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LITERATURE

THE MACHINE IN HENRY ADAMS, FRANK R. STOCKTON AND THOMAS PYNCHON. A PARADIGMATIC READING

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The reading adopted for the purpose of this work rests on the assumption that Henry Adams' The Education of Henry Adams, Frank R. Stockton's The Great Stone of Sardis and Thomas Pynchon's V. and Gravity's Rainbow can be treated as though constituting a compound self-reflexive text – a text folding upon itself, expanding and supplementing itself, or, several texts fading into each other along a common paradigm. Such reading must of necessity be selective, leaving out vast areas of meanings contained in separate texts. It refers particularly to The Education of Henry Adams and Gravity's Rainbow. The paradigm composes itself, as it were, of the major metaphors around which each of these texts evolve and from which derive much of their teleology: Adams' dynamo and the Virgin, Stockton's bomb, Pynchon's V. and the Rocket. It is tacitly assumed that they proceed from Melville's Moby Dick or that Moby Dick is a part of the same paradigm. When linked together these tropes, metaphors or symbols form an allegory which, broadly speaking, reflects the reifying imagination or consciousness in the age of increasing technology or what Henry Adams called "multiverse". The meaning of this allegory best reveals itself in Pynchon's Rocket, in its ultimate fusion of the human with the machine, already adumbrated in Adams and Stockton. As an analeptic trope Pynchon's Rocket absorbs into its own anatomy Adam's and Stockton's metaphors, completes them, and articulates what particularly in Adams' texts remains in an nascent state, as unresolved tension. The reading proceeds chronologically from Adams and Stockton through Pynchon, but this order may also be reversed as we recognize Pynchon's Rocket in Adams' dynamo and Stockton's bomb and also Pynchon's V. in Stockton's Margaret and Adams' nineteenth century woman as they all converge upon the Rocket.

Henry Adams' Virgin and the dynamo as a part of American literary mythography constitute a familiar tale to the students of literature. Nevertheless, a brief

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review of the Virgin's symbolic qualities will help to foreground the figure of her nineteenth century sister or, what Adams called "New American Woman", and her relationship with the dynamo. The Virgin as the symbol of love, procreation and sex, art and order was most potent in the twelfth century. As "goddess" she was "the animated dynamo; she was reproduction – the greatest and most mysterious of all energies; all she needed was to be fecund" (Adams 1931: 384). According to Adams, the presence of her energy can still be felt in France but in America her energy is unknown. "American Virgin would never dare command, an American Venus would never dare exist" (Adams 1931: 385). With the exception of Walt Whitman and Bret Harte and one or two painters, according to Adams, hardly any artist insisted on the power of sex. "All the rest used sex for sentiment, never for force [...] American art, like American language and American education, was as for as possible, sexless. Society regarded this victory over sex as its greatest triumph" (Adams 1931: 385). The nineteenth century artist, in Adams words, did not feel the "Goddess as power – only as reflected emotion, human expression, beauty, taste, scarcely even as sympathy. They felt a railway train as power, yet they [...] constantly complained that the power embodied in a railway train could never be embodied in art. All the steam - engine in the world could not, like Virgin, build Chartres" (Adams 1931: 388). For the historian, however, and here Adams is speaking about himself, whose task is to understand the nature of energy, to find "where it came from and where it went; its complex source, its shifting channels, its values, equivalents, conversions" the energy of the Virgin is "the easiest to handle" (Adams 1931: 389).

Far more complex and mysterious for Adams is the energy embodied in the dynamo: the symbol of contemporary "infinity", multiformity, chaos, dissipation of energy, irrationality. Its silent, incomprehensible power invites worship. Standing before the dynamo in the Great Exposition of 1900 in Paris, Adams writes that he felt it as a "moral force, much as the early Christians felt the cross [...] one began to pray to it; inherited instinct taught the natural expression of man before silent and infinite force. Among the thousand symbols of infinite energy, the dynamo was not so human as some, but it was the most expressive" (Adams 1931: 380). In the stanzas addressed to the dynamo in the poem "Prayer to the Virgin of Chartres," Adams describes its inscrutable, infinite "blind" nature, and also prays to it to reveal itself as though it were a divine power.

We know not whether you are kind, Or ernel in your fiercer mood; But be you Matter, be you Mind, We think we know that you are blind And we alone are good. What are we then? the lords of space? The master – mind whose task you do? Jockey who ride you in the race Or are we atoms whirld apace Shaped and controlled by you?

(Stevenson 1955: 285-286)

Understanding ourselves would be then contingent on the understanding of the dynamo, but as it remains mute, unresponsive, inscrutable, Adams turns to Virgin for guidance, enlightment and consolation.

Adam writes that for him as a historian the value of the machine, the dynamo, lay chiefly in its "occult mechanism". In order to measure its energy, he isolates it from its driving power, from its technological environment of causality and thereby symbolizing it into an entity, he says he will "risk translating it into faith" (Adams 1931: 383). Reduced to its basic structure, Adams' symbolizing strategy recalls that of Melville's Ahab in that both tend to establish the symbolic object as a being independent of its generic origin. Thus defamiliarized, displaced, the object is ready to receive meanings assigned to it in the symbolizing process.

Though, as Adams maintains, the Virgin and the dynamo are "two kingdoms" which had nothing in common but attraction", yet both can be treated as "conversible, reversible, interchangeable forces on man, and by action on man all known forces can be measured." (Adams 1931: 388) The question that arises here is one of subjectivity, as the object acted upon is also the perceiving subject, in the system of conversible opposites the perceiving self will tend, let as assume, to measure the unknown force in terms of the known. Saying then that he will translate the dynamo into "faith", can be construed as Adams' desire to measure the force of the dynamo in terms assigned to scared Virgin, and that also includes her "fecundity". Thus, in the process of its metaphoric individuation the dynamo is also being "virginized", absorbs elements of femininity.

Adams says that until he could measure its energy he "cared nothing for the sex of the dynamo." (Adams 1931: 385). Yet the Virgin – dynamo opposition indicates its masculine character. This also follows from Adams' discussion of the nineteenth century woman dilemma in which the machine, dynamo, is treated as representing male principle. Abandoned by man in his pursuit of the machine and thus desexualized, left to her own resources, she must involuntarily follow the way of man which is also the way of the dynamo, a "tract" of masculine energy. American man, according to Adams, "could not run his machine and a woman too, he must leave her, even though his wife, to find her way, and all the world saw her trying to find her way by imitating him" (Adams 1931: 445). Adams has no doubts that woman is superior to man in intelligence and only too aware of her plight, yet deprived of her traditional world of the Church and the family and thereby made "free": "She had no illusions; she was sexless, she had discarded all that the male disliked, and although secretly regretting the discard, she knew that she could not go backward, she must, like the man, marry machinery" (Adams 1931: 447). In the androcentric world, projected by the ideas of "socialism, communism, collectivism, philosophical anarchism [...] which promised paradise on earth for every male [...] she saw before her only the future reserved for machine – made collective female" (Adams 1931: 448). There seems to be a conspiracy which diverting the woman from her natural course of reproduction, desexualizing her, threatens history itself. Discussing in the Chapter "Vis Inertae" the inertia (movement, motion) of race and sex Adams writes:

Of all movements of inertia, maternity and reproduction are the most typical and woman's property of movement in a constant line forever is ultimate, uniting history in its only unbroken and unbreakable sequence. Whatever else stops, the woman must go producing [...] sex is a vital condition, and race only a local one. If the laws of inertia are to be sought anywhere with certainty, it is in a feminine mind (Adams 1931: 441).

Inertia of sex could not be overcome without extinguishing the race, yet immense force, doubling every few years was working irresistibly to overcome it (Adams 1931: 448).

It follows from the above that the "dark force" ought to be looked for in the area delineated by the male dynamo. Adams says that he is helpless confronting the woman's dilemma, like "Faust was helpless in the tragedy of woman" (Adams 1931: 447), and he leaves it to the woman to choose her our course. "The tragedy has been woman's lot since Eve," he says, but "The Marquerite of the future could alone decide whether she was better off then the Marquerite of the past, whether she would rather be a victim to man, a church, or machine" (Adams 1931: 447). In the growing social multiplicity which uprooted the woman and left her "inarticulate", "the reproductive forces lay hidden" (Adams 1931: 445), and only woman herself can perhaps discover them. Comparing the new woman to her traditional self which as Venus used to govern nature he states:

The woman force counted as inertia of rotation, and her axes of rotating had been the cradle and the family [...] but [...] if her force were to be diverted from its axes, it must find a new field, and the family must pay for it. So far as she succeeded, she must become sexless like the bees, and must leave the old energy of inertia to carry on the race (Adams 1931: 446).

Adams does not define the "new field", instead he prophetically claims that: "All these new woman had been created since 1840, and all were to show their meaning before 1940" (Adams 1931: 445).

In A Grammar of Motives written about 1945, the approximate date for Adams' new woman to show her "true mark", Kenneth Burke can still see Adams Virgin as symbolizing "natural forces of reproduction". Viewing Adams' symbols as synchronic forces Burke writes:

And we may say that the Dynamo stands for man – made forces of *production* and the Virgin as natural forces of *reproduction*. The forces of reproduction proceed by growth and decay, the forces of production proceed by the acceleration and declaration of motion. Growth is by the assimilation of food, motion is by the consumption of fuel (Burke 1962: 121).

Burke reverses the meanings of Adams' symbols. Where Adams sees chaos, entropy, dissipation of energy, Burke sees order and "intellection", "knowlege". For him the dynamo is the symbol of technological rationality and power. "In its noblest aspect [it] is wisdom, reason: veritas" (Burke 1962: 122). It is also capable of giving the realm of reproduction and love "its true maturity and control". The realm of the Virgin, nature, - "the realms of appetites ... whole range of desires ... of eros and libido" – is seen here apparently as potentially irrational, needing supervision. Both realms, according to Burke, can be viewed as two parts of a triad of which the third term is "authority". As social forces they can be complementary: "Love, Knowledge, Authority: three basic ideals [...]. As translated into terms of social organization, they are necessarily somewhat at odds. But in a moment of exaltation, ideally, we may think of them as a trinity, standing to one another in a relation of reinforcement" (Burke 1962: 124). What is of interest here is not so much Burke's usage of Adams' categories of nature and technology in his analysis of social forces, but the allegorization of these forces in terms of Adams' symbols and the possibilities of these symbols to merge into each other - the symbiosis of the Virgin and the dynamo. Interestingly enough, Burke says that Adams identified himself with the dynamo because "he died childless, the kind of power in terms of which he finally proclaimed his identity being not the powers of generation but the powers of the machine" (Burke 1962: 121).

Reading Adam's text symbolically, and the metaphorization of his historical, scientific and philosophical discourse justifies such reading, we may define his "new field" as a playground in which the feminine, the male and the dynamo are poised to enter into a new generative relationship; the process during which the machine undergoes anthropomorphization, at least as a textual being. The fact that the dynamo can absorb the feminine within its energy, their respective forces being "conversible, reversible, interchangeable" problematizes its metaphoric purity as merely a male force. Conflating then the male and the female, "marrying" theme, as it were, in its own metaphoric anatomy, the dynamo sexualizes itself and thus also inscribes its presence in the "new field" as an androgyne, a male/female machine hybrid. Such reading is consonant with Adams' concept of the "larger syntheses" – "the great law of contradiction," according to which "order and anarchy (is) one, [...] the unity (is) chaos" (Adams 1931: 406). Translated into symbolic terms the "law of contradiction" suggest the merging of Virgin with the dynamo. To use the terms of Burke's triad, the forces of production fuse with the forces of reproduction in Adams' "new field." The third category being in Burke's "Authority", in Adams' terminology, energy, power, force.

To place Stockton's The Great Stone of Sardis, a novel which has already fallen into near total oblivion, alongside Adams' The Education, may be presumptuous. Even by nineteenth century standards, when Stockton's novels and stories enjoyed great popularity, The Great Stone of Sardis would hardly measure up to the contemporary canonical works, notwithstanding Stockton's claim as the first science-fiction novelist in American literature (cf. Golemba 1981: 141). It is not in the plot, however, but in the figurative meanings that its plot generates that the significance of Stockton's novel ought to be sought. Like many nineteenth century

American literary works it also answers D.H. Lawrence's contention that "You have to pull the democratic and idealiste clothes off American utterance, and see what can of the dusk body of It underneath" (Lawrence 1965: 8). It is only when this "It" is deciphered and articulated that Stockton's novel can be read as intertextual partner of Adam's and Pynchon's fictions.

Published in 1898, Stockton's novel is contemporary to Adams' The Education (1907). Both present the vision of the future. Where Adams is, however, deeply profound, visionary, Stockton is reductive, nearly simplistic. In the opening chapter of The Great Stone, Stockton says that the scientific progress "which had burst upon the world at the end of the nineteenth century" in the next two decades gave way to a nostalgic longing for the pastoral simplicity of the pretechnological age and the world was coming virtually to a standstill. All new discoveries such as "telegram" and "electric vehicles" were abandoned and even "revolutionaries postponed their outbreaks". However, this "reactonary" state of affairs did not last too long and "the new century was not twenty years old" when the progress regained its momentum:

[...] the world found it self in a storm of active effort never known in its history before. Religion, politics, literature and the art were called upon to get up and shake themselves free of the drowsiness of their years of inaction (Stockton 1900: 10).

By 1947, the projected time of the novel, the progress is in full swing. As though to illustrate the technological marvels of the age, Stockton has his main protagonist, Robert Clewe, a world renowned scientist and inventor, travel by boat from Europe to his laboratories at Sardis, New Jersey, in less than three days. We learn that he has some important but somewhat clandestine project afoot at Sardis. There is also an intimation that some obstacle or "flaw", apparently of psychological nature, has prevented him from carrying out his greatest, world astounding discovery. We are also told that his researches are financed by Margaret Raleigh, a rich widow of a scientist and the owner of Sardis. Upon arrival at Sardis, Clewe learns from the manager of the works, Samuel Bloch, that the plant has been invaded by one Ivan Rovinski, a Pole, who hovering over it in a flying machine attempted to discover Clewe's invention by penetrating the glass dome with a reflector. Bloch, however, veiled the glass roof with some sort of light screen which prevented penetration. At present this sinister and malevolent character is lurking in the neighborhood awaiting his second chance. Prompted by Margaret, Clewe decides to give the world some major discovery. Several options are considered, among them the powerful rocket already completed but not tested yet. Finally they settle upon the discovery of the North Pole, satisfy the growing impatience of the public. But in the meantime Clewe will proceed with his most secret project, the discovery of the inner structure of the earth by means of an "Artesian ray",

an electric light probe, not unlike an x-ray or laser beam. Since this project demands Clewe's presence, it is decided that he will supervise the polar expedition from Sardis by means of a telegraphic cable attached to the submarine used for the discovery. The polar expedition consists of scientists and seamen headed by Samuel Bloch accompanied by his wife Sarah who would not let her husband go alone. While the submarine heads for the North Pole, Clewe and Margaret "discover" that they are in love with each other.

At this point the narrative structure bifurcates into two parallely unfolding subplots: the horizontal movement of the polar expedition and the vertical penetration into the depth of the earth. The vertical plot – the main interest of Stockton's novel – absorbs also the theme of Clewe's courtship of Margaret and both share the same metaphoric vocabulary. They are informed by what Kenneth Burke calls "perspective by incongruity" ("perspective" is Burke's term for "literal" or "realistic" application of metaphor): "... the seeing of something in terms of something else involves the 'carrying-over' of a term from one realm into another, a process that necessarily involves varying degree of incongruity in that the two realms are never identical" (Burke 1962: 504). Burke's principle of "perspective by incongruity" describes best Stockton's strategy of metaphoric displacement which consists in encoding the meaning of one thematic plane into another. The theme of courtship, particularly its physical, sexual aspect, is displaced here in the narrative of scientific discovery. A word, an image, or a metaphor may simultaneously have several frames of reference. Thus, Clewe's "flaw", so much emphasized in the course of the narrative, defines him as both a scientist and a lover, and Margaret, urging him towards the completion of his major discovery, plays the role of seductress in the plane of courtship. This results in an ambiguity, if not confusion, "inconguity", of some narrative events, which also obfuscates the novel's generic purity as science fiction. The recognition of this narrative strategy will help the reader to recover the full meaning of Stockton's novel, to identify and articulate that which Lawrence calls "It", the subconscious meaning consciously, so it seems, displaced, hidden away, in the metaphoric structure. Since the "perspective by incongruity" mediates between different narrative planes of the text it can also be seen as an intratextual trope.

Ivan Rovinski's presence is discovered in the submarine which after some routine adventures surfaces into the open sea of the North Pole. The ceremony of taking possession of the Pole is disrupted by that "infernal Pole", Rovinski's attempt to claim the discovery in his own name ("the glory and honor would have been mine for ages to come"). As the initial thrill of the discovery wears off, there is nothing to relieve the boredom induced by the "solitude" of the vast expanse of "nothingness" of the polar sea until the appearance of the whale, the only survivor of its race, since, the reader is told, the last two known whales in the world were killed in 1935 "north of the Melville Island". One of its flukes is damaged as though "it had broken it flopping in some tight place". No one knows how the

¹ Martin I.J. Griffin claims "that it is not unreasonable to suppose that Thomas A. Edison, whose New Jersey laboratories were not far from Stockton's home, was the model for Roland Clewe" (Griffin 1939: 103-104).

This displacement of narrative planes is apparently the reason why Henry Golemba calls *The Great Stone of Sardis* a "freakish hybrid". "It is a good domestic novel but a science-fiction and domestic novel make a bad marriage" (Golemba 1981: 140-141).

whale got "caught" in the polar region but according to the computation it must have been "a hundred years ago", that is in the middle of the nineteenth century according to the time sequence of Stockton's novel. After building a telegraphic post the expedition makes its return journey leaving behind the whole whose "(two) tall farewell spouts rose into the air and then his tail with its damaged fluke was lifted aloft and waved in a sort of gigantic adieu" (Stockton 1900: 150). Ahab identified Moby Dick as "a white – headed whale with a wrinkled brow and a crooked jaw [...] with three holes punctured in his starboard fluke" (Melville 1956: 138). Given its damaged fluke, the estimated time of its surfacing in the polar sea, and above all, the mention of Melville Island, the reader could as well have expected to see Ahab's skeleton still roped to the body of Stockton's whale. Upon the arrival at Sardis Rovinski is placed in the lunatic asylum since the discovery of the North Pole must be kept secret until Clewe completes his major scientific feat – the "penetration" of the earth.

Were it not for Rovinski's antics and the appearance of the whale the polar plot would be completely uneventful. The whale is of special interest to Sarah Bloch, her constant worry and fright. The thought of a physical contact with it is for her as much threatening as thrilling, nearly titillating.

"To meet a whale would be very bad", she speculated, "but then, a whale is clumsy and soft", a swordfish was what she most dreaded. A swordfish running its sword through one of the glass windows; and perhaps comming, comming in himself along the water, sent a chill down her back (Stockton 1900: 42).

Hearing about the whale's appearance she is putting on move clothes: "thres a shawl over her head and waited for the awful bump". "Fortunately the whales are soft "she said to herself over and over again.

... he will be worse then a bull in a china shop. I don't want to say that I think that he wants to do us any harm... but if he takes to bouncin' and thrashin' when he scratches himself on any rock, it would be a bad box to be in (Stockton 1900: 144).

I hope he will not come under us ... he always kept a respectful distance, and as long as we are in a canal I don't mind in the least if he follows us. But as far as going under water with him, I don't want anybody to speak of it (Stockton 1900: 150).

Sarah's "speculations" are obviously meant to provide a comic relief, but while the reader is led to believe that he is looking at the whale through her eyes, he is in fact witnessing the objectivization of her libido. Though the priapic imagination of this Victorian wife goes as far as it is decently possible, her comments, vocabulary and imagery at the same time connote and metaphorize the motif of "penetration", one of the most often repeated in the novel's lexicon. In the system

of substitutive correspondences that generates metaphoric structure of the novel, Sarah's blunt and comic account of the encounter with the whale expresses sentiments which the genteel Margaret – her female counterpart in the Sardis plot – would never bring herself to utter. She articulates that which in the Sardis plot must either remain submerged in the novel's subconscious or finds a metaphoric displacement to reveal itself.

As already mentioned, the Sardis plot mingles and displaces two narrative planes: the process of the "penetration" of the earth and the theme of courtship. The first embrace of Clewe and Margaret is interrupted by the cable from the submarine informing them about the discovery of the "devil's" presence on board. By withholding the identity of the "devil" (it is Rovinski) the author probably tried to build up dramatic suspense, but to Clewe's own astonishment, and to no less surprise of the reader, Clewe reads the "devil" figure as referring to himself, before he learns that it is his adversary and "shadow". This "incongruous" displacement of identities may throw some light on Clewe's "failure" resulting from his "flaw", but it is also obvious that Rovinski is meant to function as Clewe's diabolic, shadowy double.

"... let us give up our souls to each other and to the Artesian ray" (Stockton 1900: 65), Margaret urges Clewe, but Clewe decides to conduct the experiment alone so that no one would witness his possible "failure", least of all Margaret. The Artesian ray is generated from a machine suspended above ground in the "lens-house" and Clewe with his "breath quick and his wild eyes distented" watches the disc of light bore day after day deeper into the earth until it reaches the region of "nothingness" shining with pale, colorless, "beautiful" white, soft light, neither solid nor liquid, neither air nor fire. This incomprehensible spectacle frightens Clewe. What worries him particularly, however, is the fact that between the bottom of the liquid "cavity" and himself, as he is looking into its depth, there seem to be "nothing at all", though the illuminated ground seems solid. Then the sight of the body of his assistant bisected by the beam of the Artesian light, showing its "infernal colors and outlines" makes him collapse in a "dead faint". The thought that a part of him might have also disappeared in the course of the experiment makes his "heart stop beating". Such overreaction in a scientist seems surprising. It testifies to the fact that the Artesian ray is not only an instrument of discovery but also a metaphor. As its vehicle bores into the ground its tenor carries for Clewe some psychosomatic connotation. Early on in the narrative Margaret chides Clew for his procrastination in declaring his love: "...if we could have discovered some sort of ray by which we could see into each other souls, we should have gainst many hours which are now lost" (Stockton 1900: 65). The ray "carried over" from the realm of technology to that of courtship lights up the physical aspect of love. Bringing into light the incomprehensible bottom of the cavity and inscribing upon it the image of bared "bisected" human body it reflects Clewe's libidinal bewilderment.

Since it is essential that Margaret participates in the discovery ("it is cruel to keep her waiting" (Stockton 1900: 72). Clewe allows her to look into the "cavity" though he adamantly refuses her often repeated plea to accompany her. The sight

of the bottom makes her excited, dizzy and entranced; it is so "beautiful and grey ... white and glittering". Clewe promises then to invent a method that would allow both of them "to stand side by side and look down into the depth of the earth as for as our Artesian ray can be induced to bore (Stockton 1900: 74).

The mystery of the "cavity" drives Clewe to distraction so that Margaret suggests to give the experiment a rest and induces him to take up instead his other scientific invention: the "automatic shell", a powerful self-propelling rocket of cylindrical form. The mechanism driving the rocket ensures that the greater the resistance it encounters the greater its velocity and the power of "penetration". While Clewe and Margaret are discussing its possible use, the rocket, as though it had a mind of its own, breaks free from its stand and striking the earth disappears from view. The loss of the rocket is another blow for Clewe but the shaft it made penetrating the earth arouses his scientific curiosity. He finds that the shaft is rather cool, much to Margaret's astonishment and shock, and that the "perforation" is as deep as the Artesian ray went and the photograph taken of its interior shows the same shining "nothingness". Margaret points out to Clewe a tiny speck in the print which they recognize as the rocket lying in some "cavity" of light. The iconicity of the photograph recalls the image of the whale in the lonely "nothingness" of the polar region. Margaret grows exasperated with Clewe's preoccupation with what she calls "the everlasting old hole in the ground", but she also fears that he might try to descend down the shaft himself. Yet, for all her fears this Victorian heroine is also ready to let him sacrifice his life to satisfy his curiosity and scientific ambition. The passage in which she makes her declaration to Clewe, in fact inducing him to go into the "hole", is ambivalent in the light of her fears but not so ambivalent if read in the context of the courtship.

"Roland", she exclaimed, "you think you know all that is in my heart, but you do not. You know it is filled with dread, with horror, with sickening fear, but it holds more than that. It holds a love for you that is stronger than any fear or horror and dread. Ronald you must go down that shaft, you must know the greatest discovery you have made. Even if you should never be able to come back to the earth again, you must die knowing what it is. That is how I love you." ... Suddenly her knees bent beneath her, and before he could touch her, she had fallen on her side and lay senseless on the floor (Stockton 1900: 169).

The passage refers of course to the scientific discovery but its language deriving from the lexicon of love, charged with sexual imagery, activates simultaneously two contexts and the word "discovery" becomes a trope functioning in both, with "dying" as connoting sexual act.

Clewe goes down the rocket shaft in a cable-car (provided with a lantern, food and drink), observes the geological layers of the earth as they are floating past, takes notes, smokes a cigar and in moments of "black-outs" fixes his attention on Margaret's "flower-beds" in her garden: he eroticize his descent into the feminine

earth. Beneath his feet he can see the "illuminated" hole fading away at the bottom of the shaft and then recognizes his "automatic shell" lying on its side in a pool of light, a lighted "cleft", which recalls Margaret senselessly lying on her side at his feet in the above quotation, and he knows that he has a "companion" in this region of "nothingness". He descends from the car onto the rocket and the "immobility of this great mass of iron", gives him a sudden shock of mysterious fear. Bestraddling the rocket and "clinging to its great spiral ribs", he is watching its shadow going "down' down, down" until he feels sick. "He drew back quickly, Clench the shell with his arms ... (and) felt as if he were about to drop with it into the measureless depth of the atmosphere" (Stockton 1900: 176). Then, sliding down the side of the rocket, he discovers that he is standing on some solid, rocky substance which feels like "petrified air", and also finds that the rocket's conical end is "shattered and broken". Taking a few steps from the rocket he feels as though he were about to slide downward so he returns to it and "clenches it in a sudden frenzy of fear" (Stockton 1900: 177). He then discovers that the transparent surface on which the rocket rests "in the ligtbed cleft" is pure diamond. Ascending to the surface of the earth he speculates about its origin (it must have been a comet) and stepping out of the car he feels himself "encircled by a pair of arms" (Margaret's) as though in return for the embrace he gave the rocket. As a proof of his discovery he shows Margaret a few pieces of diamond that the rocket chipped off when it struck the bottom of the cavity. Margaret is duly entranced and they decide to keep the discovery a secret since the news that the core of the earth is composed of diamond would upset the world's economy. Clewe also promises Margaret never to go to "that cleft again", since, as he says, "there was a moment of awful terror" as he put his feet on that transparent "nothing" he might have "slithered – where?" Margaret again throws her arms around him and "held him tightly".

The telluric adventure can be sketched out in a pictorial, cartoon-like sequence of frames: Margaret lying on her side senseless of Clewe's feet. Clewe descending in a cable-car smoking a cigar. The rocket lying on its side in a pool of light. Clewe bestraddling the rocket. Clewe sliding down the side of the rocket, Clewe taking a few steps away from the rocket on the surface of the diamond. Clewe embracing the rocket in a sudden "frenzy" of fear. Clewe ascending in the cable-car to the surface of the earth, counting the diamonds - perhaps. Margaret embracing Clewe. The rocket is a vehicle of discovery but as the language and the icons supplement each other semantically in the sequence of abysmal events, it becomes the physical projection of the tenor of love and its fulfillment. As an icon framed in the area of "nothingness" it identifies itself with the whale. Like the whale it is injured, its conical end "shattered". As though fleshed out in the image of the phallic whale, the rocket acts as Clewe's metonimic extension and "lying on its side" it simultaneously becomes Margaret's metaphoric substitute in Clewe's "embrace". Acting as Clewe's phallic metonym it metaphorizes the abysmal "nothingness" into the female diamond. In the process of this telluric procreative act the rocket antropomorphizes itself. Like Adams' dynamo, fusing the male and the female, it is also an androgyn and, thus, also inscribes itself into Adams' "new

field". Unlike Adams' new woman bound to grope for new generative methods in the contradictory multiverse defined by the male machine, Stockton's Margaret uses femininity to control the man and his machine, though she too, like Adams' female identifies with the machine.

Clewe's education can not be complete, however, until his evil "other" is annihilated. "In the brilliantly lighted sky of discovery which was rested, one edge upon Sardis and the other upon the pole, there was but one single cloud, and this was Rovinski" (Stockton 1900: 194). This "ambitious" and "unserupulons" Pole, "cunning and wary", makes now his third and final appearance. Escaping from the lunatic asylum he steals into Clewe's laboratory where "bouncing like a mad animal in the cage" he sets the cable-car in motion and reenacts Clewe's downward journey into the womb of the earth. Unlike Clewe's descent, calm and stately, Rovinski experiences "the wildest sensations of animal delight and ecstasy". Frequently stopping the ear, he admires "the wonderful depth of the shaft" and the moment he saw the cave of lighted "nothingness" with the rocket resting upon the "bottomless" transparent floor, he shut his eyes and thus died with the "incomprehensible thing" imprinted on his mind.

It was then that the night-watchman looked down into "the mouth of the shaft" and the pin which he found that morning and stuck in the lapel of his coat slid out and "descended the shaft head downward". "... the pin was of recently invented kind, being of light, elastic steel, with its head slightly larger than that of ordinary pin" (Stockton 1900: 200). Gathering speed, this rocket-like pin, went down with "velocity like that of light". It passed through the roof of the car and "Rovinski's head [...] his heart [...] down through the car and into the great shell that lay below". When the car was brought up "in it sat Rovinski motionless and dead". No one, except the narrator and the reader, will ever know the cause of his death, the general opinion being that he was "frightend to death" (Stockton 1900: 120-121). That the antagonist be punished is predetermined by the poetic justice of the kind of fiction that Stockton practiced but the manner in which he is being disposed of is as much comic and ridiculous as following the logic of "incongruous" perspective. Rovinski must be removed not only because he invaded the space of the "cavity" reserved for Clewe and Margaret alone but because he threatened it with his animal-like male irrationality. Though presented in adverse terms he is not unlike Clewe himself in that "he was a man of great mechanical ability and an expert in applied electricity. He understood that machinery as if he built it himself" (Stockton 1900: 197). He is Clewe obverse image, his diabolical, irrational double, and as such, defines Clewe's unspecified "flaw" of which the author ceaselessly reminds his readers and which Clewe himself acknowledges in the "we have the devil on the board" episode. To ensure Clewe's stability his irrational other, the embodiment of his id must be annihilated and instrument of the execution is Margaret's since the pin, being obviously of feminine provenance, functions as her metonimic reification. As it runs through Rovinski's head it frees Clewe from his irrational self so that Margaret can now act as his sole guardian and companion. Grafting itself upon the body of the rocket it reinforces the feminine aspect of its antropomorphic self and virtually pinning it to the feminine diamond it safeguards against its possible male waywardness. We remember that the rocket is capable of acting of its own accord. With his "flaw" erased Clewe can now fully qualify to the title of the greatest scientist of the world and the representative man of the ideal technological utopia that Stockton projected for the middle of the 20-th century.

Since the Rovinski affair disclosed to the public the existence of the shaft Clewe and Margaret decide to close it up. Accordingly the hole is shattered and choked up with earth by means of explosives ("great bombs" are used). The rest of the narrative being devoted to a rather protracted process of establishing Clewe's status as the greatest scientist in the world is of little interest here. The reader is also told that Clewe and Margaret marry, travel, build a fine mansion and live happily everafter. Clewe also promises Margaret never to try to descent to the core of the earth again, instead he pledge to devote his life to what he calls his "greater achievement", the Artesian ray. "It is my object to penetrate deeper and deeper into the interior of the earth" (Stockton 1900: 216).

Before he let the curtain fall, however, Stockton treats his readers to yet another of Clewe's discoveries. In a walk with Margaret he points to her an old tomato-can in which a robin has a nest with "three dear little robins inside". "It in the sweetest charm of your triumphs to be able to notice such a thing" comments Margaret (Stockton 1900: 218). The image is cloying, sentimental and more fitting a scraphill than the supposedly elegant estateground on which it found, but it also provides a tropological coda for the novel's metaphoric teleology, its symbolic closure. As the image of new birth it signals the completion of Clewe's emotional metamorphosis, the fact duly acknowledged by Margaret, its chief engineer. As an icon of fertility it fuses the biological with the inorganic, animate with inanimate, and can also be read as an externalized offspring of the antropomorphized rocket incepted at the bottom of the shaft. Inscribing "dear" little birds into the tomato – can, Stockton creates an icon simultaneously reflecting the metaphoric meaning of his novel and glosses it over in the image of domestic bliss, harmony, affection.

Before the reader is taken into the new age of rationality envisioned at the beginning of the novel all the disturbing, ambivalent or anxiety causing elements evoked in the course of the narrative must be eradicated. With Rovinski gone and the rocket buried away in the depth of the earth, there remains now the whale, a relict of the irrational past.

The interest of sportsmen, especially the hunters of the big game, were greatly excited by the statement that there was a whale in the polar sea. The great creature being extinct everywhere else. It would be unique and crowning glory to capture this last survivor of his race, and there were many museums of natural history which were already discussing contracts with intended polar whalers for the purchase of the skeleton of the last whale (Stockton 1900: 206).

Stockton's whale is a docile and friendly creature, only his scars testify to the

bygone days of his epic glory. Yet behind that docility one can still see the shadow of Melville's Leviathan, which, according to D.H. Lawrence is "the last phallic being of the white man ... our blood – consciousness sapped by the parasite mental or ideal consciousness" (Lawrence 1965: 152). It is not a coincidence, perhaps, that the only woman in the polar expedition could recognize that phallic nature of the whale in her comic, eroticized comments. A "terror" inspiring creature which, in Melville's words "having been before all time, must needs exist after all human ages are over" (Melville 1956: 352). Considering the ferocity with which he is hunted, Melville also wonders "whether Leviathan can long endure so wide a chase, and so remorseless a havoc; whether he must not at last be exterminated from the waters, and the last whale, like the last man, smoke his last pipe, and then himself evaporate in the final puff" (Melville 156: 354), but he also hopes that the whale will develop strategies of survival in his natural habitat, oceans and seas:

Furthermore ... they have two firm fortresses, which in all probabilities, will for ever remain impregnable [...] hunted from the savannas and glades of to middle seas, the whale – bone whales can at last resort to their polar citadels, and diving under the ultimate glassy barriers and walls there, come up among the icy fields and floes, and in the charmed circle of everlasting December, bid defiance to all pursuit of man (Melville 156: 354).

Needless to say that is where Stockton set his trap for Melville's whale. Even as a barely recognizable symbol of Melville's disturbing multiverse, mere echo of nineteenth century metaphysical anxiety, the whale would be the least welcome visitor in Stockton's streamlined twentieth century utopia.

For all its pedestrian, social optimism, Stockton's novel and Melville's Moby Dick as well as Henry Adams' The Education derive from the same cultural matrix, which, according to Leo Marx also shaped such works as those of Hawthorne, Thoreau, Twain or Faulkner, and which, broadly speaking, subsume the dramatic intrusion of technology upon idealized pastoral nature. Marx says after Richard Chase that in literature it "... has given rise to the habit of defining reality as a contradiction between radically opposed forces" (Marx 164: 342). The technological fact inscribing itself into pastoral myth produced dilectical cultural metaphor reflecting consciousness at once contradictory and inseparable. In Stockton's novel this basic dilemma of American fable finds a radical solution. As though dismantling the metaphor and placing the pastoral and the technological in a sequence of historical progress from "retrogressive" to "progressive" he consigns the former to the aberrant past. Stockton does not explain why the "retrogressive", backsliding "populace" should be so easily won over to the idea of scientific and technological advancement, he simply attributes it to the combined effort of the best minds at the beginning of the 20-th century, but his The Great Stone of Sardis illustrates this process in the history of Clewe's metamorphoses from irrationality to rationality. That this metamorphoses is contingent upon his sexual initiation is concealed in the novel's metaphor but it is obvious in the story it tells that it is Margaret who is the agent of his education. Seen from this perspective Stockton's novel can also be read as a refiguration of Adams' Virgin and the dynamo.

Stockton does not invest his machine with any particular meaning. It is merely a wander bomb, a technological marvel and the fact that it is capable of acting by itself solves for Clewe the problem of descending into the core of the earth. It is only when seen in the context of substitutions, displacements and transformations which the reader will discover under the narrative surface, that it takes on metaphoric meanings. Identifying itself with the phallic whale and posing as a metonimic representation of Clewe and also substituting for Margaret in the act of displaced sexual union it merges the opposites, the feminine and the masculine. The immersion of the human in the machine, or conversely, the technologization of the human in a procreative act, which Stockton's tropes so clearly indicate, can only be extrapolated from Adams' symbolic system. Adams says that he is not interested in the sex of the dynamo until he can establish his energy, nonetheless, all the clues in his text point to the dynamo as a generative power, if only generating "multiplicity", chaos, dissipation of energy. Even if its sex can not be established in the "multiverse" of its own creation which is also the mutitext of Adams' The Education, the dynamo identifies with the male and the female, the human, and defines them in its own terms. Stockton's text can then be read as complementing Adams' ambiguities in terms of its metaphoric unambivalence. In other words through its metaphor of sexual union it articulates that which in Adams' text remains in a state of latency and at the same time transforms Adams' multiverse into its own one-dimensional universe. As the embodiment of Clewe's id the rocket must remain buried in the earth: in the recesses of the text while his unruly, irrational impulses are being naturalized in the surface of the narrative. He promises Margaret never to descend that "damned hole" again for fear of losing his mind. Instead he will make do with the laser beam, the Artesian ray: a rocket substitute for the penetration of feminine earth. Scientific discovery equated with sexual act is being rationalized here and thus brought under control. Were she to answer Adams "prayer", Margaret could point to herself, who, though desacralized and robbed of her mystery, still, like the Virgin, uses sexual energy for order, rationality and moral force. As Adams' "Marquerite" she reverses the roles. Plying a female Mephistopheles to her Faust Clewe she delineates for him the areas of his "disaverces". Stockton's nineteenth century readers would perhaps expect him to provide his heroin with a child or children to complete their domestic bliss, instead, they are shown the robin/tomato can image: the epitomy of their "triumphs" the mutant breed and descendant of the androgynous rocket procreated in the depth of the earth. Inasmuch as Stockton's rocket is an analog of Adams' dynamo and both epitomize male anarchy it must be erased, but Adams' text in Stockton's novel foregrounds also the female kinship with the machine. In the rhetoric of Adams' The Education, Margaret marrying Clewe marries a machine and thus from Stockton's perspective reinscribes for Adams his "new field", while, to use Adams'

metaphor again, herself remains "sexless as a bee". As such she is ready to enter Pynchon's novel where she will reemerge as V.

As though emerging from Adams' *The Education*, Pynchon's V. not only "marries" a machine but virtually becomes one. In one of Stencil's daydreaming fantasies about V. she turns into "an inanimate object of desire":

To freudian, behaviourist, man of religion, no matter – a purely determined organism, an automation, constructed, only quaintly, of human flesh [...] skin radiant with the bloom of some new plastic; both eyes glass but new photoelectric cells, connected by silver electrodes to optic nerves of purest copper wire and leading to the brain [...] wrought as a diode matrix could ever be [...] nylon lymbs [...] platinum heart – pump [...] butyrate veins and arteries [...] complex system of pressure transducers located in a marvelous vagina of polyethylene [...] leading to a single silver cable fed by pleasure voltages direct to the correct register of digital machine in her scull (Pynchon 1968: 386-387).

Herbert Stencil relates his search for V., her meaning, in the third person. He, "like small children at a certain age and Henry Adams in The Education, as well as assorted autocrats since time out of mind, always referred to himself in the third person (Pynchon 1968: 51). Compared to Adams' search for the meaning of the dynamo Stencil is at a disadvantage. Adams at least could sit at the foot of the dynamo in Paris Exposition as he translated its energy into a symbol. History taught him the meaning of the Virgin. The new American woman was already becoming an enigma but one that, at least, could be measured in sociological terms. Stencil had never met his V. All he know about her came from the testimonies of those who supposedly met her and from the journal his father, Sidney Stencil, a secret agent of British intelligence service, left him, in which, under Florence, April 1899, he read the following sentence: "Ther is more behind and inside V than any of us had suspected. Not who, but what: What is she. God grant that I may never be called upon to write the answer, either here or in any of my official reports" (Pynchon 1968: 43). This sentence launched Stencil out on his hunt for Vand what he has is only inference. Like his father he does not know who or what she is. To reconstruct her, or construct her, he must then depend upon clues, hearsay, leads, inferences, testimonies, which he pieces together and weaves into the story of V. – the main plot of Pynchon's novel and also, the reader may well assume, the plot of contemporary history of which V. may be a symbol or an agent.

In the course of the narrative V. makes several appearances. She first appears in Egypt during the Fashoda crisis as Victoria Wren, an eighteen year old daughter of a British diplomat. A Roman Catholic, she spent already some time in the novitiate but decided not to take the veil. In Cairo she is involved in an espionage plot and a political murder and also loses her virginity. A year later, in 1899, she is in Florence during the riots of the Venezuelan anarchists where she meets Sidney

Stencil whom she seduces. Stencil as a Foreign office agent is at that time is also investigating the case of a mysterious land Vheissu discovered some years earlier by one Godolphin, also present in Florence. In 1922, in South-West Africa during the Bondels revolt, her name is Vera Meroving and her companion a lieutenant Weissman (he reappears in Gravity's Rainbow as Captain Blisero, commander of a V2 launching site in war-time Holland and Germany) and she comes from Munich. She has an artificial eye with a clock built into it. In 1913, in Paris, she has an lesbian affair with a ballet dancer and has no name. The Victoria of Egypt and Florence is now gradually replaced by Pynchon 1968: "something entirely different, for which the young century had as yet no name" (Pynchon 1968: 386). In 1919, Sidney Stencil meets her again in Malta. Her name is now Veronica Manganese. She is intimate with Mussolini and the poet D'Annonzio and is apparently a double agent working for the British and Italians. Leaving Malta Sidney dies in a sea accident. She reappears in Malta again during WW II where she is known as Bad Priest, her sex indeterminate. S/he is "prowling for souls" preaching sterility: "The girls he a advised to become nuns, avoid the sensual extremes – pleasure of intercourse, pain of childbirth. The boys he told to find strength in – and be like the rock of their island ... preaching that the object of male existence was to be like a cristal, beautiful and soulless" (Pynchon 1968: 319). In 1943, she is killed in a Luftwaffe air raid and discovered to be a woman with detachable artificial parts. According to Fausto Maijstral, a Maltese writer and one of Stencil sources, who witnessed her death and disassembly and who gave her the Sacrament of Extreme Unction:

I wondered if the disassembly of the Bad Priest might not go on, and on ... Surely her arms and breast would be detached; the skin of her legs be peeled away to reveal some intricate understructure of silver open work [...], intestines of part – colored silk, gay balloon-lungs, a rococo heart (Pynchon 1968: 322).

Stencil, however, refuses to believe in her death and continues his search. If she can be thus dismantled, like a price of machinery, a rocket or a dynamo, she could also be reassembled in a new form.

As Bad Priest she is an avatar of Mara, the Venus of Malta, goddess of "love", "perversion" and "disguise", according to Pynchon, "a quaint, hermaphrodite sort of deity" (V: 435), who as the Bad Priest centuries later, had been condemned to "haunt the plains", and her powers still "potent". The intricate plot to steal Botticelli's Birth of Venus in Florence, obviously another of V.'s emanations, is abandoned, since, as its chief perpetrator, asserts: "what sort of mistress, then, would Venus be, ... what of her God, her voice, her dreams? She was already a Goddess. She had no voice he would ever hear. And she herself (perhaps even her demesne) was only ... A gaudy dream of annihilation" (Pynchon 1968: 193). And this connects her with Vheissu, her demesne or kingdom. V. is a textual being and having no referent other than textual, Stencil can paranoically read her presence in any entry

along the lexicographic map of Vs. and thus creates for her new contexts. She signifies not only Botticelli's Venus and her perverted version Mara, faint echoes to Adams' Virgin/Venus, Veronica Wren and her manifold mutations but also V-Note bar in New York, the rat Veronica in New York sewers whom a crazed priest attempted to convert to Roman Church during the depression of the 30's, La Valletta, as well as the mysterious land Vheissu. Her meaning is thus endlessly displaced as she becomes a trace, "a remarkably scattered concept" (Pynchon 1968: 364). Stencil, like his V., lives in textual reality and perhaps Wittgenstein's "The world is all that the case is ..." used in the novel as a secret code, should also be read as its key (Pynchon 1968: 259). Stencil, as one of the characters put it "had left pieces of himself – and V – all over the western world" (Pynchon 1968: 364).

The V. in Stencil's father's files may refer to a woman as well as to Vheissu, or to both, and from Vheissu the clues lead to the South Pole and thence into the depth of the earth. Apocryphal or not, Vheissu is real enough for Godolphin who supposedly discovered it 1884, and for Foreign Office which wants to keep this discovery secret. For Godolphin it is a riddle – "a feral and lunatic dominion". (Pynchon 1968: 188), both terrifying and beautiful, though, as he says, there is nothing "supernatural" about it. "There is barbarity, insurrection, internecine feud" (Pynchon 1968: 155), "human sacrifice [...] volcanoes with cities inside them [...] iridescent spider monkeys [...] men in the hills with blue faces and women in the valleys who give birth to nothing but sets of triplets" (Pynchon 1968: 177). It is no different from any other "godforasken remote region except for its changing, shifting colors, as if you lived inside a madman's kaleidoscope" (Pynchon 1968: 155). Godolphin compares these colors to woman's skin, rainment which prevented him from understanding the "soul" of the place. "If it had a soul. Because their music, poetry, laws, ceremonies came no closer. Like the skin of a tattooed savage, like a woman" (Pynchon 1968: 155). The experience is maddening and haunting him for years until in 1989 he did what no man had ever done before him. He went to the South Pole, "one of the only two motionless places on this gyrating world" (Pynchon 1968: 189), to see what was "beneath her skin" (Pynchon 1968: 154), the skin of Vheissu. What he discovered at the Pole was "Nothing – there could have been no more entirely lifeless and empty place anywhere on earth" (Pynchon 1968: 189). Striking the ice he saw a strange light moving inside it and then he saw one of Vheissu's iridescent monkeys shimmering through the cristal ice at the bottom of the earth: "Staring up at me through the ice; perfectly preserved, its fur still rainbow - colored, was the corpse of one of their spider monkeys" (Pynchon 1968: 189). Godolphin is convinced that the monkey is a message left there especially for him which he reads as a sign of inanimatness and annihilation – "A mockery" (Pynchon 1968: 189),

If Eden was the creation God, God only knows what evil created Vheissu. The skin which had wrinkled through my nightmares was all there have ever been. Vheissu itself a gaudy dream. Of what the Antarctic of this world is closest to: a dream of annihilation (Pynchon 1968: 190).

Botticelli's Venus also a "gaudy dream of annihilation" and thus all V.'s mutations inscribing themselves upon the image of Vheissu may now be taken to signify the earth itself, the feminine earth also of Stockton's diamond. Stockton's readers will perhaps also recognize here the metaphor of the polar "nothingness" written into the shining core of the earth before Clewe discovered it to be a diamond. Upon entering the "Region of Nothingness" - the North Pole, the only sign of life, apart from the living whale, that the Stockton's expedition encountered was a polar bear encased in ice "as in a vast funereal casket" which had been there "for thousands of years" (Stockton 1900: 84). For the members of the expedition the bear is merely a natural phenomenon, for Stockton's readers inclined to read his signs along their metaphoric displacements, the bear may prefigure the doomed whale and through the whale tie up with the rocket encased in the earth and resting upon the shining diamond. When read in reverse order, from the core of the earth to the polar region, the rocket will also shine through the ice like Pynchon's "irridescent monkey", a "gaudy dream of annihilation", a message from Stockton's realm of technology reaching through V. to Pynchon's Gravity's Rainbow. And Margaret, the rocket's female double, will join the gallery of Pynchon's Vs. The last image in Adams' The Education are the seals Scott saw at the South Pole. He quotes Scott: "the seal seems often to crawl to the shore or ice to die, probably its instinctive dread of its marine enemies". "Nature has educated herself to singular sympathy for death" (Adams 1931: 501), is Adams' comment.

V. maybe then an object, a land as well as a human and a symbol. If she is Adams' nineteenth century woman already aligned with the dynamo, technologized, is she a victim of "dark" conspiratorial powers, as Adams would have it, or the instigator of chaos which she seems to embody and which Adams already saw around him? She may be both. As one of the characters put it "her etiology is war" since her presence usually signifies revolts, riots, political turmoil. Like Adams' Virgin she may also symbolize her untemporary history. "Socialist awareness grows, the tide is irresistible and irreversible", we read in V. "It is a bleak world we live in, [...] atoms collide, brain cells fatigue, economies collapse and others rise to succeed them, all in accord with the basic rhythm of History. Perhaps she is a woman. Woman are a mystery to me. But her ways are at least measurable" (Pynchon 1968: 380-381). "Measuring is Adams' method of cognition and the sentence sounds as though lifted from The Education. Faced with the problem of measuring the energy affecting human progress, Adams the historian, found that the Virgin, "symbol or energy" "the easiest to handle" (Adams 1931: 389). The Virgin's genealogy as immortalized in history, architecture, literature, art, archives, mythology and religion, provided Adams with a stable point of reference. The vantage from which at least, he could delineate the extent of growing anarchy in diachronic sequence. But as he writes, "In 1900 he entered a far vaster universe, where all the old roads ran about in every different direction, overrunning, dividing, subdividing, stopping abruptly, vanishing slowly, with sub-paths that led nowhere, and sequences that could not be proved" (Adams 1931: 400). This is Stencil's multiverse - synchronic, logocenterless, Derridian world in which he wants to reenact Adams' role. but where Adams could, nevertheless, still see history as progression ("inertia") moving towards whatever goal and "measure" it in culturally comprehensive symbols of the Virgin and the dynamo, Stencil is only a semiotician and his V signs blur into each other, endlessly defer, escape signification.

At the end of his search Stencil seems to have arrived at some understanding of V.'s meaning: "Events seem to be ordered into an ominous logic [...] V.'s is a country of coincidence, ruled by a ministry of myth. Whose emissaries haunt this century's street.[...] Could any of them create a coincidence? Only Providence creates. If the coincidences are real then Stencil has never encountered history at all but something more appalling" (Pynchon 1968: 423-424). V.'s etiology may not only be war also decadence which in Pynchon's novels' lexicon is equated with animateness, gradual loss of humanity: "Decadence ... is a falling away from what is human, and the farther we fall the less human we become. Because we are less human, we foist off the humanity we have lost on inanimate objects and abstract theories" (Pynchon 1968: 380). Stencil's discovery may then coincide with Adams' notion of entropic exhaustion of energy, of which Pynchon's V. could also be a manifestation.

Towards the close of *The Education*, writing about contemporary moral and political anarchy, Adams once again and for the lost time evokes the image of the Virgin:

The Virgin herself never looked so winning – so one – as in this scandalous failure of her Grace. To what purpose had she existed, if, after nineteen hundred years, the world was bloodier than when she was born? The stupendous failure of Christianity tortured history. The effort for Unity could not be a partial success; even alternating Unity resolved itself into meaningless motion at last (Adams 1931: 472).

Were Adams a Stencil he would have found an answer in his own text. Stencil with his propensity for connectedness would have pointed out to Adams that his nineteenth century woman is but a mutation of his Virgin/Venus, that "marrying" her to machinery must have bred a V. – a failed nun, a devout Roman Catholic and a Bad Priest; that the "meanigless motion" is perhaps a new dispensation whose meaning, like his history, is as yet not too clear but of which V. is a symptom, a sign or a goddess. Like Adams' Virgin in the 13th c., Pynchon's V. is also the goddess of art, the art of the 20th c. decadence and thus inanimateness – art created in her image. Stencil avoids any association of his V. with the Virgin, although, given his paranoid imagination, such association would he only natural. V's perverted Roman Catholicism and her adoration of crucifixion would make it credible. Instead he evokes the figure of Venus which in Adams' mythography is always associated with the Virgin and in Pynchon's text becomes a V.; like her country Vheissu a "gaudy dream of annihilation". Graceful Venus and Sinister V., they represent the two perennial female opposites in American literature, one angelic the other diabolic, in Pynchon's novel they shade into each other as he absorbs and transcends Adams' The Education. Behind the two of them hangs the shadow

of Stockton's Margaret. Like the Virgin she teaches love and order, sex, unity, and using the machine, the rocket as the medium of her teaching, to the point of impersonating one, she also becomes a version of V.

During one of her many peregrinations in search of V., Stencil runs into one Kurt Mondaugen, "a balding and porcine gentleman in a suit of European cut", who met V. in South-West Africa and who had worked "at Peenemunde, developing Vergeltungswaffe Eins and Zwei. The magic initial!" (Pynchon 1968: 211). Curiously enough Stencil does not follow the clue, as though he reserved in for a different fiction. Mondaugen will reappear in *Gravity's Rainbow* as one of the chief constructor of German rocket V.

Whatever Pynchon's Gravity's Rainbow is about, it is first of all the history of the rocket, the German rockets V1, and V2 (A4) and the story of a hunt for its latest version in the Zone of the post-war Germany, apparently fired at the end of the war with a man inside it. The German V-rocket is real enough, its fictionalized version is in the possession of international cartels, various secret state agencies, which form an ominous global conspiracy of "Them" – the select few who also control the lives of the preterite – the passed over – to follow the Puritan terminology used in the novel. The origin of this fictionalized, textual rocket can be as well sought for in Stockton's fiction. Not only did Pynchon resurrect the rocket that Stockton buried at Sardis in The Great Stone of Sardis, he could also find the birth of his conspiracy in another of Stockton's novels, The Great War Syndicate. Put together these two Stockton's novels read as a shadowy blueprint for Gravity's Rainbow.

The bomb that Clewe invented and buried at Sardis, Stockton had already used in his earlier novel The Great War Syndicate (1889). It relates the history of the war that broke out between the United States and Great Britain over the rights to the fishing grounds off Newfoundland "in the spring of a certain year not far from the close of the nineteenth century". Faced with defeat (Great Britain being still the greatest naval power in the world) the government of the United States placed the conduct of the war in the hands of a business consortium composed of 23 richest men in America. This faceless body of capitalists established the War Syndicate with the sole purpose to make profit from winning the war. It was agreed that the government would pay them a sum of money if they brought the War to a victorious end within a year. Should they fail, the loss would be theirs. It turned out that the Syndicate was already in possession of secret weapons, of which the most powerful were self-propelling rocket, or guided missiles, so powerful that only one a of them was capable of wiping out whole cities, ports, islands. In the course of the war the Syndicate made several demonstrations of the destructive power of its rockets but it was not until a portion of Wales was ripped off that the British were brought to terms and the war ended with accidental death of only one life. As a result of the peace treaty a new Anglo-American Syndicate was founded whose duty was to conduct the future wars and the "Instantaneus Motor Bomb", as the rocket was called, had to remain in the hands of this New Syndicate. Stockton ends his war narrative with a warning and a bit of enthusiasm.

Now there would be no mere exhibitions of the power of the Instantaneous

Motor Bomb. Hereafter, if battles must be fought, they would be battles of annihilation. [...] Whether or not the Anglo-American Syndicate was ever called upon to make War; it is not to be stated here. But certain it is that, after the formation of this Syndicate, all nations of the world began to teach English in their schools, and the spirit of Civilization raised her head with a confident smile (Stockton: 1900: 128).

In Pynchon's Gravity's Rainbow Stockton's Syndicate grows into "A Rocket-cartel, a structure cutting across every agency human and paper that ever touched it. Even to Russia, [...] a state that spans oceans and surfaces, sovereign as the International or the Church of Rome, and the Rocket is its soul" (Pynchon 1973: 566). Like Melville's whale Pynchon's Rocket is a symbol universalized in human consciousness, a subliminal owe and terror inspiring creature:

But the Rocket has to be many things, it must answer to a number of different shapes in the dreams of those who touch it – in combat, in tunnel, on paper – it must survive heresies shining, unconfoundable ... and heretics there will be: Gnostics who have been taken in a rush of wind and fire to the Rocket – throne. Cabalists who study the Rocket as Torah, letter by letter [...] its text is theirs to permute and combine into new revelations, always unfolding ... Manichaeans who see two Rockets, good and evil [...] Rocket to take us to the stars, and evil Rocket for the World's suicide, the two perpetually in struggle (Pynchon 1973: 727).

It falls beyond the scope of this work to even attempt a discussion of the symbolic meaning of Pynchon's Rocket or the thematic structure of his vast epic novel. Technology, philosophy, religion, economies, politics, nearly all aspects of contemporary history enter into the composition of the Rocket which, in its turn, symbolizing their meanings, still, like Adams' dynamo, it remains a hardly comprehensible quality. From the intertextual perspective, however, it is possible to read it as a mutation of V. in her ultimate transformation and, thus, also as a textual progeny of Adams' Venus and her nineteenth century female version brought into figural play with the dynamo in *The Education*, as well as an extension of Stockton's antropomorphized bomb. It recalls Melville's whale in its subliminal phallic aspect and like the whale and the dynamo it is also a text.

The following fragment are meant to show that Pynchon's Rocket harks back to, supplements, transforms and completes Stockton's and Adams' metaphors. Waiting to be fired with young Gottfried in its bowels the Rocket is a sentient sexual object; a humanized machine, male and female – a penis with its own vagina, a womb. Its "incongruous" perspective is derived from human anatomy and the lexis of love and divinity.

A giant white fly: an erect penis buzzing in white lace, clotted with blood and sperm [...]. He is gagged with a white kid glove [...] the glove is the female equivalent of the Hand of Glory

[...]. The cavity into which the Hand fits [...] is the womb into which Gottfried returns [...] The two, boy and Rocket concurrently designed [...] They are mated to each other [...] and one of the valves [...] one pressure switch, is the right one, the true clitoris, routed directly to the nerves system. She should not be a mystery to you Gottfried. Find the zone of love, lick and kiss [...] Here is the sergeant bringing the Zündkreuz. The Pyrotechnic Cross to fire you off (Pynchon 1973: 750-751).

Mondaugen, one of the Rocket's constructors and one of the German mystics "who grew up reading Hesse, Stephen George and Richard Wilhelm, ready to accept Hitler on the basis of Demian – metaphysics, seemed to look at the fuel and oxidizer as paired apposites, male and female principles uniting in the metaphysical egg of the combustion chamber: creation and destruction, fire and water, chemical plus and chemical minus" (Pynchon 1973: 403). What in Stockton's text is only adumbrated through figural displacement, implicit, here is fully brought to light. The gathering of the opposites, male and female in the inanimate body of Stockton's bomb that gave birth to his puny and weak, hybrid image of birds in the tomato-can, prefigures nevertheless Pynchon's powerful symbol of the Rocket which will also mutate into the atom bomb. In its sacred and mystical aspects, Pynchon's Rocket brings into its anatomy, as it were, the male energy contained in Adams' dynamo and fuses it finally with sacral sexuality of the Virgin.

V. makes her reappearance in *Gravity's Rainbow* as Virgin, Venus, a White Goddess at the moment of the atomic bomb explosion at Hiroshima on July 4, 1945 (Virgo).

At the moment it happened the pale Virgin was rising in the east, head, shoulders, breasts, 17°36' down to her maidenhead at the horizon. A few doomed Japanese knew of her as some Western deity. She loomed in the eastern sky gazing down at the city about to be sacrified ...The first burst came roaring and sovereign (Pynchon 1973: 694).

The images which accompany her appearance: the phallus, the Cross and the Tree – sacred and sexual, nearly obscene – are used throughout the novel as the Rocket's metaphoric substitutes. Slothrop, the Rocket – Man, hallucinates them into a press photo of the Hiroshima atom bomb explosion that he found in an old newspaper towards the end of his peregrinations in search of the Rocket, his double, in the Zone of the occupied Germany:

a giant white cock dangling in the sky straight downward out of the white pubic bush "over the letters" MB DRO ROSH; (Bomb dropped on Hiroshima) ... The white image has the same coherence ... as the Cross does. It is not only a sudden

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white genital onset in the sky – it is also, perhaps, a tree (Pynchon 1973: 693-694).

These images transposed upon the "pale" Virgin and the bomb, the Rocket's most deadly metamorphoses, spell death and destruction here, but they also symbolize rebirth, transcendence and unity of opposites. The Cross is not only the obvious Christian symbol but also the emblem of the Rocket. Seen from below "the four fins of the Rocket made a cross, another mandala ... opposites together" (Pynchon 1973: 563). In the topography of Gravity's Rainbow's esoteric symbolism, mandala merges with the Bodenplatte (the ground plate – steel launching pad for the Rocket) - "the axis of particular Earth, a new dispensation, brought into being by the Great Firing", into which the Tree of Life is "rooted" (Pynchon 1973: 753). The Tree is the cabalistic symbol of life (The Tree of Life) – the Celestial Chariot or the Body of God – and also the route of ascent to the Throne of God and descent to the Kingdom of Death, the earth, which is also the route of the Rocket, the "Great Firing". Thus, the Bodenplatte corresponds to the Lowest Sephira in the Tree of Life, Malkhut – Kingdom or Dominion – divinity immersed in nature, known also as the Mother, the region of femininity, and the axis mundi - the center of the world in the mandala, from which proceeds the Great Firing, the Rocket. Both, the Tree and the mandala are male – female unities. "Beyond that simple steel erection", we read in *Gravity's Rainbow*, "the Rocket was an entire system wan away from the feminine darkness, held against the entropies of lovable but scatterbrained Mother Nature" (Pynchon 1973: 324). As these images fade into each other they reemerge in the figure of the Virgin - the metaleptic approximation of the Rocket and also its progenitress. The phallic Rocket brought to life by feminine earth whose ascent in Gravity's Rainbow will be "betrayed to Gravity as it rises on the prophesy of Escape", transcendence (Pynchon 1973: 758). As though incepted in the womb of the earth, or won away from the "feminine darkness", it is bound to return to its source: "It begins Infinitely Below The Earth Goes Infinitely Back into The Earth, it is only a peak that we are allowed to see, the break up through the surface out of the silent other world, violently ... a very large transfer of energy: breaking upward into this world, a controlled burning braking downward again, an uncontrolled explosion" (Pynchon 1973: 726).

The Rocket is an ambivalent symbol. As the Tree of Life "rooted" into the Bodenplatte, the axis mundi of the mandala and its own lowest Sefira Malakhut, the region of the Mother, it is a sacred object, the celestial Chariot or the body of God as well its own route, a passage for its own firing. Reaching upward towards the stars and downward into the earth, it recalls the image of Henry Adams cathedral contained in the last sentence of Mont-Saint-Michel and Chartres: "The delight of its aspiration is flung up the sky. The pathos of its self-distrust and the anguish of doubt is buried in the earth as its last secret" (Adams 1961: 370). This is the Chartres Cathedral, or the cathedral at Rheim, or Amiens, or Bourges, seen now by Adams from the perspective of the age of the nineteenth century multiplicity, complexity and contradiction as devoid of its thirteenth century context of faith, harmony and the organic unity of art, God and thought which the Virgin provided.

Pynchon's readers of Adams' Mont-Saint-Michel and Chartres will perhaps notice an analogy in the fact that the Chartres Cathedral was not merely intended for the Virgin but willed into existence by her. Adams writes about the building of the Cathedral as though the Virgin was its chief architects and the builders only reading her blueprints, and complying with her wishes: "Every day as the work went on, the Virgin was present directing the architects ..." (Adams 1961: 108). Norman Mailer in A Fire on the Moon, who like Henry Adams refers to himself in the third person, as Aquarius, and also like Adams before the dynamo in the Paris Exhibition, standing in awe in the vehicle Assembly Building housing the Apollo - Saturn rocket, calls it "the first cathedral of modern technology" and the rocket "a Leviathan ... ready to ascent the heavens" (Mailer 1970: 54). The vastness of the structure brings to mind the world's greatest churches "Alhambra, Santa Sofia, Mont-Saint-Michel, Chartres, Westminster Abbey, Notre Dame" (Mailer 1970: 55). The astronaut Mike Collins called Apollo 11, the rocket which took man to the moon, his "mini – cathedral" (Mailer: 1970: 196). To describe the first moment of Apollo – Saturn lift-off on its way to the moon Mailer brings in both Melville, and indirectly we may say, also Adams, the whale and the Virgin:

> Two mighty torches of flame like the wings of a yellow bird of fire flew over a field, covered a field with brilliant yellow blooming of flame, and in the midst of it, white as a ghost, white as the white of Melville's Moby Dick, white as the shrine of the Madonna in half the churches of the world, this slim angelic mysterious ship of stages rose without sound out of its incarnation of flame and began to ascend slowly into the sky, slow as Melville's Leviathan might swim, slowly as we might swim upwards in a dream looking for the air (Mailer 1970: 94).

Resting on its pad and waiting to be fired the rocket is sacred, masculine and feminine for Mailer: "Sainted leviathan, ship of space, she was a planetary traveler" (Mailer 1970: 81).

Pynchon's Rocket in its upward surge – a phallus with feminine "nervous system", is animated matter, controllable and uncontrollable, as though it had a mind of its own. Mailer suspects that all machines have one (see his chapter on "The Psychology of Machines" in A Fire on the Moon). As a metaphor it reflects the 20th century consciousness shaped by the increasing technologization of life. And also as a metaphor it would perhaps define for Adams the sex of his dynamo and also its "energy". Pynchon's postmodern allegory epitomizes the ultimate fusion of the feminine with the machine, which in The Education, though attracted to each other, still as symbol had to remain in the confines of their generic categories but as abstraction they already manifested their kinship in Adams' notion of unity in diversity which he could see taking shape in his own time and already moving towards some future entity to fully reveal itself.

Of the 400 characters appearing in Gravity's Rainbow, all of which to greater or lesser degree converge upon the Rocket, or whose destinies intermingle with

the Rocket's history, Tyrone Slothrop is its closest human approximation. Conditioned sexually in his early childhood to a chemical ingredient later to be used in the Rocket, he remains under secret surveillance of international cartels. In War - time London he is a lieutenant in the American Army and his frequent sexual chance encounters anticipate the targets of German V2 rockets. Still "owned" and secretly controlled by "Them", he is send to Europe as a decoy in the hunt for the latest version of the Rocket, supposedly constructed at the end of the war. In the French Riviera, in the Herman Goering Casino, he is initiated in the anatomy of the Rocket by Katje Borgesins, his chief initriatrix, a rocket expert and the agent of "Them". His studies of the text of the Rocket's technology is coupled with frequent and violent love making with Katje which is obviously meant to introduce him to the "femaleness" of the Rocket and let him discover his own Rocket self. As though impersonating the Rocket he begins to think of himself as being his own phallus; and there is also a side of Katje he can never comprehend. As she is introducing him to the Rocket's sexual mystique, she can be tender and understanding but also brutal, hardly human. She would never let him see her "rentral side ... terrible beastlike change coming over muzzle and lower jaw, block pupils growing to cover the entire eyes space" (Pynchon 1973: 196). As though she were the Rocket approaching its orgasm - orgasmic explosion and thereby its own destruction. In their sexual union they reenact the Rocket's firing, its flight and death. In its bare outline the Herman Goering Casino episode is reminiscent of \$tockton's novel in that in both cases it is the woman who brings the man to the recognition of the rocket's peculiar anatomy.

Not only can the anatomy of the rocket be transcribed in terms of human physiology, its biography, its "Life" can equally be seen as paralleling human life. Born in the womb of the earth, its transcendence "betrayed" to gravity, it falls to assimilate again with the earth - "plunging, burning towards the terminal orgasm" (Pynchon 1973: 223). During its life span the Rocket is controlled by unknown forces and its behavior can not be predicted. After being launched, Katje says "All the rest will happen to the law of ballistics. The Rocket is helpless in it. Something else has taken over. Something beyond what was designed in" (Pynchon 1973: 223). Programmed to hunt the Rocket, and like the Rocket launched into the Zone, where he becomes a legend known as the Rocketman, Slothrop gradually escapes control of "Them" until his final, physical "scattering". Moving along his own parabola he reenact the Rocket's trajectory. According to one of stories circulating about him in the Zone:

> [he] was sent into the Zone to be present at his own assembly - perhaps, heavily paranoid voices whispered - his time's assembly - and there ought to be a punch line to it, but there isn't. The plant went wrong. He is being broken down instead and scattered (Pynchon 1973: 738).

Towards the end of the narrative Slothrop fades out of the text or into the text like most of the characters and also Katje.

Katje is Slothrop's female version, a Rocketwoman. Unlike V., whom she resembles in great many respects, she is a full-blooded woman and, perhaps, an epitome of nearly all Pynchon's female characters. In her role of Slothrop's initriatrix into the lore of rocketry through the act of sex, she looks backwards to Stockton's Margaret and as the woman predicated upon the machine she already inhabits Adams' "new field" and with her presence defines it for his nineteenth century woman. "(All) her bets bare in, she has only a tedium now being knocked from one room to the next the sequence of numbered rooms whose number do not matter, till inertia brings her to the last. That is all" (Pynchon 1973: 209). Both, Adams and Pynchon use "inertia" as a trope delineating the fate of woman. While in Adams it implies the course of the procreative force ensuring continuity, it exhausts itself in Pynchon, as though the woman did make her choice between "church, family and machine". Adams feared that some unspecified dark, malevolent force might divert the woman from her natural biological path, her "inertia", and Pynchon spelled out this force in the conspiracy of "Them". But then Katje is also capable of making her own choice and aligns herself with the "Counterforce", which in Pynchon's novel, is the growing force of the preterite opposing the death - mongering "Them". She thus inscribes Adams, "new field" and also defers it, blurs its meaning. Like the Rocket which she metaleptically embodies she also escapes final definition.

The Machine in Henry Adams...

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