# Death-Dream in Two Parts: Vertigo's Roof(e)scapes

Anahita Shadkam Don Kunze

*Abstract.* Hitchcock's *Vertigo* shows how architecture and the story share a common logic. The film involves (1) a confidence trick, played by a con, shill, and mark, (2) projective geometry, which in both stories and architecture involves self–intersection and non-orientation, configured into (3) the "thaumatrope," a disk spun on a chord to combine images on its opposite sides. *Vertigo* is a story about architecture and the subjective fear of falling and an architecture itself that engages the complexity of orthography, the raising of structure and its antipodal consequence, ruin — another way to tell the story of the Tower of Babel.

## Introduction

Alfred Hitchcock's *Vertigo* (1958) blueprints the way fictional narrative and architecture meet on the common ground of projective geometry's "surface of no escape."<sup>1</sup> Although this geometry is more popularly known through such non-orienting, self–intersecting shapes as the Möbius band and Klein bottle, we introduce the "thaumatrope" as another example. This is a small disk with two images on either side, suspended with a string so that the disk may be spun and the images combined, thanks to the mind's "phi effect" of deletion and replacement.<sup>2</sup> Cinema's visual illusion stems from this ancient toy's same trick,<sup>3</sup> but *Vertigo* in particular shows the thaumatrope's relation to the confidence scheme, the triangulation of a "con," a "shill," or assistant, and the victim, or "mark." The con of *Vertigo* relies on two thaumatropic syntheses: (1) of a fictional woman whose double–existence is reified by (2) the love of the mark whose own thaumatrope of authenticity and shame secures the plot's logic. The thaumatrope is equally primal for architecture. The Tower of Babel, architecture's first major project,<sup>4</sup> relies on the same dissimulation, provoked by God's fear — that He will be *uncovered*, by those who *speak as He speaks*.

To tell our story about architecture, we have constructed a ladder alternating between two points of view, one *facing* the audience's tendency to disbelieve, the other calling that same audience to *suspend* this disbelief. We endeavor to pass the *Vertigo* idea over to the reader through an "orthographical" step-by-step climb to the ladder's end. As with the climb up the Tower of Babel, this orthography is simultaneously architectural and linguistic. The reader must re-arrange *Vertigo's* "anagrams" to puzzle out two issues key to architectural and fictional imagination alike: how containers can contain themselves and how the true can be — must be — found within the fake.<sup>5</sup>

#### Step 1 / The Projective Line and the Strong Story (Récit Fort)<sup>6</sup>

In projective geometry, a projective line, —, is really a line plus a point, —  $\bullet$ , a point that lies at infinity. The line has two ends, however. The point at one end turns out to have a twin at the

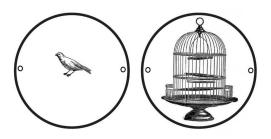
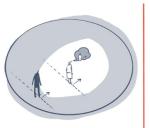
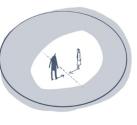


Figure 1. "Thaumatrope of Bird and Cage," J. A. Paris, 1826. Thaumatropes have been found in Magdalenian caves in France. A single disk with "complementary" images on either side is suspended by twine and spun by the user. Ancient disks had a single hole in the middle that played a role in the phiinduced merger, such as an arrow penetrating an animal shown just before and just after death. The phi rather than the beta phenomenon (illusory movement between two static images) is cinematically significant in that the effect is transferred neurologically to the viewer, where negation produces a "Jekyll/Hyde" effect. In Vertigo, Judy is not simply another *persona* but key to Scottie's falling in love; the co-inscription of love's two aspects, mutually self-deleting, of the "accidental encounter" and "fatalistic necessity" of meeting. Source: "Make a Thaumatrope," National Park Service, https://www.nps.gov/articles/make-athaumatrope.htm.





# INVISIBLE

VISIBLE

Figure 2. In Vertigo, Judy goes through two rounds of transformations by two male characters in the movie, Elster, and Scottie. They both turn her into a version of Madeleine. In Elster's scheme, Madeleine is "the suicidal wife." In Part Two, Scottie discovers the actress, who reminds him of his tragically lost love. Judy must play a dead-and-livingwoman, a thaumatrope that constructs a duplicity "as such." The thesis that we are inside Scottie's death dream must be expanded to include the "operative" death dreams of the fictional Madeleine as well as the hypothetical death dreams of the real wife and Judy, as she jumps from the tower in the final scene. Source: drawing by author.

other, from which it has been separated at birth, • — •, two infinities,  $\infty - \infty$ .<sup>7</sup> But, as with Hitchcock's *Vertigo*, projective geometry has a second part to its story. This other point is actually the *same* point, • = •, which looks like self-identity, A = A. But, the "=" is really a "—" (a temporalized journey rather than the instantaneous bond of identity).<sup>8</sup> Fiction uses its own version of projective geometry to configure the anxiety essential to any story. This is —'s fear that "the more it tries to go somewhere the more it goes nowhere," a prisoner escaping through a tunnel that leads back into the prison, possibly into the warden's office.

Like the fictional story, projective geometry's endings "answer" to the beginnings, but in a surprising way. An ending has already been reached, *as soon as the intention to escape its fate is made*. Although the line circles around to intersect itself, the difference between end and beginning cannot be neutralized. It is preserved in the form of the "non-orientation" that we can demonstrate with a Möbius band. The two-dimensional surface appears to have two sides but can be proved to have only one, and not just a one, but a "one of one." A similar situation exists in a thaumatrope (Figure 1). When the toy disk spins, it combines the images on its two sides; the one side "has" a one on its other side *by not having it*, just as the shill of a confidence trick is, by nature and necessity, duplicitous.

In *Vertigo*, a shipbuilding magnate, Gavin Elster, hires an actress, Judy Barton, to play the part of his rich wife, Madeleine, so that he can convince his college chum Scottie to testify that his wife died by suicide (Figure 2). Judy plays "Madeleine" as a suicidal woman possessed by the ghost of her ancestor, Carlotta Valdes. Elster will kill the real Madeleine, but Scottie will be convinced that he has *allowed* "Madeleine" to kill herself. His failure and guilt locks in this belief: — •. Both the audience and Scottie must wait until the end to see • — •, that Judy is a shill, that her Madeleine is "Madeleine."

By the time Scottie circles around, —, to "connect the dots," •/•, the audience may realize that the first dot spookily was Scottie's. The opening sequence, a rooftop chase where Scottie has lost his footing, has left him and the audience hanging over a void: another — •. Was Scottie saved, as we presume because we "see" him in the story that follows? Or, is the audience possibly being given privileged access to Scottie's death–dream, a rapid succession of events that Scottie's dream quickly assembles to prepare him for the infinity of extinction — the other way to interpret the hieroglyph, — •, as •  $\bigcirc$  •, or even the projective equivalent,  $\bigcirc$ . The rule of suspense is that all audiences must be left hanging until the end when the point at infinity will return to itself at the antipode of the story's geometrically projective universe. In these terms, all stories are death–dream ciphers.<sup>9</sup>

#### Step 2 / Rooftop Chasing: The First Fall

Hitchcock's thriller *Vertigo* begins with a rooftop chase scene. Detective John Ferguson, "Scottie," and a uniformed police officer pursue a criminal suspect across a perilous topography. Scottie trips. His colleague attempts to pull him to safety but falls himself instead. Still holding on to the edge of the building, Scottie, horrified, watches the policeman fall. This is the backstory for the next scene when we find Scottie alive and well in the apartment of his college girlfriend and fiancée, Marjorie ("Midge") Wood. He attempts to demonstrate his successful recovery from debilitating vertigo. But, clearly, he is far from full recovery. His "decision to retire" may not have been entirely voluntary. His trauma persists.

But, what if Scottie did, in fact, fall and die in the opening scene?<sup>10</sup> What if we are now in the middle of his death-dream? We might be inside a kind of eternity that is said to be compressed in the last seconds of life.<sup>11</sup> Scottie's problems were re-packaged as acrophobia, a fear of heights. We find out in the second scene that his *falling* in love — unsuccessfully, it seems — compounded his suspicion that he was not who he said he was, "son of the wrathful one," Fergus, but a generic Scotsman, "a Scottie," a childish zero, a "Johnny-O" as his old college girlfriend, Midge, calls him.<sup>12</sup> Scottie's dying brain needs to address these problems by suspending his awareness of impending death, the zero moment of being reduced to a pronoun. This is the culturally recognized interval "between the two deaths," the first a literal death, the second a symbolic death.<sup>13</sup> The soul, unaware of being dead, will imagine its own "adventure" or set of trials, as a way of purifying it for final admission to a restful Nirvana.

That Scottie has problems with women is clear from the opening scene in Midge's apartment. Midge plays the role of a friendly comforter, good at providing "the basics" of companionship, support, and sympathy. For the audience, she is the critical device for exposition. In her company, we hear Scottie sum up his situation and some of his plans. We also know, from what he doesn't tell Midge, what he would prefer to keep secret. She is thus a figure both of inclusion and deletion.

Not for nothing, Midge is a commercial artist, a working girl whose advertising assignments provide some comic relief (designs for bras and girdles, revealing Scottie's naïveté). Her failure to qualify as Scottie's romantic partner prevents her from entering into Scottie's later obsession with Madeleine. When she paints a joke gift portrait of her face replacing Carlotta's in an otherwise accurate copy of the painting on display at the Legion of Honor Museum, her disqualifications loom large. Her plea for love is too desperate. She seems to say that she is ready for a makeover if that is what it would take. This effort foreshadows Scottie's attempt in Part 2 to remake the shopworn Judy into the elegant Madeleine.



Figure 3. James Stewart and Kim Novak, flower shop scene, *Vertigo*. Directed by Alfred Hitchcock, Alfred Hitchcock Productions, Paramount Studio, 1958. Hitchcock gives away the "algorithm" of the switch between pursuer into pursued, with the "thaumatropic" virtuality of the actress Judy, pretending here to be unaware of being observed. "Madeleine" is the construct at the surface of the mirror that optically duplicates the confidence trick run by Elster, the shipping magnate, and his shill, Judy. This shot demonstrates how Hitchcock is able to adopt the logic of the thaumatrope into the blocking of a scene. Source: "Vertigo," *Film Freedonia*, Film essays and commentary by Roderick Heath, https://filmfreedonia.com/2012/05/13/vertigo-1958/.

# *Step 3 / Dreams, Stories, and the Architecture of the Con*

(Phonic) anagrams, or rebus-ciphers of *Vertigo*: The "I" of the story is a private *eye* —who is homophonically h'ired, "ire-ed," and "high– erred" or "spy–ired" — to sur-*veil* a woman– mirage (the "shill"; she, ill-ed; "shi-eld") planted by a "con" (he who constructs an angle,  $\lfloor$ , "Elster") to convince the spy (the "mark," signifier; or "marque," retribution, or *march*, as in defensive field) of false facts that would later become critical for his employer, who plots *con– fide*–ntly to get away with murder, "truth by scam."

The mark, Scottie — "he who will give testimony according to the letter of the Law,  $\lfloor$  — takes up his position peering through the narrow slit in the back door of the flower shop where the shill Madeleine is picking up a bouquet for her

visit to the portrait and grave of her "peasant" ancestor, Carlotta Valdes (Figure 3).<sup>14</sup> The hunter is in his "blind," but the mirror on the door reveals the entire logic of the con. The woman in the mirror is also a mirror in the woman: the shill (Judy) is playing the to-be-murdered wife (Madeleine) but must seem to be drawn to suicide. The flower shop bouquet duplicates the flowers shown in a portrait of Carlotta at the Legion of Honor Art Museum which Madeleine visits frequently. What Scottie believes to be his invisible wedge into the flower shop is in fact what will flip him from hunter to hunted, trapper to trapped. In this he resembles the hunter Actæon, who has spied on the bathing Diana but gets splashed and transformed in return. In other words, he does not get off scot-free.

This much–reproduced scene is perhaps *Vertigo*'s best example of a literal thaumatrope, antithetically linking visibility and invisibility. This creates a "spinning cloud" where Scottie's belief in his "free Euclidean movement" as a figure across a ground "holds him in place," *as per* the planned "idempotency"<sup>15</sup> of the scam. The scam carefully manages the theatrical virtuality of the shill (Judy's portrayal of Madeleine) to secure Scottie as the dupe/mark. No matter where or how he moves, Scottie will always be returned to the center of the trap. He is, like all dreamers, paralyzed, a puppet held in place by invisible strings.<sup>16</sup> In his dream, he experiences free movement, but this illusion is created by *moving the ground across his motionless figure*. The figure–ground reversal will hold the indexicality of the con, the scam, in place, as it does for all stories. Projective geometry here plays the part of the puppeteer's wooden marionette, to create conditions of both weightlessness and unconsciousness, thanks to the specific gravity effect of the invisible strings.<sup>17</sup>

#### Step 4 / The Private Eye

Scottie's between-the-two-deaths adventure begins with a job offer from his college acquaintance, Gavin Elster. At first, it seems that Elster is hiring Scottie to follow his deathobsessed wife, Madeleine, to keep her from harm. Not until late in the film will the audience realize that Elster has gotten his mistress, Judy Barton, to play the part of a haunted woman who will go to strange places and do strange things, haunted by her great-grandmother, Carlotta Valdes. Carlotta was a beautiful woman out of San Francisco's wild past who became, according to local lore, "first sad, then mad." The history of Carlotta's suicide provided Elster with a readymade script for Judy to follow, but it also provided a reliable energy source to power Scottie's belief in Madeleine's death wish. Scottie's and Midge's forensic research in the Argosy Book Shop presided over by a legendary San Francisco antiquarian, "Pop Leibel," uncovers Carlotta's tragedy.<sup>18</sup>

The beautiful Carlotta ... the sad Carlotta ... she came from somewhere small, to the south of the city, some say from a mission settlement, and she was found singing and dancing in a cabaret by [a rich and powerful man]. He took her and built for her this great house in the Western Addition ... and there was a child.... I cannot tell you how much time passed.... He kept the child and threw her away. You know, men could do that in those days. *They had the power and the freedom*.<sup>19</sup> And she became the sad Carlotta. And she died ... [b]y her own hand. There are many such stories [Emphasis ours].<sup>20</sup>

#### Step 5 / Doubles

Scottie believes he is *following* Madeleine, but in fact is being *led through* a carefully planned *instructional* program. Madeleine's wandering is deformed by the gravitational field of Carlotta: a flower shop, a church graveyard, a museum, an old hotel. Scottie is held in place by this orbit, until he is pulled out of his cover when Madeleine jumps into the waters at Fort Point, beneath the San Francisco Bay Bridge. Still, he cannot reveal his mission. He must accept Madeleine's lie about being "just a wanderer" and lie that he is wandering himself, to propose that they "wander about together." This turns out to be an unconscious acquiescence to Elster's plan, which is anything but wandering. Madeleine's orbit circles the dead body of Carlotta. Scottie is held in place by his duty to follow. This planetary system is as idempotent in its motion as its central sun is twice dead: Carlotta's real death worked into a fiction. Like the dreamer paralyzed in sleep or the soul between the two deaths, motion is virtual. It moves through a Euclidean space to connect the same to same,  $\bullet - \bullet$ , only to meet up with an irreducible projective (non-orienting, self-encountering) difference,  $\bullet/\bullet$ .

## Step 6 / Two Worlds

Scottie moves in two worlds, somehow simultaneously. Hitchcock installs a set of geodesic monuments to help the audience get its bearings. The most famous of these is the pairing of Coit Tower on Telegraph Hill and the belltower at the Mission San Juan Bautista, some thirty minutes' drive from town. Visible from Scottie's and Midge's apartment, Coit is a standard phallic reference contrasting his beige friendship with Midge with his runaway romance with Madeleine. There are two churches, again, one in town and one in the country; two hotels, the McKittrick (formerly Carlotta's mansion) and Judy's no-star digs (but with a green neon marquis). Each object–pair establishes a meridian along which signifiers flow in alternative "neural networks," as if *Vertigo* were a cinematic–visual brain processing the spectator's errant impulses. No energy escapes this system; each pulsion is redirected into the circuit where the story de- and re-temporalizes it through spatial doubles.



Figure 4. Athenesius Kircher, *Turris Babel*, Amsterdam, 1679. Babel combines the logics of the story with a theory of language and meta–program for architecture. God fears what humans, who speak as He does, might accomplish, namely an indexical ladder–connection of earth to heaven. Source: Wikimedia Commons, https://commons.wikimedia.org/wiki/Fi le:Turris\_Babel\_by\_Athanasius\_Kircher .jpg.

#### Step 7 / When God Is Asleep, the Rest of Us Are Paralyzed

Thanks to this map of meridians and neural networks, Scottie re-enacts the story of humankind's first major architectural project, the Tower of Babel (Figure 4). In a rooftop chase scene, Scottie slips but catches himself on a metal gutter. A pronomial policeman tries to pull him to safety but slips and falls instead. Scottie later reconfigures his vertigo as a "green cloud."21 In the Babel story, God has the same symptom and the same response. The human builders communicate in "Adamic" speech, an indexical relation between signifiers and signifieds known as "bi-univocal concordance."22 God knows well what this kind of talk can bring. He Himself had called things into being, then passed on the trick to Adam.<sup>23</sup> Human indexicality was vertical: dizzying and green, the official color of the immortality "between the two deaths."24 With humans threatening to storm this sacred zone, the space outside of space, He-Who-Must-Be-Feared became, Himself, afraid.

God's defense involved a two-step deletion. He first had to disable the indexicality of Adamic speech to allow substitutions in the symbolic chain — "metaphor."<sup>25</sup> Second,

he had to ambiguate the top of the tower, making it impossible to say whether it was invisible, unfinished, or destroyed.<sup>26</sup> Ambiguity "ever–greened" the tip and banished linear time. The three possible relations to this theological "green" virtuality (worship, devotion, atheism) correlate to the dramatic development of Scottie's character. He first "worships" Madeleine in the role of obedient spy–follower; he then turns to "devotion" when he falls in love. He undergoes a second paralysis when the shill Judy fakes her death. In the wake of this figure–ground reversal, he achieves a pure "atheism." He is not free of his theological obligation; rather, he is even more in its thrall.<sup>27</sup> As Lacan has said, reversing Dostoevsky, if God is dead, then nothing is possible.<sup>28</sup> This can be re-written: as long as the (bi-univocal, indexical) con stays concealed, the mark will be idempotent within the "dream" constructed for him by the con. Elster needs Scottie to "stay in place."

#### Step 8 / The Gravity–Defying Fall into Love

Elster, the puppet master pulling strings behind the scenes, is aware of Scottie's acrophobia and his lack of success in love. He realizes a thaumatropic potential in Scottie's two weaknesses — the combined value of Scottie's original attenuated fall with a second attenuated fall in love with Madeleine. His vertigo will prevent him from reaching the top of the convent bell tower.<sup>29</sup> But,

for Scottie to fall in love, he must first be drawn out by Madeleine's pretended suicide attempt in



Figure 5. Chuck Jones and Michael Maltese, *The Road Runner* [cartoon animation], *Looney Tunes*, Warner Brothers Entertainment, Hollywood, California, 1949 to present. The coyote's suspension in mid–air, in the brief moment just after realizing his situation, condenses the "thaumatropic" logic whereby the spin supersedes the authenticity of either image. Source: Kelsey McKinney, "The 9 Unbreakable Rules of the Wile E. Coyote/Road Runner Universe," Vox, https://www.vox.com/2015/3/5/8157519/chuckjones-rules-for-roadrunner-coyote.

the shadow of the San Francisco Bay Bridge.

Scottie pulls her out of the frigid waters. She is unconscious when he takes her back to his apartment. The shy bachelor must take off her wet clothes — a "bride laid bare by her bachelor, even." After this vision of the goddess's nakedness, Scottie accepts the full spin of the Madeleine–Carlotta thaumatrope. The spin of the double gives Scottie a double chance to fix his doubled past. His rescue of Madeleine from the icy waters redeems his failure to save the policeman in the opening scene.

Like Actæon, the hunter who stumbled onto a view of the naked Diana, Scottie can no longer resist the intoxication of beauty. He falls in love through the physics of love's specific gravity. He is suspended, weightless, in mid–air, unaware of the chasm beneath him. This is the moment that Wile E. Coyote of the *Road Runner* cartoon runs past the cliff edge but doesn't know it yet (Figure 5). As in the case of the Coyote, the actual fall requires the victim's voluntary

complicity. Scottie won't fall until he looks down — a condition (a hitch) that Hitchcock reserves (cocks) for the film's last explosive moments.<sup>30</sup>

#### Step 9 / The Death-dream

Another name for Babel is, Bab'El, "Gate of Heaven," a reference to the Akkadian ziggurat's divinatory role.<sup>31</sup> The architecture of the base corresponded to the interval of initiation connecting the king's ritual humiliation as a laborer (he is shown in ancient bas-reliefs with a trowel in hand) to his meeting with the dove–goddess (Ishtar, in the case of Nineveh). The dream's illusion of Euclidean movement corresponds to this universal purification process. This is evident in Classical antiquity's widespread use of the Thesean labyrinth to model the interval between the two deaths as a series of fractal folds of a single passageway (Figure 8). The path in effect rotates around the initiate, who seems to get nowhere no matter how far he/she travels, like the dreamer who dreams of running in place.

Following this model, the death-dream in literature allows the creation of a point-ofview narrator who does not realize that he/she is actually dead. The audience is not required to be aware of this. Hemingway's "The Snows of Kilimanjaro" (1936) leaves the reader puzzling about the airplane flight. In Billy Wilder's 1950 film, *Sunset Boulevard*, the narrator greets the audience floating face down in a swimming pool, to tell his story. His orthography is simultaneously orthopsychic, obliging the audience to" justify" his end with his beginning. The advantage of this device is that the audience doesn't need to be in on the trick. Hitchcock made four films that opened with a character's seeming survival of a near-death experience: *Lifeboat, Rear Window, North by Northwest*, and *Vertigo*. In *Vertigo*, when Scottie is left hanging above an alley in San Francisco, we don't actually witness his rescue. We see him next at Midge's apartment, trying to prove that he has conquered his vertigo. Because he fails the test the audience must consider that, one way or another, he needs to correct his past life. Dead or alive, Scottie must follow the



Figure 6. Kim Novak as "Madeleine," *Vertigo*, 1958. The Madeleine/Carlotta thaumatrope, fantasized by Scottie as he looks over the book from "Pop" Leibel's bookshop, The Argosy. The premise of the con using Scottie as its mark depends on the idea that Carlotta is spinning Madeleine towards suicide. Haunting constructs its own "secondary virtuality" within the Euclidean space of normal expectations, where figure–ground relationships rule out the effect of fate, but where one image is in this case two, thanks to a twist. Source: *Vertigo*, Alfred Hitchcock, director [DVD], Paramount Studios, Hollywood,

selfsame project of redemption.

# Step 10 / Two Wanderers

To allow the audience to read the film as a "diegetic" account of ordinary characters in actual situations (i. e. not dying dreamers), the death–dream's subjunctive modality must be coded. Scottie as a "*private* eye" is *held in place* by the command of the master con, Elster, who pulls the strings of his *powerless* puppet, who does not know he is "dead." The audience readily understands what a con is, it doesn't need to decide whether or not Scottie is living or dead to understand how Scottie himself thinks he is alive whereas the con has taken control. The scam allows him the (Euclidean) illusion of free travel. The lovers' thaumatropic identities spin synchronistically to create a

motion that is motionless (Figure 6).

"... Ah, but only one is a wanderer / two, together, are always going somewhere," says Madeleine when they go to Muir Woods. In the dark forest, looking at a cross-section of a cut sequoia, Madeleine points to different concentric rings showing that "somewhere in here I was born and here I died." Another code: two circles make a circuit. Madeleine rehearses the dark interval between the circles to hold Scottie in place, promising that they will be "always going somewhere," together.

Step 11 / The Round Story, Part 1

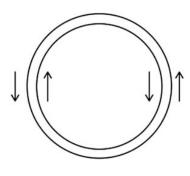


Figure 7. The function of deletion and the pomœrium as a space reserved for civic encirclement demonstrates ethnographically the means by which a projective virtuality was used to bless or curse a space. In Vertigo, the structure of the récit fort accomplishes the same goal of self-intersection (Scottie recognizes that he was "turned" by the scam) and non-orientation (the shill Judy's "thaumatropic" role). The pomœrium becomes the staircase in Vertigo, essential because in part one Scotty will be unable to complete it (half the required blessing) because Scottie is trapped in the Euclidean matrix of the con, held in place (idempotent) by Judy/Madeleine's thaumatropic spin. This spin is modeled by the pomœrium's double circuit. Source: drawing by author.

According to Roland Barthes, a true story, a *récit fort*, requires the ending to answer to the beginning. It is a projective line with a point and antipode that must rejoin,  $\bullet - \bullet \to \bigcirc$ . Story space folds retroactively, the two points were really one "all along," and the single line was actually a double curve "out and back," @. This is the ancient city's *pomœrium*, the space between an inner and outer wall, reserved for ritual renewal (Figure 7). Cities, like stories, must be folded origami–style.

In cinema, the thaumatropic *récit fort* combines opposites through the phi effect, where an absence — a deletion — leads to an inverse substitution. The classic demonstration is a circle of pink dots with a moving empty position the viewer fills with an illusion of a circling green dot. Thaumatropic effects in cinema are the moving gaps in the story, which must be filled in by the audience in the same way the brain fills in emptiness with an opposite.<sup>32</sup>

Collectively, these gaps correspond to the cloud at the top of the Tower of Babel: a gateway ruin. Madeleine attracts Scottie because she seems to be held in a fixed orbit around Carlotta. Scottie, fixed in his "orthographic" duty, follows *in line*. As Judy spins the Madeleine and Carlotta thaumatrope, Elster spins Scottie so that his shameful failure to prevent Madeleine's suicide will guarantee his proper testimony at the coroner's inquest. Lacking eye-witness evidence, his lack will prove the case, to the "letter of the Law," which in this case is the  $\lfloor$  engineered by L-ster.

#### Step 12 / The Fake Fall

Two Madeleines must "fall" from the top of a bell tower. Fictional (and therefore immortal) Madeleine disappears when mortal Madeleine dies. Scottie must be in love with "green" Madeleine to make his failure to climb the tower into the shame that will authenticate his testimony. Just as the film begins with the fall of a "generic" figure, the uniformed policeman, the mortal Madeleine is the "generic" wife we have never met. We only see her falling past the window in the fraction of a second (only one or two "frames" of the film) while Scottie, horrified, looks on.<sup>33</sup> What happens at the top of the tower is invisible to Scottie. Hitchcock color codes Scottie's shame as red, complementary to the (redemptive) green cloud Madeleine will step out of later. In the red–cloud phantasmagoria of his breakdown, Scottie sees himself falling off the belltower. The red hallucinations hold his falling in place: flowers, a grave, an abyss extend the fall, preventing him from hitting the ground. In the spiral, Scottie is again a wanderer who moves without getting anywhere, traversing the fractalized labyrinth.

#### Step 13 / The Round Story, Part 2, the Pomœrium

The universe is a monad thanks to its do-it-yourself act of enclosure. Exteriority as such is deleted, incorporating externality by making it intimate, what Lacan called "extimity."<sup>34</sup> The infinities of the projective line, • — •, are the same when they combine in the *récit fort*. The (self-defining) circuit is really an "idempotent" double line (or double circle): Scottie's surveillance of Madeleine and Madeleine's acting out of an "orthographic" relation to Carlotta. Both use a 90° (= concealed) position in relation to a path or trail,  $\perp$ . The 90° axial independence defines orthopsychics as both objectivity and panopticism, moving from Babel's ground to heaven, then heaven to earth, radiating Justice as an extromissive directive. The projective line, the doubled circle, is proof, Law. It corresponds to the tradition of the *pomœrium* as the space of ritual renewal of city's boundaries, a gap of infinity as the lines curve into circles and the circles combine into a circuit.<sup>35</sup>

What makes a story a story is the same as what made the ancient city a city. In the case of Babel, it was what made language into a tower, an architecture of deletion. The movement of one circle of the *pomœrium* palindromically "cancels" the movement of the other because, together, they are an inside of an outside and an outside of an inside.<sup>36</sup> This is another function of idempotency. In the logic of the scam, the *pomœrium* is the open space created when Scottie comes out of his cover and suggests that Madeleine and he "wander around together." Scottie is unaware that their mutual wandering is really a palindrome. This almost literal version of the double circle with the gap of the "two infinities," the eternity before birth and its complementary void after death, tells the story in a simple graphic section of the sequoia, the ever*-green* tree. Madeleine points to her projective plane, the section of the felled sequoia, and addresses it, rebukingly: "[A]nd it was only a moment for you … you took no notice …."

#### Step 14 / Reunion

Being trapped in love prolongs Scottie's recovery from his nervous breakdown. After being released from hospital, he wanders around familiar places in San Francisco, but these only provoke new melancholia. Suddenly he encounters a woman who resembles Madeleine in a spooky out-of-synch way. He follows her to her room at the seedy Empire Hotel, whose green neon sign will backlight Judy's dark silhouette when Scottie tries to imagine her as Madeleine. He insists on finding out more about her life, her past. Why is she living in a hotel? Is this an echo? Madeleine had rented a room in the equally dowdy McKittrick Hotel, which had been Carlotta's mansion originally. Judy seems trapped by this "hotel logic."

Scottie and Judy are given a second chance of love, with Scottie's proposition, that he renovate Judy in lieu of "the real thing." But, even if Judy doesn't want, how can she say no to becoming what she was by not being what she was? The answer, like the question, leads in circles. She stands to gain power over Scottie outside Elster's control. A new wardrobe and hairstyle remake her into "Madeleine," but the cost is that the couple both enter again into the space between the two deaths, their personal *pomœrium*.

Judy makes a fatal mistake, *the* fatal mistake all those navigating the space back from Hades to life make. She turns to look back. She has kept a souvenir from her acting job, the necklace the real Madeleine inherited from Carlotta. She decides to wear it on a special dinner date at Ernie's restaurant, where Scottie met the Madeleine for the first time. He sees that Elster was the con, that he was the mark, and that Judy was the shill. The discovery of the jewel makes it

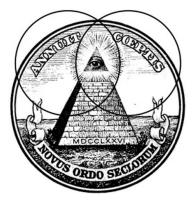


Figure 8. The Masonic Eye with superimposed vesica pisces, both a logical VEL (null set of the forced choice condition) and circuit of thaumatropic movements of Judy/Madeleine as shill of the con. God knows nothing of metaphor, so the position of atheism, visited most famously by Jesus in the terminal moments of his life, is radical in not just accepting contradiction but identifying with it. The enthymemic aspect of this position and architectural feature is that they are not simply "cosmic" by association by fiat. Source: drawing by author.

#### Step 16 / The Last Fall

into the story's final thaumatrope. Fiction and truth spin in an agony of love.

#### Step 15 / Cloud 9

The cloud shown in depictions of the Tower of Babel locates God's fear of the bi-univocal concordance of Adamic language and provides architecture with a material place for the deletion He must construct against any attempt connect earth with heaven. If human language is left, generally, with dissensus, polysemy, and incompleteness, art will be left, specifically, with the vertigo of metaphor, not just misunderstanding but a fear of heights, *as* heights. Mortality will thence be a matter of falling, just as resurrection will be, by definition, a rise from the dust.

Language is the stuff of duplicity and scams. Elster and Judy-the-shill simply localize a device to trap Scottie. What can we say about Scottie's escape from the trap, where he achieves a *vista*? In effect, Scottie addresses the question of infinity from his newfound perspective from *within infinity*, where he sees • — • as •/• at the top of the Mission tower (Figure 8). This is his "power and freedom." The story folds over itself, cruelly. The *pomœrium* unfolds into a *vesica pisces*, two circles intersecting in a void, an impossibility. This circuitry allows no escape from contradiction, but it does allow architecture to take up this human condition through its own vertical drops.

Scottie's extromission sees the dead woman in the living one, now knowing that he is seeing the same woman, no longer playing the murdered wife but *being* the murdered wife. Judy confesses her complicity with Elster's plan. But, when Scottie finally overcomes his fear of heights, he accesses the space of the Law, blind and unconscious. Judy must die. She jumps to her death when a vengeful ghost (really, a nun) suddenly steps out of the dark behind the bell. Scottie endures a final fall, the second death of "himself." The first time, he was the generic policeman, the "man in blue," a pronoun for a proper name. The second fall was held in suspension within the liquid gravity of his love for the Janus–woman. Now, he falls by proxy. His Galatea, the Madeleine he made out of Judy's rough clay, falls for him, ironically after she confesses that she

had "fallen for him." His liquid suspension inside love gave way as soon as he "looked down" to see the jewel around her neck. Jewels make every look up into a look down, to remember where

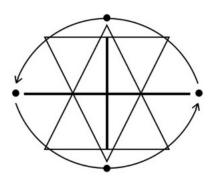


Figure 9. Contronymic/thaumatropic chirality of the Tower of Babel as récit fort, combining arguments of linguistics, ethnography, literature, theology, and psychoanalysis into a monogram summarizing the circuitry of Vertigo. This double movement recourse to the origin, thanks to the three chants of the phrase, "freedom and power," each with their indeterminate pronouns. The monogram of *dæmon–askesis* throws into question the location of God and refuge: is the "cloud" empty or full? - or, simultaneously empty of something and full of nothing? Source: drawing by author.

they were once buried, the lesson of Babel.

The entire movie can be then, illustrated as a series of circuits that are, in fact, stories within the stories, death-dreams inside the death-dreams, even the death-dreams of others. We also argue that it is the thaumatropic characters in the film who create, out of separate circles/cycles, the "master circuit" of events. The film zooms in and out of the circles and spins until we lose our sense of linear duration. The circuit of *Vertigo*, an eternal "green time," emerges out of this de-temporalization (Figure 9).

References to locations in this movie are used to mark the points along the circuit where the story circles back in a physical space but without linear temporality. The church graveyard, the McKittrick Hotel, the Legion of Honor Museum pull Scottie into a tight orbit around Madeleine and her gravitational obsession with the dead Carlotta. These a-temporal scenes are coded by Bernard Herrmann's dreamy score, filled with its famous arpeggios trembling against ominous major and minor chords.<sup>37</sup> Midge's apartment is used as a reference/ground, the functional frame for the architecture of the movie. Scottie returns every day for drinks, favors, sympathy. It is the film's the familiar *home*, in contrast to the

uncanny of Madeleine's orbits around their central grave. Ernie's restaurant is where Scottie first met Madeleine, so their return would have marked a happy conclusion. Instead, echoing Scottie's first attempt to climb the Mission tower, the couple fails to reach Ernie's and instead returns to the Mission, to complete the interrupted climb.

#### Step 17 / The Slide Rule

The contronym, a word meaning two opposite things, can be extended, as in the famous case of *unheimlich*, where Freud demonstrated the emergence of the uncanny out of the familiar retreat-value of the family home.<sup>38</sup> One could say that, as an idea slides along the history of its etymological evolution, it gives birth to its antithesis in a Hegel–Möbius rotation (Figure 16). This is the thesis of Carl Abel, which Freud promoted enthusiastically: that contronyms were the very essence of primal speech, where central ideas slid from thesis to antithesis: the sacred (L. *sacer* as both reviled and worshiped), hospitality (L. *hostes* as both hostile and hospitable), and — noteworthy in our case — verticality (L. *altuus* as both high and low).<sup>39</sup> This law of contradiction makes historical primacy a logical fundament.

Speech itself is a localization of the contronymics of the projective line,  $\bullet - \bullet$ . The beginning of a sentence has eclipsed, like birth, a prior infinity. The end, like death, proposes a future infinity. Speculatively, the death-dream may be the palindromic realization of the line of life, making termination identical to the initiation. In contrast to life's seemingly lateral, linear motion from a beginning to an end, the death-dream introduces an implicit vertical factor, but with the contronymic inheritance from *altuus*: its verticality is, like the contronymic jewel, both low and high. This is not an abstract idea but, rather, a visceral feeling that can be "tricked out." In *Vertigo*, Hitchcock combined camera movement with lens zooming inside the Mission tower to simulate the famous vertigo-like experience directly for a queasy audience.

Contronymic sliding means that motion can only be retroactive. With the sentence, this is the rule that, as meaning slides metonymically from signifier to signifier, the first of the sentence will be put on hold until we hear from the ending. If the end is conventional, it will fill in this blank as if it were just signing for a delivery. If it is "story-ful," the end will "answer" to the beginning, in recognition of the fact that enunciation begins with a self–inflicted, self–*inflected*, question. Storyful architecture does the same with linear, literal building. It recovers its origins, its logical and historical *primacy*, in an act of falling, anticipated or actualized.

If the story is a *récit fort*, the beginning may rightly claim the position of God in *Genesis*, who begins as a *dæmon* in relation to his Adamic-speaking creatures. But, with their bi-univocal concordance, do they need Him? He fears that they won't, and just His fearing gives away His secret: the power to self–annihilate. If humans can call a world into being by naming it, connecting earth to heaven will simply be an architectural application of this Old Testament justice of the index, a "story for a story." It will take 1000+1 nights, — •, to complete humankind's first major architectural project.<sup>40</sup> At this point God realizes the need to delete the middle term allowing humans to predicate their way from speaking to Being.<sup>41</sup> He retreats into/behind a cloud he creates at the unfinished margin of the tower. The cloud is a sanctuary/refuge (*askesis*) where his contraction (*Zohar*: zim-zum) will take up the defensive function of all conditional boundaries, at which riddles and rebuses challenge the traveler's wit, binding the idea of *kenosis* (the traveler must be able to call up that of which he/she was unaware) to the idea of passage and *apophrades* (the voice of the dead) to a sideways application, a "voice of wit."

#### The Last Step

Some terms, such as *dæmon/askesis*, *kenosis/apophrades*, are reversed contronyms, naming two opposed aspects of a single phenomenon.<sup>42</sup> *Vertigo*'s Judy/Madeleine would be a key example. But, in speech and writing, the end and beginning have the same question–and–answer destiny. Separated by metonymy and linear time, they find their identity retroactively. To do this, they curve their line, pairing two infinities but not merging them. Here, we realize the true nature of identity and, at the same time, its architectural implications. It is a duality, not a "monocity."

This is the premise of *Vertigo*: that identity is simultaneously concealment. This is not the reality-behind-appearance model, based on a Euclidean field where shadows can be invaded by the observer's movement. Instead, the shadow has a durable basis (Figure 17). As in the dream, where the sleeper's idempotency is maintained by reversing the figure-ground relationship and moving the field around the viewer, in dream-equivalencies (stories, visual artworks, and cinema) the viewer is pronounced dead at the scene of the "crime," the universal con of "once upon a time" that is the willing suspension of disbelief. The shadow is, as in the ethnographical uncanny, the anamorph of the body and substance of the soul. If we can model this identity as • - •, geometric projectivity (non-orientation, self-intersection) applies also to architecture, not as distinct from "mere" building, but as integral to it. Euclid is grounded in projective geometry, which is logically prior to it, not the other way around. Projective geometry's history might seem to begin with Pappus in 200 A.D., but this is a second coming.<sup>43</sup> What is historically prior to Euclid is the extensive domain of the uncanny. Orthography also belongs to this pre-Euclidean order, and the shadows that follow it in skiagraphy are not ordinary perspectival calculations but the fate of the building. We might be able to draw the shadow of the Tower of Babel at sunset, but where would we place the shadow of the cloud, without considering what happens at dawn?

# **ENDNOTES**

- <sup>2</sup> Thaumatropes are ancient, and may have been regarded as magical as much as entertaining. The French archaeologist Marc Azéma speculates that Magdalenian culture used thaumatropes to enchant, pray, and re-enact the moment of capture/killing: "Animation in Palæolithic Art: A Pre-echo of Cinema," *Antiquity* 86 (2012): 316-324; and Rossella Lorenzi, "Stoneage Artists Created Prehistoric Movies," *Seeker* (June 8, 2012), https://www.seeker.com/stoneage-artists-created-prehistoric-movies-1765822038.html. The spinning of the thaumatrope may be an early version of the Tibetan prayer–wheel.
- <sup>3</sup> Cinema's illusion of movement created by the rapid juxtaposition of still photographic frames is actually the "beta phenomenon," not the phi, the more general term for the perception of motion where none exists. See https://en.wikipedia.org/wiki/Phi\_phenomenon.
- <sup>4</sup> E. A. Speiser, "The Tower of Babel (xi 1–9: J)," *Genesis: A New Translation*, Vol. 1, The Anchor Bible (New York and London: Doubleday, 1962), 74-76.
- <sup>5</sup> This is the thesis of Michael Rifaterre, *Fictional Truth* (Baltimore: Johns Hopkins University, 1990); we borrow the idea of the cipher/anagram transfer from Tom Cohen, *Hitchcock's Cryptonymies* (Minneapolis and London: University of Minnesota, 2005).

<sup>&</sup>lt;sup>1</sup> Like the Möbius band, Klein bottle, cross–cap, and Boy's Surface, projective surfaces have no proper margins or limits but are finite. Jacques Lacan's assertion is that human subjectivity is itself a surface "of the Other," where alienation creates the condition of a trap despite the illusion of free will and a sense of orientation; *The Ethics of Psychoanalysis*, Seminar VII, trans. Dennis Porter (London: Routledge, 2008), 60. Non-orientation and self–intersection are discovered through the story and work of art, where standard, universal motifs use narrative to create conditions that are radically uncanny, particularly evident in themes of the fantastic, such as the double, travel through time, the story in the story, and contamination of "reality" by the story or dream. In some way, all stories rely on these master tropes, which directly embody spatio-temporal self–intersection and non-orientation. See David Hilbert and Stefan Cohn-Vossen, *Geometry and the Imagination*, trans. Paul Nemenyi (New York: AMS Chelsea Publishing: 1952).

- <sup>6</sup> Roland Barthes, "Deux Femmes," in Éric Marty, ed., *Œuvres complètes* III (Paris: Seuil, 1995): 1052-1054. We owe this reference to Dan Collins, "Stealing Money from Offices," *Lacunæ* 16 (July 2018): 106-124.
- <sup>7</sup> David Hilbert and S. Cohn-Vossen, *Geometry and the Imagination*, 2nd ed., trans. P. Nemenyi (Providence RI: AMS Chelsea Publishing, 1991). See also Norman J. Wildberger, "Projective Geometry / Math History," *Insights into Geometry* [podcasts], May 10, 2011, https://www.youtube.com/watch?v=NYK0GBQVngs; Kent Palmer, "Projective Geometry and Schemas Theory," *academia.com*, 2018, https://www.academia.edu/36045610/Projective Geometry and Schemas Theory.
- <sup>8</sup> The identity issue of A=A is a Hegelian puzzle best pursued elsewhere. See Todd McGowan, *Emancipation after Hegel: Achieving a Contradictory Revolution* (New York: Columbia, 2019) and Alireza Taheri, *Hegelian–Lacanian Variations on Late Modernity* (New York and Abington, OX, UK: Routledge, 2021).
- <sup>9</sup> Despite the wealth of intelligent critical studies of *Vertigo*, none directly engage questions of projective geometry, the death drive, or the structure of the confidence trick. Tom Cohen's otherwise masterful *Hitchcock's Cryptonymies* (footnote 5) misses the opportunity to apply his productive idea of the cipher to the dream's insulating idempotency. Robert B. Pippin's *The Philosophical Hitchcock: Vertigo and the Anxieties of Unknowingness* (Chicago and London: University of Chicago, 2017) is so surprisingly unobservant that the author mistakes a foghorn for a French horn in Hitchcock's standard cameo appearance. Nonetheless, both authors dig into details that are essential for any reviewer, who must ponder why deletion of key topics has kept otherwise attentive studies from hitting the very mark they seek.
- <sup>10</sup> The rooftop chase scene ends with Scottie suspended by his fingertips. No other policemen are in sight, and it would be hard to imagine that help would arrive in time to save him. The audience, *like Scottie*, are "left hanging." Thus, when the next scene begins the audience has the option of reading it as a "diegetic" account of the living Scottie or a magical–realism entry into the liminal space of the death–dream. Either way, the tale may be considered as a "rectification" calling for an "orthographic" reading of Scottie's original sins: a failure to establish a relationship with a woman and a failure to speak the truth (his testimony at the coroner's inquest). On both counts, *Vertigo* qualifies for a Lacanian analysis, where "the sexual relationship does not exist" and truth is sublated by the Symbolic, meaning that we can never say what we need to say, except through slips of the tongue and bungled explanations.
- <sup>11</sup> Christof Koch, "What Near–Death Experiences Reveal about the Brain," *Scientific American* (June 1, 2020), https://www.scientificamerican.com/article/what-near-death-experiences-reveal-about-the-brain/.
- <sup>12</sup> What debt? Scottie as a bachelor, has gotten off "scot-free," an expression deriving from Swedish *skat*, payment, meaning in this case that Scottie has not had to do his duty with respect to women. His "father," the Fergus of Ferguson, is angry in the way that, as Lacan would say, all Master Signifiers use anger against other signifiers to distance them from Symbolic mastery. Scotty, a son of this anger, is castrated symbolically and unable to make it to the top of the pyramid that separates at the same time it tries to join signifieds to a satisfactory (truthful) signifier, a "master metaphor." Jacques Lacan, *The Other Side of Psychoanalysis*, trans. Russell Grigg (New York and London: W. W. Norton & Co., 1991).
- <sup>13</sup> See "The Two Deaths," No Subject, Encyclopedia of Psychoanalysis, https://nosubject.com/Two\_Deaths. This psychoanalytical interval separating literal death and a second, symbolic death is the universal ethnographical theme of the "rites of passage" experienced in life as initiation and foundation ceremonies and, at death, as the period of mourning dedicated to guiding the soul to a proper rest, typically indexed to the reduction of the corpse to bone by animal ingestion, desiccation, or cremation. See Victor Turner, *The Ritual Process: Structure and Anti-Structure* (London: Taylor and Francis, 2016) or W. F. Jackson Knight, *Cumæan Gates* (Oxford: B. Blackwell, 1936).
- <sup>14</sup> Carlotta is the Spanish feminine form of Karl, a Germanic name, Cearl, meaning "freedman, originally a peasant." https://en.wikipedia.org/wiki/Charles. The implication is that Carlotta was elevated and then returned to a humble state, as Pop Leibel summarizes in his exposition of Carlotta's story. See footnote 20.
- <sup>15</sup> The authors are grateful to Mr. Alireza Moharer for introducing them to the term "idempotency" and explaining its relation to the "energetics" of critical theory. Idempotency is key to the Lacanian–Freudian idea of the "energetics" of the death drive. See Richard Boothby, *Death and Desire: Psychoanalytic Theory in Lacan's*

*Return to Freud* (New York and London: Routledge, 1991). Idempotency is paralysis made possible by insulating something from external stimulation.

- <sup>16</sup> Matthew Walker, *Why We Sleep: Unlocking the Power of Sleep and Dreams* (New York: Simon & Schuster, 2017). For critical moments in sleep, the body is completely paralyzed. The dream preserves this necessary stage by producing the illusion of Euclidean figure–ground motility, but the dream's scenery must be, in effect, moved across the field of the motionless dreamer. Figure–ground reversal is key to the idempotency of the "dead" dreamer. The sleeper dreams in Euclid but sleeps in a projective space that is self–intersecting (internally produced) and non-orienting (figure–ground reversing). The con, Elster, insulates Scottie from his plan to murder his wife and "keeps him dreaming" in a Euclidean mode, while Elster constructs a "surface of no escape" the trap of the con using projective geometry.
- <sup>17</sup> Heinrich von Kleist, "On the Marionette Theatre" (1810), in Michel Feher, ed., *Fragments for a History of the Human Body* (Cambridge, MA: MIT Press, 1989), 415-429. While it may be easy to reject a structuralist account of fictional form, it will be harder to reject the materialism, in popular culture of all kinds, of the consequent idea of specific gravity, by which characters, such the Coyote in the *Road Runner* cartoon, run past cliff–edges and hang suspended in space until they look down. Generically, this is the condition where the audience sees a danger that is invisible to the point–of–view character.
- <sup>18</sup> Many commentators have noted that the bookstore seems to be pushed outside of time in the interval of Midge and Scottie's visit. As Leibel's story deepens, the light inside the bookstore dims, but when Scottie and Midge step outside again, the street light is equal to what it was when they entered. See Wemisse [blogger name], "VERTIGO Deconstruction of a Scene: Argosy Book Shop," *Alfred Hitchcock Blog*, https://alfredhitchblog.wordpress.com/2019/04/06/vertigo-deconstruction-of-a-scene-argosy-book-shop/.
- <sup>19</sup> Leibel is the second to utter this phrase, establishing his bookstore as a hinge in part one of the story, where exposition is balanced against the action of the odd-numbered references. The hinge of part two is also "even," the "thaumatropic" discovery of the jewel in Judy's drawer, carelessly kept as a souvenir from her acting job. In this instance, the jewel is like the jewel movement in the escapement of a watch. The story's pattern is ABA' expanded to Aaba'Baba'A'aba'. The A=A' as thaumatrope reveals the importance of fractal design. The string of the thaumatrope in reality offers some friction, but the ideal is that of a self-propelling escapement. This is the "perfect con" where the mark cons himself, the genius of Elster's design, where Scottie's guilt would preserve the idempotent belief that he had failed Madeleine and secure the coroner's judgement that this failure was the proof of suicide. Leibel's escapement is, likewise, friction-free. It is the device of the story–within–the–story, where fictionality, being doubled, authenticates its own container.
- <sup>20</sup> Alec Coppel and Samuel Taylor, "Vertigo" [screenplay], draft September 12, 1957. http://www.dailyscript.com/scripts/vertigo.html.
- <sup>21</sup> Tom Cohen has ingeniously connected *vert*igo to the color green that Hitchcock uses to construct the cloud where Judy is reincarnated into the dead Madeleine. Of course, Madeleine never lived, so Scottie's love was eternal on account of the idiotic symmetry between never living and never dying. *Hitchock's Crytonymies, Volume 1: Secret Agents*, 1; *Volume II: War Machines*, 147.
- <sup>22</sup> See Jacques Lacan, "L'Étourdit," Scilicet 4 (1973): 5-52.
- <sup>23</sup> The logic of calling is simultaneous with the logic of crossing. Calling is idempotent (once called into Being, other calls are neutralized as unnecessary) but crossing is spatial and ambiguous. You can enter into and exit a marked–off space, but it will be impossible to distinguish the "Euclidean" function allowing entry and exit from the creation of concentric depth of self–intersection and non-orientation. Idempotency and ambiguity are the contronyms of Form. George Spencer-Brown, *Laws of Form* (London: Allen & Unwin, 1969).
- <sup>24</sup> Scottie tells Madeleine that "sequoia" is an Indian word, meaning "ever–living, ever–green." Madeleine then points to her indexical marks on the felled trunk, saying "Here I was born, and here I died." Tom Cohen, *Hitchock's Cryptonymies*, II, 148.
- <sup>25</sup> See Dan Collins, "On Metaphor," (Re)-Turn: A Journal of Lacanian Studies 6 (Spring 2011): 149-157.

- <sup>26</sup> Alert readers will compare the top of Babel to the central shuttered tower of Jeremy Bentham's Panopticon.
- <sup>27</sup> This corresponds to the "red pill option" in the Wachowskis 1999 film, *The Matrix*. Morpheus offers the initiate a choice between living in reality without being aware of its structural determinisms, in effect, extending the illusory dream of the Symbolic, or seeing the Real of its parasitic circuits of energy exchange. https://en.wikipedia.org/wiki/The Matrix.
- <sup>28</sup> Jacques Lacan, *The Ego in Freud's Theory and in the Technique of Psychoanalysis*, trans. Sylvana Tomaselli (New York: W. W. Norton & Co., 1988): 128. The idea of an idempotent (dead, sleeping, unable to act) God is critical to Christianity in its stepwise progression from worship, to devotion, to atheistic denial, exemplified by Christ's query during crucifixion. Dostoyevsky's three Karamazov brothers each live in the stages Vico described as mythic, heroic, and human. Giambattista Vico, *The New Science of Giambattista Vico*, trans. Thomas Goddard Bergin and Max Harold Fisch (Ithaca, NY: Cornell, 1968).
- <sup>29</sup> The falls of the two Madeleines illustrate the way the theatrical space sets up actions within a "Euclidean virtuality" the fall of the Madeleine Scotty loves while the efficient cause of this fall lies within a secondary virtuality, a virtuality of effectiveness, i. e. the scam.
- <sup>30</sup> Wile E. Coyote's gravity-defying ability is discussed extensively at "The Canyon Fall Gag," Looney Tunes Wiki, *Fandom*, https://looneytunes.fandom.com/wiki/The\_Canyon\_Fall\_Gag.
- <sup>31</sup> André Parrot, *The Tower of Babel* (London: SCM Press Ltd., 1955). "The 'Tower of Babel' was a ladder, and the temple it supported was, after all, a 'gate'." The connection between earth and heaven was "meroic" in that each step corresponded to a challenge or puzzle to be unraveled to recover the indexical function of the ladder. In the universal concept of "between the two deaths," literal death is unnoticed/deleted by the deceased, who undergoes a series of trials in order to achieve psychic rest. The interval between the two deaths has been a theme in literature and philosophy at least since Plato's *Republic*, where "the Myth of Er" retells the experience of a soldier, left for dead, who recovered and recounted his experience as a soul processed for admission to Eternity. The late Latin author Macrobius used this story to preface his own account, based on Cicero, of *Scipio's Dream*, where the nephew of the famous deceased uncle visited heaven, realized that earth, as the death of the soul, was the material trial preceding immortality in heaven.
- <sup>32</sup> Hitchcock was fond of the imagery of spinning as a metaphor of fate. In *The Man Who Knew Too Much* (1932), the young daughter Betty looks on in amusement as the sharpshooter Louis Bernard's coat picks up a thread from her mother's knitting basket while her mother dances with him, winding it around the couple as they dance. Bernard is shot suddenly by another sharpshooter because, as a spy, he "knows too much" but doesn't know what he knows. This filmic thematization of kenosis, "knowing without knowing," accurately represents its thaumatropic logic, of having something without and because of not having it.
- <sup>33</sup> Between the two deaths, the soul does not recognize its status as already dead and so must conceive of a generic double. In *Vertigo*, doubling of the proper name with the generic subject is the key to the scam.
- <sup>34</sup> Jacques-Alain Miller, "Extimity," The Symptom 9 (Fall 2008), https://www.lacan.com/symptom/extimity.html.
- <sup>35</sup> Numa Denis Fustel de Coulanges, "The City," Book III, Chap. IV, *The Ancient City* [1864], trans. Willard Small (Boston: Lee and Shepard; New York: Charles T. Dillingham, 1889): 182.
- <sup>36</sup> This is the logic pairing the curse with the blessing. In the Scottish witches' custom of "running Widdershins," a curse involves circling a person or thing counter–clockwise, while a blessing is delivered clockwise. See James Frazer, *The Magic Art and the Evolution of Kings* (New York: St. Martin's Press, 1955), 111.
- <sup>37</sup> David Cooper, *Bernard Herrmann's Vertigo: A Film Score Handbook*. Film score guides, no. 2. (Westport, CT: Greenwood Press, 2001). Listen to: https://www.youtube.com/watch?v=QAGSdAxZlw0.
- <sup>38</sup> Sigmund Freud, Hugh Haughton, and David McLintock, *The Uncanny* (Brantford, ON: W. Ross Mac- Donald School Resource Services Library, 2013).
- <sup>39</sup> Sigmund Freud, "The Antithetical Meaning of Primal Words," *Five Lectures on Psycho-Analysis*, Leonardo da Vinci, and Other Works, trans. James Strachey (London: Hogarth Press, 1951): 155-161.

- <sup>40</sup> Another number for "one thousand nights and one night" is 40, the number of quarantine. The idea is that the construction of the buffer, like the construction of the scam, is the same as breaching it. As Lacan said (somewhere), there is no space into which a hand attempts to conceal something that cannot be reached by another hand that finds it.
- <sup>41</sup> The deletion of the middle term produces the metaphor, where the ladder–like analogy form of A:B :: C:D is converted, thanks to B/C as one rung of the ladder and two sides of the same thaumatropic coin/con as the shill Judy, with a virtual turn becomes the gone girl Madeleine. The indexicality of the analogy is converted into the rhetorical syllogism, the enthymeme, whose middle term is silent thanks to its virtual turn. In rhetorical practice, this allows the speaker to persuade the audience to so something thanks to the fact that it has been omitted. Deletion in the enthymeme's structure is deletion in actual practice, with the result that the transfer is a transfer of the speaker's "nothing," — •.
- <sup>42</sup> We also realize that these terms originally belonged to a completely different kind of analysis, Harold Bloom's consideration of the anxiety of the young poet in the face of a legacy of masters. *Anxiety of Influence: A Theory of Poetry* (New York, NY: Oxford University Press, 1997). Bloom did not pair his terms or regard them, as we do, as a circuitry (the combination of multiple "circle options").
- <sup>43</sup> Norman J. Wildberger, "Projective Geometry/Math History," *Insights into Geometry* [podcast], May 10, 2011, https://www.youtube.com/watch?v=NYK0GBQVngs. In contrast to Wilberger's positive review, see Mark Scheider's scathing denunciation of projective geometry, "Girard Desargues, the Architectural and Perspective Geometry: A Study in the rationalization of Figure," PhD dissertation, Virginia Polytechnic Institute and State University, 1983. According to Schneider, the founders of projective geometry (Pappus, Girard Desargues, and Blaise Pascal) were "second-rate figures better forgotten than exhumed for an academic autopsy."