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Richard A. House '94
Illinois Wesleyan University

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ORDER AND ORDERLESSNESS IN *GRAVITY'S RAINBOW*: A DIALECTIC

Richard A. House
Research Honors Project
Dr. Wes Chapman, Advisor
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I. "WHAT RUINOUS MOSAIC": THE FRUITS OF PARANOID EPISTEMOLOGY

"Just because you're paranoid don't mean they're not after you..."
—Kurt Cobain, "Territorial Pissings"

Gravity's Rainbow is a notoriously unreliable text. The perspectives of the strange narrator and various characters give an account of the novel's events that is clearly problematic in terms of the degree of "reality" that can be ascribed to various episodes: fantasies, hallucinations, and paranoid delusions are often indistinguishable from the events which may cause them or to which they may refer. To an unusual degree, then, the fundamental plot-question—"What happens?"—becomes a point of departure for a sort of textual metaphysics. Often, arguments about the significance of passages may be upstaged by arguments about the plot itself: what "really" happens and what is illusory? The reader faces the same difficulties that plague the characters: all seek knowledge of, or at least a coherent theory about, the fictional world of which the characters are inhabitants and the reader is a curiously stationed observer. Definitive answers are impossible; Pynchon's work revels in its ambiguities. However, *Gravity's Rainbow* is spectacular in the vastness of the fictive world it creates and chronicles, prompting a tremendous array of claims about the ways in which it functions. Thus, it seems appropriate to inquire into questions which are as fundamental in Pynchonian metaphysics as in the "real" world. Probably the most important question is the one of whether or not ultimate order exists. Is the world of the novel orchestrated, ordered, or structured by some outside-the-System force or basic organizing principle, or is it characterized by randomness, with each event falling into a universal Poisson distribution?

Pynchon's preoccupation with paranoia is perhaps the most important hint as to how to interpret traditional ordering strategies. At some point, the

epithet of "paranoia" is applied to almost all of the major worldviews portrayed in the novel: scientific, mystical, religious, and political. Given the pejorative connotation of the term, which is almost always used to dismiss the "paranoid" idea, a strong case can be made for reading *Gravity's Rainbow* as a nihilistic refutation of ideas of order, a manifesto for the rejection of the human "rage for order" in favor of a probabilistically oriented take on a universe that is truly random and ultimately defeats any attempts to impose structure upon it.

However, there is also a case to be made for a reading that favors continued belief in order over such nihilism, one that interprets Pynchon's insistence on paranoia as a commentary on epistemology rather than a refutation of actual metaphysical structure. To illustrate this epistemically oriented dimension of the text, it is necessary to examine its treatment of paranoia in both the traditional conspiracy-oriented sense and a new sense born of the similarities between such raving fears and other, more traditionally approved ways of looking at the world.

Pynchon's fascination with paranoia is unquestionable. The narrator provides "Proverbs for Paranoids" that describe the rules of living with illusory fears, and most of the major characters are either explicitly called paranoid or exhibit tendencies that make the term seem to apply: specifically, a tendency to believe that "They" are responsible for whatever situation is at hand, to believe that events unwind only as "They" plan them. "Their" identity is variable enough for the paranoid finger to point at conspiracies at both bureaucratic and cosmic levels; "They" mete out funding for research programs and govern life and death. Yet Pynchon portrays many more common belief systems as being "paranoid" in a similar way. The psychiatrist Pointsman's firm adherence to Pavlovian cause-and-effect dogma ignores the failure of real-world phenomena to conform to its expectations, just as a conventionally paranoid worldview,

which Pynchon calls a "They-system," refuses to admit evidence against the hypothesized conspiracy. Thus, paranoia comes to be primarily defined not by positing a conspiracy against oneself but by insisting on a foregone conclusion despite evidence to the contrary. By pointing out the similarities between conspiracy theory ("I just know They're out to get me") and other irrationally maintained belief systems ("I just know a Pavlovian causal mechanism is operating here"), Pynchon effectively extends the definition of paranoia beyond the normal conspiracy-centered model. The content of one's conclusions (i.e. belief in a conspiracy that doesn't actually exist) is the traditional grounds for determining whether or not a theory is paranoid. Pynchon's redefinition demonstrates that the problem of the clinical paranoid is no different than that of many others: the lack of a proper justification for the belief.

According to the conventional definition of paranoia, saying that all notions of structure are paranoid is identical to claiming that no structure exists; paranoia is supposed to imply falsehood. It is therefore understandable that Pynchon can be taken to be making the nihilistic claim against metaphysical order. Yet the redefinition of paranoia along epistemological lines means that a belief may be simultaneously paranoid and true. This is the most powerful argument for structure despite paranoia in *Gravity's Rainbow*. The best test case is protagonist Tyrone Slothrop's constant insistence on the existence of a conspiracy surrounding him. His belief is based on intuition rather than evidence; its manifestations are as absurd as the imagined demon giving him the finger. Yet it is also true that conspiracies do surround Slothrop: the White Visitation manipulates him to discover the nature of his link to the Rocket, and his father and Dr. Laszlo Jamf conspire to make Infant Tyrone the subject of a psychological conditioning experiment. Thus, the evidence bears out his belief in a conspiracy.

But since his paranoid conclusion is formed before he discovers any evidence to suggest its truth, it is simultaneously true and unjustified.

So far, this only proves that unjustified beliefs may nonetheless be true, and therefore that the universe of *Gravity's Rainbow* may be an ordered one despite the fact that each idea of order represented in the novel is exposed as being unjustified. Yet Pynchon gives us much more than an ambivalent admission of order as an abstract possibility. Indeed, the strange case of a completely paranoid scenario that more or less accurately portrays a real situation demands some kind of explanation and is evidence that some kind of underlying structure is connecting events. After all, the fact that traditional Pavlovian causal explanations cannot account for the correlation between Slothrop's erections and V-2 impacts in no way asserts that no other structure-oriented explanation will suffice: to posit a random, structureless universe because current models and theories fail to explain a situation is as unjustified as the worst paranoidias Pynchon can concoct. Pynchon's skepticism about the validity of cause-and-effect reasoning and other typical assumptions makes it easy to jump to such nihilistic conclusions: perhaps one reason Pynchon includes so many instances of amazing "coincidences" is to reinforce the sense that there must be some kind of ordering explanation for the phenomena. For example, statistician Roger Mexico charts V-2 impacts, Slothrop's sexual encounters, and births in London and finds that all follow Poisson distributions, the expected pattern of random events—but all follow the *same* Poisson distribution, a finding that completely defies the expectations of a random, orderless worldview.

The problem of the corresponding Poisson distributions is especially important because Mexico is a part of Pynchon's elaborate comparison of old and new paradigms of science and their expectations of order and chaos. Mexico, the statistician, eschews the question of explaining causal relationships—whether

and why an event happens—and seeks instead to arrange those events which do happen into statistically predictable patterns. His boss, the Pavlovian Pointsman, wants to read the mechanisms of the cerebral cortex to predict the occurrence of psychological events. The discrepancy in worldviews puts the researchers at odds: Mexico insists that the failure of causal thinking requires that science “strike off at some other angle”, while Pointsman insists that “there is only forward—into [true causal explanation]—or backward” (89). Pointsman is restricted “to the zero and the one”—an event’s occurrence or its failure to occur; to Mexico belong all of the probabilities “between zero and one” (55).

Pointsmen’s mechanistic determinism follows the paradigm of Newton as well as Pavlov; Mexico’s emphasis on statistical probability corresponds to the “new physics” of Einstein, Niels Bohr, and Werner Heisenberg. Their conflict (excellently detailed in Alan J. Friedman’s “Science and Technology”) epitomizes the one that occurred at the dawn of modern theoretical physics. Of course, we know which side prevailed in the mechanistic/statistical debate in “real” life: modern theoretical physics is largely a discussion of probability waves. Similarly, Pynchon stacks the deck in favor of young Mexico: not only is the unrestricted range of possibilities between zero and one more intuitively appealing than Pointsman’s rigid all-or-nothing analysis, but its resulting Poisson distributions are necessary to confirm the existence of the Slothrop-Rocket connection. Addressing the same problem, Pointsman’s causal approach reveals nothing.

On one level, then, the privileging of Mexico’s viewpoint is a refutation of traditional ordering strategies: those that operate along the lines of causality and rigid determinism. However, it leaves other important questions rather open: does this viewpoint mean that individual events are random and unpredictable? The reader is uncertain, and the question has all of the import of

the assertion that perhaps God really does play dice with the universe.

Significantly, even Mexico himself is secretly unsatisfied with the answers of his mathematical models: he wonders "what ruinous mosaic, facing outward into the Waste" of the world, truly encompasses the events he lays out statistically (89). This imposition of a structure is of course paranoid; the desire to assign responsibility even hints at the archetypal paranoia of an invented "They-system." Thus, even Mexico is not as decisively separated from the rest of the novel's paranoid cast as the strictly openminded metaphysics he espouses.

It is easy to make Mexico's slip into paranoia an argument against structure: we can say that, like other characters, Mexico is rationalizing an emotional need for order despite his knowledge of the true randomness of the universe. As White Visitation researcher Géza Rózsavölgyi describes the more general psychological principle: "The *ba*-sic theory, is, that when given an *unstruc*-tured stimulus, some shape-less *blob* of *exper*-ience, the subject, will seek to impose, *struc*-ture on it. How, he goes a-*bout struc*-turing this blob, will reflect his *needs*, his hopes..." (81, punctuation and emphasis Pynchon's). Mexico, like the other characters, can clearly be seen as simply imposing this kind of structure. Yet the single Poisson distribution that charts V-2 impacts, Slothrop's sexual exploits, and births in London needs explanation, even from Mexico's statistical viewpoint: the explanation need not be causal, but it must point toward a somewhat connected universe, for the data indicate some sort of correlation. To a certain degree, the very existence of this data refutes Mexico's viewpoint, with its expectations of randomness; it at least proves that the paranoid's insistence on the connectedness of all things is justified in some instances.

Of course, even without such evidence of connectedness, Slothrop's case—an intuitively /paranoiically sensed conspiracy that actually exists—proves that an unjustified imposition of structure may actually correspond to an existing

order. Besides, *Gravity's Rainbow* is based around the premise that situations generally involve more than initially meets the eye, as evidenced by Pynchon's account of the sinister (and historically accurate) technocracy behind the War (see Tölölyan, "War as Background in *Gravity's Rainbow*"). Faced with the bizarre coincidence in Poisson distributions, is a belief in unknown overriding structures unjustified after all? Pynchon maintains that Antiparanoia—the belief that nothing is connected to anything else—is impossible for the human psyche to maintain. Based on this idea and the refutation of so many ideas of order, it is easy to revert to the assumption that Pynchon is pushing a vision of a "real" world that is random and structureless while maintaining that human beings are simply incapable of facing such a reality as it is. But equally valid is the possibility that the traditionally expected orders, such as those of Newtonian science, are indeed erroneous, but only because they fail to conform to a true order which has not been—and perhaps cannot be—discovered.

Molly Hite suggests one possibility in her essay "*Gravity's Rainbow* as Secular History," in which she theorizes that the Rocket's parabolic curve (the "gravity's rainbow" of the title) represents a universal pattern of creation, expansion and destruction. If the parabola represents a real universal order, it is easy to see that many characters—Slothrop, the rocketeer Captain Blicero, and the Herero rocket-seeker Enzian—have relationships with it that promise them access to whatever truth it offers. If, as the Herero maintain, the Rocket is a sort of Kabbalistic Text which reveals the structure and meaning of the universe, the message it sends is a grim one, but an ordered one nonetheless: structuring the universe in terms of creation, expansion, and entropic heat-death; human life in terms of birth, growth, death, and decay; and civilization in terms of ascendancy and decline. It offers no solution in terms of identifying "Them," but it certainly succeeds in structuring the phenomena of the universe in a decisive way. Most

importantly, the idea of the Rocket-as-Text shows the epistemological peculiarities of the novel: Slothrop's progress into its mysteries is motivated not by any epistemologically sound ideas about the Rocket's significance but by intuitive, paranoid feelings of connection with it.

Of course, it is arguable that schematizing the universe according to the Rocket's parabola may simply be another paranoid delusion—Hite herself raises the possibility primarily to expose its inadequacies. But the point raised by the example, the fact that veridical structures are indeed accessible by epistemological strategies typically considered faulty, remains valid. *Gravity's Rainbow* is filled with examples of knowledge gained through unconventional means. Dreams, drugs, and seances, among other avenues, appear in the novel on the same level with scientific inquiry in terms of their capacity for yielding true information (that is, readers have at least as much reason to believe in these strategies' results as indicative of what is "really happening" in the novel's plot as in "scientifically" determined hypotheses). The outstanding example of this emphasis on alternative epistemology is Pynchon's account of the chemist Kekulé von Stradonitz's discovery of the benzene ring, one of the most critical developments in the history of chemistry. While Kekulé was futilely attempting to solve the riddle of benzene's structure, he dreamed of "the Great Serpent holding its own tail in its mouth" (412). He then confirmed via experiment that benzene exists in a similar ring structure—prompting even Pynchon's eminently scientific chemist Laszlo Jamf to invoke the paranoid They-system in asking "who, sent, the *Dream*?" (413).

This general format, of intuitive, subconscious, and more conventionally paranoid revelations taken as indicators of the actual state of the world, holds for many situations in the novel: most notably Slothrop's learning of the conspiracies surrounding him. However, *Gravity's Rainbow's* narrative intermingles history,

fictional plot, and hallucination. It is often impossible to separate actual historical events from those which are unique to the novel; more importantly, it is equally impossible to separate these fictional events, which “actually” occur in the Pynchonian universe, from the dreams, drug-trips, and imaginations of the characters and the narrator. Thus, attempting to validate any epistemological strategy becomes a problem: the fact that it seems to yield true results within the novel is far from a definitive argument. The fact that Pynchon draws attention to Kekulé’s case, however, offers a better-than-average argument for the validity of alternative (and, by Pynchon’s redefinition, paranoid) epistemology: the truth of its conclusion, the ring-structure of benzene, is a real-world empirical fact (or as close to empirical “fact” as the Pynchonian epistemological vacuum allows us to arrive). Given this, denying that the novel makes an argument for paranoid epistemology as a route to knowledge about real-world structures requires radical skepticism, maintaining that not only is the novel’s immense discussion of *The White Visitation*, Laszlo Jamf, and all other evidence of the Slothrop-centered conspiracies fantastic and hallucinatory, but that Kekulé’s dream-discovery represents a mere coincidence.

Ultimately, refusal to accept an overwhelming number of coincidences (between Slothrop’s paranoia and the conspiracies around him, Kekulé’s dream and the structure of benzene, seemingly unrelated but identical Poisson distributions, etc.) is one key to any attempt at characterizing Pynchonian metaphysics; the other is recognizing that “paranoid” epistemologies, for all of their often-noted distortions of reality, provide the only available insight into the ultimate metaphysical questions (and many more immediate empirical questions) of the universe’s order or lack of order. These distortions, of course, make it impossible to characterize whatever overall order may exist—but they do not preclude its existence. The novel’s insistence on the limited capacities of at

least all earthly perspectives means that however veridical its paranoid epiphanies may be, the ultimate level of the order-and-chaos question is inaccessible. Yet for all of the importance of this limitation, it is equally important that *Gravity's Rainbow* not be read as an assertion of ultimate orderlessness. It is one thing to say that Pynchon is suspicious of traditional ways of ordering the universe, another to claim that his project is to refute all possible conceptions of order. The idea that the first claim entails the second is reductive and fails to capture the curiosities that make the novel's metaphysics so interesting in the first place.

II. "BORDERS FALL AWAY": ENTROPY AND ANTI-STRUCTURE

"The universe is based on sullen entropy—it falls apart as it goes on..."
—Robyn Hitchcock, *"The Devil's Coachman"*

The first paper in this series forwards the notion of *Gravity's Rainbow* as an argument for metaphysical order: it identifies clues of connectedness and organization, of a structure revealed through paranoid epiphany. Yet it argues for a structure which it cannot detail, an order whose constituent elements it can neither identify nor even remotely address. These elements may be material or conceptual, and the essay concedes that their manifestations are frequently indistinguishable from conventionally paranoid (as opposed to veridically paranoid) delusions. Yet just as Pynchon's treatment of paranoia provides a springboard for claims of metaphysical connectedness and an overriding structure, his treatment of the concept of entropy supplies both questions and answers about the degree to which the Pynchonian universe is adequately characterized by positing an ultimate connecting structure. To more fully assess the novel's position on order, an analysis of entropy, the irreversible dissolution of orderings along Time's Arrow, is required. The analysis which follows aims to show that entropic "anti-structures" are as essential to *Gravity's Rainbow* as connecting structures and also that these anti-structures serve to limit the applicability of any totalizing structures to the novel's world by showing that perceptions of structures depend on limited perspectives and can thus never capture any objective truth.

Definitions of entropy vary among disciplines. Most familiar is its use in thermodynamics, in which the term denotes the disappearance of differences in the amount of heat energy present in various parts of a system: differentiations are lost as the chaos of particle movement becomes maximized. Thermodynamic systems move irreversibly from heat differentials to a uniform temperature, with

new differentials introduced only when heat energy is introduced from outside the system. Other disciplines, such as information theory, have borrowed the term to describe similar progressions. In the early short story "Entropy," the collegiate Pynchon relates the thermodynamic concept to the breakdown of order in human lives. Although his introduction to *Slow Learner* expresses regret at the story's technique of creating characters and situations solely as illustrations of the symbolic entropic force (12), a similar (if more sophisticated) usage persists throughout his later work. "Since I wrote this short story, I have kept trying to understand entropy," Pynchon writes (*Slow Learner* 14). In *Gravity's Rainbow*, the parallel between thermodynamics and other systems is typically more tacit, but the text is filled with situations to which the concept applies.

The novel's clearest example of entropy, however divorced from its thermodynamic origins, is found in the sociopolitical system of the Zone, the torn-up remains of the Third Reich war state. Geli Tripping points out the results of an entropic process to Slothrop in response to his reference to the "Soviet zone": "You sound like a German. Forget frontiers now. Forget subdivisions. There aren't any" (294). What Tchitcherine calls an "interregnum" in Germany has arisen as the Allied Zone-differentiations, like pockets of a substance with a variety of temperature gradients, have disappeared, leaving the ultimately chaotic Zone. As double agents and black marketeers work the system, commodities like information chaotically work their way from person to person, like the heat energy transferred from molecule to molecule, until differentials exist no longer. As thermodynamics tells us, entropy in a system always increases.

The other argument for analogizing entropy to the sociopolitical, economic, and geographical chaos of occupied Germany is that, like all entropy, we must discuss it in terms of the system. Pynchon gives almost epic

descriptions of the bureaucracies that make up the capital-S Systems of the War, and the Zone functions in Systematic terms as well. Occupation begins the entropic pattern by introducing new political and military elements to the German Zone, creating differentials of information, allegiance, and technology just as heat energy from outside creates heat differentials in the thermodynamic analogue. Even a completely homogeneous substrate, when such forces from outside penetrate its System, will exhibit a change that seems counter-entropic: heat gradients, or political subdivisions, or demands for previously worthless commodities, will reappear, and the System will again be characterized by order-imposing bureaucracies and hierarchies. However, what has essentially happened is that the System which was previously the whole has become part of a new System, encompassing the intruders. New gradients form between its climate and those of the intruding forces, and these gradients then dissolve until maximum entropy is reached or until the System's hierarchies are again altered from Outside.

Of course, the fact that the changing orders of the Zone follow the pattern of entropy says little about the larger metaphysical claims at issue here. However, the text's other structured systems seem equally plagued by entropic anti-order. Most significantly, the text itself degenerates from a more-or-less coherent narrative into a scattered mess of tiny sections whose relationship to one another is hardly evident. Bits of relevant plot are intermingled with playful ruminations on language ("On the Phrase 'Ass Backwards'"), random background on characters and events ("Mom Slothrop's Letter to Ambassador Kennedy"), and shtick-filled episodes with no narrative relevance to anything which precedes or follows them ("A Moment of Fun with Takeshi and Ichizo, the Komical Kamikazes"). For all of the paranoid insistence that "*everything is connected*" (703), the novel ends by refuting our expectations about even its own

connectedness. Before the narrative breakdown begins, the novel makes traditional connections among its subplots, usually based on the relationships of the characters to one another and to the Rocket. Slothrop, Blicero, Tchitcherine, Katje, Pökler, and the others either encounter one another or move toward the Rocket in ways similar enough to justify their inclusion in the same storyline. Yet when entropy attacks the novel's structure, connections no longer hold: even the final Ascent of the Rocket, which should be the pivotal event in all of the various plots, has no obvious effects on most of the characters who have occupied the Systems based around it. As in the German Zone, a coherent and connected structure is ultimately unable to maintain itself, and plot-information is scattered entropically throughout the Zone of the Text's end.

Of course, given the novel's general multilinearity, the claim for entropy at its end might be contested on the grounds that this chaotic conclusion is simply a refutation of expectations of ordered synthesis in a text that is structureless from the start. Yet the first three sections of the text are organized and unified in ways in which the fourth is not. The first three sections maintain their focus on the War, with occasional diversions like Slothrop's dream-trip-through-the-toilet always given some sort of connection to the more straightforward plotlines. These lines are also connected in time: they all connect to the War, occurring roughly contemporaneously if separately. By Part 4, some segments display only remote thematic connection: the characters and events chronicled no longer seem to occupy the same fictional space as those which precede them. The textual system has moved outward, forward and back in time, and abandoned its earlier rules. Slothrop is no longer a distinct character at all, the importance of Rocket 00000 is downplayed, and bits like the conspiracy-oriented story of Byron the Bulb show only thematic connections to the plot which has until this point connected the narrative.

Pynchon's portrayal of such connected structures' inability to remain intact is equally important within the events the narrative chronicles. In one of the most bizarre developments in the novel, protagonist Tyrone Slothrop himself undergoes a type of entropic scattering, the relevance of which is emphasized by the fact that the narrator announces it in terms of a plan of connectedness gone wrong: "Tyrone Slothrop...was sent into the Zone to be present at his own assembly...and there ought to be a punch line to it, but there isn't. The plan went wrong. He is being broken down instead, and scattered" (738). Other characters suddenly have trouble remembering Slothrop "even as a concept—"it just got too remote"s what they usually say" (740). Theories are raised about Slothrop-fragments growing into new individuals, but his dissolution ultimately remains a mystery. However we interpret it, this instance of entropy speaks powerfully against ideas of connectedness. Here, it is the structure of the Self, a basic element in metaphysically oriented discussions, that cannot maintain itself. How can we believe in the veridicality of the paranoid insistence on the connectedness of all things when even personal unity—the most basic of presumably connected Systems— is subject to omnipresent entropy?

What these entropic elements of the text ultimately give us is an assertion that, in Yeats' words, "Things fall apart; the center cannot hold." Molly Hite has demonstrated the ways in which Pynchon's work withholds the "holy center" of meaning—"a central insight that is unaccountably missing from Pynchon's fictional worlds"—from its readers, systematically depriving us of a "real" story (10-11). To use Pynchon's physics-oriented description of such epistemic situations, we are always Δt away from actual knowledge. This is reminiscent, of course, of the Derridean idea of the center as the unattainable position of the "transcendental signified" to which all of the text's signs aspire but which they can never reach. Indeed, *Gravity's Rainbow* is a deconstructionist's dream,

repeatedly drawing our attention to the fact that *everything* is a text, an act of discourse. To the Herero, the Rocket is a Kabbalistic Holy Text; Pointsman reads the cerebral cortex, Mexico the Poisson distributions of the Blitz and Slothrop's amorous escapades. The various "texts" which appear to Slothrop are too numerous to list, but by novel's end he is an accomplished reader of all conceivable signifiers: "he reads the guts of trout he's caught and cleaned, scraps of lost paper, graffiti on the broken walls where facing has been shot away to reveal the brick underneath—broken away in specific shapes that may also be read . . ." (623, ellipses Pynchon's).

Amid this mess of signifiers, as Hite shows, no center of meaning emerges. Moreover, the problematic state of the structure of textual meaning is also the state of metaphysical enquiry in *Gravity's Rainbow*. However convincing we find the empirical argument for order in Pynchon's universe (coinciding Poisson distributions, etc.), notions of structure collapse when no center can be posited around which the structure can be organized. In "Structure, Sign, and Play in the Discourse of the Human Sciences," Derrida points out the reliance of posited structures on a center "to orient, balance, and organize the structure—one cannot in fact conceive of an unorganized structure....even today the notion of a structure lacking any center represents the unthinkable itself" (960). Given the way in which the novel treats the absent "holy center" as the key to any proper structuring of reality, Pynchon seems to share Derrida's belief in this reliance. While Derrida's remarks are ultimately aimed at the problems of structuralism in critical theory, they are clearly relevant to the problems of basic metaphysics:

...the whole history of the concept of structure...must be thought of as a series of substitutions of center for center, as a linked chain of determinations of the center. Successively, and in a regulated fashion, the center receives different forms or names. The history of metaphysics, like the history of the West, is the history of these

metaphors and metonymies... It would be possible to show that all of the names related to fundamentals, to principles, or to the center have always designated the constant of a presence—*eidos, arché, telos, energeia, ousia* (essence, existence, substance, subject) *aletheia*, transcendentality, consciousness, or conscience, God, man, and so forth. (Derrida 960-1, ellipses mine)

It seems clear that the metaphysics of Pynchon's paranoids fits into the same pattern, its salient feature its centering of itself around "Their "presence. If we treat the paranoid assertion of metaphysical order as merely another manifestation within this "series of substitutions," it is difficult to see why it should be privileged. The argument offered by the first essay rests on the conformity of Pynchon's world with paranoid epistemology. The "Mystery Insights" (691) of Slothrop and the novel's other paranoids serve the same role as the prophecies and miracles of any religious metaphysics: outside of personal revelation, little separates Slothrop from his Calvinist heritage, "his own WASPs in buckled black, who heard God clamoring to them in every turn of a leaf" (281). Whatever fruits paranoid epistemology may bear, the argument for structure depends on this faith in miraculous revelation—and entropy, with its insistence that real structures are temporary at best and perpetually unstructure themselves, is as critical to the text as the paranoid connectedness which it opposes.

Entropy implies more than the temporary nature of earthly structures, however. If we accept Derrida's assertion that structure relies on centeredness, then the novel's Systems can only properly said to be structured if they have centers. In two important ways, entropy destroys systems' centeredness. First, while a center is defined by its distinctness from the marginal System oriented around it, entropic decay entails the erasing of these distinctions, the hierarchies which define centeredness toppling as the System reaches homogeneity. Second, as self-contained Systems invade one another to become part of new and larger

Systems, original centers become immediately marginal. The perpetual redefinition required by entropic change emphasizes the fact that centers are defined by the marginal Systems around them even as they supposedly organize and define these margins. If entropy affects all structures, their centers are centers only because of the limited way in which the structure is perceived. Inclusion of a wider perspective, taking into account the effects of factors outside the proposed structure or of entropy within the structure over time, reveals that the identification of the center is contingent on one's perspective of the system.

For example, the Zone is defined with the Rocket as its center. Blicero's position of power comes from his access to the Rocket, and the various Rocket-seekers are measured by their relative proximities to and distances from it. Within the novel's Part 3, "In the Zone," the Rocket 00000-as-center holds, for the distinctions show minimal change. Yet in Part 4, "The Counterforce," we are forced to reevaluate this center as the narrator fast-forwards to show the world's political and technocratic systems at a later stage. End-of-the-War Europe, defined by the 00000, is juxtaposed with a movie theater managed by a caricature of Nixon named Richard M. Zhlubbb and menaced by a decidedly more threatening missile. Given twenty-some years of change in power structures in which the German Zone is absorbed into the larger political system of the Cold War and the German Rocket-quest supplanted by the new technocratic center of nuclear weaponry, Blicero's Rocket seems marginal even as it sends Gottfried to his death. Suddenly, we view its role not as central but as significant in its parallels to the new apocalyptic center, the missile about to strike Dick Zhlubbb's Los Angeles.

The other way in which entropy puts ideas of structuredness into question, the dissociation of a supposed center and the consequent change in its system's structure, is exemplified through Slothrop's dissolution. Throughout

the early stages of the novel, Slothrop and his eerie Rocket-connection are at the center of a systematic observation by The White Visitation—a system made meaningless when he dissipates. We see some of the players in this system trying to maintain its order by chasing Slothrop's ghost—Mexico, for instance, is "unwilling to give him up." However, other accounts after Slothrop's dispersal illustrate that even this most well-defined of the text's systems is centered around Slothrop only from a certain perspective. "We were never really that concerned with Slothrop *qua* Slothrop," a "spokesman for the Counterforce" tells the *Wall Street Journal* (738). Even the text itself, in which Slothrop is the most "centered" figure, continues without him.

Such entropic events make no definitive statement about ultimate metaphysical order, but they do draw attention to the fact that Pynchon gives us no structure which is not subject to entropic change over time, no order which persists or provides a basis for positing a totalizing structure for his fictive world. The connections attributed to "Mystery Insight," which are the basis for the argument of the first essay, may reveal an inability to understand the reasons for certain phenomena—but this does not in itself require a belief in an overriding structure to accommodate them. Instead, the dependence of ideas of structuredness on perspective demonstrates that *Gravity's Rainbow* actually supports a relativistic worldview. For example, we can order the Zone around the 00000 or the White Visitation's efforts around Slothrop within a limited perspective, but we must acknowledge that from other perspectives these attempts at structure collapse. Instead of hints at meaning, order, or truth, our perceptions of structuredness actually emphasize our inability to achieve any kind of universal or transcendent knowledge: all is relative and contingent on perspective.

In fact, this inability explains the paranoid insistence on a They-system. If the center of the paranoid's ultimate structure is centered around a presence which is by definition unknowable, it can never be refuted, or even found to be limited to relative "truth." No matter what evidence is forwarded to demonstrate the relative nature of order and truth, it is imaginable that our inability to transcend the relative is due to the fact that this is the way that They want it. As Mark Richard Siegel notes, even the entropic ruin of structures can be explained away as "the central element of [Their] cosmic conspiracy" (150). When the very concept of structure itself is shown to be dependent on a center, which is in turn determined by perspective, one can attribute metaphysical reality only to a structure whose center can never be perceived at all. Indeed, the text suggests that the They-system of its paranoids shifts outward as it goes on, moving away from bureaucratic and political conspiracy theory to metaphysical claims. In the early references to "Them," Pirate Prentice and, later, Slothrop clearly refer to "The Firm." Only as this limited System seems incapable of explaining the novel's events is the pronoun shifted to indicate an all-encompassing conspiracy. This shift is indicative not of the revelatory paranoid epistemologies lauded by the first essay, but rather the problematic conspiracy theory which "paranoia" usually denotes. The "They-system," adopted eventually even by the narrator, never provides a scheme of connectedness for the novel's events with any notable explanatory appeal; instead of fitting the pieces of the Pynchonian world-puzzle together, They provide only an excuse for insisting that the pieces do somehow fit together.

Pynchon's relativist stance on human knowledge, especially as it relates to the change of systems along Time's Arrow, is emphasized in the motif of " Δt ." Using the physicist's notation for temporal change, *Gravity's Rainbow* points out many of the problems time presents for knowledge. The Δt between frames of

film, for instance, represents time uncaptured and unobservable. Given knowledge of only particular segments of time, attempting to achieve more general knowledge is impossible. For instance, Franz Pökler, allowed only one annual visit with his daughter, realizes that he cannot confirm the girl's identity—he cannot know if she is his child or even if the same child returns from one year to the next. Through such situations, Δt comes to represent the epistemic difficulty which attends humans' limited perspective.

Of course, given the entropic and epistemic situation, "Mystery Insight" and the occasional triumphs which the first essay uses to argue for its efficacy are not much worse off than any other epistemological strategy. The novel's relativism, however, insists both that the world's systems shift and decay around us and that their alignment and structure depend on our perspective in the first place. With this background in place, it seems clear that *Gravity's Rainbow* is no affirmation of mystical paranoia as an avenue in to a holy center of metaphysical knowledge. The first essay is correct insofar as it recognizes Pynchon's critique of traditional means of knowledge, but it too readily endorses the paranoid enterprise as an answer. The subject of metaphysical order in Pynchon's world is more complex than analyzing evidence for whether or not it exists; the novel is deeply concerned, like Derrida, with ways in which our perspectives of structures influence our belief in them and our identification of the centers which define them. The relativism appropriate to Pynchon's entropically changing and perspective-dependent world offers less in the way of knowledge than the less skeptical viewpoint of the first essay; coupled with the novel's apocalyptic bent, it allows little comfort in our interpretation. However, accuracy, not comfort, is our objective, and this relativism most properly indicates the emphasis of *Gravity's Rainbow's* metaphysics.

III. "AN ELLIPSE OF UNCERTAINTY": THE READER AND THE ORDER-CHAOS DIALECTIC

"You can add up the parts but you won't have the sum..."—Leonard Cohen, "Anthem"

The first two essays in this series take issue with one another in their readings of the metaphysics of *Gravity's Rainbow* based on their identification and promotion of different themes of the text. According to the first, an adequate characterization of the Pynchonian universe must take note of the success of paranoid epistemologies in identifying features of the textual world. This reading is both empirical and mystical, emphasizing the need to address events and phenomena but recognizing that standard ideas of justification for belief fail to accomplish this task. The second essay subordinates this empirical emphasis on individual plot events to a relativistic framework by using the concept of entropy to argue that the novel exposes its structures and their centers as dependent on limited perspectives. It seems that each has something important to say, but the difficulties in reconciling them are prodigious. Both identify tendencies in the novel which cannot coexist without a degree of paradox, each describing important features in the text which cannot be accommodated into the worldview of the other. If this is true, we cannot read Pynchon's engagement with ideas of metaphysical order and orderlessness as a complete argument for one way of perceiving the universe. The question, then, becomes one of establishing the relationship between the simultaneous promotion and refutation of ideas of order within the text. A wide variety of critical approaches might be applied. The formalist-influenced critic, for instance, might argue that the entropic breakdown of the text in Part 4 resolves the tension between order and chaos in favor of the relativist worldview; the deconstructionist might analyze the hierarchy of these opposing concepts and the ways in which the text subverts it.

Excellent arguments could be made for these and other interpretations, but perhaps the most interesting take on the dialectic of structure and structurelessness is the model set up by reader-response criticism. Concern with metaphysical order entails an interest in interpreting the world. The earlier essays debate whether or not the interpretive moves of paranoid characters, with their conclusions of connectedness and They-systems, are legitimate, and therefore whether the proper reader's response is one of assenting or objecting to such interpretations. The characters' metaphysical readings of the world are thus, by all accounts, inextricably tied to the reading of the novel. With this connection in mind, a number of issues about interpretation and the discovery or imposition of order arise. Here, I argue not only that Pynchon's double-sided presentation of metaphysical order and orderlessness is an issue to be resolved by the reader, but that this presentation results in a parallel in the order-seeking of readers and characters by creating the same dynamic of epistemological difficulty in the corresponding searches for structure in the novel's world and in the text itself.

Before examining this parallel in detail, it seems fruitful to examine the exact problem posed by the opposing readings of the earlier essays. The first essay points out the successes of paranoid epistemology which the relativist paradigm of the second essay cannot accept as being privileged outside of a certain perspective. On the one hand, the paranoia of Slothrop and others reflects structures in the text, like the conspiracies around Slothrop, in such a way that its potential for discovering true order seems privileged. On the other, the relativism suggested by entropic change is unable to accommodate this privileging, because it insists that "true order" is true only within a certain context and from a certain perspective. Yet to place the remarkable efficacy of paranoid epistemology within the relativist framework is to say that its

revelatory power is no more or less correct than any other strategy; the amount of "truth" it reveals is no longer a valid criterion for evaluating it. In characterizing the novel's world, we want to capture both the privileging of paranoia and the circumstances which subvert it by necessitating a relativist worldview—but these two elements of the text contradict in a direct and unavoidable way.

One way to attempt to resolve the pro-paranoid thesis and the relativist antithesis is to separate them into different spheres. We might say that paranoid epistemology is privileged in a pragmatic framework concerned with empirical phenomena and events, but that limited perspective makes it as problematic as any other strategy within the framework of ultimate metaphysical inquiry. However, this attempt at resolving the paradox neglects the fact that it is empirical, "real-world" systems, such as the German Zone and its Rocket-technocracy, whose entropic change and resulting perspective-dependence make relativism necessary in the first place.

Given the fact that this paradox is unavoidable, the relevant issue is the way in which it functions in the novel. To begin addressing this matter, it is helpful to examine which sections of text support the claims in question. The citations from the novel of the two previous essays illustrate that their contradictory theses draw their primary support from different sections of the text. Evidence for the efficacy of paranoid epistemology comes primarily from the first two sections, while support for the claims about relativism comes from the final section. In fact, the text bears out the pattern this suggests, fostering expectations of connectedness in its first sections, then engendering suspicion of these expectations as it becomes clear that no resolution is forthcoming.

The novel begins like many others, with different subplots which seem that they may be easily integrated at some point and with plot-questions which

seem that they may be resolved. Accustomed to novels which draw separate plot-threads together, the uninitiated reader has every reason to expect synthesis, and the novel plays on this expectation. As Slothrop traverses Europe in search of the Rocket to which he is so intimately and mysteriously tied, we expect an encounter which will explain this connection. As the various bureaucracies (The White Visitation, Pirate Prentice's Special Operations Executive, IG Farben, the German rocket research establishment) are developed, we expect that their role will be explained. Approximately the first half of the novel complies with these expectations, revealing bits of seemingly central information with real promise for resolving and ordering the textual puzzles which entice us to keep reading. When we learn of Infant Tyrone's role in Dr. Laszlo Jamf's experiments, we expect that this information will sooner or later play a role in explaining Slothrop's Rocket-erectations. Connections and structures build, with the Rocket as their usual center, connecting the companies and researchers who have produced its plastics and fuels, the enigmatic Captain Blicero who wields its power, and its various seekers like Slothrop, Tchitcherine, and Enzian.

Thus, as Slothrop enters the Zone, virtually all of the novel seems to fall into a tremendously complicated but nonetheless coherent plot which, given some time, could be mapped out. Yet Slothrop's progress through the Zone is accompanied by a textual shift—connections are drawn less clearly, more marginal events take over the narrative, and the gradual decline into textual entropy begins. Yet as this all happens, invocations of Them and Their mastery over a supposed structure become more and more prevalent: the more phenomena defy conventional explanation, the more the paranoid seems prompted to point to Them as the answer. In the early sections, when They need only be highly stationed bureaucrats, the paranoid's ideas of order are plausible—how many of us have our own possibly paranoid ideas about The

System, The Man, or The Powers That Be? By the time we are told that it is “within Their power to go on forever”—to transcend death and the other entropies which can then be explained as Theirs, the reader is, like the characters, floundering as expectations of connectedness and ideas of order are thwarted; the epistemic ground formed by our half-formed ideas about the resolution of plot-issues, has been pulled out from under our feet.

The progression of the text as a whole, then, seems to follow a pattern not unlike the one Stanley Fish has identified in individual sentences and lines of verse, in which, the reader is led to form a conclusion which is promptly subverted by what follows (Culler 65). In *Gravity's Rainbow*, the reader is never allowed any definitive conclusions; Pynchon subverts expectations of connectedness and coherence instead. We expect a solution to the Slothrop-Rocket connection, for instance, and instead witness not just a failure to reach this solution but the dissolution of the character who defines the problem in the first place. Paranoid ideas of order—the only ideas of order available—seem more and more ridiculous. They are even treated as a ludicrous game in which Pirate Prentice is able to coach “novice” paranoid Roger Mexico, both of them agreeing to play despite their admission that even the game’s only real end is defined by Osbie Feel’s desire to “piss on Their rational arrangements” (639). Instead of the Mystery Insights ascribed to paranoia earlier on, we see a pathetic attempt at escape from a world whose orderlessness only grows more evident.

At the same time, however, the reader has been shown time and time again, as the first essay demonstrates, that paranoia has sometimes been “a route In for those...who are held at the edge” (703, ellipses mine). By means of paranoid epistemology, Slothrop has discovered the conspiracy surrounding him, and Kekulé has discovered the structure of benzene. The refutation of order accomplished in the text’s entropic end is always qualified by the possibility,

however unlikely, that They really exist and are arranging things. If the reader's own paranoid inclinations were not wooed throughout the novel, its ending would be precisely the manifesto of relativism which the second essay promotes. Instead, the text's relentless promotion of paranoia's possibilities means that the reader is moved not only to skepticism about order because of entropy and perspective-dependence, but to a sort of counter-skepticism about this relativism itself, an unshakable idea that perhaps the denial of absolute truth, order, and meaning is missing something. Relativism certainly creates an epistemological vacuum in which nothing can be proven, but a relativism which is itself drawn into question creates another sort of uncertainty. The reader, like the characters, is bombarded with contradictory tendencies in the novel's fictive world and put into an epistemological situation which cannot be comfortably resolved by adopting the relativist worldview. Acceptance of paranoid truth is naïve, but complete denial of its possibilities is reductive.

This identification of the reader's experience with that of the characters, based on their parallels in interpretive moves thwarted by an epistemological vacuum leaving ultimate uncertainty, is also supported by direct invocations of the reader and of the reading process. The narrator occasionally addresses the reader directly, usually responding to her lack of information. Sometimes these addresses acquiesce and tell us what we want to know: "You will want cause and effect. All right" (663). Elsewhere, they refuse, perpetuating rather than easing the reader's epistemic plight: "—say what? what's Slothrop's own gift and Fatal Flaw? Aw, c'mon—" (676). In both cases, the voice of the narrative is conscious of its own difficulties for the reader and of the fact that it controls her access to information. Its emphasis of this fact stresses that for all of the amazing amount of information contained in *Gravity's Rainbow*, much is still withheld from the reader—drawing our attention once more to the uncertainty the novel produces

in its readers. We may even say that such direct invocation of the reader periodically brings her into the text as a character denoted by the second-person pronoun, with this perpetual uncertainty as her only given trait.

This parallel between the reader's interpretation of the text and the characters' interpretation of their world is made explicit insofar as the characters' interpretation of empirical data is frequently called "reading," from the Herero readings of the Rocket-as-Text to Pointsman's readings of the cerebral cortex. Even minor characters such as Army barber Eddie Pensiero have their own peculiar texts: "Eddie is a connoisseur of shivers. He is even able, in some strange way, to *read* them, like Säure Bummer reads reefers, like Miklos Thanatz reads whip-scars" (641). The usual difference between textual interpretation (the decoding of the words of a text and the attribution of a meaning or significance to them) and empirical interpretation (the analysis of data and formulation of hypotheses based on this data) is effectively erased. Therefore, it seems reasonable to say that it is readings and readers who "move in an ellipse of Uncertainty" (427). If *Gravity's Rainbow* is about the epistemological difficulties inherent in making correct judgments about metaphysical reality, it seems to include the reader's attempts to make correct judgments about texts—to reach Molly Hite's "holy center" of meaning—within this species of interpretive acts.

This essential similarity of interpretive acts explains and justifies what may initially appear to be an unjustified conflation in the second essay of the structure of the universe which the novel portrays and the structure of the novel itself. The essay uses the entropic degeneration of the text itself to argue for the appropriateness of applying the concept of entropy to the situations and events faced by the characters within the novel's fictive universe. Yet if the interpretive enterprises of reader and character are essentially the same, the disintegration of the text is more than just a case of the novel's form running parallel to its content

(the entropic change of Slothrop, the Zone, and the Rocket-technocracy). It is a case of form building on content and emphasizing it in an important way. Each epistemological roadblock set before a character (e.g. Pökler's inability to identify his daughter based on disconnected, isolated moments) has the same effect on the reader; each time a character's capacity for accessing truth is denied, the reader's is denied as well. The novel is engineered so that our confrontation with the issue of the daughter's identity involves only the same information available to Pökler himself. In most instances, then, the difficulties encountered by reader and character are not merely parallel, so that tales of epistemic uncertainty might be read as an allegory of the reading process, a typical conclusion of reader-response criticism. Here, reader and character face the same dilemma: the reader's additional peril of the degenerating text is simply another instance of the kind of problems that elsewhere wreak their epistemic havoc on both sides of the form/content divide.

The fact that Pynchon so neatly bridges the gap between form and content is particularly significant in the relationship of questions about the novel's formal structure to those about metaphysical structure in its fictive universe. Because the centers of structures within the novel are identical to the centers around which we might attempt to orient a proposed structure of the text, *Gravity's Rainbow's* refusal to resolve issues of metaphysical structure simultaneously prevents the resolution of the question of its own formal structuredness. When entropic change reveals the fact that Slothrop and the Rocket serve as the centers of systems only from a certain perspective, their roles as centers of plot and theme are equally at issue; the same epistemological problem of perspective-dependence which can marginalize these would-be centers of metaphysical structures entails that the structure of the novel itself is equally perspective-dependent. For instance, when Slothrop dissipates and the Counterforce

announces that it was never "concerned with Slothrop-*qua*-Slothrop," we also see that the novel too can continue without him and even without traditional assumptions about character and plot. Like the attempt to find a satisfactory center for metaphysical structures within the text, the effort to locate a satisfactory center for the text itself can yield only arbitrary and ultimately unsatisfactory answers.

Again, however, the paranoid They-system introduces an irrefutable possibility which adds to the complexity of the issues of metaphysical and textual structure. By virtue of Their very inaccessibility, Their presence can never be shown to be perspective-dependent, and a structuring of the novel's universe or of the text around this presence can never be refuted. Its epistemic unsoundness, of course, can be demonstrated—but as the first essay illustrates, the difference between soundness and truth is considerable. The stakes of uncertainty are raised with respect to the text's own structurality just as they are in the metaphysics of the Pynchonian universe. Given only the relativism of the second essay, we would be forced to say that the novel lacks a true structure because all of its possible centers are undercut; considering also the impossibility of relativizing an inaccessible presence, the novel's structurality is made indeterminate but They provide a possible center which is never fully refutable. The novel can always be read as an account of Their successful effort to withhold knowledge from those who seek it, its structure defined around Their presence and designed to accomplish Their ends.

Given a dialectic so impossible to resolve, it is entirely possible to continue this back-and-forth analysis *ad nauseam*. Such is the circle of argument embodied in *Gravity's Rainbow*. In the text's metaphysics and again at the level of the text itself, ideas of structure are simultaneously undercut and sustained, always providing an argument for each side of the dialectical opposition. The reader of

the novel, like the characters within its world, is at best able to identify the nature of the circle in which she and they are caught, a circle with its roots in the epistemological problem posed by the human inability to transcend a limited perspective. In this circle, proof of structure is as impossible as proof of structurelessness. To ask for more resolution than this is as hopeless as asking for the circle's origin or its terminus. The closest we can come to a real "Mystery Insight" from the reader's point of view is an acknowledgement that maintaining the circle itself is the real achievement of *Gravity's Rainbow's* metaphysics and textual structure—it keeps us spinning around inside, overcoming our best efforts to break free.

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