

*Dominika Oramus*  
University of Warsaw

## TWO EXERCISES IN CONSILIENCE: ANNIE DILLARD AND KURT VONNEGUT ON THE GALAPAGOS ARCHIPELAGO AS THE ARCHETYPAL DARWINIAN SETTING

### Abstract

The aim of this essay is to compare how Darwinian references are used in the writings of two late 20<sup>th</sup> century American authors, Annie Dillard and Kurt Vonnegut who both choose the Galapagos archipelago as the focal setting of their symbolical narratives, as we see in Vonnegut's novel *Galápagos* and in Dillard's essay "Life on the Rock: the Galápagos." As far as Dillard's prose is concerned, she also depicts the archipelago in other short narratives from *Teaching a Stone to Talk* and *Pilgrim at Tinker Creek*. Although neither Dillard nor Vonnegut have a conspicuously political agenda, they both consider the theory of evolution a heavily ideological subject and both apply the Darwinian paradigm to describe nature and the human race within nature.

The turn of the millennium debate concerning the relationship between the sciences and the humanities is one of the most exhilarating issues in the contemporary intellectual life of the West. Ever since Edward O. Wilson advocated 'consilience' among all the branches of learning in the last decades of the 20<sup>th</sup> century, neo-Darwinist scholars have dreamed of charting an integrated body of knowledge extending from the theories of narratology and aesthetics all the way to theories explaining how atomic particles and photons behave. The only way for researching such a vast territory is within the Darwinian paradigm of evolutionary studies. Darwin's theory fascinates numerous scholars and writers precisely because of its universality: it brings an enormously large range of phenomena (from the scope of psychology, geology, biology, anthropology, and many other branches of science) within the simple compass of casual explanation.

The theory of adaptation by means of natural selection is crucial for the contemporary worldview and yet it stirs a lot of controversies. In Britain, the homeland of both Charles Darwin and Richard Dawkins, novelists reference the theory of evolution and describe 19<sup>th</sup> century Darwinian naturalists in order to discuss such issues as religion, rationalism, and the human nature. Antonia Byatt in *Angels and Insects* depicts the mid-Victorian spiritual crisis evoked by the publication of *On the Origin of Species*; Graham Swift in *Ever After* focuses on the loss of faith of the first readers of Darwin's book; Julian Barnes in *Before She Met Me* applies evolutionary psychology to describe jealousy; Hilary Mantel in *A Change of Climate* poses questions concerning the reconciliation of Darwinism and Fundamentalist Christianity. All these authors, among many others, look back to previous epochs – the Victorian era or the distant past of the human race – in order to explain diverse aspects of the human nature we have inherited from our ancestors. Yet, as far as American culture goes, the public debate on Darwinism and the theories targeted at proving Darwin was wrong is definitely not a thing of the past. Thus, American writers who apply Darwinian<sup>1</sup> references in their fiction are at the same time making a sort of ideological, if not to say political statement – just as was the case in 19<sup>th</sup> century Britain.

The aim of this essay is to compare how Darwinian references are used in the writings of two late 20<sup>th</sup> century American authors – namely, Annie Dillard and Kurt Vonnegut. Although neither Dillard nor Vonnegut have a conspicuously political agenda, they both consider the theory of evolution a heavily ideological subject and both apply the Darwinian paradigm to describe nature and the human race within nature. Interestingly enough, they also both choose the Galapagos archipelago as the focal setting of their symbolical narratives, as we see in Vonnegut's novel *Galápagos* and in Dillard's essay "Life on the Rock: the Galápagos." As far as Dillard's prose is concerned, she also depicts the archipelago in other short narratives from *Teaching a Stone to Talk* and *Pilgrim at Tinker Creek*.

Nevertheless, Vonnegut and Dillard's texts are generically very different. Vonnegut's novel is a work of science fiction and a bitter social satire which depicts a luxurious tourist cruise to the Galapagos and a simultaneous global crisis followed by the outbreak of a virulent plague which kills everybody on Earth except for a handful of tourists marooned on a deserted island in the archipelago. They live on raw iguanas and fish, they breed and their children do the same, as do their children's children until, finally, after a million years of evolution in the hardship of the Galapagos, the human genotype 'improves' – we change into big, friendly, seal-like marine mammals who have flippers and long toothy faces to catch fish with and who are morally good and kind. With no hands and very small brains they are literally unable to do any harm to themselves, other creatures, or the planet, which represents huge

progress in comparison to what we are capable of doing, and what we are doing, now.

Annie Dillard's texts are very often discussed in the context of the American nature writing, for example by her biographer, Linda L. Smith who writes that Dillard's childhood in all her autobiographical writing is filled with memories of rock and bug collecting and looking at pond water through her microscope (4). "The spirit of Thoreau hovers over [her] writings" claim the editors of *Literature by Women* who also call her *Pilgrim at Tinker Creek* "a *Walden* for the 1970s" (Gilbert and Gubar 2322). The critics emphasize that for Dillard naturalism and personal introspection are joined with mysticism and even with theology (Gilbert and Gubar 2322). Therefore, what she is interested in is the spiritual aspect of evolution. Her *Teaching a Stone to Talk. Expeditions and Encounters* and *Pilgrim at Tinker Creek* are essay collections whose main subject is nature. In the former, a travel book, it is the nature of exotic places – in the latter, it is the natural life of a creek in Virginia near the narrator's home, as described in a number of snapshots in consecutive seasons of the year. Vonnegut's perspective is enormously vast, his narrative spans across the millennia showing how the mechanisms of natural selection work on an entire species which in its original shape is a dangerous misbegotten genus keen on ruining its members' lives and the global biosphere. Dillard's perspective is minute and she focuses on small creatures (muskrats, snails, snakes, and praying mantises) and on precise settings: one puddle, a small shrub, a hedgerow. Vonnegut paints a full-fledged picture of human nature; Dillard by meticulous descriptions of tiny things depicts the ways of nature, human nature included.

Both Dillard and Vonnegut systematically and obsessively reference Charles Darwin and both would agree with the following statement made by Michael T. Ghiselin, a Darwinian historian of science, where he praises the eminent Victorian as the founder of the modern scientific method:

Darwin was a great scientist because he asked great questions. He was an influential scientist because he seized upon those problems which, at the time, could be exploited in further research. His works retain their interest for the working biologist because they continue to generate new and useful theories. His thoughts have been historically important because they illuminated the path of investigation, regardless of where that path may lead. (241)

The origins of this method may be found in the young Darwin's trip to the New World, and primarily in his stay in the Falklands and the Galapagos. In one of his diaries, dated 1837, he writes: "In July opened first note book on 'Transmutation of species' – had been greatly struck from about month of previous March on character of S. American fossils – and species on Galápagos Archipelago. These facts origin (especially latter) of all my views"

(qt. after Ghiselin 33). Darwin's short visit to these islands is now a part of popular science folklore, numerous nature films mention the event, and the naturalist's name remains associated with the archipelago and its wildlife, particularly the rare animals with bizarre adaptations, the finches being the best example.<sup>2</sup>

In Vonnegut's novel we see the first trip of a new passenger ship called the Bahia de Darwin to the Galapagos. It is publicized and advertised all over the world as 'the Nature Cruise of the Century.' Bahia de Darwin is to retrace Darwin's route in order to celebrate the famous voyage during which *On the Origin of Species* was conceived. The narrator who is scandalized by the publicity of the cruise describes Darwin's 1835 visit in the islands in far less romantic terms. He calls the naturalist "a mere stripling of twenty-six" (12) who is "underspoken and gentlemanly, impersonal and asexual" (16) and who came to see boring, gray, disappointing, and rocky islands. Only the tremendous success of *On the Origin of Species* made people falsely maintain that the archipelago was interesting at all. The ship-wrecked passengers of Bahia de Darwin found them as they really were: dull, inhospitable, and chilly. The contrast of what things are in nature and how they are described in culture is very sharp, though admittedly, "there were no woodpeckers on the islands but there was a finch which ate what woodpeckers would have eaten. It couldn't peck wood, and so it took a twig or a spine from a cactus in its blunt little beak and used that to dig insects out of their hiding places" (131). Interesting as the finch is, it definitely does not make the archipelago worth visiting.

The picture of Darwin Dillard believes in is quite different and apparently derives from the standard text-books on the history of biology:

Charles Darwin came to the Galapagos in 1835, on the Beagle, he was twenty-six. He threw the marine iguanas as far as he could into the water; he rode on tortoises and sampled their meat. He noticed that the tortoises' carapaces varied wildly from island to island, so also did the forms of various mockingbirds. He made collections. Nine years later he wrote in a letter: 'I am most convinced (quite contrary to the opinion I started with) that species are not (it is like confessing a murder) immutable...' it is fashionable now to disparage Darwin's originality; not even the surliest of his detractors however, faults his painstaking methods or denies his impact. (*Teaching...* 117)

And yet his discoveries made all the difference and altered the way we view the universe, ourselves, and God. Before Darwin came:

We were all crouched in a small room against the comforting back wall awaiting the millennium which had been gathering impetus since Adam and Eve. Up there was a universe and down here would be a small strip of man come and gone,

created, taught, redeemed and gathered up in a bright twinkling, like a sprinkling of confetti torn from colored papers tossed from windows, and swept from the streets by morning. The Darwinian revolution knocked out the back wall revealing eerie lighted landscapes as far back as we can see. Almost at once Albert Einstein and astronauts... knocked out the other walls and the ceiling, leaving us sunlit, exposed, and drifting. (*Teaching...* 121)

In the light of this statement the Galapagos are the first, primordial place, both metaphorically and literally. Dillard describes these islands as “just plain here” (*Teaching...* 91). They are rocky plots of ground which blew up out of the ocean. Some animals drifted aboard, some plants were blown to them, and in the austere conditions these organisms evolved weird forms: “you can go there and watch it happen, and try to figure it out. The Galapagos are a kind of metaphysics laboratory, almost wholly uncluttered by human culture” (*Teaching...* 91). For Dillard each of the islands rises from the sea as “a chunk of chaos” (*Teaching...* 109) with rough and smooth parts and devoid of any life. It is empty and uninviting and yet stowaway creatures, shipwrecked creatures, and flotsam get there and evolve unmolested into “a Hieronymus Bosch assortment” (*Teaching...* 110).

Wildlife conquers all the space available, life abounds and yet is thrifty enough to make use of every particle. Such a statement, one which both Vonnegut and Dillard consider valid, is of course very old, it dates back to the very famous passage in *On the Origin of Species* describing the so-called ‘entangled bank’ vision of nature:

It is interesting to contemplate an entangled bank, clothed with many plants of many kinds, with birds singing on the bushes, with various insects flitting about, and with worms crawling through the damp earth, and to reflect that these elaborately constructed forms, so different from each other, and dependent on each other in so complex a manner, have all been produced by laws acting around us... a Ratio of Increase so high as to lead to a Struggle for Life, and as a consequence to Natural Selection. (Darwin, *The Origin...* 54)

Vonnegut’s narrator is outraged that “Darwin’s law of Natural Selection” (79) works ceaselessly for millennia filling the Earth with resilient yet senseless life of every imaginable kind. The best-adapted organisms are born and die in the myriads and the only goal of all this life is to produce yet more life. In the Galapagos lives a blue-foot booby which is but a big stupid bird famous for its very complicated and majestic courtship dance. Before the global disaster, Mary, the protagonist of Vonnegut’s novel and a high school biology teacher, used to give her students extra credits if they wrote an essay on the courtship dance. Most of those who undertook the task claimed in their papers that boobies worship God. Only one insightful boy, subsequently killed in Vietnam, saw the dance for what it was: a manifestation of the

mindless, never-ending drive to multiply. Instead of an essay he wrote a poem, the boobies' eternal love song:

Of course I love you,  
So let's have a kid  
Who will say exactly  
What its parents did  
Of course I love you,  
So let's have a kid  
Who will say exactly  
What its parents did  
Of course I love you... (108)

Mechanically repeated the song goes on and on, generation after generation, but there is no meaning in it beyond generating yet another repetition. Nature is plentiful and tolerant of the clearly ridiculous mistakes evolution has committed. Vonnegut's examples of horridly maladapted and yet long-surviving species are the Irish elk with antlers the size of a ballroom chandelier that make it highly difficult for the animal to feed at all, and humans with their poisonous, overgrown brain keen on destruction of every kind.

Dillard conversely adores the entangled banks in the world and the bounty of nature, and the pressure the environment has on every creature, propelling them to evolve into an unimaginable richness of shapes: "Extravagance! Nature will try everything once. No form is too gruesome, no behavior too grotesque. If you are dealing with organic compounds then let them combine!" (*Pilgrim...* 66), she exclaims in *Pilgrim at Tinker Creek* where one plot of ground is the world in miniature. Its narrator, an avid reader of Darwinian natural history looks at the grass and the insects and finds out that that, yes, everything is just as the biologists say and "that the insects have adapted is obvious" (*Pilgrim...* 66). She ponders the top inch of soil and considers it to be the whole world squirming under her palm with an average of 1,356 larger organisms in every square foot and, probably "up to a billion" bacteria, fungi, and protozoa. All this richness is somehow connected to the narrator herself as they all belong to the gigantic living macrocosm. Thus, being capable of logical thinking, the narrator feels obliged to look for the meaning of nature: "If I did not know about the rotifers and paramecia... fine, but since I've seen it I must somehow deal with it, take it into the account" (*Pilgrim...* 95).

Humans, thanks to their spiritual place in the Universe, have to speak for the rest of Creation and the Darwinian perspective allows people to see the grand design of the universe. For the narrator, who is a reader of Pierre Teilhard de Chardin, Darwinism and Christianity complement each other:

De Chardin, a paleontologist, examined the evolution of species itself, and discovered in that flow a surge towards complexity and consciousness, a free ascent capped with man and propelled from within and attracted from without by God the holy freedom and awareness that is Creation's beginning and end. And so forth. Like flatworms, like languages ideas evolve... in the supple flux of an open mind. (*Pilgrim...* 120)

Darwin himself was aware that if the organic scale is topped by humanity it is so only because humankind fought to rise that high, which fact gives us all "hope for a still higher destiny in the distant future" (Darwin, *Descent...* 78). Yet, as he claims in the very last sentence of *The Descent of Man*:

We must however acknowledge, as it seems to me, that man with his all noble qualities, with sympathy that he feels for the most debased, with benevolence which extends not only to other men but to the humblest living creature, with his god-like intellect which has penetrated into the movements and constitution of the solar system – with all these exalted powers – Man still bears in his bodily frame the indelible stamp of his lowly origin. (Darwin, *Descent...* 78)

Human minds are thus what they are because they have evolved from earlier forms. 'Much to the distress of our planet,' Vonnegut's narrator adds, because he firmly believes that the human brain with its lethal potential is the greatest mistake of nature. He rhetorically asks:

So I raise this question, although there is nobody around to answer it: Can it be doubted that three-kilogram brains were once nearly fatal defects in the evolution of the human race?

A second query: What source was there back then, save for our overelaborate nervous circuitry, for the evils we were seeing or hearing about simply everywhere?

My answer: there was no other source. This was a very innocent planet, except for these great big brains. ( 8-9)

Yet for Dillard humans were created "from a clot and set in proud, free motion" (*Pilgrim...*12) by the apparently merciless laws of nature. Evolution loves death and births equally and is "this whole business of reproducing and dying by the billion" (*Pilgrim...* 170). Yet all of it happens "ad majorem dei gloriam" and "we little blobs of soft tissue crawling around on this planet's skin" (*Pilgrim...* 175) are entitled to ask the big question, to look at the universe, and to worship its Creator. People or finches, we all are 'èmbellishments of random chromosomal mutations selected by natural selection and preserved in geographically isolated gene pools" (Dillard, *Stone...* 175) because all the organic matter participates in the gigantic Darwinian game:

Ça va. It goes on everywhere tit for tat, action and reaction, triggers and inhibitors ascending in a spiral like spitting butterflies within life we are pushing each other around. How many animal forms have evolved just so because there are, for

instance, trees? We pass the nitrogen around, and vital gases, we feed and nest, plucking this and that and planting seeds. (*Stone* 126)

Thus all the life on Earth is like a gigantic dance and a great race. Everybody is dependent on everybody else, and having a brain – i.e., being rational, being capable of seeing this dance and understanding its rules – is one of the greatest privileges imaginable. Once you have evolved and have acquired culture you start studying nature and you realize, thanks to, among other things, Darwinian biology, the intricacies of its design. We are the acme of Creation.

Vonnegut in his novel turns a similar idea of a perfectly adapted human race into a bitter irony. Over a million-year period the descendants of the Bahia de Darwin survivors evolve into perfect creatures. Thanks to the bottleneck effect their genetic pool is easily re-designed so they will nevermore threaten the ecological balance of the Earth:

As for human beings making a comeback, of starting to use tools and build houses and play musical instruments and so on again: They would have to do it with their beaks at the time. Their arms have become flippers in which the hand bones are almost entirely imprisoned and immobilized. Each flipper is studded with five purely ornamental nubbins, attractive to members of the opposite sex at mating time. These are in fact the tips of four suppressed fingers and a thumb. Those parts of people's brains which used to control their hands, moreover, simply don't exist anymore, and human skulls are now much more streamlined on that account. The more streamlined the skull, the more successful the fisher person. (185)

In the light of the above passage the Darwinian bon mot quoted at the end of the novel reads very ironically: “progress has been much more general than retrogression” (291). This is paradoxically true – the overdeveloped human brain was a dangerous mistake of nature, and nature working slowly but steadily set this right by altering the human species in such a way as to make it harmless. *Galápagos* is the record of this alteration done in Darwinian discourse. Yet Dillard applies the very same Darwinian apparatus to emphasize the glory of Creation and the greatness of the Universe. She considers it tragic that “Fundamental Christians... feel they have to make a choice between the Bible and modern science” (*Stone* 119) because only with the help of modern science can you truly appreciate God's greatness and see beyond the apparent cruelty of death-loving evolution.

Dillard and Vonnegut being evolutionary theorists attempt to re-shape the paradigm within which the research in all possible fields of learning is conducted in order to achieve a consistent picture of how the universe works and how its nature can be studied. As artists they are neo-Darwinists because neo-Darwinism is the pivotal approach uniting the human sciences, the arts,



and the hard sciences. Thus, using precisely such a perspective both Dillard and Vonnegut seek to achieve new insights into the very nature of human beings. These insights concern the evolutionary understanding of human nature as a number of the “species-typical” or “universal” characteristics we all share:

An evolutionary perspective allows us to see ourselves both in the widest angle and with the most precise focus, as individuals solving particular problems within specific contexts, physical and social, using the cognitive equipment – including the predilection for culture – acquired through natural selection. (Boyd, et al. 3)

Human beings are therefore primarily creatures who have evolved and the theory of natural selection teaches us why and how this has happened. For Dillard both science and religion help us to understand nature. Vonnegut rejects Western religion with its insistence on God’s acts in history (Klinkowitz and Somer 209) and gives his narrator the voice of a “guru” whose message is “truth and fiction, truth against fiction. The forces of science... are shown on the side of truth, and art and religion are shown together on the side of fiction” (Klinkowitz and Somer 209).

Yet, despite all their differences, the Darwinian perspective allows both Dillard and Vonnegut to express their attitudes towards human civilization and its place within the natural environment of the planet, the human past and future, and the way culture and nature depend on each other. Both share a fascination with Darwin as well as the very profound expertise in the subject of his theory. For both authors the two most important issues Darwin discusses in his imposing oeuvre are ‘the entangled bank’ metaphor of wildlife depicted in *On the Origin of Species*, and the hypothesis concerning the evolution of the human brain and the human mind discussed in the final sections of *The Descent of Man*. And although their intimations provoked by the Galapagos islands are as ideologically far apart as possible, the above analysis of their texts inspired by this Archipelago clearly shows that they both are artists-cum-evolutionary theorists whose output is – as Wilson would have it – ‘consilient.’

## NOTES

<sup>1</sup> As early as in the 1860s the American readers of *On the Origin of Species* pronounced the work atheistic. Darwin’s American friend, the naturalist Asa Gray, wrote: “to deny that anything was specially designed to be what it is is one preposition, while to deny the Designer supernaturally, or immediately made it so, is another: though the reviewers appear not to recognize the distinction” (138). Gray goes on to compare Darwin to Newton and maintains that the two scientists approach nature in a similar way, and yet no one accuses Newton of atheism in the way they accuse Darwin. Yet Darwin was for American fundamentalist

Christians an epitome of vile, unholy science: his book symbolized a threat to the vision of the Universe as a safe and godly place.

<sup>2</sup> It is only on the Galapagos Islands that the ‘Eureka!’ moment occurred, something comparable only to the inspiration Newton allegedly experienced in the orchard when the apple fell. On these volcanic islands Darwin famously noticed that species evolve if only transformation increases their chances of survival. Nevertheless, Darwin hesitated whether to publish his book for over twenty years as he was afraid to offend religious feelings of his contemporaries. Once his theory was intellectually ready – though physically only in the form of a sketchy draft – Darwin refrained from publishing it, but only prepared the manuscript for publication. He added to it a letter addressed to his wife to be opened after his death in which he commands her to have the paper published at her own expense. Yet, Alfred Douglas Wallace discovered the mechanism of natural selection independently and urged Darwin to publish *The Origin of Species* in his lifetime in order to insure his primacy.

## REFERENCES

- Boyd Brian, Joseph Carroll and Jonathan Gottschall  
2010 “Literary and Film Studies Now: Death or Rebirth.” *Evolution, Literature, and Film. A Reader*. Eds. Brian Boyd, Joseph Carroll and Jonathan Gottschal. New York: Columbia University Press, 3–12.
- Darwin, Charles  
2010 *The Descent of Man And the Selection in Relation to Sex. Evolution, Literature, and Film. A Reader*. Eds. Brian Boyd, Joseph Carrol and Jonathan Gottschal. New York: Columbia University Press, 75–79.  
2010 *On the Origin of Species. Evolution, Literature, and Film. A Reader*. New York: Columbia University Press, 41–55.
- Dillard, Annie  
2011 *Pilgrim at Tinker Creek*. London: Canterbury Press.  
2013 *Teaching a Stone to Talk. Expeditions and Encounters*. New York, London Toronto, Sydney, New Delhi, Auckland: Harper Perennial.
- Ghiselin, Michael T.  
2003 *The Triumph of the Darwinian Method*. Mineola, New York: DoverPublications, Inc.
- Gilbert, Sandra M. and Susan Gubar  
1996 *Literature by Women. The Traditions in English*. NewYork and London: W.W. Norton and Company.
- Gray, Asa.  
2009 *Darwiniana. Essays and Reviews Pertaining to Darwinism*. Cambridge, Melbourne, New York: Cambridge University Press.
- Klinkowitz, Jerome and John Somer.  
1973 *The Vonnegut statement. Original Essays on the Lifeand Work of Kurt Vonnegut, Jr*. New York: A Delta Book.

- Smith, Linda L.  
1991 *Annie Dillard*. Ed. Frank Day. New York: Twayne.
- Vonnegut, Kurt.  
1985 *Galápagos* New York: Delacorte Press.
- Wilson, Edward O.  
2000 *Sociobiology: The New Synthesis*, Cambridge Mass.: The Belknap Press of Harvard University Press.