

**KURT VONNEGUT'S *THE SIRENS OF TITAN*:  
HUMAN WILL IN A NEWTONIAN NARRATIVE  
GONE CHAOTIC**

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Every pattern may in fact be part of a larger pattern outside its control, [...] the spectacle of the plotter plotted [...]. Can the binary opposition of fixity/fluidity be mediated by some third state or term? (Tanner 1979: 183, 19)

This paper intends to explore the notion of human identity in its relation with the much-debated issue of free will as portrayed by Kurt Vonnegut's 1959 novel *The Sirens of Titan*. The key point in my proposal shall be the idea that, written at the very threshold of the postmodernist period, *The Sirens of Titan* invites a shift of perspective in the interpretation of "reality" —namely, a transition from the modern Newtonian to a postmodernist chaotic scientific paradigm. Thus, I shall try to unravel how there is in the novel an implicit counter-message parallel to and subtly undermining its apparent affirmation of determinism. For this purpose, I shall focus on the way some passages in the novel reflect some of the major theories about the chaotic behavior of molecular systems as developed by thermodynamicist Ilya Prigogine and thermodynamicist, philosopher and historian of science Isabelle Stengers, basically temporal irreversibility and the combination of chance and necessity in molecular creative processes. Finally, I shall analyze the metaphysical macrocosmic implications of Vonnegut's novel —first, as an answer to the individuals' felt inability to find their identity through decision-making; and second, as a way out of constraining, totalizing explanations of the world and of the collective paranoia which the search for those explanations may bring about.

In the sci-fi guise through which *The Sirens of Titan* is presented, the novel can be read as a landmark in *scientific fiction* insofar as it forces a shift in the readers' views of the universe and human experience that will enable them to handle the apparent inner contradictions of the novel's implied premises.

Some critics assert that *The Sirens of Titan* centres on the conflict between the belief in free will and a deterministic understanding of the world and of human "progress", in which it is the latter, they agree, that gets the upper-hand (cf. Silver 2000; Klein 1998; Lundquist 1980: 29; Mayo 1977: 18-19). At first sight, indeed, the novel looks like a bleak but definitive affirmation of a deterministic universe ruled by some sort of unknowable external forces. These forces apparently control and manipulate every human being's actions and thoughts for their own mean purposes. And this human inescapability from a "destiny" which one cannot even understand is represented in the novel as having two possible consequences: either apathy and self-abandonment to those mysterious forces, or engagement in a personal quest to discover the meaning of one's role in the universal design.

Both attitudes find expression in *The Sirens of Titan*. The first is encouraged by Winston Niles Rumfoord's Tralfamadorian, deterministic view of events, epitomized in the motto he repeats in almost the same wording: "everything that ever has been always will be, and everything that ever will be has been" (1996: 19-20, 201). The second attitude clearly stems from a centuries-long mechanistic Newtonian interpretation of the world: the need of human reason to account for everything that happens and exists by means of the law of cause and effect. Every event and experience must have a reason or come about as the consequence of some previous thing for the "Enlightened" mind to feel in charge of what is outside itself. In fact, the human need to rationalize not only the workings of the self but also everything different from it seems to be an inevitable result of the nature of human beings as symbolic animals. According to Robert Nadeau (1981: 5), the acquisition of symbolic language by human beings resulted in the separation of their individuality from the rest of the world, while external "reality" became fragmented into multiple separate categories. And the only way for those symbolic beings to relate to those categories and make sense of them was, paradoxically, by creating patterns in which all those categories could fit by means of the symbolic language which had estranged and fractured human experience.

Hayden White describes the human tendency to narrativize isolated events in order to make them meaningful as the outcome of "a desire to have real events display the coherence, integrity, fullness, and closure of an image of life that *is and can only be imaginary*" (1981: 23; emphasis added). It is this need to find or create patterns, Jerome Klinkowitz argues, that defines Vonnegut's characters and plots. Indeed, he goes on, the novelist's training as both anthropologist and fictionist has taught

him that "men and women [...] are the only creatures in nature whose lives seemed bedeviled by having to find a purpose for things, a meaning for existence that in natural terms would rather follow its own rhythms of being" (1998: 8). This need for a global explanation of human affairs may have, in turn, two distinct consequences: for one, the individuals may unconsciously *project* an invented, conveniently meaningful narrative in which all the pieces fit together. Or they may be infected by one of the more common diseases of the current American ethos, as Tony Tanner suggests:

There is [...] an abiding American dread that someone else is patterning your life, that there are all sorts of invisible plots afoot to rob you of your autonomy of thought and action, that conditioning is ubiquitous. [...] The possible nightmare of being totally controlled by unseen agencies and powers is never far away in contemporary American fiction. [...] Confronted with this, American hero and author alike tend to react with a somewhat paranoid worry about who or what implanted those "underlying patterns" which programme their responses (1979: 15, 421).

These two possibilities are differently embodied in *The Sirens of Titan* and constitute the basic pillars of its structure. The first one is activated by Malachi Constant's initial belief that, given the meaning of his name ("faithful messenger" (14)), he was to be gifted with "a single message that was sufficiently dignified and important to merit his carrying it humbly between two points. [...] What Constant had in mind, presumably, was a first-class message from God to someone equally distinguished" (14). This character's attitude represents not only the people's need to make "purposeful" sense of their lives, as conventionally understood, but also their wish that the "purpose" involved be outstanding and that they be the protagonists.

The two possibilities fuse most conspicuously in the figure of Winston Niles Rumfoord. Being "chrono-synclastic infundibulated" (11) and therefore able to see all temporal dimensions —past, present and future— simultaneously, he jumps to the conclusion that everything in the history of humankind follows a pre-established order programmed by some extraterrestrial robots from "Tralfamadore" to serve their own ends (190-1). Rumfoord is both "plotter" and "plotted", to use Tanner's terms (1979: 183): enjoying a global view of time, he "plots" or imposes a totalizing "meaningful" pattern to what he sees (his conviction that history is governed by Tralfamadorians), while feeling "plotted" in it (he believes the accident by which he became chrono-synclastic infundibulated was just another Tralfamadorian maneuver to achieve their ends through his aid). Rumfoord, therefore, unconsciously gets trapped in the pattern of meaning he himself imposes, becoming a paranoid victim of his own forceful projections.

From the start, the reader tends to identify with this character insofar as they share the knowledge of what the whole succession of events eventually amounts to and

this viewpoint places them in a superior, ironic position with respect to the other characters in the novel. Consequently, the reader is forced to adopt in a straightforward manner the bleak, deterministic view of the universe that the novel seems to present. However, this view turns out to be nothing but a reflection of Rumfoord's paranoid machinations. Rumfoord is clearly depicted as a selfish, blinded man who consciously and deliberately manipulates hundreds of people so that everything fits into the scheme he has elaborated. This forcing of events inevitably brings about a suspicion that "destiny" may be not so inevitable after all and that there may be some place for free will in the world. This initial little fracture in the identification reader/character is supposed to widen the more as the reader realizes how contradictory Rumfoord's ideology is. On the one hand, he expounds the creed that human beings are just the victims of a series of accidents (161). But, on the other, he seems to ignore the *chance* aspect inherent in accidents and interprets them as part of the extraterrestrials' deterministic plan for the universe—with the paradoxical result that, as Stanley Schatt has stated, "he creates the Church of God the Utterly Indifferent because he cannot tolerate the thought that he does not control his own destiny" (1976: 39). That is to say, he cannot even face the ideological implications of his order-imposing activities.

The fact that such a goal-oriented man suffers from this inner conflict raises the issue of the relationship between *free will*, or the capacity to decide one's destiny, and *human-ness* itself (cf. Mayo 1977: 51; Schatt 1976: 32). For, if human beings are relegated to the position of mere pawns in a superior entity's prearranged game, they immediately lose their human dignity and status, and become little more than flesh-and-blood automata. On these assumptions, *The Sirens of Titan* has been frequently interpreted as "an expression of the belief that we are imprisoned in a universe that lacks meaning and that there is no way to make sense of the human condition [...] by showing everything as meaningless, [...] a statement of human absurdity" (Lundquist 1980: 29). My point here is to argue how this kind of limiting approach to Vonnegut's novel is caused by a failure to recognize the *shift of scientific paradigm* that underlies the logic of the story: the conflict between a *Newtonian* and a *chaotic* reading of "reality". As Prigogine and Stengers put it, Newton sought "a vision of nature that would be universal, deterministic, and objective inasmuch as it contains no reference to the observer, complete inasmuch as it attains a level of description that escapes the clutches of time" (1985: 213). The transcendence of this dependence on time can be fully appreciated in the figure of Laplace's demon—a creature who, interestingly and by no means accidentally, bears a strong resemblance to Winston Niles Rumfoord. According to Eric Charles White, Laplace's demon is "that creature of Newtonian science who, once apprised of the position and motion of all masses in the universe, could both predict the future and retrodict the past. [...] "For it [Laplace wrote], nothing would be

uncertain and the future, as the past, would thus constitute a simultaneity in the mind of this entity" (1990: 103). White goes on to explain how

Prigogine and Stengers suggest that the deterministic universe of *classical physics*, in which past and future are merely attributes of a theoretically graspable present totality, offers *spiritual consolation and relief from anxiety* by discovering an *imaginatively satisfying design* in nature. That is to say, Newtonian mechanics supports an essentially cosmic vision of the universe as an ordered, harmonious whole (1990: 103; emphasis added).

It is the influence of this Newtonian frame of mind that positions readers and critics on Rumfoord's side, who thereby see the novel's plot as the character sees the plot of history. Yet, they seem to forget that, having precise knowledge of what the future will be like, he interprets it *retrospectively*, which allows him to impose patterns that transform accidental isolated events into meaningful and purposeful ones. At the same time, critics also seem to ignore the fact that Rumfoord is forcing some of those events to happen the way he has "fore-seen" them—which implies some fear on his part that they would not really take place without his help. It is also worth noticing that the contextualization of his "task" as the engine motivating those events involves the use of traditional science-fiction motifs: antennas implanted in humans' skulls, extraterrestrial robots, spaceships or life on other planets, to mention a few. This fact makes it even harder to take Rumfoord seriously as bearer of the novel's "message" or as the author's spokesman.

Even though what seems to dominate in the novel is the characters' yearning for a totalizing grand narrative that may account for everything that happens, there are many hints in the text that point in a different direction. There is a straightforward statement by Rumfoord whose possible implications critics have systematically ignored—perhaps to avoid the contradictions it reveals at the core of his attitude. Yet, it leaves no room for doubt about the scientific frame of mind which the novel is demanding from the reader: "Things fly this way and that, my boy, [...] with or without messages. *It's chaos*, and no mistake, for the Universe is just being born. It's the great *becoming* that makes the light and the heat and the motion, and bangs you from hither to yon" (28; emphasis added).

The explicit allusion to "chaos" directs the reader's attention to the field of research in which studies on chaos theory were born, thermodynamics, inviting a parallelism between molecular and macrocosmic systems. As Prigogine and Stengers point out, before colliding, molecules behave *independently* of one another, and it is only the outcome of their collisions that creates a harmonious, coherent pattern (1985: 246):

A system far from equilibrium may be described as *organized not because it realizes a plan alien* to elementary activities, or transcending them, but, on the contrary, because the amplification of a microscopic fluctuation occurring at the “right moment” resulted in favoring one reaction path over a number of equally possible paths. Under certain circumstances, therefore, *the role played by individual behavior can be decisive* (176; emphasis added).

The *free* actions of each individual in the universe —like a single molecule in a system— can therefore have the power to change the overall development of the structure. Nevertheless, it is not total anarchy at the hands of human beings that rules the cosmic sphere. As Eugene Debs Hartke, the protagonist of Kurt Vonnegut’s *Hocus Pocus* puts it, “[...] all you can do is play the cards they deal you” (1990: 292) —but you *can* play them anyway. To use Prigogine and Stengers’ terms once more:

The “overall” behavior cannot in general be taken as dominating in any way the elementary processes constituting it. Self-organization processes in far-from-equilibrium conditions correspond to a delicate interplay between chance and necessity, between fluctuations and deterministic laws. We expect that near a bifurcation, fluctuations or random elements would play an important role, while between bifurcations the deterministic aspects would become dominant (1985: 176).

This interplay of necessity and chance (or time and luck) as the ruler of the universe is a recurrent theme in Vonnegut’s oeuvre. It is clear, for instance, in the “prayer” Billy Pilgrim, the protagonist of *Slaughterhouse-5* has framed in his office wall and which is engraved on his lover’s locket as well: “God grant me the serenity to accept the things I cannot change, courage to change the things I can, and wisdom always to tell the difference” (1991: 44, 153). Likewise, this is one of the central notions in the revision of the Book of Genesis Kilgore Trout (Vonnegut’s alter ego) makes in Vonnegut’s latest novel, *Timequake*, and which he explains as follows: “I hate to tell you this, friends and neighbors, but we are teensy-weensy implications in an enormous implication” (1997: 28).

This “order out of chaos” view is notably metaphorized by the narrator’s description of the Rumfoord estate garden when Constant first enters it —a passage that becomes an utterly self-conscious epitome of what the whole book is about:

The turns in the path were many, and the visibility was short. Constant was following a damp green path the width of a lawn mower—what was in fact the swath of a lawn mower. Rising on both sides of the path were the green walls of the jungle the gardens had become.

The mower’s swath skirted a dry fountain. The man who ran the mower had become creative at this point, had made the path fork. Constant could choose the side of the fountain on which he preferred to pass. Constant stopped at the fork, looked up [...].

Impulsively, Constant chose neither one fork nor the other, but climbed the fountain itself. He climbed from bowl to bowl, intending when he got to the top to see whence he had come and whither he was bound (13).

On the one hand, this passage is an overt metaphor for a free conception of a “creative” universe insofar as the path that leads to the destination (the Rumfoord mansion) *bifurcates*, forcing the pedestrian to *choose* one way or another around the fountain. This combination of *necessity* (there is one single path) and *chance* (it forks and he must choose) is inherent to the process of collisions and consequent expansion that characterizes molecular systems in far-from-equilibrium conditions. The parallelism is in turn reinforced by the fact that “the visibility was short”: following the arrow of time, human beings can never predict what the future will be like, as we can only see what lies ahead up to the next bifurcation point. On the other hand, the scene also epitomizes the Newtonian attitude towards complex systems: Malachi “looks up” as if for instructions from The Grand Designer, and decides to avoid any chance element by choosing neither bifurcation. Instead, Malachi creates a *third* path in this manner: he climbs the fountain so as to get a *global* perspective of past and future: where he has come from and where he will arrive.

In addition, the fact that Constant has to follow a lawn mower swath to cross the jungle that the garden has become indicates that it is the human subject who “mows” his or her own path across the jungle of life —a clear recognition of the power of the individuals’ capacity to create their own destiny. The passage might be interpreted, as well, as a reminder that everybody impersonates the role they created for themselves in the narrative they built to come to terms with their apparently meaningless lives. As Thomas R. Holland explains, human predicament in Vonnegut’s work is that “man attempts to make order out of chaos. The universe is absurd, unintelligible, but man must pretend that he understands it and must try to exert control over it” (1995: 54).

Another significant issue raised by studies in thermodynamics is what Eddington has called the “arrow of time” (cf. Prigogine and Stengers 1985: xix): time can only flow towards the future, never turn backwards toward the past. This “irreversibility plays an essential role in nature and lies at the origin of most processes of self-organization” in molecular —as well as in macrocosmic— reactions (8): it is “a manifestation of the fact that the future is not given, that, as the French poet Paul Valéry emphasized, “time is construction”” (16).

This change in perspective as regards the nature of time, flowing always toward the future according to the thermodynamic “order out of chaos” paradigm, in opposition to the Newtonian notion that past, present and future fuse in a static whole which Laplace’s demon was able to transcend, is the key for bringing to light

what is ultimately wrong in—and the cause of—Rumfoord's deterministic interpretation of universal development: he violates the arrow of time—something that cannot actually be done—and, consequently, he can observe the “chaotic” behavior of the cosmos backwards<sup>1</sup> and thus consider it determined in advance.

The inadequacy of Rumfoord's perspective is suggested in the novel through the use of “spirals”, a recurrent term in the heterodiegetic narrator's accounts: “Titan describes [...] a spiral around the sun. [...] Winston Niles Rumfoord and his dog Kazak were wave phenomena—pulsing in distorted spirals [...]. For reasons as yet mysterious, the spirals of Rumfoord, Kazak and Titan coincided exactly” (187), and Chrono's good luck piece is a fragment of a spiral of steel strapping that *accidentally* snarls around a worker's ankle in a school tour to a factory (102). This motif connects again with chaos theory, which has demonstrated how the *becoming matter* that results from particle collisions appears in photographs as “graceful, spiraling lines” (Nadeau 1981: 18). Yet, the narrator says that Rumfoord's spiral is “distorted” (11, 187). It is compared to the white staircase in his mansion, which is described as “a counter-clockwise spiral” (29; emphasis added) and clearly points to his mistaken point of view. Thus, if Rumfoord—and the reader with him—were a man of the thermodynamic age instead of a Newtonian one, he would have realized how everything was just a series of *accidents* whose succession led to Salo's accidental reception of the piece he needed to repair his spaceship—not an inevitable sequence of extraterrestrial manipulations of world history to achieve his personal ends.

The shift in scientific paradigm may in turn be read as a correlate of the evolution from the modernist to the postmodernist ideological set-up taking place at the time *The Sirens of Titan* was written. Vonnegut's novel launches a satiric comment on the modernist ethos and its failure to provide an answer to the epistemological questions it raised. The modernist writers' beliefs in the coming of a revelation or “moment of truth” are parodied by recurrent allusions (34, 168) coupled to the eternal deferral of that moment and the harmful—paranoid—effects this frustrated quest for a vision of integrated illumination can lead to.

In contrast, chaos theory, like postmodernism, “shifts attention to those aspects of reality that characterize today's accelerated social change: disorder, instability, diversity, disequilibrium, nonlinear relationships (in which small inputs can trigger massive consequences) and temporality—a heightened sensitivity to the flows of time” (Toffler in Prigogine and Stengers 1985: xiv-xv). What is more important, not only do postmodernism and chaos theory alike focus on diversity and multiplicity; they do so by paying attention to the individual aspects of a multi-vocal “reality” in fragmentation: the different scales at which “molecules” go on colliding and creating larger scales of signification and *lateral* patterns of complexity are to

be observed independently, shattering the old hierarchies that stem from integrative discourses.

Looking at one of those scales, the novel seems to suggest how moral values like love and friendship can make individuals' lives meaningful by themselves, with no need for transcendence or larger-scope narratives (cf. Vit 1997; Huber 1999). This message is explicit in Constant's late discovery that “a purpose of human life, no matter who is controlling it, is to love whoever is around to be loved” (220) and in the character's final reunion in heaven with his best friend, Stoney Stevenson (222). This emphasis on the importance of human communion is reinforced by the possibility of communication, which was reduced to scarce, fruitless attempts when people became victims of their search for a transcendent purpose in human existence: the soldiers on Mars who had an antenna implanted in their skulls according to Rumfoord's plan were allowed a few times “to look around and to send messages with their eyes, *if they had messages and could find receivers*” (71; emphasis added).

As a final remark, it is worth noting how the sense of closure provided by this belief in the power of love and communication emerges as a *tour de force* imposed upon the narrative structure to somehow lessen the overall bleakness of the plot, despite its connection with the narrator's retrospective statement in the first line of the novel that “EVERYONE now knows how to find the meaning of life within himself. But mankind wasn't always so lucky” (7). Yet, however skeptic about the coherence of this paradoxical “happy ending” the reader may be—or, more precisely, because of that very paradoxical quality—the moral ending can be recognized as the novel's last attack on the validity of any closed, self-contained and coherent explanations—a glimpse of the postmodernist ethos which, as I have tried to demonstrate, reveals the ultimate intent of the text. As Linda Hutcheon puts it, “the paradoxes of postmodernism work to instruct us in the inadequacies of totalizing systems and of fixed institutionalized boundaries (epistemological and ontological)” (1988: 224). And, as she points out taking on David Caute's views on metafictional works, “if art wants to make us question the “world”, it must question and expose *itself* first” (36; emphasis in the original).

To sum up, the vision of human identity and the role of free will in the development of human affairs in *The Sirens of Titan* can be fully understood only when the reader accepts the novel's invitation to interpret the universe not as a static entity outside the clutches of time but as an eternal process of becoming or self-generation. This change of perspective results from a shift of scientific paradigm that goes hand in hand with the cultural and ideological evolution that was being consolidated at the moment of the novel's publication in 1959—from the modernist obsession with the discourse of integrative “revelation” to a postmodernist reaction against the excesses of narrative totalization.

## Notes

1. The same conception of the development of human and cosmic affairs is beautifully reworked in *Timequake*, where the whole universe moves a ten-year step backward "making everybody a robot of their own past" (1997: 111), unable to change the least bit of what the past during that lapse of time had been. If reversibility is possible, the novel suggests, it is so only to demonstrate that it is not. However, this step back is by no means deterministic, as *free will* "kicks in again" everywhere when the moment in which the timequake had taken place is reached for the second time.

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