period perhaps lacked a proper unconscious and, hence, did not fall under the metaphor of Argus, half of whose eyes remained open and vigilant while the other half slept. There are actually birds (e. g. the swift) and other animals capable of shutting down half of their brains while the other half is alert. Cyclopian consciousness has a psychotic relationship to the significant signs of nature, regarding them as absolute and therefore collapsing the function of the paternal signifier, which stays in place as a master signifier supporting the incomplete chains of local signifiers. Without a father to displace there can be no proper unconscious, which, as Lacan argues, is structured like a language. Thus, the literalism of the Cyclops when Odysseus gives him the obviously (to us) fake alias, Nohbdy, is psychotic in its immunity to irony, the hallmark of the paternal signifier. Lacan plays on the phrase, *nom du pére*, hearing *les non-dupes errent*: "those who do not let themselves be caught in the symbolic deception/fiction and continue to believe their eyes are the ones who err most." Certainly, the Cyclops was one to believe in his monocular superposition of appearances onto realities.

The Cyclops Tale is a literal example of a story in a story, an episode within the broader narrative of King Odysseus's wanderings after the Trojan War, his delay in returning to Ithaca. Anthology's necklace of tales always requires a clasp by the string becomes a circle, often with a literal rule of return. The rule relates to extimity, inversion, disguise (Odysseus returns home as a dirty beggar), *Nachträglichkeit*, and depth. Here, the superimposition of triangles in Desargues' Theorem offers a way out, a line to the beach,



Figure 12. Ubaldi Gandofi, *Endymion and Selene*, 1694. Los Angeles County Museum of Art. The goddess Selene falls in love with the mortal shepherd Endymion but he resists. Her only solution is to complete their love from within the dream. Pliny the Elder makes the bold claim that Endymion was the first human to observe the movement of the moon, which accounts in some way for the claims of his burial sites being on Olympia or Mount Latmus ($\Lambda \acute{\alpha} \tau \mu o \varsigma$), in the Beşparmak Mountains near Ephesus.

an alignment that escapes the curse of the effect as dark pharmakon. In this we see that the fantastic theme of the double and travel through time have been carried into the logic of the story—in—the—story, reclothed in concentricity.

Contamination of Reality (by Dreams or Fictions)

THE CASE OF THE TWO DIANAS

In a relatively overlooked passage in *The New Science*, Giambattista Vico (§528) puts (according to him) a pin at the middle of his map of the human domain. The pin belongs, he says, to one of two or both goddesses (since the goddesses may in fact be one goddess), Diana and Semele. Both signify chastity, and in particular the chastity assigned to the *line of access* connecting mortals with gods. But, as with the innumerable cases of (im-)morality of the ancient gods, the moral lesson is unclear, at least in the way that the modern mind holds divinity to represent that gold standard of ethnical goodness. If religion's function is to impose severe standards of moral behavior on a humanity given to debauchery, how is it possible that its representatives are themselves debauched?

Semele fell in love with the mortal shepherd Endymion but limited her sexual encounters to Endymion's sleep. Diana's line of access was secured by a thick forest, but when the hunter Actæon, wandering after a hunt, with no thought in mind to vio-

¹⁹ Vico's interest in Diana relates to his perceived need to take issue with the immorality of ancient myths, a problem he puts beside the problem of anachronism (*New Science*, §80). Myth offers a time paradox in that primitive and crude cultures seem nonetheless capable of producing the most elegant and sophisticated poetic expression. The moral problem arises from the licentiousness of the ancient gods, who thought nothing of rape, murder, adultery, and deceit. Thus, "chaste Diana," enamored of Endymion, copulates with him while he sleeps. Mortals, on the other hand, are held accountable to impossible standards of piety: Actæon unintentionally happens upon her sacred spring but is nonetheless punished with transformation and death, devoured by his own hunting dogs. Possibly for the sake of the Inquisition's censors, Vico explained that only after many years did the original fables acquire their obscene forms, suitable to audiences wishing "to sin with the authority of the gods" (*New Science*, §81). But, this explanation seems insincere. For, it is precisely the gods' transgressions that conceal the inexplicable logics that Vico finds so enticing, which become the targets of his most ingenious explanations. Nothing could be more the case than Vico's defense of the two Dianas in their relation to "innocent" mortals, Semele/Endymion and Diana/Actæon. Each Diana seems unjustified, but sleep and wandering in the wood have their common bond in the unconscious, where conscious choice is not an issue. Piety is the ultimate prize of Vico's conjectures about Diana, piety in relation to the irrational, the scandalous. Vico is anticipating the logic of de Sade who, in his *System of Pope Pius VI*, establishes the kind of "principle of good in the guise of perfect evil" that Vico finds fascinating. See Richard Boothby, *Death and Desire: Psychoanalytic Theory in Lacan's Return to Freud* (London and New York: Routledge, 1991), 68.

late the goddess sanctuary, inadvertently penetrated it, he was punished with transformation and death. So, when Vico cites Cicero's summary advice about sanctifying the line between humans and gods, (*Ad divos adeunto caste | Pietatem adhibento, opes amovento;* "Let them approach the gods chastely, let them conduct themselves with piety, leaving riches behind") the rules for humans seems not to apply to the gods.²⁰ Vico is calling out a vector that requires a specific human mental attitude, piety, but he is intentionally



Figure 13. Frontispiece of Giambattista Vico's New Science, called the "dipintura," de Forest edition. It is possible that Vico's divine eye was intended as a viewing hole through which the reader saw, reflected in a mirror, the image pasted onto the board with its punched hole. This would be both anamorphic and projective, in that a unique viewing position allowed what was otherwise distorted (within Euclidean space) to pop into corrected view. This "orthographic" procedure was defined by two antipodal points, the viewer as divine eye and the helmet of Hermes, as the reader's discovery procedure. The idea of line is expanded to that of "alignment," of the three ages of humanity, mythic, heroic, and modern.

citing two instances when no mental attitude can be formed. This can't be a mistake. By choosing cases of sleep and indifference, Vico wants to suggest the existence of an unconscious, where waking focus is missing — some 150 years before Freud made his famous attempts to do this. But, Vico's attempt, unrecognized in its time as much as today, went a bit further than Freud. He made the "Lacanian qualification" to Freud's idea of suppression to locate the unconscious as an "out there," an Other externalized as resistant to the Subject as a kind of "reverse writing." This "out there" is not just antithetical to the human subject; it itself is antithetical to itself. The goddess of chastity comes in two contronymic forms: one (Semele) who liquidates her separation from Endymion with reckless abandon, another (Diana bathing) who severely punishes a mortal for his accidental violation of this same distance. Diana seems to borrow the Lacanian rule of masculine sexuation, "that all who would wish to call themselves men must obey the phallic law, as long as there is One (Semele in this case) who does not" ($\forall x \varphi x$; $\exists x \sim \varphi x$).²¹ Interestingly, just before his review of the case of the two Dianas, Vico had asked the same question of early cultures' poetic abilities: how is it that humans, violent and crude in every sense are able to create the most complex and beautiful formations in poetry (and, by extension, in music, art, and storytelling). Again, the sexuation matheme: early cultures were afforded eloquence as long as they were crude and violent. Law is not lessened by exception, it is made out of it!

"Homer," Vico reasoned, was not a historical person but a collective, an institution of wandering bards able, thoughtlessly and without effort, to shuffle local lore into a Master Narrative about the war between the Trojans and Greeks. Again, it was the *lack of thought* that gave rise to its antipode: skillful, elegant masterpieces, the result of a mentality that worked more as an automaton than a hardworking

²⁰ Cicero, De Legibus 2.8.19.

²¹ Lacan's *matheme* for male sexuation forms two parts of a quadratic. For those who would call themselves women (for the name itself is subject to the logic of the *matheme*), *not* all of the woman is subject to the phallic law, $\sim \forall x \varphi x$, and there are no exceptions to this: $\sim \exists x \sim \varphi x$. The not–all principle could easily be applied to Diana/Semele, although the bi-goddess seems to embody the idea of exception perfectly. Such is the case with most divinities, in Vico's view. They *give* laws to which they are partially exempt, and their exemption constitutes the foundation of the law as such.

artist trained in the poetic arts. The "One who does not," the $\exists x \sim \varphi x$, is both the licentious Semele and the thoughtless process of memory devices maximizing the effects of chance insertions.

Vico realizes that the line of piety specified by Cicero, ad divos caste adeunto, is a line with two antipodal points. One is the chaste goddess, the other the exception, the automaton. Careless Actæon takes this line of travel, as straight in projective space as it was meandering in the diffracted space of the Euclidean forest. Euclid, after all, suppresses any notion of infinity. Something lying "at infinity" is for all practical purposes non–existent, or at least in the category of Wittgenstein's "Whereof one cannot speak, thereof one must be silent" (Wovon man nicht sprechen kann, darüber muss man schweigen). This, however, makes it an even more interesting situation. Whenever Euclid contracts, infinity returns. Focus on Endymion's sleep and Actæon's indifference is strategic on Vico's part: the turn to the unconscious recasts the issue of piety in a completely modern way. And, in the context of early culture's equally unconscious abilities to produce exquisite poetry, this unconscious is structured like a machine. The meander in Euclidean space is straight in projective space. What seems miraculous to the Euclidean eye is simply a matter of crossings and alignments for the "projective eye," although in projective space there is no difference between observer and observed; the infinities imagined to exist, front and back so to speak, are brought into the same orbit, charging any line (observerobeserved) with a polarity of reversed views,

●—○.



Figure 14. Dante Gabriel Rosetti, *Paolo e Francesca da Rimini*, 1855. Tate Museum, London. The poet Dante and his guide, Virgil, turn from the efficient cause of the lovers' sin to their punishment in the projective space of the Inferno: perpetual rotation within a whirlwind that holds them as antipodal figures, both bound and separate.

Just as Freud was struggling in 1920 to define the zone beyond the pleasure principle, Vico was addressing the issue of how a Diana–vector of indifference and sleep might also be what makes early cultures into geniuses. Clearly, the vector was not Euclidean. If we can accept the frontispiece Vico used to introduce *The New Science* (Fig. 13) as a rejection of Euclid in favor of a "divine" space of antinomies, we can see that the divine eye placed at the upper left, beyond the clouds, zig–zags off the jewel on the breast of Metaphysics (literally above the cosmic globe) to the problematic Homer (cf. the cracked base of the statue), and then *via* Homer's downward gesture to the helmet of Hermes (Vico's *muss man schweigen* — he does not comment on this item although he claims to explain every element of the

image). This is Vico's own projective geometry, in the sense that the projective line, \bullet —o, is the "piety" with antinomous law–giving properties, thanks to the master model of the phallic law, $\forall x \varphi x$; $\exists x \sim \varphi x$, that Vico finds to be embodied by the two Dianas. The sensuous and chaste Diana(s) parallel the crudity and sophistication of early cultures. The line is the access to the divine, crooked in Euclidean terms, straight (in the sense of *coincidence* and *identity*) in projective terms; able to connect and separate at the same time. This is the essence of contamination.

The literature of the fantastic portrays contamination in the same uncanny way as Vico's ●—o. Dante's Paolo and Francesca (*Inferno*, Canto V) could be regarded as the First Couple of Projectivity. After

Francesca's arranged marriage to the cruel and deformed Guido, his brother Paolo served as a stand–in. The couple spent companionable time together. During one session, reading Chrétien de Troyes, they found Sir Lancelot's love for Guinevere a "uncanny fit" of their own situation. Because Lancelot's friend, Galehaut (Galeotto), facilitated their meetings, Dante described the story itself as a Galeotto, an enabler, the *line of effectiveness* by which the originally innocent couple was contaminated by the story they read. We must for the moment suspend the vulgar explanation of "the power of suggestion" and see the Galeotto line as a magical vector, an example of •—o. In Euclidean space, the obedient wife and loyal brother obey laws of propriety. What interrupts their propriety also interrupts the Euclidean frame, where infinity plays the same role as the contagion whose vanishing points are, within projectivity, brought into a linear relationship, a Galeotto.

In Sir James Frazer's durable distinction, where appearance is able to act on reality in the same way an effigy with pins produces pain in its look–alike victim, the fiction–within–a–fiction of Lancelot and Guinevere create a semblance machine that induces love in Paolo and Francesca. The story shadow aligns perfectly with the couple's flat profile. Contamination = alignment; and alignment = (literally) the projective line with its two antipodal vanishing points, now redefined as desiring lovers who, thanks to their geometry, are condemned to revolve around each other, held apart but at the same time bound eternally at their 180° position by the Galeotto line.

Could it be that Danti Alighieri, solid citizen of the Late Middle Ages, is giving us an explanatory name for the line of travel made by the secondary virtuality of effectiveness? Perhaps the entire schema of Dante's *Inferno* could be said to be a demonstration of how sinning, with its acts staged in Euclidean circumstances of fears and desires, finds its unavoidable shadow in projectivity, where the very dimensions that it had constructed, both intentionally and unintentionally or circumstantially, with calculated measures and angles, were "unconsciously" being mapped in another plane of the Real. Contamination here is cosmic, apocalyptic, revelational. Anticipation of this ultimate map of the Real belongs to prophecy and epiphany. In our Euclidean locality, foreshadowing can only appear as uncanny. In this miniature view, Dante gives us the formula for his entire project. What is sinful about sin is not some evil calculation to cheat, steal, or kill but the indifference, the sleep, when vigilance is off duty. Sin is not a lapse but a universal, a "fatal design flaw" in human subjectivity. Just as we cannot help but sleep, we cannot avoid, like Actæon, losing our way when the forest is thick, when it becomes a *selva oscurra* that, Dante instructs, is the landscape surrounding and visually dislocating the entry to Hades. It is both peripheral, as a wild labyrinthine domain, but also *nel mezzo del camin* — in the middle of the road.

In the story of Paolo and Francesca, Dante gives us a name for the dimension between Euclidean indifference and its universal geometry, the Galeotto, the fictional character who facilitates Lancelot's romance with Guinevere but also the physical page that becomes the line connecting the fiction to the "real" couple, Paolo and Francesca. The page is nothing until it is opened, 180° to admit a space of reading; and nothing did it not attenuate this line projectively, into a <0° line of contagion, making one couple the antipode of the other, and locate both as vanishing points on a circling infinite horizon. Galeotto is a line in the projective plane, always a line *plus a point*, and that point always being in two places at the same time, on a circular infinity. Such is forbidden by Euclidean locality, where sin happens, but it is the rule in the projective plane, where punishment happens, and happens forever, thanks to the fact that it is form.

Does Dante sufficiently annotate Vico's Two Dianas theory about love, piety, and the unconscious? In his clear references to projectivity, doesn't he fold in the logics of the double, time travel, and the story in the story? Does the "Galeotto line," the line with two vanishing points lying at infinity, cover all cases of "contamination of reality by the dream or fiction"? And, if Galeotto is a true go-between effecting this immediate fold of punishment over crime, is he not the crease in the origami space, the internal sagittal line that is simultaneously the circumferential round-about connecting the outermost to the innermost? Isn't it the case that Galeotto's local role as a "go-between" is truly Diana-esque in its indifference? Doesn't it really act as a kind of local unconsciousness, an unconscious that is as tangible and ordinary as a friend who gives a couple in love the key to his unused apartment in town? My point is that when effect becomes a cause, it does so "innocently." It retains its passivity as an effect, so that its role as a cause is devoid of premeditation, of "criminal intent." It is cause in the mode of the middle term, preserved in many languages to deal with just such issues as broken cups, lost pets, and words thoughtlessly spoken. "Stuff happens," the material essence of the middle term is the logic of the middle term in the enthymeme, which silences itself as a go-between, which becomes the silence that it constructs through double negation, by playing both container and contained. The middle turns, first to one "lover" then the other. In the turn it is the pure effectiveness of a swift arrow in flight; but its sagittal line is curved in the Real of projectivity, where it binds and encloses whoever would find themselves as vanished / vanquished along its infinite round.

The Unreliable Narrator's Relationship to the Truth of Truth

The official take on Vico's account of primitive religions is that, although he qualifies them as inauthentic in relation to the "true religion" of Jews and Christians, this is not his real view. Although Vico did not "believe in" the ancient gods, neither did he discredit the metaphoric process by which the mythic mind creates divinity for itself without being aware of the fact. Critics are divided on whether or not Vico "really thought" that the Judeo–Christian God might not also fall into the category of created divinity. In Vico's mind, this would have been revelational, not apostate. The invention of sacred being out of the limited means of the first mentalities was not a cynically exposed trick of self–deception but the discovery of a truly miraculous process. Of course, "try telling that to the Inquisition," the reality of whose oppressive influence in 18c. Naples forced Vico to make convincing distinctions between the "true religion" of Jews and Christians and the "false religions" of the Gentiles.

Vico continually cites cases similar to the "two Dianas" and the anachronism of Homeric genius. As opposed to the "truths" of Judeo–Christian religion, he sets aside a category analogous to what Lacan called "the truth of truth." ²² To whom does this truth belong? Is this Vico's specification of the scholar's gold standard, certified as a combination of philology and philosophy? — philology to see how cultures develop within historical and geographical contingencies, and philosophy to comprehend, amidst the variety of ethnographical cases, how any and all inventions can be consolidated within a general model of subjectivity. Vico's own philosophical principles, applicable to all cultures, include such ideas as the "imaginative universal" (the initial act by which the minds of pre-humans become human); the "ideal

²² Jacques Lacan, *The Seminar of Jacques Lacan IX, Identification* (1961–1962), trans. Cormac Gallagher, *Lacan in Ireland*. URL:http://www.lacaninireland.com/web/translations/seminars/.

eternal history" (fixed stages through which all cultures progress from mythic mentalities to "fully human"); and the "common mental dictionary" (a set of ideas and institutions found in all cultures under different guises, each suited to the nature of the culture in which it is found). Vico anticipated much of what it would take two hundred years for semiotics and structuralism to discover. The key to his clairvoyance was his technique of viewing the testimony of cultures as if it were the narrative of an unreliable narrator, sources beyond which one looked, as one might advance against a hastily drawn curtain. This move was revolutionary in two senses. (1) Without commemorating myth as prisca theologica, forgotten esoteric wisdom encoded in images and archetypes, it regarded the formation of mythic and, later, heroic figures as key to the formation of the human mind.²³ On a purely psychological — later, we will see that this is more accurately described as psycho-analytical — level, this formation constitutes a kind of "anamorphic" universality within subjectivity, something whose concealment is native and constitutive, and whose discovery is embedded from the start, as a permanent "prophetic" dimension. (2) Vico aligned myth's unreliability with his own. The structural design of *The New Science*, the "too good by half" story of the last-minute insertion of a frontispiece, necessitated by the decision not to publish a letter condemning Carlo Lodoli for his withdrawal of financial support; his manipulation of dates of events recorded in his annual lectures to the University of Naples; and his repetition of phrases and formulas to make readers think that Vico must have been suffering from early-onset dementia; all point to an intentional evasion of the reader's rational inspection.²⁴ Vico wished to evade direct empirical review. He employed an exaggerated Aristotelian formatting, labelling sections and sub-sections with logical designations: principles, axioms, corollaries. Opening chapters are designated as "Elements," "Principles," and "Method." This Jesuitical style may have been yet another offering to the censors of the Inquisition, but it also reflected Vico's annoyance at the prevailing atmosphere of Cartesianism and the subjection of all philosophical thinking to logical proof.

On this matter, Vico showed himself to be thoroughly radical, and thoroughly "anamorphic," in a way that his use of an image to introduce his last great work demonstrates. In contrast to the customary proof of axioms and corollaries, Vico invents something original, a "proof of the body":

Thus the proper and consecutive proof here adduced will consist in comparing and reflecting whether our human mind, in the series of possibilities it is permitted to understand, and so far as it is permitted to do so, can conceive more or fewer or different causes than those from which issue the effects of this civil world. In doing this the reader will experience in his mortal body a divine pleasure as he contemplates in the divine ideas this world of nations in all the extent of its places, times and varieties. And he will find that he has in effect convinced the Epicureans that

²³ It was commonplace to regard myth as a originally factual. Euhemerus, a Greek mythographer at the court of Cassander, the King of Macedon, was bold enough to suggest that mythic characters were exaggerations of actual historic figures, but even this allowed that myth involved excessive falsification. Even for those who accepted myth as fiction, it was, to those with ears to hear and eyes to see, a *prisca theologica*, forgotten wisdom, valorized by Rosicrucians, and followers of Hermes Trismagistus, and other mystics as original to the all–wise Egyptians. Vico himself came of age in the midst of a network of mostly secret intellectual groups intent on preserving Renaissance legacies reviving the lore of the classical gods. See Don Cameron Allen, *Mysteriously Meant : The Rediscovery of Pagan Symbolism and Allegorical Interpretation in the Renaissance* (Baltimore, MD: The Johns Hopkins University Press, 2019).

²⁴ Margherita Frankel, "The 'Dipintura' and the Structure of Vico's New Science as a Mirror of the World," in *Vico: Past and Present*, ed. Giorgio Tagliacozzo (Atlantic Highlands, NJ: Humanities Press, 1981), 43–51. Frankel argues that the general form of *The New Science* is a labyrinth, whose folds and twists are designed to disorient the linear reader and introduce a fractal super-structure.

their chance cannot wander foolishly about and everywhere find a way out, and the Stoics that their eternal chain of causes, to which they will have it the world is chained, itself hangs upon the omnipotent, wise and beneficent will of the best and greatest God [New Science, §345].

Vico, some two hundred years before Lacan, discovers an idea of "scholarly *jouissance*," not as a byproduct of investigative thinking but as the sign of its authenticity. Also, in an equally Lacanian move, he sets this *jouissance* between surpluses and lacks, the "fewer or different causes" producing the civil world's effects, and the bi-modal excess and austerity of the Epicureans and Stoics. This relieves *jouissance* from playing the role of a Golden Mean between linear ideas but not from being a ratio, a "middle term," like the middle term of the rhetorical enthymeme.

Vico understood very well that myth's unreliability was intrinsic to its ability to transform not just the empirical materials within its span but its own internal, logical operations. That it *had* logical operations was one of Vico's most original discoveries. Not until myth's dignity was restored by the so–called "Cambridge Ritualists" were its unreliable stories seen as orderly. Harvesting the wealth of data coming in from missionaries, explorers, commercial travelers, and the military, scholars such as Jane Harrison, F. M. Cornford, and (elsewhere) Gertrude Levy, Sir James Frazer, and Arne Thompson began to combine their skill in compiling detailed catalogs with a nose for common themes, resulting in studies that were foundational for the structuralist study of myth. Yet, as sober as the Ritualists and Structuralists were, the overall effect was to valorize mythic and folkloric thinking as a kind of sensitive, primary connection to nature, an innocent and hence admirable world–view lost to the modern mind corrupted by ideas of rationality, efficiency, and utility imposed by the Industrial Revolution.

Vico did not participate in this valorization. Rather, he realized that myths were just as enigmatic and unintelligible, just as obscene and inconsistent, to their original audiences as to later philologists. Their status as "unreliable narrators" began with their first formations. There was no "mythical conception of the world" giving subjects magical access to cosmic truths. Yet, Vico did not regard mythic corruption as itself degraded. Rather, he saw, in the logic of the unreliable narrator, they key to how myths were able to serve thought by "enigmatizing" perceptual and social experiences, binding the individual to the collective through activities such as rituals, performances, and even (or should I say, especially) warfare. In this insight, Vico continues to outstrip his interpreters, who continue to regard his unreliability as a defect and underestimate or misconstrue his view of myth as an unreliable narration. Wishing to defend either the author or his ideas, they avoid the issue of unreliability, its necessity to look behind the literal.²⁵

Of course, what I mean by looking behind the curtain is not the standard subordination of appearances to realities. By employing the term "anamorphosis," a theory of projectivity is required. Just as Mladen Dolar argued for taking this term beyond the Early Modern context of "slanted picture planes and cylindrical mirrors," it is necessary to broaden the idea of the "Euclidean locality" in which anamorphosis appears at first to be a mistake, and to broaden as well the idea of just what kind of mistake

²⁵ This is Mladen Dolar's point about the need to expand the role of anamorphosis ("Anamorphosis"). It first appears as an error, a stain, a *surface defect*. Things could be left at this point without looking further, but as in the example of Holbein's painting, *The Ambassadors*, one is offered the chance to find the special point of view from which the defect is converted into a revelation. Dolar's unawareness of the geometric wealth of the painting does not take full advantage of the anamorphic skull, which would have proven his case many times over.

anamorphosis exploits as its opening act. In these expanded ranges, Vico's idea of scholarly *jouissance* opens the way to the role played by unreliability, both at the level of cultural formations and at the level of scholarly understanding. By connecting the *jouissance* of unreliability to anamorphosis, we are able to move into the critical construction zone of subjectivity: the way that repetition and depth engage space and time. Here, Euclid gives way to its logical predecessor, projective geometry; and projective geometry's logical priority reveals itself through the historical forms and techniques of the uncanny — primarily in and through methods we can group under the heading of anamorphosis to satisfy, simultaneously, (1) the aim of restoring the role of psychoanalytical *jouissance* (within the general domain of the drives, and in particular the death drive) and (2) situating this project within the material domain of projectivity.

Maslow's Pyramid, Its Inversion, and Lacan's Matheme for Metaphor

The move from the unreliability of myth, to the *necessary* unreliability of any discussion of myth, to the idea of a jouissance of anamorphosis is ambitious. It requires an emblem, a visual idea to serve as a guide to the upcoming project of locating Lacanian/Freudian drives within projective geometry. The middle term of this project is metaphor. It was Vico's principal achievement (according to his own report). And, metaphor allows Lacan to locate his theories about the signifier within the "body" of the subject, to the extent that we are finally able to conclude his project with a single act of extimity, a "writing of the body" in the way that the external Other maps itself into the subject "from the inside out." Lacan's achievement lies in the way that all of the terms of this act — writing, body, inside, map — are redefined by their collaborative effort to establish subjectivity. Even (or especially) if we take into account a Deleuzian demand, to consider subjectivity in terms of its margins and breakdowns, this writing becomes radical in a way that I would associate with Vico's own radicalization of myth, both as an object of discovery and as a means of that discovery. When Vico said that it cost him a "good twenty years" to come up with the idea of imaginative universality, this cost was not liquidated by an idea that was immediately intelligible. Rather, it continued to cost the readers of *The New Science* just as it continued to "cost the text" as Vico determined to employ a version of this universality into the acts of writing and reading-as-writing specified in his idea of a "proof of the body."

There is no way to simplify this full embrace of unreliability as a principle of construction and understanding. However, there are other forms of unreliability that can be re-purposed. If I may, I would borrow from the cabinet of mathematicians a technique devised for similarly difficult projects. Where a problem is encountered but no clear path to solving it is evident, mathematicians employ what is called an *Ansatz* methodology. *Ansatz* means "lucky guess," but to set its wheels in motion, it requires a randomized initial move, an *ersatz* conjecture. The *ersatz* step is unreliable on purpose and in extreme. It intentionally has as little as possible to do with the problem at hand. When the conjecture is applied to the problem, data is generated; data about the degree and nature of the error of the conjecture. Although this is not like a negative that can be inverted to see a positive image, it reveals much about the structure of the problem. It is in a sense a symptom, converted into its liminal form, the Lacanian *sinthome*, a more primitive form that moves analysis from interpretation to topology. Lacan, in this move, relied on the guidance of the Borromeo knot, a set of rings that appear to be stacked on top of each other, but in such a way that each ring must also "tuck under" the next ring, to serve as a bottom as well as a top.

The ring relies on the structure shown in Fig. 6: an echelon of consecutive forms able to create depth out of the "nothing" that binds them together. In the combination of a *repeated* action with a *depth function*, we have an element of occultation, concealment, that suited Lacan's need to revise the symptom into the more fundamental form of the *sinthome*. This revision, I contend, happens whenever a topology must support both its evident structure and its opposite, a negation. To use a stupid example, I borrow the famous pyramid devised by the sociologist Abraham Maslow's "Pyramid of Needs." The broad base of this pyramid stacks what are tautologically assumed to be essential, in the order of their necessity: physiological concerns (preserving the body from physical injury), security (preventing threatened injury), love/belonging (prevention converted into psychological comfort), esteem (the need for differentiation and valorization), and finally full self–actualization. Like the Borromeo knot, Maslow's pyramid is a stack, but unlike the knot, it does not intersect/penetrate itself. There is no depth, simply consecutive order.

My *ersatz*–to–*ansatz* conjecture is to add this element. The only apology needed here is that the conjecture is not completely idiotic. Maslow's pyramid has been extensively employed in disaster theory, as a protocol of providing emergency aid to victims of hurricanes, tsunamis, epidemics, earthquakes, etc. Where expenditures are limited, the bulk of resources must be devoted to the most pressing and universal causes, and the Maslow Pyramid is a horizontal histogram, where the area of the layers can be almost directly converted into budget outlays.²⁷ The ersatz conjecture inverts this idea and superimposes, over the upright pyramid, an inverted but homologous shape, pointing down. Here, self–actualization appears first, before the needs of the body. The failure of this conjecture is that this priority is not entirely false.

According to relief workers attending disaster sites where homes have been destroyed, it is a working principle to allowed evacuated residents to return to their ruined homes as soon as safely possible. The recovery of small objects — jewelry cases, photo albums, stuffed animals — plays an unexpected large role in facilitating

To allow victims to recover even small objects — jewelry cases, photo albums, stuffed animals — constitutes an unexpected disproportionate factor in their psychological recovery from the trauma of loss. Without these minimalistic mementos, recovery is difficult and sometimes impossible. The policy is not sentimental or humanitarian, it is pragmatic, a constitutive mainstay of recovery therapy.

What about the other end of the pyramid? How poorly (= how well) does the *ersatz* conjecture work (fail) on that extreme? At the point where Maslow valorizes self–actualization, the inverted pyramid sets, as the field of this actualization, physiological concerns: the body. Specifically, however, this is not the body as a unified concept of normalized health, but rather, in Lacan's terms, the "body in pieces" (*corps morcélé*) that is the state of the pre-subject before the Mirror Stage. It is the auto-erotic body of the young child unable to dissociate fully stimulæ coming from within from those coming from without. This blur-

²⁶ Maslow's theory was fully expressed in his 1954 book *Motivation and Personality*. See "Maslow's Hierarchy of Needs," *Wikipedia*, https://en.wikipedia.org/wiki/Maslow%27s_hierarchy_of_needs.

²⁷ In these terms, Maslow's Pyramid makes good sense, in terms of the costs of supplying shelter, food, medical support, etc. in comparison with the cost of psychoanalysis required to restore self–esteem and full actualization. Cost factors could be used to argue for the effectiveness of early application of psychoanalysis, as in the non–official application of its principles in allowing residents to return to demolished houses to recover mementos.

ring of the "person-environment" interface is dynamic. It is carried into the logic of children's play, the ability to transform, invert, super-impose, and re-assign elements of any play space-time.

Freud encountered this adaptability when, watching his 18—month old grandchild play with a wooden spool tied to a long thread. The child would repeat the action of throwing the spool out of his crib then recovering it, emitting the long drawn–out sound "o-o-o-o" representing (according to the mother and Freud) by the German word *fort* ("gone"), later completed with a recovery word, a joyful *da* ("there").²⁸ The game of disappearance and epiphany seemed to allow the child to move from a *passive endurance* of his mother's periodic absences to a situation where he could master the parameters of this loss, re-configuring its ins and outs as desirable or undesirable. The issue was not which place was which place — i. e. the game involved non-orientation — but rather mastery: the young subject's claim to subjectivity as a whole (literally, as a body *not in pieces*). The external exercise was required to make an "internal" re-evaluation. The body's own "extraterritoriality," its auto-erotic (in-)capacity, gave rise to the ultimate self–actualization Maslow held as a goal but thought was only rarely attained.

The first payoff of the ersatz conjecture has been unexpectedly large. Quantitatively, it has suggested that what Maslow held to be a rare commodity, reached only by a few exceptional individuals, was in fact a universal achievement of all children who must advance from pre-subjective passivity and auto-erotic fluidity to a subjectivity that stabilizes relationships between self and world, inside and outside, appearance and disappearance — and, *especially*, re-appearance as confirmation of achievement, a reinforcement of objective value and personal ability. This enables the child to move from a magical account of re-appearance (evident in games, such as peek-a-boo or jack-in-the-box, where sudden re-appearance is staged) to a less fantastical understanding of the space and time of separation. Freud had put his finger on the issue of mastery; Lacan carries mastery from its Hegelian structural beginnings (the rivalry of the double) to discourse, where mastery comes in the form of a "master signifier" (S1) that connects the Symbolic to the Real by being the "exception" within the field of signifiers.²⁹ The formula, mastery = master signifier carries the Real of trauma to the Symbolic, where subjective mastery develops through the good offices of the conscious ego, which begins its life in the optical field of rivalry (the young child who sees his "more masterful" reflected image).

We might accurately label the tip of triangle superimposed above Maslow's as S1, and supply it with an antipode at the opposite end, a mysterious 'x' element that somehow accounts for the *effectiveness* of the signifying chain, S2...S2. As in the case of allowing disaster victims to return to their demolished homes to recover *small objects* that will make recovery possible, the 'x' of effectiveness is effective even

²⁸ Sigmund Freud, Beyond the Pleasure Principle [1920], trans. James Strachey (New York: W. W. Norton & Co., 1961).

 $^{^{29}}$ Part of the complicated story of the master signifier S1's relation to signifying chains, S2...S2, is told by Dan Collins, in his essay, "Stealing Money from Offices," *Lacunæ* 16 (July 2018): 105–124. Here, the master signifier is put in the place of metaphor, which combines with the "x-factor" in Lacan's *matheme* for metaphor, S2...S2/x • M/S2...S2 = M(1/x). The crisscross relation of 'x' and 'M' suggest that, if 'x' could be considered as that "certain unknown something" that ties signifying chains *together*, M is most likely a principle of circularity, sphericity, or containment in the spirit of extimity shown in Fig. 6, a model of Lacanian extimity. Linking circularity as a feature of containment comes with the proviso that it must also, in terms of extimity, also be an *internal line* as well as a bounding circuit. As both — and O, the master signifier specifies both a void and a liminal passage that accesses this void, and hence meets Vico's requirements for the line of piety connecting mortals with gods/immortals. Vico's own "imaginative universal" also takes this form, connecting the first humans to the thundering Jove thanks to the circular re-entry of divine and human natures from "around the outside" (= without human awareness of their projection of their own self–natures).

when sustained (or *only* when sustained?) by an attenuation of their protective home. The switch between container (the house) and contained (small object) is a metaphoric crisscross. The 'x' finds its form in 'M', a metaphor with an inverse relationship, not just of container to contained but of *sup* pressed effectiveness with *ex* pressed materialization. Suppression and expression are two sides of the same coin, in this case — as are, also, the house and its inverse, the uncanny.

Note that while Maslow's professional field, social psychology, demands independently verified data from empirical research, his model is largely tautological and therefore un-refutable. It generates its own self-confirming data. This violates the *modus tolens* principle set forth by Karl Popper, in his famous *Conjectures and Refutations* (1962). To be science, Popper argued, a statement must be refutable (*modus tolens*, "mode that denies by denying the consequent"). Thus, the gold standard of scientific research is the "null hypothesis," the statement of what one wishes to prove, put in negative form. But, Maslow, the scientist, cannot meet this standard. Instead, the anecdotal observations made by Freud in a setting that offered almost nothing in the way of scientific objectivity connects to experience in a non-tautological way. The expectation that the child would, in his distress over his mother's absence, show anything but pleasure at her loss was reversed. Instead of pain Freud observed pleasure, but the source of this pleasure was not loss but the gain in mastery. And, in the child's willing and even obsessive replay of the painful experience of loss, Freud was forced to revise the tautology of the pleasure principle, going past even the "reality principle" (postponed pleasure) because his grandson was not yet sufficiently prudent in calculating future advantage.

Maslow opens the door to moving from the issue of mastery to the more Lacanian territory of the master signifier. How unlikely! Freud's early identification of mastery as the key issue of the young subject's progress from an autoerotic instability to a stabilization of both the subject's position amidst networks of symbolic—social networks as well as the subject's perception of a space—time where an object disappearing behind another does not really cease to exist existentially, nor does its re-appearance constitute a miraculous epiphany. Eventually, this problem relates to Euclid's avoidance of infinity and resistance to projectivity. More generally, this antipathy can be considered as a cultural trait, even a positive one, connected to the Greeks' unequaled historical advances in the sciences, the arts, and especially philosophy, where even from the beginnings of pre-Socratic thinking, infinity in the form of the void, non-Being, and religious concepts was either ruled out or carefully insulated from reason. As E. R. Dodds has argued, Greek life was saturated by the irrational, like other cultures; but their talent for articulating rationality had the effect of generating energy from friction points with the customary uncanny folk beliefs and practices. It could be said that Greek thought was the first psychoanalytically derived cultural revolution, since it was based on suppression rather than direct refutation of the irrational. In an important sense Greek thought did what Freud's nephew did: he chose pain over pleasure on behalf of mastery.

This claim would be hard to make historically or philosophically. Maslow however (inadvertently) points the way to a localized experimental field, the role not of the master as a historical figure or mastery as a political/philosophical issue but of the master *signifier* as a special function of the Symbolic. I refer specifically to the Lacanian Symbolic, one of the three primary domains Lacan regarded as co-dependent (the relations between any two depended on the ambiguous presence/absence of a third): the Real, Symbolic, and Imaginary, the "RSI system." The Symbolic is manifest primarily through language, but it in-

cludes all networks of symbolic relationships, at all levels and divisions of society. It penetrates the Imaginary wherever images play the semiological role of words, as the case of the hieroglyph or rebus. The basic unit of the Symbolic is the "signifying chain," which I will abbreviate as S2...S2, which can be as small as a sentence or as extensive as a complex causal sequence, a set, a categorial domain, a whole language. The master signifier, as its name suggests, embodies the function of control within and over such chains, without itself constituting anything pretending to be a meta-language. Any signifier can become a master signifier, since it is a role and relation rather than a type. I use Lacan's designation of the master signifier, S1, especially in his definitions of discourses where the master signifier and signifying chains are linked to functions of truth ("the truth of truth") and *jouissance*, the peculiar form of pleasure that survives in the space beyond the pleasure principle, i. e. in the space of the drive.

The master signifier's Lacanian provenance begins with Hegel. In his seminars with Alexandre Kojève, Lacan was led to focus on the irony of the (historical) master's demand for recognition and respect. These can come only from *other* masters, leading to the fight-to-the-death struggle between competing masters. In the process, the role of the Servant emerges as an independent productivity that allows masters to compete, often violently and destructively, while "culture goes on" thanks to Servants' relation to signifiers — their own mastery — of producing goods and providing services to the masters while, collaterally, accruing knowledge and skills that support cultural development economically and ideologically. Politics thus works on two levels, one that is honor-based, another that is mercantile.

The master signifier develops a similar economy, using the unknown in the place of recognition and respect. While signifying chains can enjoy the illusion of closure through circular displacements of meaning (words in a dictionary are defined by other words, which must be further defined by yet more words), master signifiers disavow this manner of meaning by retaining a permanent relation to enigma. Historical masters were masters in an ultimately ironic sense. If the master continued his mania to dominate other masters through mortal combat, there would be only one master left standing and no masters left to provide the respect that was the motive for conflict. Mastery, logically considered, is radically "self-refuting." The master *signifier*, however, deploys its circularity to achieve the opposite effect, i. e. to be immortal. I use this temporal designation to introduce a dynamic into an otherwise all—too—easily spatialized idea of universality. Immortality is the stuff of the master signifier, as evident in the proclamation, "the King is dead, long live the King." This involves the symbolic castration of the signified by the master signifier, the crown, whose possession by the physical person is key to his/her power. Master signifiers use metonymy (such as crown for king) to reinstate a version of pre–Euclidean, autoerotic disappearance/re-appearance. The new king is a rebirth, a resurrection, more than simply the next in the line of succession.³¹ Infinity is incorporated in the master signifier, "king," to outlast any empirical occupant of the position.

Immortality is evident even in the way that frames, thresholds, and screens point to spaces and things without saying much about *what it is* that is indicated. Indication is in a sense *pure* indication; a pointing *at* that opens onto a space of designation that remains empty, potential. Indication splits space and even

³⁰ Alexandre Kojève, *Introduction to the Reading of Hegel: Lectures on* the Phenomenology of Spirit, trans. James H. Nichols, Jr. (Ithaca, NY: Cornell University, 1980).

³¹ Eric L. Santner, *The Royal Remains: The People's Two Bodies and the Endgames of Sovereignty* (Chicago: University of Chicago Press, 2012), also Simon C. Thompson's *The King's Two Bodies: A Study in Medieval Political Theology* (London: Taylor and Francis, 2017).

time, "turning off" the space of spectating just as it illuminates (from within) the space of what is indicated. The split at first gives 180° of the circle of communication to the viewer, but once past the plane of indication, illumination opens up a panorama, a "complete world," in the same way that the interior of a work of fiction disappears the "fourth wall" by which the reader or spectator has gained entry. The 180° indicates that the work is open to view — otherwise it would not be a work. But, this portable proscenium arch, so to speak, is invisible from within, from one's position inside the work.



Figure 15. Réne Magritte, *Memoirs of a Saint*, 1960. The curtain of appearance has an interrupting entry-way *and* a pretended 360° panoramic internal reality, presenting the paradox of the theatrical void and the audience's liminal passage.

Actors on the theatrical stage do not refer to the audience except when they wish intentionally to refer to the irony of the audience being both present and absent at the same time. Even a soliloguy is delivered to a "whoever" that the audience imagines the actor is imagining. At the same time, the fantasy disappearance of the fourth wall is what the audience must imagine that the actors are imagining. The pointing function of the frame as indicative gesture thus goes in a forward, as the audience views the fictional spectacle. But, to authenticate this spectacle, the audience must imagine that the view from the stage is a 360° panorama that does not see the audience. Yet, the audience is there, in the dark, sitting still. The actors' blindness without which we cannot sustain even the least illusion of theatrical reality — is *hysterical*. Anyone lacking the master signifier of theatrical projective effectiveness would see the audience as a fact of theatrical necessity, paying patrons who laugh,

murmur, applaud. So, the hysteria is the S1 without which S2...S2 makes no sense, the master signifier of *effectiveness*. The mastery of the master signifier is this binary regulating the alternating darkness, death, and desiccation of spaces separated by a curtain, a surface whose closed and open "sides" turn out to be the same side, like the surface of a Möbius band, a non–orientable side that is simultaneously open and shut, inside and outside, nowhere and everywhere. The binary as hysteric is the geometry of the work of art, able to connect the audience's $<0^{\circ}$ to the stage's $>360^{\circ}$, as art becomes *pure act*.

The master signifier referees this geometry by separating its own concerns from the signifying chain, in the algebra of S1/S2...S2. Because S1, like the Cretan Liar, embodies both the acting and containing functions of language (or sign formation in general), it is a binary. It is a ruthless, obscene master who switches the rules any time a signifier wishes to obey them, inducing a depth function. In the classic routine, "Who's on first," the comedy team of Bud Abbott and Lou Costello elongate a pointless conversation about a Mr. Hu, the Chinese first-baseman of the (fictional) baseball team, the St. Louis Wolves.³² The interrogative pronoun "who?" has no chance to find its answer because the deep answer is the *form* of its question. The truth is both "who?" and "Hu," but the truth of the truth, the depth of the question, is the question itself, its crisscross between acting and indicating. Action involves mimesis; indicating a content involves disavowing any attempt to pull the strings of objectivity, of making sure the causal arrow comes

³² The well-known "Who's on first?" dialogue was devised by the comedy team Bud Abbott and Lou Costello. One of the many sources of this transcript is http://www.baseball-almanac.com/humor4.shtml (last accessed February 20, 2009).

from the object to the subject's passive perceptual apparatus. When (dead) objects speak or move on their own, magical hysteria violates this rule. The object will become "blind to the fact" that we are the ones, the *sub*-jects, those who have been "thrown under," into the darkness of the auditorium, to turn their blindness to the 180° of our occupancy of nowhere into their continuous circular/spherical consciousness — which the audience must imagine as the minimal requirement for enjoying the spectacle of the theater. At least for the duration of the play, the S1 that struts and frets its hour upon the stage then is heard no more will not see us sitting still in the dark.

Like the Cretan Liar, the binary between the content and act of speaking spin off a depth within the puzzle, is the Cretan lying or telling the truth? We don't find the truth (it's tied up in the circularity of the binary), but thanks to the irresolution we gain access to a specific kind of depth, the "truth of truth." This is an echo that makes the echelon of alternative positions shudder. It shoots through the alternating series of truthful and lying Cretans like a cold wind. It is "stochastic" like the white noise that bathes silence so that weak sounds are amplified.³³

This resonance does not supersede or replace the binary or, least of all, supply an answer terminating the aimless blahblahblah. Rather, it converts content into the *act of deepening*, different in kind from the self–referential act (asking who) that runs headlong into the content (the Chinese surnamed first-baseman, Mr. Hu). This difference in kind is the action basis of the master signifier. It's what allows Master Odysseus, who like all heroes has submitted to the humiliations of the Cyclops (on purpose, to *learn something*), to make it back to his ships while the Cyclops' confusion, again over a pronoun, "nobody," *buys him time*.³⁴ Buying time is indeed the idea of an exchange economy added to the idea of effectiveness, with a specific spatial dimension of access and egress. In effect, you can't get to first base, presumably to meet Mr. Hu, without the master signifier; neither, in more global terms, can the audience access the void that is the performance on a stage in the theater of the world. That access, that movement into the supercircle, that disembodiment of the viewer within the body of the viewed ... that is *act*; and the structure of the act is the *depth of uncanny resonance*.

In the words of Ed Pluth, "the signifying activity involved in an act achieves something fundamentally different from what fantasy achieves. In an act, a subject does not constitute itself as a satisfying object of the Other's desire, and in it a subject is not demanding recognition of its own desire by the Other either." In contrast to the tight relation between historical mastery and fantasy (every master depends on it), the act — *effectiveness* and also product/*productivity* — is the Servant aspect of the Master's discourse, the virtuality in which something is accomplished in a *deepening* mode. This is the depth added to the Euclidean flat scene, the projectivity of pictorial virtual reality. Of course, we should note a critical difference: fantasy equates here with flatness, whereas "the fantastics," namely the double, time travel, story in a

³³ Stochastic resonance is the general plenitude of uniform energy *against which* a weak signal will be reinforced. In biology, this is the evolved ability of organisms' sensitivity to white noise, which will amplify the otherwise undetectable sound of an approaching predator. Alejandro Luque Estepa, "Stochastic Resonance," *Wolfram Demonstrations Project*, March 7, 2011. http://demonstrations.-wolfram.com/StochasticResonance/.

³⁴ The hero (whose name originally derives from the general term designating simply "a dead man") necessarily and voluntarily submits to suffering and, hence, sub-jectivity. See Erwin Cook, "'Active' and 'Passive' Heroics in the 'Odyssey'," *The Classical World* 93, 2, Homer (November – December, 1999): 149–167.

³⁵ Ed Pluth, Signifiers and Acts: Freedom in Lacan's Theory of the Subject (Albany, NY: State University of New York Press, 2007), 104.

story, and contamination of reality by fiction or dream are depth strategies within the arsenal of the uncanny. It is the >360° panorama–plus of fiction; fiction not as the antinomy of fact but the truth of the truth of fact. In this way, factuality's binary, true/false, is superseded or indeed overcome what amounts to the forced choice situation of the "pronomial" indicative gesture. Look at that! — What? ... or should we ask, Who? ... whose answer is itself.

We move from historical masters and servants to the realm of signifiers that also have the structure of masters (S1) and servants (signifying chains, S2...S2), one in the service of the binary, the other as a resonance chamber for depth charges, where passivity (the essence of the *sub-ject*, thrown under, quietened down, darkened, desiccated) results in the ideal receptacle for amplification through resonance. Weakness (reduction to passivity, subjection) and amplification through and by means of that weakness show how S1, the master *signifier* takes on the form of metaphor. There is a literal albeit cryptic form of this inquiry. I adapt Lacan's *matheme* as he presented it in "On a Question Prior to Any Possible Treatment of Psychosis":

$$\frac{S2 \dots S2}{x} \bullet \frac{M}{S2 \dots S2} = M \left(\frac{1}{x}\right)$$

This *matheme* is not as difficult as it looks, once one considers Dan Collins' explanation of how this works to find, in any collection of signifiers, that "certain something" ('x') that chains them together.³⁷ In his study of Alfred Hitchcock films, the collection S2...S2 means nothing (x in the position of the denominator) until the metaphor, M, of "stealing money from offices" comes to mind. Each film features, in some form, a woman who has been compelled to take money from her workplace. The *new group* is transformative. Collins: "It's insofar as the films are so designated that they become 'films about ...' [the second element, M/S2...S2]. Once they become films *about* stealing money from offices, we can ask interpretive questions, such as *Why was the money stolen? What was the money intended to pay for? What is similar about the plots of the films?* And in answering these questions, the group of films, as a series, begins to take on meaning, s." Collins sees 's' as the transformation of 'x', the movement from the feeling that their could be some unifying meaning to the embodiment of meaning in a new signified.

³⁶ The forced choice has a specific meaning in Lacanian psychoanalysis. In the classic example, where the robber says "Your money or your life!" there is really no choice, because you can't enjoy your money if you lose your life, and if you lose your money you can't enjoy life. The truth table tells the story. The TT and FF options are out because of the "if/then" structure of the demand. The remaining options, TF (keep you money but lose your life) and FT (lose your life, keep the money if you can figure that one out), are circular. Money and life are two ways of saying enjoyment, and one implies the other, TF/FT. The crisscross, F to T and T to F, suggests both the structure of the uncanny and projective space; and the suggested theme surplus/lack, <>>, echo the relation of audience space to performance space.

³⁷ Dan Collins, "Stealing Money from Offices": Collins' S2...S2 is the list of films, *I Confess, The Wrong Man, Psycho, Marnie*, and *Frenzy*. I qualify this as a signifying chain in reference to Lacan's essay, "On a Question Prior to Any Possible Treatment of Psychosis," in *Écrits: The First Complete Edition in English*, trans. Bruce Fink (New York and London: W. W. Norton & Co., 2006), 465. Where Lacan uses a barred S' to indicate the signifying chain subject to substitution by S, where he identifies here and elsewhere as metaphor. Pluth adds that "Metaphor does not only create a signified effect that exceeds any particular signifier, it also achieves an incarnation of this effect in a particular signifier, which then acts as the 'signified' of the metaphor." Lacan uses S (+) s to designate this, but plus sign is not the function of addition but rather "crossing the bar, —" between the signifier and signified, S/s (*Écrits*, 429). Metaphor is thus a passage from the signifier into the signified, the creation of a new signified. "Metaphor," *NoSubject; Encyclopedia of Psychoanalysis*, https://nosubject.com/Metaphor.



Figure 16. Maslow's tautological pyramid of needs concludes with the near-impossible goal of self-actualization; clearly this impossibility coincides with the Hegelian Master's ironically impossible demand for respect. At the same time, there is a miniaturized "mastery seed" that is essential for the recovery of disaster victims, amidst the overwhelming physiological needs following natural and man-made disasters. In the midst of zoē, "raw life," mastery is present and immanently material, with talismanic powers. Bios, social life, begins with responses to dangers that benefit from cooperation via networks of symbolic relationships. As these evolve relations of love and esteem, self-actualization would seem to coincide with mastery, but Lacan's lesson, following Hegel, is that this category is a void, coincident with sacrifice and death on behalf of honor.

Let's review. The first expression, S2...S2/x, indicates that, in a given string of signifiers, once it is set apart as a string, there seems to be some connecting theme causing this unity, whether or not it is immediately present. It is what makes the chain a chain. It is an 'x', an unknown, but it also comes with the sense that the string's end should answer to its beginning, and possibly the beginning is seen to foreshadow the end — circularity, in other words. In the second expression, M/S2...S2, a metaphor has taken the place of 'x' and subordinated the signifying chain to it, thanks to the *twist* between the signifying chain as (first, in my version) having only a sense of some unifying factor, x, followed by the idea that the signifying chain is contained within the space of the metaphor.

The positions of S2...S2 "cancel out" in what seems to be an algebra operation, but I am proposing that we look at this as an example of Pappus's Theorem (Fig. 2), of two lines with no apparent relation until a crisscross procedure, the "/" in $\frac{S2...S2}{S2...S2}$ in this case, has discovered a third line fixed between them. The third line is the metaphor, M, embodied in a signified, $\frac{1}{x}$. The fact that the first two lines can be at any angle or distance from each other is the way that the signifying chain can, before it is singled out as such, have any kind of theme and variation. Once it has been declared to be a chain, a *set*, then the question of *x* arises: what does the set *mean*? With the discovery of M, metaphor,

the question of meaning is incarnated, as Pluth puts it. A signifier embodies the meaning as the signified of the metaphor, a content that metaphor *points to*, the addition of a new kind of sense that incorporates the meaning of the twist that has taken place.

Let me return to Maslow using the example of the small object recovered from rubble allowing the dispossessed occupants the chance of healing (Fig. 16). The "field of debris" is the ruin of the house (1/S2...S2), something that can only produce a painful reminder of lost unity. The x is the lost object, hidden in the rubble, S2...S2/x. When the small object M is found, it becomes M/S2...S2, and the destruction of the storm is superseded by the recovery, M(1/x). Once the memento is found, there is an embodiment, $x\rightarrow M$. This metaphoric action is discovered by superimposing an inverse pyramid over Maslow's original tautology. The pre-disaster house has, as yet, an unrealized meaning that condenses the experiences of home but is not known, S2...S2/x. The house is hit by a tornado: 1/S2...S2, but when the small object M is found, it becomes M/S2...S2, and the destruction of the storm is superseded by the recovery, M(1/x).

The "field of debris" is the ruin of the house, something with only a painful recollection of a now-lost unity. The *x* is the lost object, hidden in the rubble. Once the memento is found, however, there is an embodiment. The signifier has crossed the bar into the signified. This is evidence in the way the object "reacquires" the libido stolen from it by the signifier, the way it becomes talismanic. Thanks to the crisscross "cancellation" of the house, in the position of rubble, this is technically and geometrically a case of the uncanny.

The metaphor manifests the hidden factor in a new and vivid way. M(1/x) stands for the way the signifiers have been at first presentational and then eclipsed, appearing then disappearing. What was behind the curtain, S2...S2/x, becomes presentational, M/S2...S2. The metaphor is on stage before the signifiers (the audience, to which they are *hysterically blind*. The bar in the first case is the drawn curtain before the performance begins. The bar in the second case is the demand that the audience play dead during the performance. The bar is the projective plane, the twist (\bullet , not so much multiplication as a "cross," as in + or \times) shows that it is a surface that traps movement with only one continuous side, a Möbius band, non-orientable. "M(1/x)" could be translated, with these considerations in mind, as "form within the projective plane."

What if an entirely more obvious interpretation could be found for this ersatz adventure? Isn't it obvious that there is an interesting dialectic opposition between the audience and the play–on–stage that justifies a re-reading of $\frac{S2...S2}{S2...S2}$? This would be to take a different starting point. We must wake up some fine morning inside the world of the stage play and wonder about the small seam, rip, or tear in our otherwise 360° panorama that, instead of subtracting from our view, adds something extracurricular. Remember that we know nothing about any "audience" (an agency that listens in) or "spectacle" (a remote viewing capability that would reduce our world to something that could be seen clearly only from an infinite viewing point). We only "see" (or fail to see, for we are hysterics in this goldfish bowl of a world) a kind of x, a mark for the spot that it is always x's duty to mark. Jorge Luis Borges uses Lacanian extimacy to describe, in his short story "The Aleph," just such a spot, occupying a humble location beneath the cellar stairs in a cousin's house in Buenos Aires. 38 This is a surprising application of the idea of anamorphosis, since the viewer has to find precisely the right viewing point, a "sweet spot," to enjoy the sweetness of seeing past local space's three dimensions through a narrow tube that, disrespecting Euclid, unaccountable opens up to a vast universe where time and space are interchangeable.

How does the Aleph change our understanding of S2...S2/S2...S2 in Lacan's *matheme* for metaphor? It is thanks to their mutual cancellation that we find metaphor to be M(1/x), or "metaphor is the inverse of the unknown unifying factor." How inverse? Reading S2...S2/x as emblematic of the "theatrical condition," where an audience experiences a series of actions in sets of "acts" (what better analog for S2...S2 than Act II, Act II, and Act III?), 'x' is analogous to a "curvature" bringing the end of the play to bear on the beginning. This is Roland Barthes' concept of *récit fort*, the "strong narrative." The audience has traded its own vivacity for the *words on stage*, their "flesh" so to speak in exchange for exchanged speech. This bizarre way of describing the ordinary theater event imagines something even more bizarre: the way

³⁸ Jorge Luis Borges, "The Aleph" (1945), El Aleph (Barcelona: Lumen, 2019).

³⁹ Roland Barthes, "Deux femmes," in Éric Marty (ed.), Œuvres complètes III (Paris: Seuil, 1995): 1052–1054.

that *moisture* flows from audience to stage, possibly in the more theatrical form of ectoplasm, the liquid famous for traversing the quick and the dead in other situations. As liquid flows from the consequently dark, silent, and cold auditorium to the bright, active, and hot stage, the 'x' becomes available for all to see and hear, but it is only by imagining what things look like from the actors' point of view. Without the implicit shift to the center–stage viewpoint — which is the *viewer of the Aleph's sweet–spot position* — no play can be comprehended as such. The audience *must* adopt this Aleph–viewing–position implicitly.

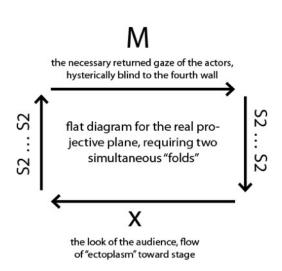


Figure 17. Another way of writing up Lacan's *matheme* for metaphor shows that it "sympathizes" with the flat diagram for the real projective plane, requiring the edges to be glued together, each with a twist. This implies that metaphor is the first but also ultimate form of the uncanny that, thanks to its projectivity, constitutes the historical priority aligning with the logical priority of projective geometry to Euclidean geometry.

Certainly, no one in the audience would be capable of articulating this idea. It is a presupposition, in the form of M/S2... S2, the *efficient cause* of the play that is a secondary form of virtuality, a way of "making things happen." Take it out of the equation and the chemicals don't interact, you get dead soup.

Re-writing the matheme in a fantastical-sounding but justifiable way, we might say that, "by virtue of desiccation (the loss of liquid), the audience is able to experience the truth of truth, thanks to a secondary virtuality that they experience in a reverse angle view as a defect (an Aleph) in the visible continuum." Elaborating further: "This defect/Aleph 'super-charges' the re-located point of view with a panorama that is spherical but non-orientable, with a >360° panopticism that includes themselves as extrinsic spectators, watching themselves watch themselves, but in a double–cross condition." I would revise "panopticism" — the word made famous by Michel Foucault's critique of Jeremy Bentham's theory of incarceration reform — to "panoptimism," because the reverse angle required of the audience to comprehend the theatrical Real is an "optimal" understanding of the sphere in projective geometry terms. It's a "sphere–plus"

theory. This comes as close as any non-mathematician can, in my view, of projective geometry's concept of immersion. Immersion is what happens when projective manifolds (2–dimensional surfaces) are brought into 3–space: the familiar self–intersecting figures of the Möbius band, cross–cap, and Klein bottle. In all of these, we can demonstrate the principle of metaphor as a version of the non-orientability of projective forms. The summation of metaphor's compact with the circularity of the unknown, M(1/x), is the same as saying "the reversibility of the vector connecting the audience with the stage ($<0^\circ$, i. e. pure bi-directionality) connects desiccation with hysterical blindness." This was in fact the saying of Meister Eckhart, "The eye through which I see God is the same eye through which God sees me; my eye and God's eye are one eye, one seeing, one knowing, one love." ⁴⁰

Figure 17 shows the homology between Lacan's *matheme* for metaphor and the standard quadrangular representation of the real projective plane. To "glue" the rectangle into its projective form would re-

⁴⁰ Johannes Eckhardt, The Sermons of Meister Eckhart, trans. Claude Field (London: H. R. Allenson).



Figure 18. The Spanish actress Adriana Ugarte's face, when split into left and right and reconstituted as "full right" (right) and "full left" (left) faces, shows two contrasting personalities.

quire two twists, as opposed to the one twist required of the Möbius band and Klein bottle. This is difficult to imagine spatially (which is locally Euclidean), but in dramatic terms it is a basic source of the uncanny. For example, in David Lynch's *Mulholland Drive*, two actresses play one character while another character is played by two actresses. As if to prove that this was not simply an affectation, the director's previous film, *Lost Highway*, involved a sequence taking place in a party where the main character, a jazz saxophonist Fred Madison, meets a weird–looking "mystery man" who claims to be both at the party and back at Madison's home. He offers Fred a portable phone and, when he phones his house, the mystery man answers. Later in the film, Fred is arrested and

convicted of the murder of his wife, Rénee, but incomprehensibly he is replaced in his prison cell by an auto mechanic, Pete Dayton — again, the theme of two actors playing the "same" character except the character in this case is "the occupant of the wife–killer's cell."

Another easy way to show the reproducibility of the real projective plane is to split a photograph of a face into left and right sides, duplicate the sides, reverse one pair, and reconstitute two full-face views, one for the left side, another for the right (Fig. 18). This has the effect of revealing, within the same person, two contrasting persons, often with a Dr. Jekyll and Mr. Hyde contrast. These commonplace examples demonstrate how tightly the uncanny is correlated to projective geometry, as if the latter provides the script for the former. But, perhaps a more fundamental relationship is given in the way that theatrical space is transformed from the standard binary of stage and auditorium into the compression of audience space to a bi-functional vector, where the audience's look requires its antidote, a spherical world surrounding the dramatic action, marred only by an uncanny rip or hole penetrating the projective thickness of the sphere, which becomes the eye of some god in control of the play. Of course, there are in actuality many "gods" pulling the strings — the writers and directors who rehearse each scene and adjust every nuance. The need for a supernatural cause identified as this magical optic penetrating the virtuality of the play is critical. Without it there can be no life, no suspense, no authenticity of anything happening on stage. The god is more a "god of God" in that it (certainly it does not project any gender identity; instead we hear the whirring of a smooth, oiled machine) is *pure effectiveness*. Without this little–g it–god, there is no play. Any minimal experience of drama requires it as a sine qua non.

The god of God is like the truth of Truth. This god is behind God; it's the god we see if we look beyond the official God's inconsistency. It's the efficient cause, what makes God work in His empirical encounters with his often–baffled and usually disappointed followers. If the First Commandment is Thou Shalt Not Have Other Gods before Me, this god is OK, because he's actually behind God. The theater just happens to be best way to demonstrate the connection between effectiveness and projective geometry, but clearly the thesis of God as an unreliable narrator has broad if not universal implications. Anyone who has ever enjoyed a dramatic performance must have done so under the conditions of that can be defined

by projective geometry, and the system of vectors that manage the economy of the audience's sight afforded by the actors' blindness is key to the effectiveness of unreliability. When the literal 180° Euclidean access of the auditorium to the stage is compressed into an access vector, the actor is, from his/her reverse angle view, pretend to see a kind of Eye of God floating in the blackness. The fourth wall, for the actors, is not a surface; it is a tiny hole that combines the darkness of the auditorium with the Collective Eye of the ("dead") audience. The necessary fiction requires actors to pretend the wall does not block 25% of their panoramic world; but it does not require them to deny its existence. Condensation satisfies this complex demand by combining optics with the idea of a hole through space. This is a "less than nothing" that becomes a "more than everything," everything being the panorama of the actors' view, the more being the necessary supplement, the efficient cause of the play. When the actor's gaze turns to the fourth wall, this less than nothing takes the form of a reversed telescope through the black cloud, revealing an infinity at an infinite distance, brought close enough to discover that it admits the viewer to a full panorama of eternity.41 To sum: Metaphor is a process of replacing one signifier with another; at the same time it shows how this replacement effectuates a transfer of something from one division of space to its complement, as epitomized by the transfer of meaning from the stage to the site of reception in the auditorium. Theater could be defined precisely, as just such a transfer. When the actor Burt Reynolds was asked if he had learned the professional trick of being able to produce tears on command, he replied by saying that the aim of acting was not to produce tears in his eyes, but to produce them in the eyes of the audience.

We have focused on the theater because of the architectural correlations with a universal problem. Through analogies to projective geometry and psychoanalysis, we have distilled the protocols by which meaning is produced. In short, there is no meaning without transfer, there is no transfer without the (somewhat fictional) constructs of a sender (actors) and receiver (audience). What is not fictional is the division that, in the theater, takes place at the proscenium. Actual architectural prosceniums are models for the more general condition, that whenever there is meaning, there is a distinction that we are labelling as a proscenium. The theater is a monogram, an emblem. It is a particular context, a "clinical condition" by which subjectivity in general may be seen from several experimental perspectives. While we should not lose sight of the universality of this clinical condition, neither should we overlook key details by which actual built theaters and actual historical performances continue to provide new information. Here are the guidelines for making such connections:

(1) The audience is the site of "theatrical" meaning. It's the place where the dramatic emotion is felt and the dramatic idea constructed, not just passively received. Hamlet may be the name of the actor who struts and frets his hour upon the stage, but "the Hamlet idea" is what the audience conceives in its by—definition—collective mentality. The trick of acting is to transfer what seems to belong properly to the characters and their interactions on stage to the audience sitting in the dark auditorium, playing (and being) the desiccated dead. The metaphoric sequence that moves from a sense of meaning to a materialized signified is circular and reversible. The audience witnesses

⁴¹ John Ford has described Raymond Roussel's technique of the *procédé*, the sharply focused beam able to penetrate great distances to inspect remote objects in great detail. Mark Ford, *Raymond Roussel and the Republic of Dreams* (Ithaca, NY: Cornell University Press, 2001), 84; but of course the correct reference is to Borges' Aleph. We should note that the fourth wall is non-directional. It can take the form of an object, an aperture (door, window), or character (a clairvoyant, a ghost, a divinity). Thus, for Hamlet, the fourth wall is synonymous with the father's ghost.

- signifying chains ("the play") which seem to have cleverly sequenced their delayed meanings. Some unknown sense, 'x', is awaited. An idea emerges. Metaphor now brings anticipation that, and how, things will fall into place.
- (2) The 'x' recovered at this point is both harmonic and melodic. It is the effect of transfer but also its content. It is the Act and the Thing the ancients included, according to Vico, in the meaning of *logos*.⁴² Metaphoric transfer is the efficient cause of the theatrical realization, the Real of the theater, and so the resemblance of enthymeme, Lacan's metaphor *matheme*, and the flat diagram of the real projective plane is not accidental. *Transfer*, the metaphoric function, depends on enthymemic silence and blindness negations that are the efficient cause of movement of meaning from stage to auditorium. The double cross of the real projective plane, mirrored both in the *matheme* and enthymeme's syllogism, materializes in the critical role of hysterical blindness.

The Euclidean imaginary is unable to move beyond the static schema of the two semi-circles of the theater as two semi-circles glued at the seam of the proscenium. Transfer requires another imaginary, another geometry. Only the idea of a secondary virtuality attenuating the audience's access dimension into an imaginary narrow channel can account for the critical vector, an anamorphotic tunnel boring into the stage to inflate the dramatic realm, registering its externality as intimacy. This registration is hysterical. Just as the classic hysteric of the 19c. felt pleasure but reported pain, the blind and unreliable actor experiences extreme exposure and presents it as intimacy. Lacan generalized the clinical condition of hysteria into his specialized function of extimity, the "intimate exterior" and antipode, the interior occupied by the *object*—cause of desire. Lacan's psychoanalytic landscape is thus reversed from the normal phenomenological one. Subjectivity is on the outside, objectivity finds asylum in a well—defended interior.

The classical hysteric converts her inner condition to an outward presentation, mastering the art of extimity while pretending to be a liar. The actor, a professional liar, masters extimity by affecting a blindness that deploys a version of the audience's anamorphic tunnel, a view of the *logos* as Thing and Act that closely resembles Borges' fictionalized Aleph.

Secondary virtuality's role is most clearly manifest in the fourth wall as a surface of blindness. Here projective geometry plays the key role. This surface, in projective and dramatic terms, is both a plane and a vector, and a line plus a vanishing point on a horizon lying at infinity that circles around to offer the point an antipodal position. And, because theatrical blindness is imagined by the audience and re-then configured by the drama, hysteria's clinical exchange of pleasure for pain must be supplemented by an architectural account of the stage's relation to this manifold. The direct benefit of this is that the projective geometry — which is the efficient cause and secondary virtuality — of the theater becomes a template for a universal condition of human subjectivity.

Transfer Hysteria

If we use term hysteria to identify the specifically geometric use of blindness in the theatrical experience, we need to move past our clinical understanding to the general condition of subjectivity. Here, it is necessary to look at the *matheme* for metaphor, particularly in the way this abstract formula aligns with the flat

⁴² Vico, New Science, §401.



Figure 19. Antonello da Messina, St. Jerome in His Study (1475). This painting's use of the oculus Dei (eye of God) device allows us to address the issue of the Aleph directly. God sees Jerome but does Jerome see God? No. Jerome's blindness is compressed with God's vectorial view (vector + surface; act + thing; Logos). The complement of this form is Jerome's hysterical service as a vessel/womb for God's breath, impregnating (act) his translation (Thing), the logos of the Vulgate. The bowl, peacock, and partridge define the necessary thin space compressed within the 'S' of the projective plane at the proscenium position.

versions of the real projective plane (see Fig. 17). Two sets of signifying chains, one ascending one descending: This would seem to be insignificant but for the theme of zero-sum alternation; where the audience expends or loses energy so that the stage may be energized. The movement of 'x' from auditorium to stage is both a flow of energy and information. The audience looks blankly, in expectation. It has breathed out; forgotten itself; opened up to the idea of local death in favor of a projective rebirth. It projects its energy as a viscous fluid. The audience's regained light is able to penetrate and coat. It has weight, in the form of obligation. When we use the expression "bathed in light," something of this idea is conveyed. The objects the audience looks at are taking a bath. They are fully penetrated by this view, like Diana to Actæon. Their exposure is panoramic. Actæon sees all of Diana, not just her full-frontal nudity. This is more than enough justification for his mortification. And, as is the case with Hades, managing the boundary between life and death is a job for dogs.

The 'x' is not a blank stare, but it does reflect the way expectation and anticipation create an empty, place–holder signifying chain, 1/S2...S2. The 'x' thus stands for the fact that, apart from advance publicity, the audience doesn't know in advance exactly how its semantic hunger will be satisfied. Rather, it has an anticipatory unconscious about this. It "knows but doesn't know that it knows," *kenosis*. When the stage is filled, the direction of metaphor, M, will fuel the ascent — a resurrection —

new flesh for old bones. In Lacan's metaphor *matheme*, the fraction form, 1/S2...S2, is "canceled" by S2... S2/1, simultaneous to the flow and counter–flow of 'x' and 'M'. This is miniaturized by the S–shaped figuration at the lower right of Fig. 20. The audience looks to the stage, their look returned by the actors' blind stare. These vectors are not so much opposed as intertwined. Each vector engages the surface perpendicular to it, located at the proscenium edge.

Antonello's Jerome makes it possible to connect hysterical blindness to the rules of projectivity. This is a new form, "transfer hysteria." The theater reveals itself to be not just a special case but the paradigm of hysteria in general. Fueling this universalization, Antonello's specifications for the function of the proscenium, which he portrays as a portal through which God is watching Jerome on a stage. This seems, uncannily, to involve the logic of the Theorems of Pappus and Desargues. The sagittal line connecting the audience to the stage is constructed out of the "anywhere" of the audience's scattered 180° array. As in La Gournerie's Paradox, oblique sight lines are consolidated into an imaginary orthogonal projective tunnel. Within this tunnel, perfectly coinciding forms define an anamorphic effect. The audience's ability to "see around" the defects of the characters produces an ontological depth. Its "perfect insight," another form of

S2...S2/S2...S2, is modeled by Desargues' perfectly aligned triangles and the coincidence of lines extended from their sides. Anamorphosis, activated by the theater paradigm, is the ethnological face of projective geometry. This is what Lacan would readily have called the Real; and what Žižek seems to identify with the secondary virtuality of effectiveness.

We might borrow Marcel Duchamp's idea of the "infra-thin" to describe the space between the planes linked to the respective vectors of the actor and spectator. It materializes the less-than-zero, negative status of the audience's anamorphic access to the stage's panorama. In Antonello's painting, infra-thinness allows the objects placed on the step between Jerome's mortal domain and God's divine domain to be like a commentary text that interprets what is happening. Like the mortified members of the theatrical audience, we mortal viewers of this painting must "remember to play dead" (the meaning of the motto, memento mori) to decipher the meaning of these rebus-like symbols. This kind of memory is different from the memory of the living. It is the memory that, once it puts its finger on the truth, the result will be apocalyptic. The rebus formation serves as a kind of password that, if deciphered correctly, will grant us entry into Jerome's "truth space," to which we will bring a "truth of truth." The partridge in particular relates to the theme of hysteria, because of its reputation of being sexy.⁴³ Late Medieval bestiaries reported that partridges could be impregnated by the wind. Thus, not only will we apply this hysteria to Jerome, who must be impregnated by divine afflatus to construct the text of the Vulgate Bible, it will apply to our own transfer hysteria in comprehending the painting. We will cease to be passive observers; we will be active agents in the constructions of the image as a holy text.⁴⁴ Hysteria's traditional crisscross of pleasure and pain, the basis of the so-called death drive (repetition compulsion), directly carries over into transfer hysteria. The infra-thin is *jouissance*; a pleasurepain, purely transactional, pure engagement, purely — shall we say? — sexual. The theme of impregnation alone would warrant this; but it is clear that projectivity in general is open to Lacan's playbook of distinguishing men and women.⁴⁵ Impregnation requires this qualification; man and woman, or (in light of the pleasurepain of jouissance, manwoman must be considered

⁴³ Penny Howell Jolly, "Antonello da Messina's *Saint Jerome in His Study*: An Iconographic Analysis," *The Art Bulletin* 65, 2. (June 1983): 238–253. The partridge has an interesting *resumé*, beginning with a human origin as the precocious nephew of Dædalus, murdered for his ingenuity. Pushed off a cliff, the nephew was pitied by the gods and turned into a partridge, a bird thence well–known for never flying far off the ground. Jolly's analysis covers the important roles played by shadows, windows, architecture, objects and animals.

⁴⁴ Vico's dictum, *verum ipsum factum*, will be read, "this image will mean nothing until I tell the truth of its truth." Vico pointed out the convertibility of truth and making in his short work, *De antiquissima Italorum sapientia*, ex linguae latinae originibus eruenda (1710), "On The Most Ancient Wisdom of the Italians" As contronyms, the two terms informed each other: truth was "faked" in the direction of production, making was "revelational" in the direction of reception. The truth of making was tied up with the crisscross combination of fiction and evidence of the divine.

⁴⁵ A subtle point is warranted here. Lacan insisted on a non-biological definition of sexual difference. Men were "those who *chose to call* themselves men; women were those who *chose to call* themselves women. The idea of choosing and calling are critical. The call sets the issue of gendering within the Symbolic. We are sexually who we are in relation to our networks of symbolic relationships. The choice is situated not in an idea of personal expression and any purported freedom to chose one's identity but, rather, as an instance of a forced choice: interlocking, self–canceling options, as in the case of the robber's demand, "Your money or your life!" The truth table of the forced choice reveals that the two choices remaining after subtracting TT and FF (ruled out on account of the "or"), TF and FT, are really two versions of the same thing. The "same thing" in the case of sexual identity is the imposition of identity itself, the necessity of subjectivity's sexual essence. Men and women are versions of "damned if you do, damned if you don't." The projectivity of this is clear. The "any" of Pappus's lines and Desargues' triangles result in the determinate formation of a line that distances itself from contingency.

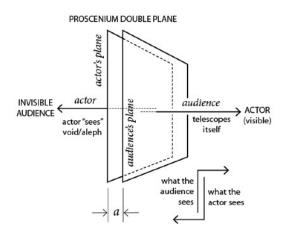


Figure 20. The theater version of the *matheme* for metaphor shows how the audience's attenuation to a narrow open "tube" of access overcoming any literal distance to the play is a vector parallel to the actor's imagined blindness to the audience's 180° presence in the auditorium, abbreviated to an imaginary vanishing point, "hysterically" held open by its fictional status as an Eye that oversees and perfectly comprehends (as a kind of Fate) the action on stage. The vectors create a proscenium "sandwich" whose planes are separated by the *object petit a*, a thin space of desire that prevents the planes from collapsing and, consequently, guaranteeing their projective status as a *single surface*.

as the hermaphroditic condition demanding reciprocal forces in the production of the fleshword that is incarnation: *logos* as both Thing and Act.⁴⁶

In both cases of the theater and immaculate conception, we find a synesthesia of organs and senses. The Virgin Mary, like the partridge, hears the (pass-)Word, which she makes Flesh. Her ear becomes her womb. Jerome, to avoid the tedious pitfalls of translating multiple languages into Latin, needed meaning to flow not from secular word in one language to a corresponding secular word in another, but from God portrayed as a gaze peering at him in his study, with the same logic of ectoplasmic insemination as our theatrical model. The ear as passage to the mind, like the vagina as passage to the womb, has its own dimensional peculiarities. It is conditional, involving the ambiguity of the etymology of host, both accommodating and hostile. 47 It is also inextricably related to jouissance, in the Lacanian sense of pleasurepain as an *object*—cause of desire, an object that causes, in other words, an effect that becomes a cause.

Antonello's mascot, the partridge, should be placed beside the theater's model of projectivity. We speculatively define the audience's visual and auditory perception of the stage as a flow of "ectoplasm" able to vivify actors on stage. We

might as well say semen, the stage might as well be a womb. This energizes actors as "unreliable narrators," able to make both good and bad judgments, to see and fail to see the future, the ability to avoid the wrong people and wrong ideas. But what is also energized our attraction to unreliability is also a compulsive attraction to the crisis that is key to both comedic and tragic drama. The audience can *see around* the unreliability that attracts it to look at the stage in the same way passing motorists are attracted to stare at the carnage of auto accidents. Because actors are by definition unreliable narrators of what's happening to them (think of Lear), they are all—the—more—credible representatives of the human condition. They are paradigmatic humans in that they are blind themselves to what outsiders can see clearly. The enthymeme's self—negating middle term facilitates the ectoplasmic impregnation of these "undeserving rep-

⁴⁶ Žižek has made this point but not pursued its implications. Slavoj Žižek, "Theorem III: The Three Unorientables," *Sex and the Failed Absolute* (London, New York, Oxford, New Delhi, Sydney: Bloomsbury Academic, 2020), 219–272. Žižek misses the important function of the silent/missing middle term, which when expanded becomes the basis of (logical) emergence. Nor, does he seem to exploit fully the properties of projective space, in its use of antipodal vanishing points. Yet, he is brilliant on the subject of 'x' as the efficient cause, "what makes a thing a thing" (231). Here, he emphasizes Freud's *Vorstellungs-Repräsentanz* — not just a psychic representation of a biological instinct but a place—holder of a missing representation. Projectivity literally "holds a place open" for that which fails to be identified within the Symbolic (i. e. infinity). Such a place is definitely a womb. Wandering wombs, i. e. synesthesia, could be settled only by impregnation, i. e. Immersion of projective surfaces into 3–space.

⁴⁷ See Irina Aristarkhova, *Hospitality of the Matrix: Philosophy, Biomedicine, and Culture* (New York: Columbia University Press, 2012, Russian translation 2017).

resentatives" so that the audience's *kenosis*, it's place–holder knowing, can be inverted/converted by metaphor.

I would like to add the theme of psychosis. Norbert Weiner has pointed to an interesting parallel binding human brains to machine processors.⁴⁸ In short, because both systems seem compulsively to increase their activities to the point of *collapse*, we should consider that not only are machines in this sense "human, all too human," but that the mind in this sense behaves as if it were a machine, i. e. as a compulsion machine. After all, what is a machine that is *not* a "compulsive" system? And, what subject is a subject who is not mechanically driven to repeat him/herself? The crisscross between subjectivity and automatism is not simply an analogy; it is evidence of a structure of projectivity, where the viewer and the viewed cannot be distinguished, where act and thing are present within a single *logos*.

Weiner's observation appears in a much forgotten chapter of his epochal book on cybernetics. Yet, as Aaron Schuster has pointed out, it alerts both information theorists and Lacanians that the catastrophic apocalypse implied by both machine and human systems' drive for increased capacity and efficiency is built into even the earliest stages of operation, to the extent that it becomes necessary to admit that a "psychotic termination" is not so much the end of things as the beginning. The *terminus ad quem* turns out to be the same as the *terminus a quo*. Psychosis clinically amounts to a reversion to a pre-subjective, autoerotic condition. Failure to submit to castration by the paternal signifier, in the jargon of psychoanalysis, becomes a rush to the end–point of subjectivity, its destruction. How can this apocalypse also be the origin? The answer lies in the way that signifiers — signifying chains as we have related them in the topsytury of the real projective plane of metaphor — are functions of emptying out, paired with filled–to–bursting. Both, regarded as "womb conditions," bind psychosis to subjectivity, even thought psychosis is historically considered as the antithesis or apocalypse of subjectivity. It is as if we must say that the contents (subjectivity) is defined by its boundary conditions.

The graphic account of metaphor superimposed onto the flat version of the real projective plane can again serve as a blueprint of this logic of "ends against the middle." The general guide to this move are the two paired elements, (1) the two sets of signifying chains, S2...S2, and (2) the reciprocity of M and x, the known and the unknown, presentation and the reception, represented architecturally by stage and auditorium. The key lies in the reciprocating energy that circulates between these two zones, both distancing and binding them together. The donation of ectoplasm/sperm understandably leaves the audience in a mortified state. They can see and listen, but they cannot move, make noise, or touch. They are partly compensated for their loss of touch by the construction of a vector that works effectively as a dedicated passageway to the stage. To play along, the audience must imagine that the actors do not see the full span of the facet common to the stage and auditorium. Actors must stare blindly into the darkened auditorium, pretending to see just another part of their closed visual sphere. The exception comes when an actor has a generic awareness of being watched, and directs attention to an imagined gap or flaw in

⁴⁸ See Aaron Schuster, *The Trouble with Pleasure: Deleuze and Psychoanalysis* (Cambridge, MA: MIT Press, 2016). Schuster cites Norbert Weiner's "forgotten chapter" in *Cybernetics: Or Control and Communication in the Animal and the Machine* (1948): "We may be facing one of those limitations of nature in which highly specialized organs reach a level of declining efficiency and ultimately lead to the extinction of the species. The human brain may be as far along its road to its destructive specialization as the great nose horns of the last of the titanotheres."

this fourth wall. This gap or flaw is constructed as a kind of hole in the actor's visual range, a defect that is more of a tunnel through the Cartesian fog of the stage world, a point that seems to know something and have something to say but is silent and invisible except as whatever the actor seems to stare at.⁴⁹ Just as the audience has attenuated its 180° literal touch of the proscenium plane into a narrow channel, the actor perceived the reverse–angle view of this as, also, a narrow channel. From both sides, this is like the narrow channel of the anamorphic image, a line with two vanishing points, one located at the actor's position (the audience's vanishing point), the other at the audience's "sweet spot position," to which the actor addresses the special form of dramatic speech, the soliloguy.

This tube, this narrow channel, is always open, by definition. The audience will use it as a vector collapsing the distance between them and the stage. The flattening of the stage creates what is called La Gournerie's Paradox, the automatic mental–visual correction made by the viewer located at an oblique angle to the representational plane.⁵⁰ Even from a cheap seat in the side aisles, spectators will imagine a "front and center" version of the drama, just as the eyes of a portrait follow a viewer as he/she moves around the room. The 180° Euclidean span becomes the <0° tunnel access, less than zero because it is a vector rather than a tube, an idealization. The vector is attenuate touch, a measure of distance. Thanks to the attenuation, the vector remains open and facilitates movement to overcome the physical separation.

From the actor's point of view, where the audience is the vanishing point in a literal, hysterical sense — i. e. *really* vanished! — the audience as gaze functions as the Fate that is sensed in various ways by the characters. It is materially the ability of the audience to "see past" the actors' frailties and misconceptions, the suspense created by the audience being able to see what is coming while the actors seem to be unaware (although they of course have rehearsed the play many times). In actual performances, actors often choose someone in the audience to whom they address their soliloquies. This is a point, not a person. The literal person sitting in an actual seat in the auditorium serves as a focus, a vanishing point, not a paying patron who is getting special attention, although they may be flattered by the choice. They must involuntarily play the part of a "god of God," the one who knows and understands what the actor is reaching to say. They are the dead man, the hero, the ancestor, the know–it–all.

Although we could say that there is only one representational plane, it is a plane that has two positions, two "moment." One relates to the audience's point of view, the other to the actors, as if to say the two modalities alternate in the same way that, in the space of geometric projection, each point at infinity has its antipode and each line vanishes to both points. In Euclidean locality, this bi-modality presents itself as a double configuration, a self-intersecting form. So, for descriptive purposes, there are, in the locality of the theater building, two representational planes, two proscenium surfaces, just as there are always

⁴⁹ One of the cleverest exploitations of the actor's relation to this invisible "flaw" in the fourth wall is Henry Koster's 1950 film, *Harvey*, based on Mary Chase's play of the same time. Elwood P. Dowd (James Stewart) enjoys the company of an invisible giant rabbit, which only he can see. This trope borrowed from the Irish tradition of the pooka, an attending spirit capable of good and evil.

⁵⁰ James E. Cutting, "Rigidity in Cinema Seen From the Front Row, Side Aisle," *Journal of Experimental Psychology* 13, 3, Human Perception and Performance (1987): 323–334. Jules de la Gournerie, *Traité de géométrie descriptive* (Paris: Mallet-Bachelier, 1860–64).

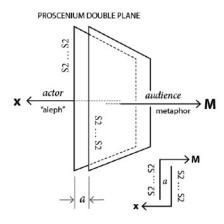


Figure 21. In this slightly simplified view, the relations to the metaphor *matheme* are clear in their designation of the double-frame aspect of the proscenium, and the functional projectivity that keeps open the thin space, *a*, to maintain the opposition between the presented and received versions of S2...S2 signifying chains. The actor is closest to the stage side of the double plane, and his vector seems to penetrate through space to the 'x' that is the audience as an Aleph. The audience encounters their auditorium–side plane and aims, god–like, at the metaphor, M, which shapes the fictional action into a *récit fort*.

two frames "locally" for any one frame for any representational act.51 It's useful to recall the idea and function of the enthymeme at this point. The enthymeme is a transfer made effective thanks to an absence, a removal of a step in an argument that allows this step to transfer to the listener. A/B,~B/C could be written: A, —, C or A/C. The missing element crosses the bar between the actor and audience, in our case, because it is left blank on the stage side. This blank is created by the "unreliability" of the actors to see what is happening to them. Logically, it takes the form of a self–negating condition, where B/ ~B produces the silence or absence. Even though the play will have many surprises built into the script, the 'x' that the audience possesses arises out of the blindness represented by the small key diagram at the lower right of Figs. 20 and 21. The small *a* sandwiched between the angle brackets is the *jouissance* identified with the gap between the audience's ability to foresee and the actor's pretended inability. The pleasure the audience *en*-joys in the *ex*-ternal frailties of the characters is a function of the actors' blindness to the fourth wall. The actors condense this into the point of the gaze, which is a gaze-for-them, a gaze viewed from the opposite side by the audience. The theater structure allows us to realize the full potential of Lacan's model of anamorphosis developed in Seminar XI.52 The

overlapping bracket angles in the key diagram explain how the *jouissance* plays a key role in maintaining a thin gap between the audience and actors, the architectural auditorium and stage. This is key to understanding the weird double—vision of the audience, its ability to "see that the other does not see." Even more complex is the actors' ability to pretend to be blind and thus invite, enthymemically, the audience to supply the missing element, the blind spot. As soon as the audience sees that the actor does not see, the audience plays the part of its own metaphorical presence on stage — which is nothing less than to "round the story" (*récit fort*).

The projectivity of the double brackets is clear. They are almost a literal portrayal of the flat diagram of the real projective plane, where the flow of the surface is directed to two imaginary folds (Fig. 17). One

⁵¹ Žižek has made a parallel argument for the frame, claiming that, for any one frame of a painting, there is another, invisible frame: "... [A]nd these two frames do not overlap — there is an invisible gap between the two. The pivotal content of the painting is not rendered in its visible part, but is located in this dislocation of the two frames, in the gap that separates them. ... [P]erhaps the decisive dimension of humanity will be lost when we lose the capacity to discern this gap." Slavoj Žižek, *The Fright of Real Tears: Krzysztof Kieślowski between Theory and Post-Theory* (London: British Film Institute, 2001), 5–6. The scandal of this valuable insight is that Žižek presented it as a "total bluff," invented in an idle pause of a boring conference. Žižek in fact reversed his claim at the end of the book by providing evidence that the double frame had long been in use by artists, citing Hopper's famous examples. See Clint Burnham, *Does the Internet Have an Unconscious? Žižek and Digital Culture* (New York and London: Bloomsbury Academic, 2018).

⁵² Jacques Lacan, The Four Fundamental Concepts of Psychoanalysis, Seminar XI, trans. Alan Sheridan (London: Hogarth Press, 1977).

concerns the theatrical idea that a fluid, an ectoplasm, flows from the deadened audience in the auditorium to the energized space of the stage. The other is the sphere of fiction through which the actor is imagined to penetrate to imagine the Aleph of the god ap-pointed to be the vanishing point constituted by the audience. This is not an image or blank but an animated panorama able to roll through the auditorium's collective wealth of dead souls. Without changing its angle or aperture, it is the anamorphic tube–passage beyond which this source parades its circular treasury. The actor "scans" it when staring out into the darkened auditorium; the audience recognizes it by the actor's change of speech and facial expression, her position on stage. Actors of course know how to rehearse their arrival at this position and are able to use operant conditioning to get the audience to respond correctly and on time.⁵³

The enthymeme's transfer of legislative control to the audience thanks to a missing element is, here, the way the imagined Aleph allows the audience to see the whole through the hole, but in reverse. *They play the part of vanishing point for the actor, who they imagine is seeing it as such.* Through this crisscross of channels through spatial sandwiches, the audience sees itself seeing itself, thanks to the actor's skill in looking like a blind Tiresias who is yet able to visualize the fated future. Although it may be difficult to imagine the mathematical extravagances of projective geometry and the real projective plane, this knowledge is not required to *experience* its effectiveness through the *act* of theater, or to extend this example to the conditions of subjectivity in general. In fact, without implicitly mastering this crisscross maneuver, no audience — no subject — can have any experience of any dramatic phenomenon, or any subjective experience. The abundant proof we have comes in the form of the universal and timeless experience of theater made evident by all cultures in all periods of history. This, indeed, is what Vico meant, in paragraph 345 in his *New Science*, by his "proof of the body."

New science, "new" in the same sense that Dante used the word in his *Nuova Vita*, is knowledge of the subject in light of mathematical overdetermination. Overdetermination is the essence of projective geometry as we find its "immersed forms" (Möbius band, Klein bottle, cross–cap) in Euclidean locales. These come in the form of twists, self–intersections, paradoxes, negations, disappearing middle terms, contradictions, contronyms, non-orientable positions, and Cretan Lairs. Proof as overdetermination is the whirlwind of Paolo and Francesca, but also other examples that we are not able to treat here: the maelstrom of Poe's *Arthur Gordon Pym*, the temple+labyrinth of the *mons delectus* of Cebes' Table, the fractal design of Dædalus's labyrinth itself and relation of this form to funerary myth and foundation rites. Equally relevant but beyond our present scope is the project of subjectivity as culture moves from "cyclopean" dispersion of authority based on hearth worship of family ancestors to consolidation of hearths into the collective flame of the city, guarded by virgins wedded to the flame.

The ethnography of the uncanny always involves anamorphosis, and anamorphosis always involves projective geometry. The stories we tell about human culture as a collective can be brought to the doorstep of the psychoanalytic clinic, where the individual is the unit, by realizing the "atom" of the sub-

⁵³ I witnessed this technique personally, at a 2003 performance of Oscar Wilde's *A Woman of No Importance*, Alan Noble, Director, The Haymarket Theater, London. Actors in this performance used voice tone, gesture, and timing to get the audience to pay particular attention to specific locations on the stage, readying them for the moment when they would be speaking from the thin space of *jouissance* that is the *sine qua non* position for speeches "rounding" the logic of the play. This point is delivered by Mrs. Arbuthnot (Samantha Bond) in her concluding speech, delivered from inside a gazebo with its fourth wall removed, an *ædicula* accentuating the role of *jouissance* and cuing the audience to consider it as transformative.

ject in ethnography is the *polis*, the architectural manifestation of the nation, which is (as Vico reminds us), "being born." From flame to city to the theater in the city to the bi-modal functions of projectivity in the theater is both an architectural and a psychoanalytical sequence, but one that must always return to the flame to refresh its thinking. The flame is none other than the Aleph, the actor's reversed telescope to the collective audience as panoramic god; or, taking as step back, it is none other than the requirement that the audience *imagine* the actor looking through a hole in the fourth wall darkening the proscenium plane. The real projective plane found here is both mathematical and ethnographic. The light of the flame connects, as it always does, to the "dead who have forgotten they are dead." They are silent but they are effective in their silence. They are enthymemic.

What makes the enthymeme "projective"? Naïvely, we could say that the enthymeme "projects" a conclusion that takes place in the heads of the audience, silently, thanks to the self–negation of the middle term. Logical self–negation happens in the syllogistic model, when the middle term serves alternatively as, first, a universal class and, in the minor premise, as a member of a universal class. In rhetorical terms, the middle term comes in the form of a statement or implied idea of denial. I say I don't want you to do something when really I do, and I structure my demand in such a way that you come to this conclusion on your own. The inversion of form or negation of idea allows the "correct" idea to transport itself across the divide — the bar in Lacanian terms — dividing the signifier from the signified. The signified in this case is the idea embodied silently in the listener's mind.

But, naïveté has its benefits. The enthymeme's "basics" reveal the structure of silent transfer. This becomes essential when we consider how silence is hysterical in the same way that selective blindness is hysterical. In theater terms, the silence function is the audience's necessary perception of the blindness of the actors to the fourth wall, requiring them to envelope stage space with a panorama that excludes all but the *point of audience access*, which from the actor's constructed point of view appears as a kind of Aleph poking through space into a panorama of the Real. The presence of vanishing points, vectors to infinity, and convergence of parallels makes theatrical space sound like a near–perfect model of geometric projectivity. Even the contingent conditions of Pappus's two randomly set points on randomly placed lines have their analog in the play's seemingly accidental sequence of events. Just so, the fate to which characters are drawn are related to the spooky presence of a "third line" that the audience sees is evolving despite the characters' carelessness and denials. Geometric projectivity focuses on the logical connection of chance and necessity; theatrical projectivity is the enthymemic transfer of clairvoyance to the audience, thanks to the perceived blindness of the fictional characters. Both geometry and theater require a crisscross calculation, both require chance and necessity to revolve about each other, the eternal vortex that is "the suffering of lovers," as we are told by Paolo and Francesca.