

The Curvature of the Alethosphere

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This is a Lacanian thesis about Lacan, meaning that I embolden myself to, as did Lacan, become “a dupe of writing,” obeying rules I stumble on inadvertently, while at the same time staying focused on the function of the dupe as a scientific discourse unfolds thanks to this submission.

The Lacanian universe is two things, thanks to the two distinctive origins of the world “universe.” It is a universe in a colloquial sense, (1) “a complete world, self-defining for the most part and self-sustaining thanks to Lacan’s canonical aspiration to complete a task defined by three domains held together by a mysterious virtual fourth domain, and (2) the universe of the guild-derived “university,” which originated in the idea of a conviviality arising out of the common, often overlapping, and directional unity of a group of skilled craftsmen or tradespeople. Such groups were bound together defensively, to protect their rights and secrets in the competitive atmosphere of the Late Middle Ages, when commerce and evolving cultural conditions shifted power from the military and church to mercantile and craft production. This was the beginning of Capitalism, of course, as well as the trampoline accelerating the movements of science, from the empirical to the theoretical, generally speaking. My view is Cassirerian, namely that, like the Count de Sade, regard human development with a eye equally cold for its anti-entropic development as well as its devolution.



Figure 1. Ernst Cassirer (1874–1945), here about 1935. A “neo-Kantian philosopher and rival of Martin Heidegger, whose *Philosophy of Symbolic Form* borrowed key ideas from Giambattista Vico’s *New Science* (1744) by proposing an original account of the “originary thought” of first humans, which Cassirer called *Ausdrucksfunktion*, or “expressive function,” present not only in mythic thought but modern conceptualism as well.

Following the famous treatise of Pappus of Alexandria on Analysis, my view, and I believe Lacan’s, is that there is no Analysis without Synthesis, and no Synthesis without Analysis.¹ This could be put in terms of theory and practice, although by practice I would be thinking of *praxis* as the sum total of arrangements needed to sustain social order, a principle of collectivity. Think of who would do theory and *praxis*, the solitary thinker and the “university” guild operation.

The monogram of this crisscross conception would be the Alethosphere, i. e. not just something Lacan invented as a counterpart of the “lathouses” that are found everywhere, but the “a-sphere” he emphasized as the topological Real of both this idea of entrapment.² I believe that Lacan’s coinage of alethosphere was perhaps an “invention on the spot,” thanks to his need to relate the gadget (lathouse) with something universal, virtual, and effective. The Greek word for truth may have sprung into his mind at a fortunate moment, but with a cryptographer’s eye, he immediately saw that inner letters could be eclipsed — *a letho sphere* — to produce what he needed. The privative “a” that emboldened Heidegger to regard truth as a matter of un-enclosing what had been intentionally concealed (and, thus, a exorcism of an

¹ Jaakko Hintikka and Unto Remes, *The Method of Analysis: Its Geometrical Origins and Its General Significance* (Dordrecht, ND and Boston: D. Reidel Publishing Co., 1974).

² This study follows from a reading of Jacques Lacan, *The Other Side of Psychoanalysis*, Seminar XVII, ed. Justin Clemens and Russell Grigg (Durham NC: Duke University Press, 2006).



Figure 2. “La impresa,” the name given to the image on the title page of the 1744 edition of Giambattista Vico’s *The New Science*. Donald Verene has written on the meaning of the motto shown on the plinth, where Lady Metaphysic is shown sitting on a globe, contemplating a triangle (or “builder’s square”) through a mirror. “Ignota latebat” means “She lay hidden,” possibly meaning that a poetic metaphysics, the subject of Vico’s work, was latent but unexplained until Vico’s explication of how humans had made their own world.

original uncanny containment within the *Heim* of the *Heimlich*) was not fully accepted.³ The privative “a” might have been positive, in the word *aletho* (ἀλήθω), to grind. Truth, after all, is a kind of mill that grinds fine, thanks to the massive wheels that subjugate humans to industry of food–production.

Lacan was most likely on the side of Heidegger in suggesting the alethosphere as something mysterious, related to small objects claiming to conceal secrets, or at least secret technologies. But, by isolating the “a” and joining it back to “sphere” to make, not an abbreviation but rather a self–standing virtuality that worked like a spatiotemporal Mill grinding out necessity, he might also have used the word as a model of the Freudian unconscious. “Letho” is a Latin idea: “lie hidden, secret; forgetfulness, forget, inactive through forgetfulness; also sleepy, drowsy, dull, sluggish.”⁴ Latin goes further. Giambattista Vico picked up on the idea of lying hidden to create his own motto, “She” (meaning truth, dressed as Lady Metaphysics) “lay hidden” (*latebat*). To insure that the reader of this motto appended to his emblem (Fig. 1), Vico appended *ignota*, “unknown.” Like Heidegger, Vico wished to synthesis a saying that “had been there all along,” in the idea of laying low, but also in the conspiracy of lying as factual misrepresentation and lying as taking a prone position. The British expression “lying doggo” conveys this alliance nicely.

Two words could not be further from each other than lie (to tell an untruth) and lie (as in “to lie down”). Lying as misrepresentation comes from Proto–Germanic *leugana*, from Proto–Indo–European *lewǵ-*; Cognate with Old Saxon *liogan*, Middle Dutch *liegen* (*utch liegen*), Old High German *liogan* (German *lügen*), Old Norse *ljúga* (Danish *lyve*, Swedish *ljuga*), Gothic *𐌺𐌹𐌸𐌹𐌶𐌰*.⁵ The disconnect is like the joke Slavoj Žižek has retold several times, about the little girl who says, “My mother was from Manchester, my father from Leeds, and I was born in London; isn’t it amazing how we all got together!” We are, in effect, the little girl who is naïvely amazed about a natural bond that is understandable and un-noteworthy. The certainty that drives her amazement is the same as our weak claim that, in telling a “big porky” we also lie prone. The conversion of truth to lie is embedded in the idea of truth itself, that it is Janusian. Truth is, in fact, the truth about conversion, the movement from one state to an opposite state. This is present in the idea of truth as *a-letheia*, un-coveredness, as well as milling. Conversion is, in essence, *version*, a turning. And, there’s no point converting something that is already what it will be. True conversion involves the kind of opposition that fueled Freud’s famous “primal words,” *altuus* (both high and low), *hostes* (both accommodating and hostile), and *sacra/-um* (both reviled and revered). Just as, from the Renaissance on, Europeans admired the Egyptians for the mysterious secrets embedded in their hieroglyphs, convinced that

³ Paul Friedländer and Hans Meyerhoff, *Plato: An Introduction*, I (Princeton, New Jersey : Princeton University Press, 1973). Friedländer is adamant that there is no etymological basis for Heidegger’s assertion that the “a” is privative, providing him a basis for arguing that truth is about *un*-concealment. This de-frocking of the aleph, however, did not mean that truth did not involve revelation. The alternative model of *aletho* as a mill-works could be argued to be equally revelational, in the contrast between the massive automaton and the fragile but fine–grained product. Other milling metaphors come to mind: wheat from chaff, “what grinds slow grinds fine,” grinding down something, etc. Also, the notoriety of mills as places of human subjugation lends truth an element of emancipation. Truth is not free, it is “liberated,” which is not far from the need for revelation to be preceded by obfuscation or imprisonment.

⁴ See “Letho,” *English Word Information*, URL: <https://wordinfo.info/unit/1176>.

⁵See the article for “*leogan* (Old English)” in *Word Sense Dictionary*, URL: <https://www.wordsense.eu/leogan/>.

decoding them would lead not just to a lexical concordance but revealed wisdom, Freud himself regarded contronyms as royal roads to the innate truth—telling of archaic cultures. Thus, the *archē* was a basis, a fundament, thanks to the retroaction that Vico distilled later in his expression *verum ipsum factum* (something becomes truth in the making of it and thus truth and making are convertible). Ancient peoples told a pure kind of truth because, simply, they didn't know any better. In perceiving the world without prejudice of categories, they occupied the moment of apperception's wonder longer than would be tolerated by more sophisticated minds. Out of astonishment they "tarried with the negative" long enough to regard it as a source of untainted truth and then built their cultures around the "sacred" (*sacra, -um*) structure that drenched it with fear.

The ancients, as Freud, Vico, and Cassirer seem to have thought in common, did not suppress *letho* simply because they were unable to know that it was there "all the time." That original cultures were incapable of lying is something of a construct. Of course, humans that speak cannot do so without lying; the human subject's initiation into the Symbolic confers, as if it were a reward, misrecognition. The idea of *letho* however goes beyond this simple binary. The mythic conception of Truth is durable, complex, and contronymic. It is "Janusian" in the sense that, instead of deciding whether the cosmos expands outward to an un-contained infinity or whether it circles inward to a "divine" kind of black hole, there is mental suffering to be done. Truth can no longer be done by containment, to say "this thing is *that*": $X(Y)$ where X is this thing and Y is the truth about it. The problem is in the brackets that make truth work as a kind of hierarchy machine. Topology refuses to go this way. It makes it impossible to say which side of a boundary is an inside and which is an outside, if there *is* curvature. In the standard view that has $X(Y)$ as "X encloses Y" this kind of truth is affirmed only *locally*. Taken *topologically* truth is both this and the inverse, $Y(X)$. The "(" is also an ")", $a \rightarrow$ is also $a \leftarrow$... also $\uparrow = \downarrow$, thanks to Truth's allegiance (truth *to*) conversion rather than containment. The Chinese Taoists claimed that the only thing that doesn't change is change itself. But, we can equally and paradoxically say that "Change is Itself," that "change itself changes." The topological view, the conversion view, holds that it is equally valid to say that the small object you hold in your hand is surrounding you.

Certainly this contrarian view is on par with the claim of the agrimensors who, as civil priests charged with maintaining the spiritual efficacy of city walls, would walk in the space reserved between the military defensive wall and an inner wall, the *pomœrium*, not to surround the city but to enclose, contain, and neutralize the space around the city.⁶ It is possible to interpret this nearly-universal ritual sentimentally, as a "symbolic act." Or, as good Lacanians, it is more productive to see it as an act whose authenticity derives from its *conversion function*, its transformation of the particulars into universals, the details of ritual re-enactment, tedious to say the least, into the Truth—conferring benefits of gods, who, in understanding the topology of this act, get proof that they are dealing with mortals who, if they don't know the Truth exactly, at least know what to do on its behalf.

Where does *-letho-* go when Lacan topologizes *alethosphere* as an *a-sphere*? It "goes" to the same place that it went in the mythic mind's conception of the astonishing sensorium, or (more accurately) the sensorium—as-astonishment. "It" went to where it had never gone before because "it" had not existed before it went. The *act* preceded the content inferred by the act. This is an inverse of the rabbit that did not exist before it was pulled out of the hat. Of course the magician will tell us, and not just a little condescendingly, that the rabbit was "there all the time," but the point is that the "rabbit" as prop is not the same as the "rabbit" of the audience's astonishment, which

⁶ See Numa Denis Fustel de Coulanges, *The Ancient City* (Kitchener, Ontario: Batoche Books, 2001).



Figure 3. In *Vertigo* (1958), Alfred Hitchcock posits how love develops in the self-negating case where an actress is hired to play the fictional part of a mad wife, the real wife being the object of a murder scheme designed by her husband, Elster, but set in motion by the “shill,” the actress Judy, played by Kim Novak. Detective Scottie Ferguson (James Stewart) has suffered trauma in a near-death experience of nearly falling; the con and shill exploit this by leading Scottie, hired to follow “Madeleine,” to the tower of a mission outside of San Francisco, a tower they know in advance he will not be able to climb, thanks to his symptom of vertigo.

“came out of nowhere.” The prop is material cause, the astonishing lagomorph (form with slack ears) is the “efficient” cause of astonishment, as a virtuality that “makes whatever works work.”

This idea relates to Slavoj Žižek’s idea of effectiveness, which pulls efficient cause itself into a primary zone that can only be retroactively known, before the mind has time to form a Final Cause out of a Formal Cause, thanks to the magician’s Material Cause. Truth be told, there have to be three rabbits in the hat for the fourth to get applause. The Final Cause combines the audience’s wish to be deceived with the magician’s intention to exploit that desire. This is the classic structure of the Con, where a Con (magician) victimizes a Mark (semiotic as well as “vou-dou” sense of victim) thanks to the latter’s unconscious wish to be put down. In Alfred Hitchcock’s *Vertigo* (1958), the detective Scottie wishes to erase the uniformed policeman’s fall on his behalf. He internalizes the sacrifice in all its antique hardware and software. Even as a modern conceptualist, he feels the horror as a concrete astonishment of the conversion of one human’s death for another human’s life. But, the question is, as it always is for sacrifice, who really dies and who really lives? In *Somnum Scipionis*, the “Dream of Scipio,”

Cicero reviews the evidence of the soldier Er in Plato’s *The Republic*, who was left for dead in a pile of corpses, to reveal after he was revived that he had in fact visited the Realm of the Dead to witness the process of reception into Elysium and options of eternal survival among the gods or rebirth. Er’s death dream compares to Scottie’s, in that it is possible to read the entire film as Scottie’s final few seconds of consciousness, a project of reclaiming his mortal project before a final tally. “A policeman has fallen” could explain why the figure we see falling is dressed in uniform (just as Scottie later sees “a Madeleine” fall, who is, he thinks, *the* Madeleine). The two women, Judy and Madeleine, are dressed alike for death, just as Scottie, a “plain-clothes” policeman, is “more uniform than uniform.” The dead are dressed alike, according to customs the world over of covering the corpse in a shroud.

The rabbit is slack-eared, the Homeric *ἄγῳός* (*lagōós*) in a telling Lacanian sense. The Analyst’s ears are “slack” to the blah-blah-blah of the Analysand, but they immediately become erect — in the sense of other “erectile tissue” — to the *phallic* signifier embedded within the Analysand’s slips of the tongue, slurred speech, and bungled explanations. These are the signifiers of the Unconscious to “another signifier,” the signifier that is Analysis, which is not a word or deed but a prying-open of space in the continuum of the Imaginary (*a — a’* in Lacan’s L-schema, two egos sitting in a room) to allow for a prison-break, a deft smuggling operation akin to Devlin’s rescue of Alicia in *Notorious* (1946) from the Nazi-spy Sebastian’s house. Devlin’s escape is akin to Odysseus’s from the cave of the Cyclops.⁷ He, too, has gone into the lair of the Cyclops (whose “one eye” refers not to monocularity but to the commitment to a immobile, idempotent point of value — in this case, the wine cellar containing bottles filled with uranium dust) knowing that the Cyclops can’t venture far from his hearth (the Rule of Hestia). Devlin reminds Sebastian that his Nazi colleagues will liquidate him if they discover that Alicia has been an American spy all

⁷ See Louis Armand, “The Cyclops and the Gnomon,” *Lacan dot Com* 5 (Winter 2004). URL: <https://www.lacan.com/cyclomonf.htm>.



Figure 4. Devlin and Alicia kiss in the door to the wine cellar to make Sebastian, who has surprised them, think they are meeting for a tryst. Yet, this is precisely the kiss that liquidates Devlin's failure to properly understand the famous kiss during chicken dinner that Alicia has cooked in hopes of securing a domestic love partner. The kiss that is feigned turns out to be the kiss that dupes the couple into true love.

along; then, he betrays Sebastian by refusing to give him a ride to the hospital; he converts Sebastian into a sacrifice by changing his name from a noun, Οὔτις, to a “nobody,” οὐτις, by converting from a Final Cause into an Efficient (and therefore a successfully escaping) Cause.

Odysseus's and Devlin's escapes are a retroactive recovery of “that which was never possessed, except in loss.” Devlin's loss “first” occurred when, in the longest kiss yet filmed beneath the eagle eyes of the Hayes Code censors, she kissed him but he could not return her passion, thanks to his mistrust of her alcoholic romanticism. This kiss was “cured” when, to give the couple an alibi for scouting out the wine-cellar during Sebastian's grand party, they pretended to be two lovers escaping for a moment alone. The sincerity of this kiss, intended as a ruse, was paradoxically a kiss of *true* love — an exchange between two lie-ers, two lovers lying prone in the a-sphere of the alethosphere.

Within this virtual contronymics, the in and out are out and in, Custer surrounds the nations of the Lakota, Northern Cheyenne, and Arapaho.

Otherwise, how would one get out of the Cyclops' cave, modeled as a *uni*-vocal concordance connecting the ancestor-containing hearth with the incontinent world “out there” (of the Greeks, the nobodies). *Con*-version, *con*-tainment, *in-con*-tenence, *con*-tronyms ... the pattern here is that of the Con, how Odysseus became a Con by willing submitting to the Mark who is only marked after his mythic-mentality gave way to prideful boasting and was blind (literally) to the bi-directional irony Odysseus, as a *hero* (originally this word meant, simply, “a dead man”), could hear. That's when his rabbit-ears perked up, when he was able to hear the phallic signifier, the “name of the father” in the Cyclops' blah-blah-blah. It was there because it was not there. To hear what isn't said requires good ears, ears that pick/prick up on their own. This is Lacan's natural talent: to hear what hasn't been said. The *letho*- gets dropped (silenced) so that an opening can be made, < >, in the Imaginary.

I connect the question of alethosphere to topology, using the justification that the a-sphere is what Lacan says it is: a topology he defines specifically in “L'Étourdit,” the notoriously unreadable essay published in the journal

Scilicet. Part I is about sex, Part II about topology. It leaves little doubt that what Lacan meant by a-sphere was to be laid at the feet of projective geometry, the legacy of Pappus, Desargues, Pascal, and (later, after this group had been discredited by non-Cartesians and misrepresented by Cartesians) Riemann, Möbius, Euler, Klein, Lobachevsky, Boy, Hilbert, and the like. Lacan shows that he “knows his stuff” by referring to projective geometry's “secret lore,” the idea of a central point through which “one-dimensional subsets” of 2d spaces pass through to intersect a projective plane, “going in one side and out the other.” Even as early as Seminar IX, Lacan demonstrated his familiarity with the “standard polygons” of projective geometry, the impossible origami folding that demonstrated the homologies

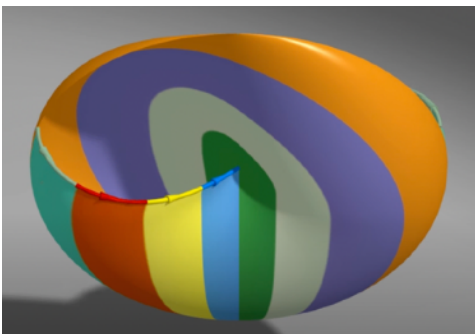


Figure 5. Jos Leys, “Cross-cap,” animation, <https://www.youtube.com/watch?v=W-sKLN0VBkk>. Leys many animations of topological “sequences” demonstrate that projective geometry is time-based rather than drawable.

connecting the cross-cap, the torus, the interior-8, Möbius band in a single logic of *con*-ectivity.

I emphasize the Con of the “con-” to suggest that the structure of homology supersedes the different form projective figures can take to particularize the principles of projectivity. If projective geometry cannot be drawn with ruler and compass, it can be *animated*, and thanks to the clever computer demonstrations of Jos Leys, Lacan’s opaque explanations of how a cut as obstacle can appear and disappear (the meaning of the cut is, as a square–wave oscillating contronym is revealed) to create the cross-cap as a model of the psyche is evident in Leys rotating, revolving, combining, and dis-combining colored surfaces. In all this, the role of the Shill is seen as critical. In *Vertigo*, the Shill is Judy, who plays Elster’s wife Madeleine. She is the go-between, in a way equivalent to Alysia in *Notorious*. Judy is notorious for being able to play someone she, as Judy, seems unable to imagine and powerless to accept, although it has been her very acting that skilled Scottie into falling in love. Like any Hermetic lover, she knows how to steal love, first through the devices of helplessness (she “falls” into the waters of San Francisco Bay; she is undressed while unconscious in Scottie’s apartment and knowingly gives her nakedness to his bachelor’s Duchampian desire). And, just as Duchamp depicted his bachelors as shells (shadows, hanging costumes, pronoun-devices), Scottie forgets–because–he–suppresses his own relation to the pronoun, “policeman.” As a detect-*ive* he has detected (followed, surveilled from a place of hiding, lying “doggo”). Now, with the naked “Madeleine” lying in his bed, he stokes his hearth fire. He, like his Cyclops ancestor before him, has forgotten what he never knew, thanks to the blinding vision of the goddess created by a mortal who would later resist being dragged back into the Real.

“Madeleine” can blind Scottie because he only has one eye, one hearth, a monocular obsession with “truth,” without seeing that the Truth is drawn on the other side, and that it must be combined with his naïveté in a spin to show how he has been trapped. This is the logic of the ancient toy, the thaumatrope, where in Magdalenian caves in southern France, the ancients spun small stone disks to assure success in the next day’s hunt. The running animal on one side “met” the dead animal on the other side, “in hopes that” the Ø phenomenon happening in the brain of



Figure 6. In the story of Apollo and Daphne, Lacan leaves out the backstory about Eros’s fashioning of an arrow that is, essentially, a projective line. This missed opportunity makes an even clearer connection to architecture, which Lacan defines in Seminar VII as a “surface of pain.” Daphne’s escape is a Pyrrhic victory, a “fictory,” because she has neither escaped nor been trapped, except as an image of idempotency (the permanent siting of a tree).

the spinner/hunter would constitute a Real Kill. The modern version classically shows a bird put in a cage, converting the bird’s flight to the token’s spin. The bird flies *away*, but the spin converts this outward movement into a centripetal capture. The more you escape, the more you are trapped — the logic of the story about the “Appointment in Samara,” where a servant sees Death in the marketplace and runs away to distant Samara, only to find that Death has been waiting for he there all the time.

As Cassirer put it in his fourth volume of the *Philosophy of Symbolic Form*, the very intention to flee generates, all by itself, a space where entrapment is both inevitable and necessary. Lacan knows this very well. In *Seminar VII, The Ethics of Psychoanalysis*, he tells the story of Apollo’s pursuit of Daphne. The god can’t help it; he’s been shot with an arrow of love by the imp Eros, in revenge for making fun of the child-god’s bad archery skills. (Who ever falls in love with the “right” person, although that is the universal claim?) With an

“opposite” arrow, or perhaps with the same arrow’s other tip, he shoots Daphne with hate. Daphne runs but she cannot hide. Lacan takes up the story here, maybe expecting us to find the fore-story on our own, where the connections of the double-pointed arrow with the projective line and two vanishing points that are really one, central point, the *a* of the *objet petit a* that figures in Lacan’s famous gapped circle of desire. “If” is buried in Lacan’s presentation: *if you but see what has been left out of my retelling of this story, you will hear it left out in what is present, and your ears will perk up, or “prick” up as English allows, and the connection to better-known examples of erectile tissue will be discovered, in the form of a phallic signifier that is there because it’s not there.*



Figure 7. Wile E. Coyote’s “silhouette hole.”

In the cartoon of *The Road Runner*, Wile E. Coyote is forever falling after running past the edge of a cliff. He does not fall immediately. Rather, he must *recognize* his situation *in order to respond to it properly*. He looks down, *then* and only then does he fall. His impact is usually a double. He falls through a surface (a projective plane? Yes) and leaves behind a perfect silhouette. The accuracy of this hole defies out knowledge of materials science. A clean hole can be made only by a projectile traveling so fast that the barrier “doesn’t have time to think about it.” Gravity is converted into a laser-fast move that surprises the surface so that an accurate record remains. This in fact is the definition of the Jordan Curve, a line that, although it simply encloses a space, is almost impossible to define mathematically unless a principle of simultaneity is applied. The line “cannot be *drawn*” in the sense that drawing takes time and moves along the surface of the plane. It can, however, be *shot through*, by theorizing a perforation made *from* and *to* the space represented by the one-dimensional subspace vector. I should say “victor,” to commemorate the way the hero’s profile is embedded in the idea of the hero, as shadow or shade, from the start.

“To the victor goes the spoils,” another way of saying that all valuables go to Hades, the invisible (cf. the inviolable precinct of John Foster Kane in Orson Wells 1941 rendition of William Randolph Hearst). The sign on the fence in the opening scene is apotropaic: “No Trespassing.” We do anyway, thanks to a camera later equipped by a lens that will do the same thing in the next scene as it does in the first — penetrate space in the form of ectoplasm, in the same way the nameless Οὔτις of *Rebecca* will drift past the closed gates of the ruined country home of Mandalay. Greg Toland’s talent for calculating sphericity of a lens capable of traversing the otherwise forbidden separate kingdoms of figure and ground will be repeated by Hitchcock’s use of the zoom lens in *Vertigo*, to bring forward the background at the same time it falls into it. This contronymic optical accomplishment will leave a “perfect hole,” a profile worthy of the name Jordan Curve, in that the new interiority — not the fake inside-out of the figure-ground relationship — is the “Unconscious of the filmic ‘idea’”

We get confirmation of this Unconscious when Toland inserts a match-point in the opening sequence. After our transgressive visual flight past the exotic defensive zoo, we visually address the window of Kane’s bedroom. Inside, the newspaper magnate lies on his death bed. Outside, we square off in front of a window that, amazingly, has only straight lines that parallel the edge of the 1.37:1 aspect ratio (“the Academy Ratio”) of the screen.⁸ Orthography addresses the visual in accordance to the squared-off medium of the paper, or celluloid frame in this case. This is not a simplistic conversion of “medium is the message.” Rather, it is to say that the world is made up of

⁸ The Academy ratio of 1.375:1 (abbreviated as 1.37:1) is an aspect ratio of a frame of 35 mm film when used with 4-perf pulldown. It was standardized by the Academy of Motion Picture Arts and Sciences as the standard film aspect ratio in 1932, although similar-sized ratios were used as early as 1928. “Academy Ratio,” *Wikipedia*. URL: https://en.wikipedia.org/wiki/Academy_ratio.



Figure 8. *Citizen Kane's* orthographical shot of the exterior of Kane's bedroom will, a few frames later, be shown from the inside, a match-shot that combines the off/on of lights with the move from outside to inside. Orthography corrects the sphericity of photographed views so that the lines inside the frame match to the lines of the frame itself, a case of parallels or "line families" with one vanishing point in front (outside the camera's view) and one "inside" (behind the camera's view).

a medium in the first place, so orthography (Truth-writing) is guaranteed in advance, before the rabbit comes out of the hat. The corrective *orthos* however is required. We must first see chance in all its confusion, for necessity to reveal itself as *aletheia*. Chance is the privative *a-*, what is missing, but *it was never present in the first place*. This is Lacanian orthography. Just as Toland's lens strove to control sphericity over the interests of orthography, an "academic" venture, his craft (the academy turned university), was accomplished in the name of Truth that was "there in the first place," precisely because of its perverse absence. Desire is desire of desire, out of which we give birth to the Other, the father *in name only*.

"Chance is the fool's name for fate," the phony-cheesy gigolo, Tonetti, in the Fred Astaire movie *The Gay Divorcee* (1934) says with a Lacanian smile, after the ruse of making Mimi Glossop's repentant husband jealous when he sees the *shadow profile* of his (former) wife dancing with the sleaze-ball Italian cast onto the window shade, although it was made by

taping paper puppets of a dance couple on to a phonograph turn-table. Lady Fortuna is the gateway to Truth, or the "encounter with the Real," in this account. Without a maximal presence of accident, contingency, astonishment cannot produce the "imaginative universals" that Vico defined as the Truth of mythic thought. This would seem to be an over-extended claim were it not that mathematical theory of probability makes the same connection. Sampling is asymptotic: the "more random" (an oxymoron) the sample, the more accurate the sample. Extending this ratio, one finds Truth at the end of contingency's winding road.

Just so, Greg Toland's argument that "the truth is out there" (anticipating, or maybe providing a source for, Agent Mulder's better-known saying) is the orthography converting Euclidean sphericity to projective geometry's 2d plane, penetrated by the one-dimensional subsets defining "impossible" shapes such as the cross-cap and Möbius band. In Euclid, parallel lines are forbidden to join; vanishing points are the imagined marks of a plenum that can contain because it cannot be contained: the essence of idempotency, written as incontinence. Newton and Leibniz argued about this. Newton insisted that the universe was finite, otherwise its infinite weight would make it collapse on itself. Leibniz countered with the obvious truth, that there were no actual limits in the universe, no edge *beyond which* there would be something else to be found. Newton+Leibniz = something like projective geometry. The "boundary" exists when Newton makes his argument for necessary finitude. It doesn't exist when Leibniz brings up the absurdity of any "edge of the universe." There is/isn't a boundary precisely because it is/isn't. The boundary issue is a square-wave that moves "instantaneously" between two values. The subtle truth of the square wave is its orthogonal squareness. Movement left to right uses up time, but the back-and-forth between the two values forbids any lapse of time. The wave demonstrates how time and no-time can (and must) co-exist, especially in the situation known as the forced choice. Lacan fondly represents this through the classic robber's demand: "Your money or your life." Bruce Fink deftly points out that this demand is circular. You can't enjoy your money if you are dead, and you can't enjoy your life if you are penniless. Obviously, the story is written in terms of enjoyment, *bios*, not raw life, *zoē*. As "speaking beings," we lose our access to Being, but in a gradualistic siphoned-

off way. The more we are in the grasp of the Symbolic, the more we sacrifice our access to the Real. This does not prevent us from desiring *back* the very thing we have lost, however.

We imagine ourselves to be Orpheus, forever singing to the gods of the underworld that our Eurydice has died before her time. For this unfair $<$, we claim rights to an $>$, an exemption to the one-way only rule. We fashion a two-way passage in the same way Eros fashioned a two-way arrow. With the same result. We cannot, apparently, resist Eurydice's call. ANY word from her pulls us back into the cider-house rules of the Symbolic, rules jury-rigged from the beginning but nonetheless effective at dispelling wonder, the wonder requiring our suspension of disbelief in parallel with Hades' 12-hour pass back up the *katabasis* route. Eurydice vanishes as soon as we turn around, as soon as we try to represent the bi-directionality of the vector we have been given permission to "bi." The surface of our trap is created by our very desire to escape; Hades as a trap (the perfect trap, actually) comes about as soon as we want to leave. Piranesi drew this: *I carceri*, prison without end, amen.



Figure 9. In the 1952 apocalyptic sci-fi film, *The Day the Earth Stood Still*, the robot Gort protects the landing site's perimeter with his laser-like eye-beam, a condensation of star power mirroring the space-ship's instance of extimacy. The confederation of galaxies represents super-human intelligence and advanced technology. The eye-ray similarly condenses what is outside the earth's domain, the power of the stars, into a strong beam that is the same power "from the inside out."

Is there any wonder? Lacan's a-sphere leads straight to "L'étourdit," which leads straight to Desargues and Pappus. This much is clear. What is not so clear is how the Coyote leaves a perfect silhouette as he penetrates the pure projective plane as a two-dimensional subset, a vector radiating from the *objet a* central point cluster, showing somehow that popular culture knows very well what projective geometry is all about. How many Mulders do we need to know that "the truth is *out* there," that the alien object — the aliens *per se* — are "just like us," that in our belief that intelligent life is not only far away from us but *perfectly intelligent* because *perfectly distant*? This is seen clearly when, as in films such as *The Day the Earth Stood Still* (1951) we see what happens when intelligence and location is turned inside-out, when a spaceship lands on the Capitol Mall in Washington D. C. We must employ an automaton, Gort, to melt weapons thanks to his condensation of star power into a single light ray (a 1d subset of 2d space — literally!) as counterpart to his Master's (Klaatu's) ability to pass through the military cordon set up around the craft. He passes through this containing container because, for him, it is incontinent. He is ground to its figure. By

reversing the idempotency of the ground (what else is a ground, after all, than a container able to buffer/protect a mobile figure?) as an interruption into the life of the earthling Helen. As the mysterious stranger, Mr. Carpenter, he buys his way around using fantastic super-diamonds. "Adamant" comes from this diamond nature of Adam, the first being to doubt, thanks to his not-all companion, Eve. From this point on, "Eve and Adam's" or the Paradise-gone-south, will be Lucretius's "even atoms" flowing (the flow is called "clinamen" and is defined by its parallelism). Other carpenter-craftsmen have fashioned similar relations with skulls (cf. Holbein's complex skull relations in *The Ambassadors*) and the mortal God introduced the use of the mark, †, as the universal Mark, the dupe ("Father, why hast thou forsaken me!") who took being a dupe seriously, along with his ultimately numerous followers.

The skull for Hegel was the mystery of phrenology. How was it that stupid idiots could come up with a sublime Truth, the fact that "Spirit is a Bone"? His beef with the doltish theory was that, as an *ersatz* conjecture if there ever

was one, it had it the bull's eye with the first shot. "Chance is the fool's name for Fate," to be sure, but here the fool is correct. We want to say Truth, we say Contingency. We want to say The Unconscious, we say Consciousness, as it pushes itself to the breaking point. This is where neurosis gives way to psychosis. We say "ordinary psychosis" to indicate the non-binary relation. It's not that, as in clinical diagnosis, we are irresponsibly if we mistake a psychotic for a neurotic or *vice versa*, it's that this is not so hard to do. An alternative to the strict polarization of the two conditions based (for Lacan and Freud) on the acceptance or rejection of the Name of the Father (or the "no" of the Father, the interdiction that has $\forall x \neg \phi x$ as long as $\exists x \neg \phi x$, or else we enter into the feminine not-all, domesticated⁹ as hysteria).



Figure 10. Hans Holbein, *The Ambassadors* (1533), London. Lacan thought enough of this painting to make it his flagship representation of anamorphosis, the concealed image. Here, the trick is the famous blur at the feet of the subjects, which when seen from the right angle (beneath the crucifix) is revealed to be a skull, a *memento mori* all the more reminding because it takes the position of Adam's skull at Golgotha. Had Lacan turned the painting around, he would have found more details confirming his claim about anamorphosis as a general trait of human subjectivity.

If spirit is a bone, then we must be dead to see it, as Holbein's painting suggests in multiple ways. Unknown to Lacan was the historian John North's extensive demonstration of Holbein's knowledge of his astrologer-friend Luca Paccioli's prediction, that the Apocalypse would occur on April 11, 1533, when the sun was above the horizon at London at an angle of 27°. The numerics would generate a reticular net thrown over the contingencies of our view of the two wealthy Frenchmen and their expensive toys. Lines would generate two kinds of anamorphosis: one to engage the viewer as he/she kneels to get the one view of the blurred image of the skull, at the same time directly beneath the Other Anamorphosis connecting Jesus on the cross, half-hidden at the upper left of the canvas, with Golgotha, the *place* of the skull, Adam's skull.

No word can take the place of the gestural geometry of this *recto*, confirmed by the painting's date of *vernissage* shown on the *verso*. Lacan was not able to turn the painting over, to confirm the significance of this painterly thaumatrope, or to consider the necessity of the thaumatrope as the only device able to convey, *correctly*, the orthography of this encounter with the Real. I won't be too hard on him. He went to a lot of trouble to get his facts straight, if not his lines, with projective geometry. In this, few Lacanians apart from Will Greenshields or Juan-David Nasio (analysis of

the cross-cap in *Lacan: Topologically Speaking*) can follow. But, how else are we to speculate meaningfully on what Lacan intentionally leaves out of his account, such as the back-story of the Apollo-Daphne *fracas*?

My "proposal" has already been carried out, in a surplus of text, but I will take a reverse-angle shot to put it last rather than first. My wishful thinking was to show how the edges of the Möbius band are, when held in the fingers, parallel. The fingers never pinch closed. Yet, we know through inspection (the basis of our *theory* about the Möbius band as a 2d surface) that the edges are actually one line, one edge. We must contend that our fingers have

⁹ I don't mean to insult any true hysterics with the word "domestication," since the last thing one can do with a hysteric is domesticate her. However, the British and French believe that all "domestics" (servants) are innately hysterical. My emphasis is on the Discourse of the Hysteric, where the cover of *a* (as *jouissance*) by the barred subject, \$, presents itself *in opposition to the Master, S₁*, thanks to his "compulsive" suppression of the "facts of the case." As we saw with Dora, Freud's first but worse case scenario for hysteria, knowledge is defined as "that which has been held back by the masters' importunity." The hysteric can only respond through a *charade* or literal *pantomime*, where gestures take the place of words.



Figure 10. Diego Velázquez, *Las Meninas*, 1656, now in Museo Nacional del Prado, Madrid. The painting qualifies as an early modern “thaumatrope,” requiring the viewer to address issues of spinning, flipping, and reversing.

“actually” pinched together, although we have suppressed this closure. This is a failure of propriocept — knowledge of how our body is distributed, common in early childhood and associated with the condition of *autoeroticism*, the inability to form stable figure–ground relations, or to stand pat on certain inside-outside determinations. What am I, as a subject? I dwell on the evidence given in the mirror, the first mirror and all subsequent mirrors, that I am my stereo-reversed spectral double, known better by others than myself. This supplants my *corps morcélé*, which for all practical purposes still lies in pieces, which I can see, in horror, when neurosis reaches the end of its tether and exposes me to a primal psychosis, which is both the end and beginning of my Life as a Fool, or *Golden Ass* as Apuleius designated this condition so well. Fools are dupes, but dupes are not necessarily fools, as in Lacan’s saying, *Les non-dupes errent* (the non-dupes are making a mistake).

If we lack wit, it is that we are wits among fools, rather than a fool among wits. Thought finds its measure when it casts its shadow up not down. Such

a shadow is cast by the three “fools” in Diego Velázquez’s *Las Meninas*, another painting that interested Lacan; but Lacan also does not tell the full story. The dog and two dwarfs anchor the corner of this controversial image, an image that is itself a visual thaumatrope, and what better device to pin the tail on the donkey of this painting than the three versions of folly in the form of beings, in the sense of *zoē*, raw life, who require our protection: the dog, the dwarf resembling a small child, and the achondroplastic dwarf with a large head, indicating (wrongly) mental deformity. There is a fourth “dwarf” in the painting, the obvious one, the *Infanta* Margaret Theresa, daughter of King Filipe IV and his Queen Mariana. They are “dwarfs by reflection,” reduced in the mirror at the back of the room from the images on the canvas turned away from the present-day viewer, where they must have been painted very large, in order to “survive the perspectival trip” to this somewhat distant spot. Then, we realize that the entire painting is about dwarfism, about showing small what is originally “life size.” Then, there is the folly of Velázquez himself, who puts himself in the middle when he knows that even the idlest viewer will realize that he must have been standing at the edge to paint the painting in the first place.

To connect this argument with matters of projective geometry, I should add that the name of the Aposentador (building manager) shown exiting the room at the rear was also “Diego Velázquez,” a fact not overlooked by the tongue-and-cheek artist. In other words, we are given not one line of sight but a bundle of vectors — 1d subspaces of a 2d surface — that, like any projective line, has two antipodal vanishing points: one that is pointed at by the finger of the Aposentador and occupied as a “hole in space” at the end of the room, another that has vanished literally by being the place Velázquez had to stand in order to paint the present artwork in 1656 (Girard Desargues published, through Abraham Bosse, his treatise on projective geometry and stereotomy 1643).¹⁰ The two works constitute a sublime case of coincidental genius.

¹⁰ Abraham Bosse, *La pratique du trait a preuues de Mr Desargues Lyonnois, pour la coupe des pierres en l'architecture. Par A. Bosse, graueur en taille douce ...* (Paris : de l'imprimerie de Pierre Des-Hayes, rue de la Harpe, a la Roze Rouge, 1643).

Another connection has never been made. *Las Meninas*, like *The Ambassadors*, requires that we turn it over, although in the former, later painting, two or more senses are involved in the idea of turning. One literally must turn *The Ambassadors* over to read the over-precise date, April 11, 1533, 4 p.m. to understand how the date of the predicted Apocalypse was interpreted geometrically on the painting's *recto*. In *Las Meninas*, the flip is one more akin to the ambiguous flip(s) involved with mirrors. Hence, this painting comes closer to addressing a kind of diffuse anamorphosis as compared to the direct anamorphosis of *The Ambassadors*. The mirroring idea is present in subtle ways. The child, represented here by the Infanta and the child-like dwarfs, is thought to mirror the parents looks and behavior; the dwarfs are regarded in the fashion of the Medieval European court, as antipodal to "wisdom" divinely held by the reigning royal. The dog, in his doggie way, casts back human treatment, by being fawning, snarling, or abject. The mirror in the back, however, is the key "dwarfing mechanism," miniaturizing the royals in order to force the question of how the painting has been spinning in front of our eyes. The connection between folly and spinning is nearly universal. Germans say *du spinnst!* to tell someone they're crazy. Dervishes whirl to empty their heads of mortal folly. Benjy in William Faulkner's *Sound and Fury* (taken from Shakespeare's quote, equating life to a "tale told by an idiot") circumnavigates the courthouse square always in the same direction to keep hold of his fragile balance of mind; and is undone when his direction is reversed.

The thaumatropic truth is projective truth, and *vice versa*. Figure-ground relations, never fully stable, are sacrificed entirely to combine the hunter and hunted (Actæon), real and fake (Judy-Madeleine), even devil and god (it was common to say, in 18c. intellectual circles, that the result of learning was not to know whether one was god or demon — *aut deus aut dæmon*). Idempotency — insulation of a circuit from outside or inside disturbance — depends on the ability to spin around figure-ground relations, and so we can reconnect to Freud's 1895 thesis on "Project for a Scientific Psychology" with greater sympathy for his "energetics" approach. If the mind and its circuits are all about electricity, perhaps power, flow, and resistance have their psychoanalytical components in desire, drive, and Other. Lacan asks, somewhere, "What is science, if not reductionistic?"

If the Lacanian universe is truly curved, like Einstein's, then wherever we stand is the middle. And, there are equal amounts of it on all sides. We are in an infinite sphere where (projectively) the center is everywhere and circumference nowhere. This is a conclusion we can make only "theoretically," in that it requires engaging abstraction abstractly — with patience for having to play the dupe or dummy, with willingness to sacrifice confidence by making *ersatz* speculations, with the understanding that, like the physician studying the plague in Albert Camus's *Le Peste* (1947), we are looking at what is killing us. Will we die as neurotics (by taking the blue pill offered by Morpheus), content with our Euclidean 3d perspectivalism? Or, will we take the psychotic, and theoretical, red pill to engage with the amply disturbing consequences of projective geometry? Will we go further and ask how the projective line and plane are related to psychosis and the Name/No of the Father? I would, with Žižek prefer to find a third pill, but this pharmaceutical version of the excluded middle does not exist. Rather, it is in theory, in all its psychotic glory, that we require ourselves to see the figure in the ground and the ground in the figure, with our only solace being that others who have gone before — Pappus, Desargues, Holbein, Velásquez, etc. etc. — have made this difficult choice.