Starry-Eyed Semiotics:  
Learning to Read Slothrop's Map and Gravity's Rainbow  

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Throughout his novels, Thomas Pynchon demonstrates a meticulous concern for the interrelationship and dislocation between character and locale. Pynchon places his fictions in actual geographic locations, and like James Joyce in Ulysses and Graham Greene in It's a Battlefield, he exploits each location by filling his fictions with facts. For example, in V. (1963), his first novel, Pynchon moves his characters around on three continents with Baedeker-like care, matching events with particularized locales, and then placing his characters either within or in close proximity to the events. Thus, the outlandish activities of the characters simultaneously take on an aura of actuality and call into question the nexus between fact and fiction. As compared to V., The Crying of Lot 49 (1966), Pynchon's second novel, drastically delimits the fictional locale, restricting the actions of the characters to a small area of California. Here, Pynchon creates the fictional locale of San Narciso, investing this created world with all of the trappings of California-style middle-class America: endless freeways, factories, shopping centers, cheap motels, used car lots, and tract housing. Oedipa Maas, the central character in Lot 49, is at once absorbed and repelled by this technologically mass-produced landscape. In Gravity's Rainbow (1973), the technological metaphor for topography becomes the double integral design of the Mittelwerke near Nordhausen, Germany, where the V-2 rockets were built, and more importantly for the present context, the metaphor is spatialized as the map that marks the rocket strikes on London. Gravity's Rainbow returns to the geographic sprawl of V., and this last novel, like the preceding two, explores the problems of interrelationship and dislocation between characters and locale within the textual landscape. Pynchon dramatizes this problem through Tyrone Slothrop's map and the different intratextual acts of reading it undergoes; however, the dislocation of reading that the map undergoes extends beyond the covers of Pynchon's third novel.
Much of the critical writing devoted to Gravity's Rainbow portrays the relationship between Tyrone Slothrop and his star-studded map of London as follows: "Tyrone's London map, recording in varicolored stars the sites of his affairs, starts one of the major threads of the novel"; "On a map of London Slothrop has placed stars to designate the inordinate number of his sexual conquests [ ]; they correspond exactly with the impact points of the V-2's"; "[Slothrop] is apparently irresistible to girls and in his office he keeps a map of his many successful amorous encounters which occur at odd moments all over London"; and finally, "Slothrop is not only bound by maps, but his identity as far as others are concerned is coordinatized with the map that plots his sexual exploits." From this information, a physiological theory of Slothrop's precognitive powers has been drawn: "Somehow Slothrop carries encoded within him the ability to mark the impact of V-2 rockets"; "His initial duties, in September, 1944, are to interpret and if possible to predict the dispersal pattern of the V-2 missiles falling on London, a task for which, it is thought, he has a curious physiological talent"; "so that in London in 1944 Slothrop finds himself getting a hard-on at times and places where the V-2 rocket is to fall."

What is, indeed, fascinating in all of these statements is the consistency of belief in the factualness of Slothrop's map: the belief that every girl is real, that every sexual encounter occurred, and that Slothrop faithfully recorded each event with scientific precision. Edward Mendelson shows a flicker of trepidation in ascribing an absolute value to the map: "Slothrop first distinguishes himself when it is noticed that a map he keeps of his sexual adventures (real or fantasized) corresponds in a statistically significant manner with a map of V-2 strikes in London. To make the matter more perplexing, the stars on Slothrop's map precede by a few days the stars on a map of rocket strikes." So far so good. Mendelson displays his wariness in believing Slothrop's prolific sexual record, and the "stars" on both maps do coincide, but he continues: "Slothrop eventually becomes aware of a relation between his sexual impulses and the V-2 rocket." Mendelson's statement is valid, but it implies a real connection between Slothrop's "sexual impulses and the V-2 rocket," and we are back at the be-
ginning, assuming that impending rocket strikes motivate Slothrop's erections or vice versa. Or, to give the idea another turn, we could be drawn into believing that merely through a display on the map of his fantasies Slothrop can predict rocket strikes: he doesn't even have to go to the actual point-of-impact to have his erection.

Recently, Brian McHale revealed the probable unreliability of Slothrop's map:

Slothrop's sexual conquests in London are crucial to the plot of Gravity's Rainbow, since they provide the first evidence of that affinity for the V-2 blitz which will determine Slothrop's subsequent career in the novel. So it is with some dismay that we later learn from Slothrop himself that at least some of these conquests were simply erotic fantasies, not real girls. The passage McHale refers to is on page 302 of Gravity's Rainbow, where Slothrop recalls the "gentlemanly reflex that made him edit, switch names, insert fantasies into the yarns he spun for Tantivy back in the ACHTUNG office." We will have more to say about this passage presently, but for now, McHale's statement, and Pynchon's via Slothrop, necessitate that we rethink our readings of Slothrop's map, and re-approach the novel with an understanding that one of the "major [yarns] of the novel" is more tangled and knotted than we had previously thought. Therefore, let us first turn back to the text and attempt to discover exactly what it does tell us about Slothrop and his map, and then we will re-construct the reading mechanism to see why Slothrop's map is misread.

In the third chapter of Gravity's Rainbow, the narrator introduces us to Tyrone Slothrop via his cluttered desk and his map, both seen through the eyes and camera lens of Teddy Bloat, an operative gathering information for "The White Visitation":

Tacked to the wall next to Slothrop's desk is a map of London, which Bloat is now busy photographing with his tiny camera. [. . . ] Too bad whoever's funding this little caper won't spring for color film. Bloat wonders if it
mightn’t make a difference, though he knows of no one he can ask. The stars pasted up on Slothrop’s map cover the available spectrum, beginning with silver (labeled "Darlene") sharing a constellation with Gladys, green, and Katherine, gold, and as the eye strays Alice, Delores, Shirley, a couple of Sallys—mostly red and blue through here—a cluster near Tower Hill, a violet density about Covent Garden, a nebular streaming on into Mayfair, Soho, and out to Wembley and up to Hampstead Heath—in every direction goes this glossy, multicolored, here and there peeling firmament, Carolines, Marias, Annes, Susans, Elizabeths.

But perhaps the colors are only random, uncoded. Perhaps the girls are not even real. From Tantivy, over weeks of casual questions (we know he’s your schoolmate but it’s too risky bringing him in), Bloat’s only able to report that Slothrop began work on this map last autumn, about the time he started going out to look at rocket-bomb disasters for ACHTUNG—having evidently the time, in his travels among places of death, to devote to girl-chasing. If there’s a reason for putting up the paper stars every few days the man hasn’t explained it—it doesn’t seem to be for publicity, Tantivy’s the only one who even glances at the map and that’s more in the spirit of an amiable anthropologist—"Some sort of harmless Yank hobby," he tells his friend Bloat. "Perhaps it’s to keep track of them all. He does lead rather a complicated social life," thereupon going into the story of Lorraine and Judy, Charles the homosexual constable and the piano in the pantechnicon, or the bizarre masquerade involving Gloria and her nubile mother, a quid wager on the Blackpool-Preston North End game, a naughty version of "Silent Night," and a providential fog. But none of these yarns, for the purposes of those Bloat reports to, are really very illuminating. . . . (18-19)

I quote this passage in full here at the outset because, despite being filtered through Bloat’s consciousness,
this is our most direct observation of the actual map.

Bloat is our first reader surrogate, but his mission is only to photograph the map for a mysterious "those" who do not find parts of Bloat's "report," his reading, "very illuminating." Yet Bloat is a perceptive reader of Slothrop's map, questioning its system of signification: "Bloat wonders if [color film] mightn't make a difference [. . .]. But perhaps the colors are only random, uncoded. Perhaps the girls are not even real." In the next chapter of the novel, we learn that the colors are assigned with no apparent intention: "The stars he pastes up are colored only to go with how he feels that day, blue on up to golden. Never to rank a single one—how can he? Nobody sees the map but Tantivy, and Christ they're all beautiful"(22). This passage, narrated through Slothrop's consciousness, answers Bloat's questions about the stars, but the neglect by "those Bloat reports to" of the colors Slothrop uses for his map is odd, particularly when we learn that among "those" readers are a Pavlovian behaviorist, a Freudian psychological researcher, and a statistician. The colors might not consciously mean anything to Slothrop, but wouldn't the color-choice pattern constructed over a period of time say something about his behavioral responses to, his unconscious desires about, his unique statistical distribution of color?) The readers of Bloat's reports and his black-and-white slides openly ignore modes of signification within the map, yet, as the text makes clear, these later readings have a profound influence on Slothrop and our experience of Gravity's Rainbow.

With this incomplete transmission of Slothrop's map through Bloat, we begin to see the contours of the act of misreading, but the second question Bloat raises about the map is also vital to our exploration. The last sentence in the passage (concerning Slothrop's non-ranking of colored stars) quoted above, "Nobody sees the map but Tantivy, and Christ they're all beautiful," is a catalyst to our inquiry of Bloat's second question: "Perhaps the girls are not even real." The first half of the sentence recalls the earlier passage—"Tantivy's the only one who even glances at the map" (though interestingly, both passages are presented as interior monologues or recalled speech, but the narrator presents them through different consciousnesses: Bloat's, Tantivy's, and
Slothrop's), and the absoluteness of the "all" in the second half of the sentence should only intensify our suspicion of the full implication of Bloat's question: Maybe the map is a fiction? If, perhaps, "the girls are not even real," then certainly they are not "all beautiful." Moreover, it is not firmly established that Slothrop actually does chase girls while he is on the job; he "evidently [has] the time," but when we see him out among the ruins in chapter four, he is not doing any chasing. Pynchon's carefully placed adverb, "evidently," insinuates the subjectiveness of the hypothesis.

Then, there are the "yarns" Slothrop tells Tantivy, probably while he is pasting on the stars, in a ritual between the office-mates: Tyrone Slothrop, high priest of pick-ups and dance-hall girls, gives the daily "amorous report" (22). The brief sample of "yarns" mentioned earlier certainly suggests elaborate narrative accounts of each sexual encounter, but one wonders about that "providential fog"; surely it was culled from some steamy romance rather than real life. "But none of these yarns, for the purposes of those Bloat reports to, are really very illuminating." "Yarns" signifies the probability of fiction, and as readers, we should be wary of "those" who do not appear to recognize a fiction when they hear or see it. Not even Tantivy can substantiate the factualness of Slothrop's "yarns." Tantivy is the first, and to Slothrop, the only intended (if we can even use that word) reader of his map. But the "yarns" Tantivy retells to Bloat at the Snipe and Shaft, yet another transmission of the text, are repressed by the later readers of Slothrop's map. To the readers of Gravity's Rainbow, however, the "yarns" hold the key to Slothrop's map.

The long passage quoted from chapter three also lists fifteen names (six of which are plural) plus Gloria's "nubile mother," and in chapter four six more names appear; thus, twenty-two girls at the very least are represented on the map. We know from chapter fifteen in part one ("Beyond the Zero") that Darlene exists, or at least a Darlene exists. Marjorie and Norma are on Slothrop's mind in chapter four, but we do not meet them except through the "amorous report." Jenny (presumably Jennifer) will visit Slothrop in a
dream while he is in Nice (255-56), and apparently a rocket hits her block, but this occurs long after Slothrop has been shipped by The White Visitation to the Riviera. According to the text, these are the only London girls who might be connected with Slothrop; in addition, the text does not supply an abundance of scenes of Slothrop's sexual arousal coinciding or counterpointing with the rocket. In fact, Darlene offers the only palpable example of a "Slothropian" sex adventure, but discussion of Darlene will have to wait until we have examined the map's two most influential readers: Roger Mexico and Ned Pointsman.

Roger Mexico is a statistician for The White Visitation and the keeper of a map of rocket strikes. Mexico's map shows that the rockets are falling in a Poisson distribution, a "Robot Blitz." With his random number charts, the "domain between zero and one," Mexico is the "Antipointsman"; "Pointsman can only possess the zero and the one. He cannot, like Mexico, survive anywhere in between" (55). This distinction becomes important as each reads Slothrop's map: Pointsman reads with an obsessive need for absolutes while Mexico reads with his emotions. Mexico's first response to the parallel between his map and Slothrop's is to think "it's a statistical oddity. But he feels the foundation of that discipline trembling a bit now, deeper than oddity ought to drive. [ . . ]"

It's the map that spooks them all, the map Slothrop's been keeping on his girls. The stars fall in a Poisson distribution, just like the rocket strikes on Roger Mexico's map of the Robot Blitz.

But, well, it's a bit more than the distribution. The two patterns also happen to be identical. They match up square for square. The slides that Teddy Bloat's been taking of Slothrop's map have been projected onto Roger's, and the two images, girl-stars and rocket-strike circles, demonstrated to coincide.

Helpfully, Slothrop has dated most of his stars. A star always comes before its corresponding rocket strike. The strike can come as quickly as two days, or as slowly as ten. The mean lag is about $4\frac{1}{2}$ days. (85-86)
This is important information (which many of the critics have seized on) towards forming a reading of the map, and we sense a degree of scientific objectivity in this account, but the "yarns" are erased without leaving a trace and a different map is written. Furthermore, Jessica Swanlake, Mexico's girlfriend, asks Roger a crucial question: "What about the girls?" And with that question in mind, Mexico starts worrying about whether Slothrop is "making them fall where they do" (87), and "he feels the same unnatural fear of Slothrop that Jessica does" (91). What Mexico genuinely fears, however, is how this new player in the rocket-game affects his relationship with Jessica: "If she leaves, then it ceases to matter how the rockets fall. But the coincidence of maps, girls, and rocketfalls has entered him silently, silent as ice, and Quisling molecules have shifted in latticelike ways to freeze him. If he could be with her more . . . if it happened when they were together—in another time that might have sounded romantic, but in a culture of death, certain situations are just more hot to the jive than others [ ]" (176-77).

Mexico's reading of Slothrop's map becomes highly personal. Early in the novel, Pirate Prentice warns Mexico: "Careful, Mexico, you're losing the old objectivity again" (33). And who can blame him? Roger and Jessica have the most "loving" sexual relationship in Gravity's Rainbow. Moreover, a careful reading of the first part of Gravity's Rainbow reveals that seemingly they, more than Slothrop, are surrounded by falling rockets. Mexico's "network of death" (56) haunts their love. Slothrop's map, on the contrary, was certainly never intended as a "network of death," but this is how it is read, and this reading engenders in Roger a particular case of rocket-paranoia. By manipulating his rocket-paranoia, Pointsman gains control over Mexico, making Mexico a part of his Pavlovian engagement with Slothrop's map.

Reading sometimes involves the projection onto the text of an extratexual system of signification, and the reader forces the text to conform to that system, regardless of what accommodations or misreadings result. This is how Ned Pointsman reads the text of Slothrop's map. Pointsman, a fanatical disciple of Pavlov, projects on the map a behaviorist reading
which, for Pointsman at least, is fraught with meaning. Pointsman's reading implies that Slothrop "can feel them coming, days in advance" (49). Kevin Spectro, Pointsman's colleague, observes that he is "putting response before stimulus," but Pointsman links this reversal to the sound reversal made by the rocket: impact precedes the scream of approach. Besides, he develops a hypothesis that after Slothrop was conditioned as a child by Laszlo Jamf to the "famous 'Mystery Stimulus'"--the response being an infant erection--the de-conditioning process went wrong somehow:

Now ordinarily, according to tradition in these matters, the little sucker would have been de-conditioned. Jamf would have, in Pavlovian terms, "extinguished" the hardon reflex he'd built up, before he let the baby go. Most likely he did. But as Ivan Petrovich himself said, "Not only must we speak of partial or of complete extinction of a conditioned reflex, but we must also realize that extinction can proceed beyond the point of reducing a reflex to zero. We cannot therefore judge the degree of extinction only by the magnitude of the reflex or its absence, since there can still be a silent extinction beyond the zero." Italics are Mr. Pointsman's. (84-85)

Not only does this "silent extinction beyond the zero" fit neatly into the symmetry of Pointsman's reading, but the passage lays bare the very act of reading: "Italics are Mr. Pointsman's." Pointsman believes Slothrop's conditioning was to sound; later in the novel, however, Slothrop faintly recalls: "Once something was done to him, in a room, while he lay helpless"; and as he recalls this, "He is also getting a hardon, for no immediate reason. And there's that smell again, a smell from before his conscious memory begins, a soft and chemical smell, threatening, haunting, not a smell to be found out in the world" (285); of course, Pointsman never bothered to ask Slothrop what he might remember of that time.

It is essentially Pointsman's reading of both Slothrop and his map that the critics have adopted. But the question that must be asked is: How much do we really know about Slothrop? In the first part of Gravity's Rainbow, "Beyond the Zero," Slothrop appears
in only three of the twenty-one chapters (4, 10, and 15). In chapter four we are told about Slothrop's rocket-paranoia, about his map, about how he started investigating the rocket disasters, and that the next day he is to report to St. Veronica's hospital for testing--an assignment he appears happy to accept. We are also told of "The Moment" when Slothrop notices his first rocket-related erection; importantly, it appears to follow a strike: "the sky, beaten like Death's drum, still humming, and Slothrop's cock--say what? yes lookit inside his GI undershorts here's a sneaky hardon stirring, ready to jump--well great God where'd that come from?" (26). This is a typical Pynchon passage: the reverberations from the blast are like the beating of Death's drum, and the sky is still humming after the rocket's screaming approach. To these metaphors for rocket phenomena, the narrator adds a third: "Slothrop's cock," but an implied reader, who occasionally jumps into the text to comment, questions this third member of the series: "say what?", and the narrator, in the manner of a modern day Henry Fielding, takes us "inside his GI undershorts" to observe the third phenomenon: the "sneaky hardon." And finally we have Slothrop's own bewildered: "well great God where'd that come from?" The multiple voices create a layering of signification as the point of view shifts from observer to observer to observed, from exterior to physical interior to interior monologue, thereby calling attention to "The Moment," another piece of data unknown to Pointsman.

As we have seen, chapter four offers insights into Slothrop's character, and it pre-posit the first contradiction to Pointsman's sound reversal hypothesis. Chapter ten concerns Slothrop's testing at St. Veronica's, and it takes us through a syntactic tap dance on the sentence: "You never did the Kenosha Kid," and a bizarre fantasy journey through the Boston sewers of Slothrop's college days. Here we learn something about Slothrop's psyche but nothing about the map or the rocket. Slothrop is released from St. Veronica's, and we meet him again in chapter fifteen, paranoid about being followed. He runs into Darlene (her name is now without the quotation marks) and goes home with her. There he meets Mrs. Quoad again, who recalls his last visit when they "'brewed the wormwood tea,' sure enough, the very taste now, rising through his
shoe-soles, taking him along. They're reassembling
... it must be outside his memory ... cool clean
interior, girl and woman, independent of his shorthand
of stars" (115; my italics). This passage and the
name of Darlene, now typographically pure, hint at
discrepancies between the map we saw in chapter three
and the actual events.

Darlene is the first, and only, London girl we see
Slothrop sleep with during the present time of the
novel's first part (November/December 1944). The last
time he was there "Michaelmas daisies" were on the
mantle, indicating some time in September, about the
time Slothrop began looking at rocket disasters. Now,
as then, he must undergo the "Disgusting English Candy
Drill" (118) before he and Darlene can go to bed to-
gether. And at the end of the chapter they are awak-
ening from a post-coital sleep when,

with no warning, the room is full of noon,
blinding white, every hair flowing up from
her nape clear as day, as the concussion
drives in on them, rattling the building to
its poor bones, beating in the windowshade,
gone all to white and black lattice of
mourning-cards. Overhead, catching up, the
rocket's rush comes swelling, elevated express
down, away into ringing silence. Outside glass
has been breaking, long, dissonant cymbals up
the street. The floor has twitched like a
shaken carpet, and the bed with it. Slothrop's
penis has sprung erect, aching. To Darlene,
suddenly awake, heart pounding very fast, palms
and fingers in fear's pain, this hardon has
seemed reasonably part of the white light, the
loud blast. By the time the explosion has died
to red strong flickering on the shade, she's
begun to wonder ... about the two together
... but they're fucking now, and what does it
matter, but God's sake why shouldn't this
stupid Blitz be good for something?

And who's that, through the crack in the
orange shade, breathing carefully? Watching?
And where, keepers of maps, specialists at
surveillance, would you say the next one will
fall? (119-20)
This scene echoes "The Moment": the rocket is all light and sound; the "dissonant cymbals" recall Death's drumming; and Slothrop's erection follows the explosion. The most curious part of the passage, however, is the "watcher." He is never identified, but in many ways he is another surrogate reader, that "specialist at surveillance" who is "watching" "through the crack in the orange" cover of Pynchon's novel, a cover displaying a silhouetted skyline with numerous windows reflecting the orange nimbus of an explosion.

Within the story, however, the watcher appears to be one of Pointsman's agents, since in chapter seventeen, which opens roughly two days later, Pointsman thinks: "Spectro is dead, and Slothrop (sentiments d'emprise, old man, softly now) was with his Darlene, only a few blocks from St. Veronica's, two days before" (144). The blast that killed Spectro was not the one ending chapter fifteen but a later rocket (interestingly Pointsman forgets about this incident when he has Slothrop's map investigated at the end of part two). Nevertheless, Pointsman's reflex response to his colleague's death and toward Slothrop has been conditioned by the map; as William Plater observes in a statement quoted at the outset: "[Slothrop's] identity as far as others are concerned is coordinated with the map." Pointsman now becomes even more subjective than Mexico; he sees Slothrop as "sick" and a physiological "monster"; he considers "seeking the answer at the interface [ ] on the cortex of Lieutenant Slothrop"; and he concludes that "'We must never lose control. The thought of [Slothrop] lost in the world of men, after the war, fills me with a deep dread I cannot extinguish'" (144).

If we are to understand what happens to Tyrone Slothrop, we must understand the epistemological persona represented by the "watcher." As the text so far examined makes clear, we know very little about Slothrop first hand in the initial part of Gravity's Rainbow. The three chapters discussed here must be viewed in light of the eight chapters in part one (3, 5, 8, 12, 13, 17, 20, 21) where Slothrop, and his map, are either alluded to or discussed. What we know of Slothrop in the first part of the novel is largely second hand, interpretations drawn from the text of his map. The process of these intratextual readings and how they affect our reading is the subject of the
second half of this essay, but first, some further map passages in the second and third parts of Gravity's Rainbow deserve attention.

In the second part of the novel Slothrop dominates the six chapters on the Continent and is discussed in the two chapters set in London. Though the precise why of Slothrop's being on the Riviera is left conspiratorially vague, we do recognize his participation in an experiment involving the rocket and his sexual impulses. But "Slothrop's own image of the plot against him has grown" (237), and his escape from the web of surveillance is the crux of part two ("Un Perm' au Casino Hermann Goering"). Slothrop transfers his paranoia from the rocket to the "They" controlling his every move. Moreover, Pointsman emerges as the head of the "Slothrop Group," and as the novel progresses, Pointsman's megalomania grows in proportion to Slothrop's disintegration. Despite the omnipresence of Slothrop's watchers, when he experiences a deafening blast from a tank cannon, "loud noise and all, look--he doesn't seem to have an erection. Hmm. This is a datum London never got, because nobody was looking" (248). The narrator's conditional "seem" keeps this statement ambiguous (and can we believe "nobody" was watching?), but the complementarity theory of erection and loud noise is again disproved; if a connection between Slothrop and the rocket exists, then the stimulus/response conditioning was more complex than Pointsman had thought. Thus, even with Pointsman's elaborate experiment (of which the tank blast was seemingly not a part), the reflex behind Slothrop's supposed rocket erections remains enigmatic.

And in the last chapter of part two we are told, "Pointsman has blundered." In developing his theories on Slothrop, Pointsman (like many a reader) demonstrates an a priori acceptance of Slothrop's map as fact. But in May, 1945, Pointsman authorizes "Harvey Speed and Floyd Perdoo to investigate a random sample of Slothropian sex adventures" (270) -- in other words, to take the map out into the London world of "mindless pleasures" and verify Slothrop's "shorthand of stars." The "project" is called "Slothropian Episodic Zone, Weekly Historical Observations (SEZ WHO)," and after slamming into their latest "dead-end,"
a thought[... comes running out in the guise of a clown, a vulgar, loose-ends clown bespangled with wordless jokes[... to garble to them in a high unpleasant screech: "No Jenny. No Sally W. No Cybele. No Angela. No Catherine. No Lucy. No Gretchen. When are you going to see it? When are you going to see it?"

No "Darlene" either. That came in yesterday. They traced the name as far as the residence of a Mrs. Quoad. But the flashy young divorcée never, she declared, even knew that English children were named "Darlene." She was dreadfully sorry. Mrs. Quoad spent her days lounging about a rather pedicured Mayfair address, and both investigators felt relieved to be out of the neighborhood. ... (271)

This Mrs. Quoad has been confused with Darlene's landlady, who was "widowed long ago" and lives "up three dark flights" in the "East End" (114-15). Moreover, Darlene's name is once again typographically set off: "Darlene" and Darlene are either two different persons, or Slothrop has put her star in a different place.

The narrative signals are clear—the acronym "SEZ WHO," the vulgar "clown"—the textual arranger is tickling both his characters and his readers. Meanwhile, Slothrop has escaped from his keepers, only for his keepers to discover that the entire project was built on a false premise, the syllogism of "Their" logic proved false:

If the stars on Slothrop's map record his sexual encounters.

And the temporal and spatial location of each rocket strike coincides with a particular star in a parallel pattern.

Then Slothrop's sexual encounters occur where the rockets will fall.

Even if the major premise were true, the syllogism would be only tenuous at best, since the system of knowledge that the syllogism is constructed from is based on unreliable texts.

By reducing the act of reading within the text to a syllogism, we become readily aware of the fallacies in Pointsman's, and others' including our own, reasoning about Slothrop. Rather than carefully
studying Slothrop's activities, establishing evidence, and proposing a hypothesis after a sufficient period of observation, Pointsman jumps to a conclusion based on a map of stars, some inconclusive tests, and an ambiguous case history of Slothrop's childhood conditioning. In other words, Pointsman circumvents the standard scientific method by bypassing careful inductive analysis of the facts and, instead, proceeding with a faulty deductive analysis. The consequences of this deductive reasoning determine Slothrop's escape into the "Zone," but our reading of Gravity's Rainbow should not mirror Pointsman's deductive reading. The act of reading should be inductive, open to possibility and manifestations of the text's potential for significations. "Of course," writes Wolfgang Iser, "each inductive move presupposes certain models in order to map out a path along which investigations may be conducted, but such models are only heuristic instruments; the path would be blocked if any model achieved sufficient success to become reified."¹⁶ Reification of Slothrop's map has been the goal of nearly all the readings to date. But this reification denies the text its active existence: inductive reading accepts an open text, a text of energy, whereas deductive reading demands a closed, entropic text.

"When are you going to see it? Pointsman sees it immediately. But he 'sees' it in a way you would walking into your bedroom to be jumped on [• • •]. That is to say, Pointsman avoids the matter" (271-72). But his statements continue to concern the validity of his longed for "clinical version of truth," despite the developing record in the map of "fantasies instead of real events" (272). This loyalty to the misreading lays bare the sinister nature of what is being done to Slothrop. Pynchon makes the point abundantly clear by comparing Pointsman with Hitler: "So far, it is Pointsman's burden alone. The solitude of a Führer: he feels himself growing strong in the rays of this dark companion to his public star now on the rise" (272).

And what of Slothrop? In the second chapter of part three ("In the Zone") we read Slothrop's thoughts about Katje:

He's had nothing to say to anyone about her.
It's not the gentlemanly reflex that made him
edit, switch names, insert fantasies into the yarns he spun for Tantivy back in the ACHTUNG office, so much as the primitive fear of having a soul captured by a likeness of image or by a name. . . . He wants to preserve what he can of her from Their several entropies, from Their softsoaping and Their money: maybe he thinks that if he can do it for her he can also do it for himself . . . although that's awful close to nobility for Slothrop and The Penis He Thought Was His Own. (302)

We finally learn, conclusively, that the "yarns" involve fantasies and misinformation rather than mere exaggerations, as one would expect with sexual bragging, and therefore many if not all of the stars reflect a spatial equivalent to the "yarns." Moreover, we learn in this passage of how, reduced to a primitive state, Slothrop's only hope for survival is in the taboos on naming.17

We have traced the device of the map through three hundred pages of Gravity's Rainbow, and now that we realize the map's fictional quality, it is not mentioned for the remainder of the novel (four hundred sixty pages).18 The acts of misreading the fictional text of the map and the resulting reified signification—the syllogism of Slothrop and the rocket—motivate the complex picaresque plot in Gravity's Rainbow. And though we have established what the map actually does and does not represent and how that representation is misinterpreted, it is necessary, now, to examine the mechanism of signification constructing these misreadings and misinterpretations, to see how the activity of the reader decoding Pynchon's fiction should differ from the activities of the surrogate readers misreading Slothrop's map. By understanding the differences between the acts of reading, we unlock the aesthetic richness of Pynchon's narrative.

II

As a rule we readers slip into a role mapped out by the text.19

Any reading of a text is tentative and private, and with a text as complex and self-reflexive as Gravity's Rainbow, the degree of reader uncertainty increases
dramatically. During the course of Gravity's Rainbow, Pynchon refers to both Heisenberg's uncertainty principle (348) and Gödel's incompleteness theorem (275, 320). Both ideas concern the limits of man's perception and the impossibility of a single, all encompassing, definitive reading. Pynchon's novel is a microcosm of these two ideas, and any discussion of the reading or misreading mechanisms both within and without the text must recognize this severe delimitation placed on our perceptions. As the cartographer draws his map, making allowances for the gap between reality and representation, so too the reader must distinguish representation from reality. But to understand Slothrop's map and its narrative function, we must read its stars and its textual representation on the different levels of signification which create meaning in semiotic material. The map is at once semiotic and dynamic; it represents a world just as Pynchon's fiction represents a world; the map is an image of the novel. We can read these worlds, but we cannot "know" them.

First, we will enter the text, become one with the characters, see the map as an object carrying semiotic material. This is how Pointsman and "those" at The White Visitation see the map, but the validity of this activity depends on two suppositions that are possibly false: 1) that the stars pasted on the map are part of the map's cartographic "language field," and 2) that the map is a message in a communication system between Slothrop and the map's readers.

As readers of road maps at least, we readily recognize that maps are a system of signs conveying a high level of information about the actual world. Once we have mastered the textual code of a particular map's cartographic language, we proceed with a faith, justified by experience, that we will reach our destination without getting lost. As a paradigm for literary texts, the map has been a constant metaphor from Robert Louis Stevenson's Treasure Island to Michel Butor's L'Emploi du temps to Harold Bloom's A Map of Misreading. Within the historical context of Gravity's Rainbow, map mania seized wartime England, and the daily map in the London Times made clear what was happening at the front. Maps, therefore, are highly charged texts containing the psychological value of putting a chaotic world into a palpable order.
Moreover, a particular map is a secondary modeling system of the primary modeling system of cartographic language, just as an artistic text is a secondary modeling system of the primary modeling system of natural language. A map's text, however, is intentionally denotative, without any confusion or textual "noise" (i.e., roads, exits, or bridges which do not exist), whereas, the artistic text opens itself to connotations, thereby enriching the signs with multiple significations. How, then, do we approach Slothrop's map? The stars Slothrop pastes on his map are the elements of another modeling system, a palimpsest imposed on the original map. To bring the same reader expectations to Slothrop's map as we would to an un-starred map is to misread. Jurij Lotman puts this approach into perspective: "The informational value of language and message changes in accordance with the structure of the reader's code, his needs and expectations." Pointsman and his colleagues assume that the identical denotative function of cartographic language is present in the sign system of Slothrop's map as it would be in ordinary maps. Their reading recognizes only one system of signs, aligning the cartographic landmarks and Slothrop's stars within the same process of signification. This monovalent reading is made graphically apparent by the leveling effect of Bloat's black-and-white slides of the map. The slides dramatically create another palimpsest when they are "projected onto Roger's [map], and the two images, girl-stars and rocket-strike circles, demonstrated to coincide."

Coincidence is not a viable explanation for a scientist, and therefore, The White Visitation writes a text of Tyrone Slothrop based upon the similarity between Mexico's map, which in both its languages—cartographic and statistical—is denotative in relation to reality, and Slothrop's map. But are the two modeling systems contained in Slothrop's map denotative? As the first half of this essay indicated, the connection between Slothrop's "fantasies" and "yarns" and the stars on the map raises questions about the map's reliability. Because of the map's problematic record of actual events, it seems impossible to accept Slothrop's "shorthand of stars" as a denotative sign system. Slothrop's map is the fictional autobiography of a soldier living in a fantasy world removed from the
terrors of war, of the rocket, of death—a fantasy world predicated on the need for human contact. But the map is read as a historical document fraught with military significance.

So far, we have been examining the map as an object containing a message and requiring decipherment, but this view presupposes that the map actually is a message, consciously sent with the intention of being received. "Tantivy's the only one who even glances at the map"; "Nobody sees the map but Tantivy"; "The map does puzzle Tantivy." Slothrop really doesn't like to talk about his girls: Tantivy has to steer him diplomatically, even now" (22). The point is, Slothrop does not intentionally construct his map for transmission to any other readers except Tantivy, who only glances at the map "in the spirit of an amiable anthropologist" (as opposed to a structural anthropologist?). Moreover, since the "yarns" are intrinsically part of the map, then even Tantivy's reading and interpretation of the map and of Slothrop's behavior are bound to be misdirected. To view Slothrop's map as a part of a communication system reveals another mechanism of misreading and invalidates the second supposition upon which The White Visitation bases its reading.

To establish a communication system there must be a sender and a receiver of a message which is constructed in a code common to both parties, which refers to a context understandable to both parties, and which is transmitted over a contact channel—the physical medium of the system. This basic outline of the system assumes that the message is actively sent and that it is actively received: the purpose of the message is communication. If either the sender or the receiver is inactive or absent, then the active participant in the system might possibly appropriate both the sender and receiver functions. Because Slothrop is not intentionally (actively) sending any message with his map (I am speaking only about conscious intention, for, as suggested earlier, a psychoanalyst might discover an unconscious message and intentions in the structuring of the stars), Pointsman and his colleagues become both the receivers and the senders of their reading. In other words, they create an adequate fiction upon Slothrop's map, satisfying their need for a text. They create out of the map a "holy
Text" that insures their future existence as scientists. They become the high priests, the Kabbalists, with a text: "to be picked to pieces, annotated, explicated, and masturbated till it's all squeezed limp of its last drop . . .", forever "decoding the Text, thus coding, recoding, redecoding the holy Text" (520-21).

In constructing their reading of the map, The White Visitation orders Slothrop's stars in conjunction with Roger Mexico's map of rocket strikes. This ordering attempts to lower the entropy, to make sense out of the random stars Slothrop pastes on the map every few days. By lowering the entropy in the map's communication system, the readers derive value as information from the stars. This explanation of the reading is very neat, but as we have seen, it is impossible. Instead of lowering the map's (the message's) entropy, the created readings projected onto the map increase the map's entropy. With each re-transmission of the map's text and with each reading, the number of possible readings increases, and we approach an equilibrium of meaninglessness. But there is no time to sort through the conflicting readings; someone must establish a text. How is this done?

Rather than recognize the possible absence of meaning in Slothrop's map, Ned Pointsman realizes a way to exploit the contradictory readings and establish the primacy of his own reading. He achieves this masterstroke by projecting onto all of the previous readings one more palimpsest: "The Book." "The Book" has been identified as Pavlov's Conditioned Reflexes and Psychiatry, and Pointsman reads the map, and by extension Slothrop, through Pavlov's text, and this projection of text upon text results in the behaviorist meaning Pointsman extracts from the map. Pointsman further applies his behaviorist ideas of conditioning to the other readers among his colleagues until they too agree or at least follow along with Pointsman's theories. Ultimately, this behaviorist reading becomes the ur-text of the experiment imposed on the social structure of Slothrop's life, but in so doing, the behaviorist reading provides the necessary narrative device for the development of the remainder of Pynchon's novel.

Indeed, we come, now, to the essential function of Slothrop's map in Gravity's Rainbow. Rather than the
map's being the text of Slothrop's psychological adre-
action to the rocket, it is primarily a narrative de-
vice for the purpose of the novel's discourse. The map,
though finally exposed as a fiction, spatially repre-
sents the picaresque "yarns" Slothrop has been spinning
in the ACHTUNG office, and it becomes the motivating
device behind Slothrop's eventual fleeing into the
Zone and actually becoming a picaresque hero. Slothrop
wanders through the Zone like a modern day Tom Jones
engaging in one adventure after another, in search of
not Sophia Western but the rocket 00000. The Russian
Formalists, in the early 1920s, made a distinction be-
tween two types of devices in narrative: "free motifs"
and "bound motifs." Slothrop's map is clearly a "bound
motif," since its absence from the story would disrupt
the "whole causal-chronological course of events"2 in
Gravity's Rainbow. But if Slothrop's map is part of a
"causal-chronological course of events," then our read-
ing of the map as fiction must confront a paradox:
Pointsman's reading of the map's text as cause and ef-
fect is in the end invalid, a misreading; we, however,
must read Pointsman's misreading as an essential ele-
ment in the cause and effect structuring of Gravity's
Rainbow's discourse.

The implications for this paradox on previous
critical readings of Slothrop's map and Gravity's
Rainbow are interesting to ponder, since most of those
readings have not recognized the paradox. However, in
the intricate construction of a paradox centered on a
text and reading, Pynchon's playful narrator sabotages
a particular reading of Gravity's Rainbow and the con-
ventions of reading in general. This sabotage is
quite natural if seen in relation to Heisenberg's un-
certainty principle and Gödel's theorem. Werner
Heisenberg's principle states that the position and
speed of a particle cannot be simultaneously known to
a single observer, and therefore, a certain degree of
uncertainty is always present, and whatever knowledge
we have is at best an approximation. Kurt Gödel re-
vealed the same disruption of our perceptions in ma-
thematics that Heisenberg revealed in physics. Gödel's
theorem states that an inclusive consistency is im-
possible in formal systems containing natural numbers;
eventually in every axiomatic system there is an equa-
tion which can be neither proved nor disproved without
resorting to methods outside the axiomatic system.
Slothrop's map is both an uncertain particle and the
unsolvable equation, and our limited acts of reading the map and Pynchon's text bear out a similar incompleteness in our perceptions to those postulated by Heisenberg and Gödel. To read a text in one way is to avoid necessarily another reading; moreover, if the initial reading satisfies our needs and expectations, we are often reluctant to investigate further. It is then that we become pointsmen in a cybernetic system, controlling the information flow by projecting a structure onto the text, by recreating the text in our own image of what the text should say.

But the model for this recreative activity by the readers of Slothrop's map is within Gravity's Rainbow. The map becomes what Jean Ricardou has called a "mise en abîme": "the microscopic revelation of the total narrative... the mise en abîme challenges the preliminary order of the story." Ricardou demonstrates the function of a mise en abîme in the story the narrator of Edgar Allan Poe's "The Fall of the House of Usher" reads to Roderick Usher as Madeline emerges from her crypt. In Poe's tale, the sound disruptions within the read narrative parallel the actual sounds of Madeline's emergence from the grave, thus revealing to the narrator, and the actual reader, the eventual fall of the House of Usher. Slothrop's map is a less dramatic mise en abîme, but by mixing actual events with fiction-real girls with fantasies-Slothrop's map mirrors the fusion of historical fact and fiction in Gravity's Rainbow. Moreover, the act of reading and interpreting Pynchon's text is mirrored by Pointsmen and his colleagues' acts of reading and interpreting. Possibly this accounts for so many critics' following Pointsmen's reading of the map; he has taught them to misread Gravity's Rainbow.

Pynchon's narrator constantly berates his readers, and often he catches us in our "unhealthily obsessed" readings: "Ha, ha! Caught you with your hand in your pants!" (695-96). And the narrator is justified in poking fun at us when he catches us ("the scholar-magicians of the Zone, with somewhere in it a Text, to be picked to pieces, annotated, explicated, and masturbated till it's all squeezed limp of its last drop... well we assumed--naturally--that this holy Text had to be the Rocket") interpreting his text, just as he is justified in poking fun at
Pointsman for reading into Slothrop's map a behaviorist "Text [ . . . of] the rocket." Norbert Wiener, in The Human Use of Human Beings (often cited as one of Pynchon's sources), states:

From the magic of names it is but a step to deeper and more scientific interest in language. As an interest in textual criticism in the authenticity of oral traditions and of written texts it goes back to the ancients of all civilizations. A holy text must be kept pure. When there are divergent readings they must be resolved by some critical commentator. Accordingly, the Bible of the Christians and the Jews, the sacred books of the Persians and the Hindus, the Buddhist scriptures, the writings of Confucius, all have their early commentators. What has been learned for the maintenance of true religion has been carried out as a literary discipline, and textual criticism is one of the oldest of intellectual studies.

Pynchon challenges the activity of maintaining a "pure" text through the mise en abîme of Slothrop's map. By understanding the unreliability of the map and its readers, we see that the idea of establishing the "pure" text is farcical—another one of Pynchon's pranks on the reader. But more importantly, the mise en abîme of Slothrop's map embodies what Roland Barthes would call the "writerly text." Slothrop's map lays bare the act of storytelling, of aesthetic creation, and the picaro, Slothrop, becomes the unwitting author of the Zone, but it is a narrative he is unable to read.

Therefore, we should, in the Barthesian sense, take "pleasure" in our being fooled by Pynchon's narrator. But our masturbatory readings have failed to engage Pynchon's text "erotically"; there has been no "bliss," no "joy" in our readings. Like behaviorists or scientists, we have failed to allow Gravity's Rainbow its full dimension as a text. Instead, we have tried to delimit the novel, emasculating it in the fashion of other critical enterprises on modernist and postmodernist works. After all, Pointsman's last attempt to control Slothrop results in the mistaken castration of Major Marvy, the misreading of erection-and-rocket carried to its extreme. We become the
cartographers—as Pynchon puts it, the "keepers of maps, [the] specialists at surveillance"—who ignore the difference between the stars and the map, the dynamic of artistic creation. Thus we must ultimately return to the text and its enigmatic stars, and re-engage the enriched, the multiple, the potential text of Gravity's Rainbow.

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Notes


5 Thomas Pynchon, Gravity's Rainbow (New York: Viking, 1973); hereafter all references will be cited
within the text; moreover, 1) because of Pynchon's stylistic use of ellipses, all bracketed ellipses are mine, and 2) Pynchon does not number the chapters in Gravity's Rainbow, so I have assigned consecutive numbers to the subsections within the four parts of the novel.


7 Pages 85-87 is the first substantial section of the novel dealing with The White Visitation's reaction to Slothrop's map, and besides Pointsman and Mexico there are two other "minor" readers of the map: "Rollo Groast thinks it's precognition. 'Slothrop is able to predict when a rocket will fall at a particular place.' [. . . ]' Dr. Groast is not sure how, or even if, sex comes into it"; and "Edwin Treacle, that most Freudian of psychical researchers, thinks Slothrop's gift is psychokinesis. Slothrop is, with the force of his mind, causing the rockets to drop where they do. [. . . ] However he's doing it, sex does come into Dr. Treacle's theory. 'He subconsciously needs to abolish all trace of the sexual Other, whom he symbolizes on his map, most significantly, as a star, that anal-sadistic emblem of classroom success which so permeates elementary education in America. . . .'" (85).

8 William Plater observes, referring to Slothrop's map, Mexico's map, and Thomas Gwenhidwy's map of "'babies born during this Blitz'" (GR, 173): "London is seen entirely in terms of the rocket blitz, but its map is more than the limits of space and time: it is the map of love, death, and birth, all following the same Poisson distribution" (Plater, 60).

9 A number of critics read this passage in relation to the discussion of Slothrop's connections with Puritanism, which follows in the text (26-29).

10 Slothrop's sewer journey has drawn considerable attention; see Wolfley, 879-81; David Cowart, Thomas Pynchon: The Art of Allusion (Carbondale: Southern Illinois Univ. Press, 1980), 37, 41, 50, 80; and Mark R. Siegel, Pynchon: Creative Paranoia in Gravity's
In chapter twelve of the novel (81-82), the tests Slothrop underwent are discussed at The White Visitation, and from this discussion it is clear that among this group of readers there is no consistency of opinion regarding Slothrop.

The question of how many different (or one all-inclusive) interests are watching Slothrop becomes increasingly pervasive throughout the novel. As the story develops, particularly in connection with Lyle Bland and IG Farben, so does the number of Slothrop's watchers, but they remain enigmatic, in the woodwork of the narrative and the paranoid consciousness of the characters, rather than overtly appearing at the narrative's surface level.

Fowler, 120, identifies the watcher as Teddy Bloat, but I find no concrete evidence of this in the text.

"Mindless Pleasures" was the original working title for Gravity's Rainbow, and it is particularly cogent to the present context that this early title should be mentioned when Pynchon is debunking the map and Pointsman. It is not so much Slothrop's sexual behavior which is "mindless" as it is Pointsman's "mindless" and conscienceless behaviorism.

See Kaufman, 204.

Wolfgang Iser, "Interview: Wolfgang Iser," Diacritics, 10, No. 2 (1980), 66. The question of primacy of the inductive or deductive mode of perception pervades intellectual history, and we could also characterize Pointsman in terms of Francis Bacon's idea of the Idols of the Theater in the Novum Organum. Pointsman's errors are based on a delimited Pavlovian view of the world, and in creating his Pavlovian micro-cosm, Pointsman divorces himself from reality—at one point in Gravity's Rainbow he masturbates himself to sleep with fantasies of winning the Nobel Prize (140-43). Possibly Pynchon has Bacon in mind when he writes in the novel's fourth sentence: "but it's all theater" (3), and when he sets the final scene of the book in a crowded movie theater. Regardless of whether Pynchon intentionally alludes to Bacon or not, the per-
sistent nowness of the narrative's present tense demands our suspension of deductive reading in favor of inductive discovery, just as Francis Bacon would have recommended.

Names, naming, indeed the larger question of identity are crucial to the structuring of Gravity's Rainbow. Slothrop's character is extremely mutable in the Zone, and he undergoes many an "act of naming" (see 366 in particular). Pynchon might have derived his ideas on the taboos of naming from a number of sources: Frazer's The Golden Bough, or Norbert Wiener's The Human Use of Human Beings (see note 26 below), or Freud's Totem and Taboo, or Norman O. Brown's Love's Body. In the context of Slothrop's reluctance to name Katje, it would be helpful to quote Norman O. Brown (who in turn quotes Freud, Totem and Taboo):

_names are taboo; primitive man regards his name not as an external label but as an essential part of his personality._ Neurotics likewise: "One of these taboo patients of my acquaintance had adopted a rule against writing her own name for fear that it might fall into the hands of someone who would then be in possession of a portion of her personality." "Our children do the same." It is not that children, neurotics, and primitives are so stupid as to be unable to discriminate between words and things; it is that they are not so repressed as to be unaware that personality is a social fiction, and a name a magical invocation of a particular role in the social drama. (Love's Body New York: Random House, 1966, 92)

Slothrop is trying to control--be the author of--his own "social fiction," but Pynchon undercuts this desire by commenting at the end of the passage quoted in the text above with a paraphrase of another of Brown's statements: "the penis we are is not our own" (Love's Body, 57). Any attempt to control the "social fiction" is merely a fiction itself, and Slothrop is thereby doomed, like Sisyphus, to remain in the Zone, delimited by the boundaries of his identity.

Though Slothrop's map drops out of the text here, Pynchon continues to use maps as metaphors for a restricted existence. This kind of constant reference
reminds the reader of Slothrop's map and increases the reader's sense of defamiliarization with the essential concept of mapping: order in the physical world.

19 Iser, 70.


21 Lotman, 19.

22 See Lotman, 5-31. As students of the novel, we are well aware of the communication systems constructed within a given text between the narrator and the implied reader. See Seymour Chatman, *Story and Discourse* (Ithaca, NY: Cornell Univ. Press, 1978), 267, for a diagram of this system.


24 Boris Tomashevsky, "Thematics," in *Russian Formalist Criticism: Four Essays*, ed. and trans. Lee T. Lemon and Marion J. Reis (Lincoln: Univ. of Nebraska Press, 1965), 68. According to Tomashevsky: "Usually there are different kinds of motifs within a work. By simply retelling the story we immediately discover what may be omitted without destroying the coherence of the narrative and what may not be omitted without disturbing the connections among events. The motifs which cannot be omitted are bound motifs; those which may be omitted without disturbing the whole causal-chronological course of events are free motifs."


26 *The Human Use of Human Beings: Cybernetics and Society*, 2nd ed. (New York: Avon Books, 1967), 117-18. Again with Wiener, we confront the question of the "magic of names," and it is tempting to think of tracing an extratextual network of ideas borrowed by Pynchon from his sources. But such a study is far beyond, and in many ways contradictory to, the scope of the present essay.