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Oulipian Codes, Wittgensteinian Games, Borgesian Labyrinths:

The Potential Literature of *Gravity's Rainbow*

Throughout *Gravity's Rainbow*, there is an interplay always at work between the reader and the author, or perhaps more directly to this point, between the reader and the text. Indeed, accessing this narrative at all requires a level of engagement which is highly ergodic in nature: apart from simply reading the novel as fiction, a high degree of what Espen Aarseth calls “non-trivial work” is required of the reader in order to fully access the novel’s information. This is not only because of the prolific amount of encyclopedic references embedded within it (a characteristic of other postmodern narratives), but also because the text itself transcends its own traditional limitations by the manner in which it has been both organized and utilized. Complex meaning is typical of textual analysis, as are the multitude of various interpretations and unique contentions that must come from any meaningful scholarly engagement, but what I would argue is *not* typical of these processes is a reimagining of how one interrogates a written text altogether. Within Pynchon’s multilayered narrative structure, there is a need not only for reading between lines and across history in order to assess value and meaning, but likewise, and in equal measure, a conscious need to quite literally view and *decode* the text as something which is *other than* (or at least *more than*) simply a text. The process of interrogating and engaging with it has qualities that are more typical of mathematics and philosophy than traditional fiction. When we accept this assertion and begin to interrogate the book in such a way that we account for it, it soon becomes clear that this method is intentional, and indeed is, itself, embedded in the most potent and haunting images and symbolism in the story.

There is an intrinsic and complex mathematical quality to *Gravity's Rainbow*. This goes well beyond the narrative being divided in four parts, the adherence to details of historical dates,

the precise degrees of missile firings (and so on). It pertains, also, to a degree of randomness in how the text unfolds, a randomness that ultimately seems calculated. One need only compare a few pages of *Gravity's Rainbow* with *The Gravity's Rainbow Companion*, a carefully compiled reference manual by Steven C. Weisenburger, to realize that even some of the most ostensibly mundane sentences can often (even the majority of the time) contain references to a variety of historical events, religious ceremonies, technical discourses, and just about anything else you might imagine. This beckons us to consider each word on the page in a measured manner, in a way that is both intertextually and conceptually generative, that can quickly call into question what each word, in fact, signifies. Paul A. Harris speaks about this effect in his essay *Exploring Technographies* when discussing the textual experimentation of the Oulipians, a collective of Parisian writers in the 1960s. He says that these kinds of interrogative processes change “our gaze, our very way of looking at written signs,” and that the more closely we do this, the more that “the actual nature and function of the signs becomes less and less certain” (143). Given the sheer breadth of *Gravity's Rainbow*, this can quickly take on an overwhelming quality. Just as one begins to draw conclusions or make connections, there is already another line of thinking forming toward something else, and very soon, it all becomes a paranoid whirl of images, ideas, dates, and times—a swirl of numbers, of data, overloading the text that one holds in their hands. In these moments, the whole book is hardly a book at all, but more so a kind of computational, programmed device—some massive grid which demands massive data entry and calculations, and does not always deliver an expected algorithm.

In Friedrich Kittler's essay, *Media and Drugs in Pynchon's Second World War*, this sentiment is echoed. “Reading and paranoia coincide with each other... Consequently, the critical-paranoid method of the novel infects the readers. They turn from consumers of a

narrative into hackers of a system” (161-162). This speaks, again, to the ergodic nature of the text—that is, the “non-trivial work” that is required of anyone who meaningfully engages with it—but it also speaks to the overwhelming feeling that the text is *more than* just text, that it is a kind of computational system which must be navigated in a way that is not a typical requirement of fiction. For one thing, the multilayered nature of the story is not apparent at face value in something like footnotes—if the reader doesn’t have a guide similar to *A Gravity’s Rainbow Companion* at their side, quite a lot of what is being said might very easily go unnoticed, or at the very least, appear varyingly fragmented. For another—and perhaps more crucially—this complex encoding possesses a strange and uncharacteristic duality: while it is meticulous in its attention to detail, it is also, in bizarre fashion, capable of chaotic formulations which present ample indeterminacy.

These aspects echo through the first (and some of the more enduring) images in the narrative: that of the vapor trail of the V-2 rocket, and the shape of the arch (or parabola or mandala) that it creates as it rises and falls. The title of the book enshrines this image, as seen through the light as a circular rainbow, and very early on suggests not only an arch shape, but rather, a circle as well. How is this possible? Due to the location of the rocket when it is fired and the compass bearing which it uses, as well as the time of the day and the position of the sun, this image is indeed possible, although, as Weisenburger carefully explains in *A Gravity’s Rainbow Companion*: “...since a rainbow of illuminated light moves in a direction opposite to that of its source—that is, since the rainbow falls as the sun rises—then this imagined rainbow would be high overhead relative to any observer who might be standing one-half to one mile east-southeast of the rocket’s airborne vapor trail...” And so: “Pirate’s rainbow is imagined: to observe it under these circumstances one would have to be perched high over the North Sea.” This central image

to the narrative—one of such high importance that it was used as the title—reveals something telling about what Pynchon is doing. While he took the time to consider all that seeing this image would require, he situated it in such an abstract way that, as it is depicted in the book, is not actually possible.

This same thing happens elsewhere. Slothrop has a precise chronology to the events of his life which correspond in a seemingly flawless way with the events of the story and history, and yet, at the crucial moment in which his age is more or less named in the narrative, the result is, like the view of the V-2's circular rainbow, not literally possible. As referenced in *A Gravity's Rainbow Companion*, Weisenburger notes: "If Slothrop is ten thousand days old on this August 6, 1945, and if we count backward, including the leap years, then Slothrop's birthday would fall on March 21, 1918..." this date "tallies with everything we know about him: his association with Jamf and Lyle Bland while an infant, his entering high school when Roosevelt was "starting out" as president, and his being at Harvard University in 1937" (327). The date also has significance to astrology; as an Aries, Slothrop would have been born "on the great cusp," and, at the moment of his birth in Lenox, Massachusetts, as carefully surmised by Weisenburger, "the midheaven" of his chart would have been at "a perfect zero degrees of Aries" (327), *the zero* of course having, likewise, indelible significance to the narrative, just as the V-2 and its vapor trail. But, like the V-2 circle "high over the North Sea," this seemingly perfect and meticulous feat on the part of Pynchon is not all that it appears to be. "Slothrop's father, Broderick, laments having a "double Virgo" for a son. The remark could easily refer to the presence of Mars in Virgo on Slothrop's natal chart... Or it could be that Slothrop is a Virgo (born between August 23 and September 22) and that chasing down these patterns sends one off on a fool's errand... That uncertainty dogs the whole novel" (327-328).

Now, one can with certainty point to the story's style at this point, which admittedly is not meant to be taken literally at all times (or even most of the time), but it is curious that with such prolific attention to detail, as readers we are left to wonder why so much trouble is being gone through if what we are left with is, in fact, functionally and comparatively ambiguous. Is this, too, by design? Is it a hitch in a complex system, a spattering of overlooked details by the author? Or is it a kind of commentary on these very methods, on this unique textual experiment, orchestrated by Pynchon himself?

In *Exploring Technographies: Chaos Diagrams and Oulipian Writing as Virtual Signs*, Paul A. Harris discusses the Paris-based collective of writers and mathematicians known as Oulipo which, in the 1960s, conducted experiments “with literary forms and syntax, writing texts that adhered to self-imposed constraints or rules” (137). *La Disparition (A Void)*, a novel written by George Perec in 1969, is one of the more well-known examples of a work completed using these methods in which the author wrote an entire work without the letter *e*, a document known as a lipogram which has a history dating back to ancient Greece. Other methods include the extended use of palindrome—sequences of characters which read the same both backward and forward—as well as what is called *definitional literature*, in which Oulipians selected every noun in outside works and replaced them with nouns seven positions down in a dictionary (informally known as N+7). Experiments that were conducted by the Oulipians were always mathematical in nature, creating textual constraints by way of numerical parameters. These exercises played with the abstract notion that a written text was inherently generative and had to be interrogated in such a way that these possibilities would be revealed. In essence, the Oulipian treated “language as if [it] could be mathematized” (139). These conceptual experiments are fascinating to consider not only because of their generative qualities, but also because these generative qualities speak to

processes which are, like reading *Gravity's Rainbow*, intrinsically ergodic. They engage text with non-traditional methods which require “non-trivial work” in order to reveal hidden data—“...the researcher sets up initial parameters or constraints, and then seeks out the unexpected result or configuration” (139). The Oulipians conducted experiments with methodologies that brought unexpected language and imagery out of texts ranging widely from common fiction to classic literature to the Bible. It's fascinating to see the results that many of these experiments yielded—most of them strange and many of them beautiful—and it is suggestive of something that is perhaps counterintuitive in looking at a typical written document: its hidden potential for generative qualities should we engage with it in such a way that this secret engine is revealed.

When viewing *Gravity's Rainbow* through this experimental lens, it feels quite natural to regard much of what Pynchon does within the novel as deeply Oulipian. Not only is the text exemplified by precise scientific, technical, and mathematical datasets (dates, numbers, maps, astrology, chemistry, rocketry, and so on)—it also commonly generates “unexpected results” from the reader's interaction with said datasets. I would argue that this element of how the text unfolds is intentional but is by design functioning in a way that is, again, highly chaotic, which is to say, highly unpredictable. If we are willing to look at *Gravity's Rainbow* as something like a compilation of datasets based on diverse fields of cultural, technical, and esoteric knowledge, something that has been organized with deliberate constraints (detailed equations, even, if you will)—then we begin to see that because of the experimental nature of what is being attempted, there *must of course* be results that are unintentional and unexpected. This is the very nature of experimentation, even if the person conducting the experiment is prepared and the results seem to be predictable and/or intentional.

These concepts present themselves in the text in compelling ways. In *Gravity's Rainbow*, there is ample discussion on calculating aerodynamics, for example. Onboard what is called the "Toiletship Rücksichtslos (*Reckless*), Horst Achtfaden, an "aerodynamics man" from the rocket testing station at Peenemünde, explains some of the relevant methodologies. "In aerodynamics, because you've only got the thing on paper at first, you use dimensionless coefficients: ratios of this to that—centimeters, grams, seconds neatly all canceling out above and below. This allows you to use models, arrange an airflow to measure what you're interested in... because these coefficients are good for *all* dimensions" (460-461). This illustrates the breadth of the potential values calculated for in order to fire a rocket, but the word *all* also seems to suggest an erratic array of potential results to which these non-dimensional coefficients are indispensable.

In tandem with this quotation, and this idea of experimental, computational systems at work in the text, I think it is valuable to consider, also, a section later in the novel at the *White Visitation* involving the characters Roger Mexico and Pirate Prentice in which they are speaking about "They" systems (an underlying, paranoid specter that haunts the novel) and Chebyshev's Theorem, an empirical rule utilized in the statistics field in which "data distribution must be approximately bell-shaped and the percentages are only approximately true" (Libretext, 2019): "Needless to say, 'delusions' are always officially defined. We don't have to worry about questions of real or unreal. They only talk out of expediency. It's the *system* that matters. How the data arrange themselves inside it. Some are consistent, others fall apart." This feels like a commentary on the narrative as a whole, particularly when considering the idea of entropy and the second law of thermodynamics, both of which can be used to form a kind of anagram for one of the story's primary characters, Slothrop. The second law states, in short, that entropy can only stay the same or increase over time; that natural processes run in one direction, are not reversible.

These ideas present themselves to a careful reader, in particular, and with increasing frequency, as the story draws toward its conclusion. Not only are there specific systems in which data can arrange itself, there is also an inherent instability to them that is, presumably, by design. And this instability is capable of inducing “delusion” and “paranoia,” not only in the novel’s characters, but in ourselves as we attempt to navigate the world respective to *The Zone*, and are continually faced with contradictions: between order and disorder, unintentionality and precision, death and redemption, decay and return, all in cogent, equal measure.

It is useful to likewise consider the use of (and prolonged narrative preoccupation with) the Poisson Distribution—a discrete probability distribution used in statistics and elsewhere—and the search for a pattern in the rocket strikes across London. On the one hand, there seems to be some level of underlying order to them that several characters are hard at work in sorting out. On the other, they distribute randomly, and if they do have a pattern, it’s a patently absurd one, somehow tied to Slothrop’s sexual liaisons—which seems just another way of saying: there is no meaningful pattern, at least not one that is useful to the characters, that can accurately predict where that next bomb is going to land. Yet the struggle between these diametrically opposed ends continues to vacillate throughout the story, much like other dichotomies that Pynchon is preoccupied with, leaving the reader in a perpetual state of both knowing and unknowing, of revelation and confusion.

There is a drug-like quality—perhaps another manifestation of paranoia—to reading this novel. In a scene involving the character Tchitcherine, in which he is describing the “haunting” effects of psychopharmacology on medicated patients, he states: “Like other sorts of paranoia, it is nothing less than the onset, the leading edge, of the discovery that *everything is connected*” (717). This mindset can lead to some very strange places. Take for example the case of Ensign

Morituri. As examined by Weisenburger in *A Gravity's Rainbow Companion*, Morituri is “an ex-kamikaze trainee who derives his name from the greeting of Roman gladiators to their Caesar: *morituri te salutant* (“those who are about to die salute you”). In Conrad’s *Heart of Darkness* (1899), Marlow quotes it after visiting “the company’s offices” to get his commission for the African voyage (147). Also, as a spy or agent our Morituri may owe something to W.J. Lueddecke’s spy thriller entitled *Morituri* (1964) ...”

Now, there seems to be serious attention paid this character as pertaining to Imperialist Japan and the Kamikaze and Morituri’s overall historiographic place in the story—even to his hometown (which turns out to be, ominously, Hiroshima). But what is pointedly bizarre about this carefully plotted character and his history and his name is that something very similar occurs with him as does with Slothrop’s age or with the V-2’s vapor trail, only with Morituri, it happens in a way where we know that it could not have been done intentionally by Pynchon. When we follow the trail—like textual sleuths, Oulipian researchers—of the origin of Morituri and his name and his history, we get to a thread which adds, via Weisenburger, to the previous quote. In speaking of the spy thriller entitled *Morituri* from 1964, Weisenburger adds that it was “made into a 1965 movie starring Marlon Brandon and Yul Brynner.” Is it delusional or paranoid to then consider that Marlon Brando is also the future star of *Apocalypse Now* (1979), the film famously directed by Francis Ford Coppola which is, yes, largely based on Joseph Conrad’s *Heart of Darkness*, one of the main referential sources of the name? Cyclical? Coincidental? Mindless and aimless extrapolation? The threads of this story connect in a way that is almost hallucinogenic—dare I say *delusional*. But it is unfortunately the case, with this particular instance, that it is merely a coincidence, an illusion of extended congruency: the film *Apocalypse Now* was not released until the year 1979, whereas *Gravity’s Rainbow* was released in 1973. This

illustrates a greater point, however, something that is illustrated accurately by David Witzling in *Everybody's America: Thomas Pynchon, Race, and the Cultures of Postmodernism*. In the quote, he is paraphrasing from Linda Hutcheon from her book of critical theory entitled, *A Theory of Adaptation*, in which she examines the effects of adaptation through remediation and personal interpretations which may or may not differ from source materials. "As Hutcheon argues, in postmodernist historiographic metafiction such as Pynchon's..." a burden is placed on each reader "to make certain interpretive decisions..." (23). If this is in fact the case, then we, as readers, are not passive receivers of information, but rather active participants in a process, a process in which we can, presumably, have some form of influence—whether interpretive or otherwise.

This process of interrogating the text, attempting to decode it, ad infinitum, to seek out what the Oulipian would call its "potential literature," engages us as readers in a way that feels quite like a game, one that can be played in different ways, any number of times. As Paul Harris notes in his contribution to *Reading Matters*, "Precisely because of the chimerical quality of the Oulipian message, the textual game changes our gaze, our very way of looking at the written signs" (143). This sentiment is reminiscent of the philosophical work of Ludwig Wittgenstein to a degree which is hard to ignore. Wittgenstein was a philosopher most active in the 1930s in a circle of thinkers that convened for a number of years at Cambridge. He spent most of his life debating the basic nature of philosophy with thinkers like Bertrand Russell and Karl Popper. It was Wittgenstein's most famous and enduring contention, since the publication of his work, the *Tractatus Logico-Philosophicus* in 1929, that philosophy had few, if any, inherent problems that it needed to solve, only issues of language—"language games," as he called them. This was a manner of thinking which situated language in such a way that words or sentences only had

meaning according to the “game” being played; this means, in a rudimentary and fundamental sense, that all language is meaningless without associative context, without understanding the nature of that context. This is revelatory when placed alongside Oulipian methodologies. By interrogating the text in a way unlike others have traditionally done, you change the “rules” of the “game,” thereby creating meaning that is altogether unique and independent of what you started with in a way that is mathematically random and, at least to some degree, interpretive; this recalls computational methodologies such as those used by the Oulipians. If language as a construct, or a structure, can be interrogated in such a way, and if *Gravity’s Rainbow* plays into these chimerical, “potential” strategies meaningfully, then what are the implications of this? To return briefly to *Reading Matters* and the essay by Paul A. Harris, there is reference to what are called “recursive texts.” These texts are those that “contain a kind of generative algorithm or set of “generative rules that invite the reader to pursue the production to infinity” (143). *Gravity’s Rainbow* is one such recursive text, and is filled with symbolism that directly indicates this, a quality which explains its hesitance to commit to any one set meaning or approach any formal closure in its conclusion.

When we read *Gravity’s Rainbow*—particularly in tandem with a reference guide like *A Gravity’s Rainbow Companion*—syntactic patterns immediately begin to emerge within the text. Capitalization will often signal the reader, for example, should the capitalization be atypical of the word or simply seem to appear out of place with the surrounding text, that there is some hidden reference operating subliminally. The method is interesting in and of itself because it operates in relatively the same fashion as hypertext does—that is, as a textual linking device—in that it can cue the reader to leave the page that they are on and investigate whatever the referent in question might be. This kind of textual maneuver alerts the reader that there may be other

associative clues, other signifiers of meaning within the novel. Some of these can be found in the numbers that are used—which always seem to carry significance crucial to the story—but still others can be found in colors (red, black, and white have primary significance; so does yellow), in songs (many lyrics conceal a historical context or social commentary), and in shapes and structures (the arch and the circle found in doorways and on wheels of chance and carnival rides), to name only a few. But the most telling of these in relation to Wittgenstein and the Oulipians (and this argument) is that of the infinite circle and the labyrinth.

The circle is present, of course, in the image of the circular rainbow vapor trail of the V-2 but is also present in the launching platform (*the bodenplatte*), as well as in the insignia worn by the Schwarzkommando. This last instance is a curious example when considering Wittgenstein. If one were to just look at the insignia—K, Z, E, and V in respective place of North, South, East, and West, and an inner circle with the letter H—it appears fairly nonsensical. What do the letters stand for? What does this symbol mean to those who wear it? It is only after ascertaining the German words which these letters stand for, and their significance to the “launching switch” that this symbol emulates, that it takes on a robust meaning. And certainly, if we were to input *other* markers for those letters (say, the recurrent *SS* also seen in the novel, another form of insignia used by Nazi soldiers which echoes in the images of sleeping lovers and in the internal layout of the Mittelwerk and its slave-labor camp, Dora)—or eliminate one altogether—we might very well discover another entirely different context which works with the symbol—or perhaps not. In any case, the circle is rampant throughout the novel in several forms, as is the mandala and the arch. The circle appears as a wheel of chance, as a carnival ride, as Ouroboros a handful of times, as insignias and platforms. It appears within the arch and the mandala as well, via the implication that this curve in fact continues, underfoot, through the earth, to then become a circle—although,

like *Pirate Prentice*, we can't always *see* this true nature because of the ambiguity of the symbols involved in these literary allusions.

This image of the recurring circle is always suggestive of return, of the infinite, of a battle between diametrically conflicting ideas: the preterite and elect; salvation and damnation; life and death; black and white; past and present; prolepsis and analepsis; and a long list of other binary terms. In the case of the use of hysteron proteron (*later earlier*, a rhetorical device which places words first that, temporally, occur later in the action) and prolepsis and analepsis (also rhetorical devices which either narratively flash backward in time or forward in time), these devices situate the reader in the relative center of this circle, much like the pinpoint of the firing mechanism for the V-2, or the bullseye-like design of the launchpad. We find ourselves standing right in the middle of this, in the midst of an endless swirl of details, a condition which calls to mind yet another important and interrelated symbolic totem in the story: the labyrinth.

There are many overt references to Jorge Luis Borges in *Gravity's Rainbow*. Countless times, labyrinths are directly mentioned, sometimes in the odd manner of "a harmonica factory" (391) or in seemingly endless, "windowless mazes" (442). There is also a primary character by the name of Katje Borgesius, who is preoccupied with, among *other* things, ceremonies which subvert Kabbalistic conceptions of eternal life and knowledge, of a need for infinite processes which are required in order to attain some kind of "divine." There is a woman named Graciela Imago Portales in the narrative, to whom Borges himself is said "to have dedicated a poem" (389) which translates, via Weisenburger, to something like: "The labyrinth of your uncertainty / detains me with the anxious moon" (226)—the moon being another important figurative circle, along with the sun, in the story. But there is something very curious about this last reference to the poem by Borges. Again, according to the guide written by Weisenburger, this poem is not a

real one. It is very much in the style of Borges, it even uses Borgesian language and Borgesian motifs, but it is nonetheless a fiction, conjured by Pynchon, created via careful imitation: what Weisenburger calls “a neat trick, given the way Borges’s fictions reinvent literary history” (226).

There is an essential underlying commentary to this. First of all, the fact that Pynchon would choose to imitate and, in effect, *remediate* Borges in the form of his infatuation with the image of the labyrinth is telling. After all, in stories like *The Library of Babel*, in the masterful collection, *Ficciones*, Borges himself has much to say about the infinite and the recursive nature of texts, of the labyrinthian nature of the library. “The universe (which others call the Library) is composed of an indefinite, perhaps an infinite, numbers of hexagonal galleries...” (79). And from the same story, “*The Library is limitless and periodic*. If an eternal voyager were to traverse it in any direction, he would find, after many centuries, that the same volumes are repeated in the same disorder (which, repeated, would constitute an order: Order itself)” (87-88). All of this speaks of course to the recursive, generative potential of texts, but there is also, in the work of Borges, a mystical infatuation with mathematics—with grids and shapes and numbers; there is always an attempt to *decode* the world, to try and make sense out of data. Overt examples of this are present in another Borges story entitled, *An Examination of the Work of Herbert Quain*. In this tale, there is a direct attempt to decode the structure of a novel via the intricate diagramming of numbers—literal datasets that are arranged in grids. And this section, quite explicitly, looks like something straight out of an Oulipian experiment.

Finally, there is the strange and mysterious substance of *Gravity’s Rainbow*, Imipolex G. This is described as an “aromatic polyimide” and is, according to Weisenburger, “from a class of film-forming plastics. This, however, is little help in specifying what Imipolex G actually *is*, for the handbook advises that there are, approximately, 6.4×10^{15} theoretically possible molecular

products of the reaction used to produce these plastics” (300). The product of this equation might fall short of what is *truly* infinite, but it approaches infinity in a similarly exhaustive way as the Oulipian experiments do, in a way that is so complex and spread out that it is difficult to grasp. This generative model is echoed, again, in the random and chaotic image of the Poisson map of rocket strikes over London. It is also fascinating to consider, in the computational sense that we are thinking about the book now, the way in which this text begins to effectively deteriorate and fragment as it unfolds.

Reading the final section feels very much like experiencing a computer, or a narrative engine, beginning to “short out” or “break down.” It reads like the complex code of the novel is rapidly degenerating, an inevitable kind of entropy which in effect mimics the second law of thermodynamics. And what is literally going on in the text is also figuratively occurring—not only with Slothrop and his physical fragmentation—but also with the Schwarzkommando’s 00001 rocket, which is being transported, as the novel draws to a close, in a disassembled (or fragmented) state. Things begin to rapidly occur in both the past and the present; analepsis and prolepsis mutate into something that is both the same and also, perversely, *other*. Gerhardt von Göll puts out a new film called *The New Dope* in which there is a “reverse world” where “agents run around with guns which are like vacuum cleaners operating in the direction of life—pulls the trigger and bullets are sucked back out of the recently dead into the barrel” (760)—a reversal of cause and effect likewise reminiscent of other intriguing textual and narrative experiments like *Slaughterhouse-Five* by Kurt Vonnegut. Seaman Bodine has a “brand new reflex arc—ear, brain, hands, asshole— and a return toward innocence too” (755). Weissman’s tarot card reading functions as “yet another sign that the meaning of Gottfried’s sacrifice during the Easter/April

Fool's weekend is hopelessly equivocal: maybe a token of redemption or maybe just a fool's quest" (Weisenburger, 374-375).

This is the note that the book ultimately ends on. In a dramatic blend of prolepsis from the late sixties/early seventies Los Angeles, and analepsis back to the launching of the elusive 00000 rocket in Holland during World War Two, we are left standing in a *theater* (of movies? of wars?) in southern California, in the novel's future, in which a rocket from the past hums toward Pynchon's present moment. Is this entirely by design? Or is this another function of the nature of these random outputs "shorting out" as the novel draws to a final page? Reformulations of many of the same images used throughout the novel are echoed in this brief but powerful concluding episode. Most strikingly, garbage trucks are out on their routes, making their collections, going northward in a scene which suggests a grim continuation, a reformulation of codes into another totalizing system— "returning to the center, with all of the gathered fragments of the vessels" (772). And as they head for the center of that circle with their engines humming north, Gottfried rattles through the sky, and through time, toward his final destination—a Vietnam-era United States, another war—and in this image, a transmigration of technology by the likes of Werner von Braun, which will allow the United States to not only reach the moon, but further develop weapons far into the future, the likes of which other major world powers will soon be on a race to mimic, onward to our present day. A screaming comes across the sky. And where will we be when this happens, when these codes reconfigure—again, and again, and again, and again, and again? Where will the next rocket fall? Will it land on you or me? Can we escape this? Can we prevent it?

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