Notes for Gravity's Rainbow

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To open Gravity's Rainbow is to step within a vast, satirically leveling flux of languages. Part 3 of the novel represents it as a "Zone," a skeptical field where the pre-War hierarchy of discourse has been pulverized. Certainly that condition is characteristic of the novel as a whole, and it thus represents a remarkable challenge to narrative stylistics. Mikhail Bakhtin, who has emerged since his death in 1975 as one of the most engaging theorists of narrative art, described that multi-languaged power of the genre, the "heteroglossia" of novels, as a primary defining characteristic. He argued that by incorporating into their fictions a plenitude of voices, each embodying a particular time and place (Bakhtin called it the "chronotope" of a discourse), novelists create radically decentered, open-ended artworks.

To Bakhtin, however, the analysis of how languages are deployed in novels could be complete only if the field of novelistic "discourse" itself was broadened. His most compelling work argues for an expansion of narrative stylistics to include such extra-literary "languages" as slang, underworld cant, songs, games, folk-genres, and material culture, to name only a few of his interests. Long before semioticians staked their claim to the territory, Bakhtin had shown that the formal counterpointing of sign-systems is present everywhere in novels; characteristically the closed, orthodox, privileged language of a culture can be seen pitted against its others, the open, unsanctioned, and "low" languages. These low (preterite) forms for organizing experience are always destined to stand in ironic relation to orthodox epistemologies: they parody what is commonly accepted; they give the reigning episteme an oftentimes raucous transfusion by means of laughter.

If initially this seems a highflown theoretical position, Bakhtin also showed the pragmatics of it. Throughout his best studies--of Dostoevski and Rabelais--Bakhtin grounded theory on careful attention

to details. In particular he was meticulous about documenting the folk-origins out of which narrative discourse could be shown to have intentionally grown.

But exactly there is the difficulty: for the modes of popular discourse common to folk-genres are often orally transmitted, and therefore undocumented or, if recorded at all, likely to be found in the most unconventional locations. Consider the situation in Gravity's Rainbow. Documenting Pynchon's many borrowings from the poetry, say, of Rilke or Dickinson, even documenting his deployment of Pavlovian terminology, or the recollections of an actual General Dornberger as they shape the fictional character of Franz Pökler--these are problems for a conventional scholarship. But what of the welter of extra-literary discourses, the German underworld cant, the folk-tales, superstitions, songs, and games, circa 1945? Scholarship quite appropriately wanders into an open field.

Several years ago I began a project whose aim was to produce a complete set of annotations to the American texts of Gravity's Rainbow. The model, in matters of format, was Gifford and Seidman's companion to Ulysses, Notes for Joyce. One of my purposes was to gather evidence for a discussion of chronology and structure in Gravity's Rainbow; another was to begin the analysis of Pynchon's narrative by carefully documenting its literary and extra-literary debts, expecially its great assemblage of "preterite" languages. The attention to structuring evidence produced some remarkable discoveries I plan to make available soon, in a larger context. The documentation of Pynchon's sources is also complete, and the following notes represent a small portion of that work.

Completing the annotations has required a wide-open method. What Thom's Directory was to James Joyce and the composition of Ulysses, newspapers and magazines were, I discovered, to Thomas Pynchon and Gravity's Rainbow. One also listens to recordings of songs, for the verbal echoes; watches films, for the snippets of imagery and dialogue; consults advertisements and brand-name packaging, for similar echoes.

This selection of notes represents a rather conventional range of sources. They disclose, for

example, the importance in Gravity's Rainbow of Jakob Grimm's magisterial work of nineteenth-century philology, Teutonic Mythology, four volumes with which Pynchon was on intimate terms. Grimm's work contributed so much to the narrative--etymologies, myth, folk customs, even the name of that enigmatic "pig-hero," Plechazunga--that this selection can provide only some of the choicest examples. But others of the notes included here show similar patterns of borrowing. Pynchon went to Baedeker's guide-books for place names, local color, and Germanic myth; to the London Times, a vast source of historical detail and material culture, circa 1945; to Life magazine, for the same lode of detail buried there; and to studies in folklore and black magic, for such things as references to children's games, bogeys, riddles about getting home, and grotesque magical devices.

In this sampling, notes are arranged by page/line number references to the Viking edition of Gravity's Rainbow, with the Bantam page numbers given in parentheses. Bibliographical citations are to the most readily available editions of the source-texts.

30/12 (34), "Dominus Blicero"-- Pynchon's source is Jakob Grimm's Teutonic Mythology, tr. James Steven Stalleybrass (New York: Dover, 1966), pp. 849-50. Blicero is one of the many Germanic nicknames for Death. Grimm traces its etymology from bleich (pale) and bleckend (grinning), and it is from these that he derives others of Death's nicknames, such as Der Blicker (the "Grinning Death") and Der Bleicher ("The Bleacher," for what he does to bones). Dominus, the Latin for "Lord," recalls the apellation accorded to Roman emperors, as well as to Christ.

55/36-37 (64), "Kyprinos Orients"-- advertised in tiny, front-page notices in the London Times as "A delightful, fragrant cigarette with a rich, satisfying flavour" (see the edition of 8 May 1945, p. 1). Generally the British prefer cigarettes made from Virginia tobaccos, but like Ian Fleming's character James Bond, Pointsman smokes a Near Eastern blend. Kyprinos Orients are from the island of Cyprus. There

is more. Kyprinos is the Greek for "of Cyprus," and as Robert Graves reminds us in The White Goddess, another of Pynchon's main sources, "the Cyprus was sacred to Hercules . . . and the word cypress is derived from Cyprus, which was called after Cyprian Aphrodite, his mother." In fact Aphrodite was frequently called "the Cyprian Venus," and so it is appropriate that Pointsman smokes this brand because, as we soon see in the novel, it was "the submontane Venus" (88/10 [101]) of Pavlovian research that had called to him, as though he were a Tannhauser, out of traditional medicine and into the passageways of neurophysiology and behaviorism. For Graves's comments, see The White Goddess (New York: Farrar, Straus and Giroux, 1966), p. 140.

73/23, 27 (84), "the Lord of the Sea . . . Bert"-- the source is Grimm's etymological somersaults in Teutonic Mythology, pp. 272-82. The goddess Bertha, associated with the masculine figure Berchtold, or Bert, appears in Germanic myths as: (1) "the promoter of navigation among men" and thus a "Lord of the Sea"; (2) a white god, for "behrt or brecht signifies bright, light, white"; (3) a being whose attendant host consisted of the souls of children, which explains why the constable suggests the name of Bert to the manchild, Reg Le Froyd; and (4), a figure whose festival occurs near the Winter Solstice, December 21, which is also the date of this episode in Gravity's Rainbow. Note that Le Froyd's suicidal leap into the sea corresponds with later references to the Gadarene Swine and the rush of lemmings into the seas (i.e. GR, 555/24-28 [647]).

108/12-13 (125), "ic heb du liever . . . goude ghewracht"-- the source once more is Grimm, p. 213. He translates the lyric: "I hold you dearer than a boar-swine/ All were it of fine gold y-wrought." The lines derive from a Middle Dutch poem, Lantslot ende Sandrin, verse 374, where the gentle knight Lancelot makes this declaration of (evidently tender) love to his lady. As Grimm explains, the Norse god Freyr (also called Frô, Frigg), a god of peace and love, often appeared with a boar in attendance. At Yuletide, "atonement boars" were offered up to Freyr in antici-

pation of a year's fruitfulness. Grimm comments that, owing to his wholly creative and generative power, the god was enormously popular in pre-Christian Europe.

114/12-13 (132-33), "on the order of the old woman's arrangement for getting her pig home over the stile"--the allusion is to an ancient folktale. The best version of it can be found in W. A. Clouston's Popular Tales and Fictions: Their Migrations and Transformations, Vol. 1 (London: William Blackwood, 1887), pp. 295-96. Stith Thompson's Motif Index of Folk Literature, Vol. 5 (Bloomington: Indiana Univ. Press, 1936) lists some variants on p. 546. In Clouston it is "The Old Woman and the Crooked Sixpence," a story classed with types of cumulative stories, such as "The House that Jack Built." The old woman of the tale finds a crooked coin and buys a pig, but the pig balks at the stile on their way home. She asks a dog to bite the pig, but the dog refuses. So she asks a stick to hit the dog, to make it bite the pig, but the stick also refuses. So she turns to fire (to burn the stick), water (to douse the fire), an ox (to lap up the water), a butcher (to slaughter the ox), a rope (to hang the butcher), a rat (to gnaw the rope), and a cat (to eat the rat). They all decline, in turn. But when the cat asks for a bowl of milk from a nearby cow, and the cow gives the milk after being given hay, the old woman then has milk for the cat, that eats the rat, that chews the rope . . . and so on until the dog bites the pig and the pig jumps over the stile.

What is more interesting, Clouston then traces this and its family of tales to a sacred hymn in the Talmud. The hymn also has ten intermediary steps, just as there are ten steps between the straw for the cow (a gift, sustenance) and the pig's leaping over the stile (obedience, home). The motif of ten and of regression is noteworthy throughout Gravity's Rainbow: the launch countdown runs backward from ten, and Pynchon will eventually link it to the ten-stage order of creation in Kabbalistic myths; then there are the ten generations separating Tyrone Slothrop from his Puritan ancestor, William, even, I suppose, the ten holes of Slothrop's Hohner harmonica. The main point in this context is Slothrop's desire to return home,

and his being lost in a search for the formula, the catalyst in a chain reaction which can bring him back.

129/8-16 (150), "even a German macronic . . . attributed to Heinrich Suso . . . Alpha es et O"--the word "macronic" is a misprint; it should be "macaronic," the term for any lyric composed from several languages. The details for this interlude of singing derive from a story entitled "Macaronic Carols" which appeared in the London Times of Friday, 22 December 1944, p. 6. The Times writer takes Suso's carol, "In dulci jubilo," as an example of the genre. He comments: "No simpler or more persuasive demonstration of the unity of Christendom (even at the very time of the Reformation) and the universality of Latin could well be found than this example of macaronic verse, in which the vernacular and Latin are arranged so closely as to preserve the syntax of both tongues. There is argument over whether carols have popular or clerical origin. The conclusion of the argument, according to Richard Leighton Greene in The Early English Carol, is that while the carol is not pure folk song, i.e. a product of communal growth and oral transmission, it is popular in its use of familiar phrases, and the Latin tags do not take it beyond the reach of the illiterate men who heard them constantly in church." The Times also provides a translation of this particular carol: "In sweet jubilation/ Let us our homage sing/ Our hearts' joy/ Reclines in the manger/ And shines like the sun/ In his mother's lap/ Alpha he is, and Omega." The Times article does not mention the other two composers Pynchon mentions here, Tallis and Purcell, but Greene's The Early English Carol (Oxford: Clarendon Press, 1935), to which Pynchon may have also turned, does provide brief biographies.

133/3-4 (155), "children have unfolded last year's toys and found reincarnated Spam tins"--Spam is of course the canned meat product, and the source for this otherwise curious detail is a story entitled "Toys from Spam Tins" in the London Times of 9 December 1944, p. 2: "Months of painstaking, spare-time effort by men and women in barrage units and anti-aircraft batteries in Greater London have been largely respon-

sible for the production of over 6,000 toys for Abbey District Entertainments, which intends to distribute the toys at children's parties and among hospitals, clinics, and day care nurseries in eight London boroughs at Christmas." These toy "railway engines, lorries, tanks, dolls, and animals" were made from the tins of Spam and sardines.

133/14-15 (155), "the Radio Doctor asking What are Piles?"-- the "Radio Doctor" was a regular, five-minute weekly feature of the BBC Home Service Programme. Pynchon's source here and throughout Gravity's Rainbow, whenever the BBC comes up, is the programming schedules printed in each day's London Times. At 6:25 p.m. on December 14th, 1944, for example, the Radio Doctor answered the question, "What are boils?" The Piles are Pynchon's flourish; the Radio Doctor does not appear to have taken them up.

134/40-135/1 (157), "Mr. Noel Coward . . . packing them into the Duchess for the fourth year"-- the play is Coward's Blithe Spirit, and the same edition of the Times which supplies the macaronic carol also proclaims "The Fourth Year" for Coward's comedy, which played at the city's Duchess Theatre, on Catharine Street.

147/39-40 (172), "tales of Jenny Greenteeth waiting out in the fens to drown him"-- the likeliest source is Katharine Briggs's Faeries in English Tradition and Folklore (Chicago: Univ. of Chicago Press, 1967), pp. 46-47. She mentions Jenny Greenteeth as a bogey often invoked by adults to scare children away from danger: "Lesser spirits with whom the young were threatened a short time ago, were perhaps nursery creations, invented by careful mothers to frighten their children away from danger. One of these was Jenny Greenteeth, who lurked in stagnant pools, grown over with weeds." The danger was that a child might step out onto the weeds, mistaking them for grass, and so fall into deep water and drown.

206/24-25 (240), "the Old Norse Rune . . . Old High German name for it is sigil"-- the source for Sir Stephen's etymology here is, again, Grimm: "the sun

was likened to a wheel of fire," represented by a circle with an axis-point in the center--a mandala in other words. Ancient Goths used this rune to designate the Sun. Later, Grimm explains, "the Norse rune for S was named sôl, sun," which is also the Anglo-Saxon and Old High German sigil or sugil (p. 620). This breakdown, from mandala to sigmoid line, is implicit in Grimm's discussion but nevertheless an emphasis of Pynchon's.

221/13 (257), "A rain witch"-- Grimm remarks that "In Germany witches were commonly called . . . wetterhexe, wetterkätze," that is, weather-witches or weather-cats. A common belief was that they were responsible for whimsically calling down rain-squalls (see Teutonic Mythology, p. 1088). Thus we have Katje, the wetterkätze, who has in fact spent a good many moments idly watching the rain, earlier in the novel.

232/35 (270), "Domina Nocturna . . . shining mother" -- again the source is Grimm, who discusses the diabolical "night-riding" that witches are famous for: "night-women in the service of Dame Holda rove through the air on appointed nights, mounted on beasts; her they obey . . . these night-women, shining mothers, dominae nocturnae . . . were originally demonic elvish beings, who appeared in women's shape and did men kindnesses" (Teutonic Mythology, p. 1056). Grimm does not spell out what those "kindnesses" were, but he does mention that, like the Valkyries, the dominae nocturnae were thought to hover over battlefields to snatch off the souls of the slain. In this scene, Katje appears to Brigadier Pudding as just such a white goddess, a "shining mother" in her destructive aspect.

258/26-27 (300), "Ultra, Lichtspiel, and Sträggeli" -- Pynchon derived the names of these three fictional Zürich nightclubs from Grimm, who notes that "at some places in Switzerland the Sträggeli goes about on the Ember-Night, Wednesday before Christmas, afflicting girls that have not finished their day's spinning" (Teutonic Mythology, p. 934). The word Sträggeli, he explains, means simply "spectre" or "play-of-light"

or Lichtspiel; Ultra, then, appears in this context as a reference to the "very high frequency" light waves in any spectrum.

330/9-12 (384), "Your kraut witch, for example, has six toes on each foot and no hair at all on her cunt . . . up on the Brocken here"-- the descriptive details of this scene derive from a May 28, 1945 story in Life magazine, pp. 122-24. Pictures show the Brocken, a hotel and radio-tower perched atop the mountain peak. The murals are inside the transmitting tower, and photos in Life show the witches riding black rams and looking just as Pynchon describes them. The caption to one picture reads: "GI who is inspecting mural found one witch with six toes."

527/36-37 (615), "mythical Rügen"-- as Baedeker explains, this large island in the Baltic Sea was initially inhabited by an ancient Germanic tribe, the Rugii, then by Slavonic people who "resisted the influences of Christianity and civilization down to the middle of the 14th century." Rügen earns Pynchon's epithet because, as we see below, its place names are the residue of myth from the ancient Slavs. For Baedeker's discussion, see Northern Germany, 14th ed. (Leipzig: Karl Baedeker, 1904), pp. 201-06; the quotation here is from p. 204.

528/9-10 (615), "the Stubbenkammer, the King's Seat, and . . . Cape Arkona"-- Frau Gnahb has headed her vessel westward, and so these landmarks slide by on the left or port side. These geographical details stem from Baedeker (pp. 206-07), according to whom the island is dotted with mounds and altars used in the ancient Slavonic sacrificial rites. The Stubbenkammer is a set of rock-steps set in the chalk cliffs; further west is the Königstuhl or "King's Seat," a chalk precipice rising 400 feet above the Baltic; last appears Cape Arkona, the island's northernmost point of land, and site of a temple "consisting of a circular intrenchment 20-40 ft. high, and containing the temple of their four-headed idol Swantewit."

528/13-15 (615), "Svetovid . . . Triglav . . . Porevit . . . Rugevit"-- the sources here are

Baedeker's Northern Germany and Grimm's Teutonic Mythology, p. 201. Grimm sees the Slavonic god Svetovid or Swantewit as the equivalent of the Germanic god Tiw,a god of war like the Roman Mars. The Saxon rune for Tiw, interestingly, was an arrow pointing (rocketlike) straight up. The other names listed in this passage are variants, or nicknames, for Svetovid.

528/19 (615), "the Wissow Klinken"-- again the source is Baedeker: "a series of chalk cliffs resembling those of the Stubbenkammer," is how he describes these coastal features (Northern Germany, p. 206). Klinken is the German for "latches" or "latch-keys," which is why this white promontory might be said to metaphorically probe "the wards of Slothrop's heart" (528/20-21 [615]).

567/25 (661), "Himmel and Hölle"-- or "Heaven and Hell," is a popular German version of hopscotch. For earlier references to children's games in Gravity's Rainbow, Pynchon is indebted to Iona and Peter Opie's study, Children's Games in Street and Playground (Oxford: Clarendon Press, 1969), which would have steered him to Reinhard Peesch's Das Berliner Kinderspiel der Gegenwart, or "Berlin Children's Games of the Present" (Berlin: Akadamie-Verlag, 1957). Peesch describes Himmel und Hölle (pp. 22-28) as follows: the playing space is chalked out on the ground in the form of a cross, with ten squares in all; children begin from a zero area called Erde (Earth), and as they hop through the numbered squares, each required move becomes more difficult, square nine, or Hölle (Hell) being the worst; the tenth square, Himmel (Heaven), is also known as "Home" to the children. The overall image is a striking one, given the prevalence of crosses and of the number ten in Gravity's Rainbow.

567/31 (661), "Laterne, Laterne, Sonne, Mond, und Sterne"-- this is the call of a catcher in a game of German hide-and-seek; the source once more is Peesch (pp. 42-43), although the Opies also mention the contest rules in their book (pp. 173-74). The catcher is called Die Sonne (The Sun), and he must catch the

other children who are called the Stars (Sterne), then bring them to a holding area, which is usually a lantern post (die Laterne). The Moon (die Mond) is a player granted the privilege of releasing the captives by invading the holding area and pulling them out.

567/34 (661), "Plechazunga, the Pig-Hero"-- created from a page of etymological digressions in Grimm's Teutonic Mythology: "The lightning's flash, which we name blitz, was expressed in our older speech both by the simple plih . . . and by plechazunga . . . derived from plechazan, a frequentive of plechen. A Prussian folk-tale has an expressive phrase for the lightning: 'He with the blue whip chases the devil,' i.e. the giants; for a blue flame was held especially sacred." In a footnote at the bottom of the page, Grimm adds: "While writing plechazan, I remember pleckan (pateri, nudari, bleak), MHG blecken, blacte . . . which, when used of the sky, means: the clouds open, heaven opens, as we will say of forked lightning" (178). Simply put, plechazunga belongs to a complex of Germanic words associated with Thor (Donar, Thunar), whose weapon was the lightning. The "Pig-Hero" business is entirely Pynchon's, but it is noteworthy that other evidence in this episode of the novel fixes its date as August 2, 1945, a "Thor's Day."

592/25-26 (690), "Sandy MacPherson at the Organ"-- the BBC programming schedules in the London Times are the source. Sandy MacPherson also appears in Part 1 (13/39-40 [15]). According to the Times, he played on Sunday, August 5, 1945, at 10:15 p.m., and at no other in the weeks immediately preceding or following August 5--which fixes the time of this fictional scene with remarkable accuracy.

625/17 (728), "a mandrake root"-- the source is Grimm's discussion of the Alraun or mandrake root in Teutonic Mythology, pp. 1202-03. Compare Pynchon's description of the magical procedure with this, in Grimm: "If a hereditary thief that has preserved his chastity gets hung, and drops water or seed from him, there grows up under the gallows the broad-leaved yellow-flowered mandrake. If dug up, she groans and

shrieks so dismally, that the digger would die thereof. He must therefore stop his ears with cotton or wax, and go before sunrise on a Friday, and take with him a black dog that has not a white hair on him; make three crosses over the mandrake, and dig round her till the root holds by thin fibres only; these he must tie with a string to the dog's tail, hold up a piece of bread before him, and run away. The dog rushes after the bread, wrenches up the root, and falls dead, pierced by her agonizing wail. The root is then taken up, washed with red wine, wrapt in silk red and white, laid in a casket, bathed every Friday, and clothed in a new little white smock every new-moon. When questioned, she reveals future and secret things touching welfare and increase, makes rich, removes all enemies, brings blessings upon wedlock, and every piece of coin put to her overnight is found doubled in the morning, but she must not be overloaded. When her owner dies, she goes to the youngest son, provided he puts a piece of bread and a coin in his father's coffin."

733/26 (855), "Stretchfoot"-- from the German Streckefuss, a nickname commonly applied to Dominus Blicero. Grimm explains: "Death is called the pale Streckefuss or Streckebein (leg-stretcher) . . . because he stretches out the limbs of the dying" (Teutonic Mythology, p. 853).

750/33 (876), "the Hand of Glory"-- a grotesque superstition that derives from A. E. Waite's Book of Black Magic and of Pacts (London: 1898; rpt. Chicago: de Laurence Co., 1940). The reason why burglars, or "second-story men," would employ such a device to "light their way into your home"(750/33-34[876]) will be apparent from Waite's discussion: "the Hand of Glory is indifferently the right or left hand of a criminal who has been gibbeted. The sorcerer obtains it as he can, and in the days of Tyburn Tree such requisites might have cost nothing beyond the personal risk of the adventure; it is indispensable, however, that it should be wrapped in a piece of winding sheet, and this suggests that the criminal must have been previously cut down with a view to interment. Thus enclosed, the hand must be well squeezed so as to

force out any blood which may possibly remain in the member, after which it must be placed in an earthen vessel, together with some zimort, saltpetre, common salt, and pepper-corns, all pounded. It should remain in this vessel for fifteen days, and when extracted it should be exposed to the heat of the sun during the time of the dog-star until it is extremely desiccated. If solar warmth be insufficient, it may be placed in a furnace heated with bracken and vervain. The object is to extract all the grease from the member, and therefrom, in combination with virgin wax and sesame from Lapland, to compose a species of candle. Wheresoever this frightful object is lighted, the spectators will be deprived of all motion, and the sorcerer can do what he will. It is possible to destroy its influence by anointing the threshold of the door, or other places through which entrance may be gained to a house, with an unguent composed of the gall of a black cat, grease from a white fowl, and the blood of a screech owl. This should also be confected in the dog-days" (pp. 276-77). Note the color-scheme in the counterspell: black-white-red. It is common to both alchemy and black magic; these colors are the three coordinates of Pynchon's color-symbolism for Gravity's Rainbow.

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