

Pre-Darwinian Species Change: Reincarnation and Transformism in George Sand's *Évenor et Leucippe*¹

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The spiritual belief in reincarnation and the scientific theory of transformism both provided inspiration for theorists of social progress in nineteenth-century France. Until now, however, the connections between the two views have not been revealed. This article examines the relationship between reincarnation and transformism in a forgotten text of 1856 by the novelist George Sand. Sand is mainly known today for her canonical works of the 1830s and 1840s, for her views on marriage, and for her allegedly simplistic idealism. There has been no major study on Sand and science. Her work is worth studying from this perspective, however, not only due to her extensive engagement with geology, botany and entomology, but because of the different form of scientific literature she offers.

Unlike those French novelists conventionally linked with science, such as Émile Zola or Jules Verne, Sand is less concerned with writing scientifically-informed novels than with exploring links between science and spirituality and the potential consequences of such links for humanity's moral condition. Her experimental, visionary style and idealist poetics make her writing particularly apt for such concerns: as she outlines in a preface in 1842, "the aim is not solely to show how things are, but also how things must be, how things will be" ("*Consuelo*, Préface-dédicace" 71).² During her lifetime, Sand was widely recognized as a visionary, "not only as a poet but as a prophet" (Michel Bakounine, 12 February 1843, quoted by Mallet 326). One of her main aims in writing literature was to imagine new possibilities. In *Évenor et Leucippe* (1856), for example, Sand returns to humanity's origins as a basis for envisioning the society of the future. The text offers an original cosmogony in which life forms evolve over a series of lives, ultimately going beyond the earthly sphere into the heavens. Sand explicitly draws on thinker and geologist Jean Reynaud's religious and philosophical treatise, *Earth and Sky* (*Terre et Ciel*, 1854), and is informed by Étienne Geoffroy Saint-Hilaire's early theories of mutation between species. But she ultimately goes beyond both sources and develops a self-consciously fictional account of the pre-human earth and early human communities. In so doing, Sand offers a bold critique of cultural practices in modern French society, specifically the preoccupation with materialism in the science and literature of the period. Through her tale of reincarnatory transformism, Sand offers a counter-example to the critical view of the post-1848 period as an era of despair and disenchantment in France, and also challenges our perception of French culture in this period as predominantly secular and positivist (see: Orr, 8).

Ideas of rebirth and regeneration were attractive in early nineteenth-century France as thinkers sought new ways of theorizing social relations in the aftermath of revolution, empire and war (see: Sharp, Charlton). The notion of rebirth played an important role in the early development of Romanticism, for example (Bénichou 85–92, 515–523; Viatte II 263–276), and reincarnation became a central factor in historian Jules Michelet's understanding of the past (Mitzman 45). Sand's interest in reincarnation was in one sense located in this Romantic context, and she was influenced by socialist theories which took up concepts of rebirth in thinking about the future of society. One figure who espoused such views was Charles Fourier, who

believed in the possibility of human metempsychosis (the transmigration of the soul) onto other planets (Beecher 318–335; Fourier III 304–346). Sand also read works by thinkers such as Pierre-Henri-Simon Ballanche, Charles Nodier, and Pierre Leroux, who took up the concept of "palingenesis" (the regeneration of a living organism) to develop theories of social reform. Sand read Ballanche's *Essays on Social Palingenesis* (1829) and Nodier's *Human Palingenesis* (1832), and her letters from the 1830s and 40s (*Correspondance*, III–VI) are full of reflections on Leroux's ideas and letters to Leroux himself.

These thinkers were in many ways drawing on the earlier theories of naturalist Charles Bonnet, who had argued for the evolution of the soul in *Philosophical Palingenesis* (1769) (see: Lovejoy 283–286; Bowler, *Evolution* 62). In Bonnet's mystical hypothesis, each organism contained the germs of a future being which emerged in a different and higher form in a future epoch, and animals therefore progressed and evolved through reincarnation. Unlike these thinkers, however, who believed in collective regeneration, Sand, like Reynaud, focused on individual metempsychosis.

The political connections between Sand and Reynaud have been noted (Karénine, III 2, 219; Griffiths 162, 176, 177). The focus in this article, however, is on their shared interest in the natural sciences, which makes their examinations of the afterlife so distinctive. Sand and Reynaud both wrote their most substantial explorations of mutation between different organisms in the mid-1850s, a time of particular popular interest in the natural sciences in France. Louis Bouilhet's paleontological poem, *Les Fossiles*, for example, was published in 1854, and the discovery of Neanderthal man in 1855 generated much speculation amongst specialists and the public on the origins of life. Robert Stebbins, for instance, observes that many of the most exciting finds of prehistoric man were made in France in the 1840s and 1850s (120). Sand's interest in the progressive development of life forms mainly preoccupied her from the 1850s onwards in parallel with her studies in botany, geology and entomology, which greatly informed her understanding of organic development (see: Sand, *Correspondance* XII 249–250, 255, 608, 618; XIII 66, 93; XIV 189–90, 49). Sand's fascination with earth history was an interest she shared with Reynaud, who had studied geology at the *École Polytechnique* and published a geological study of Corsica (Griffiths 29–30, 36, 46). Sand and Reynaud's interest in the early earth heightened their awareness of temporality, and strengthened their commitment to the possibility of human advancement. In Reynaud's *Earth and Sky*, for instance, reflections on the origins of the earth and of the human race lead to new possibilities for humanity's future (see: *Terre et Ciel* 104). For Sand also, the convulsions and upheavals in the earth's history provide a source of inspiration in facing humanity's contemporary political struggles, which she comes to interpret as part of the pathway towards social progress (Mathias 526–527).

Reynaud develops in *Earth and Sky* a theory of "stellar metempsychosis" (266) in which the earth's organisms pass through successive states that move ever closer to "the supreme ideal" (148) and eventually migrate to the stars. The text pits the findings of geology and palaeontology against the Biblical view of Creation and elaborates a theory of continuous progress from the vegetal to the human and beyond. Reynaud highlights gradual mutations between different forms of life (115), and conceives of death as the next stage in this process: "Death is simply the point at which our eyes are opened to the ascension of the soul" (153); "successively passing from one location to another, and each time changing in organic form, . . . through

migration and metamorphoses, our soul pursues the diversified course of its immortality" (290–291).

The focus on increasing perfection through reincarnation is the main element in Sand's enthusiastic response to Reynaud's book. Referring to Reynaud in an essay of 1856, for instance, she makes plain her adherence to his theory of stellar metempsychosis (*Autour de la table* 85). Sand already believed in reincarnation before reading *Earth and Sky*, as is made clear in 1854: "I believe in our immortality, in a succession of existence on earth and then elsewhere" (*Correspondance*, XII 370). At this point, however, Sand bases this belief on "a personal sentiment" deep in her soul, which is pitted against "reason" and what she calls "*pure science*" (original emphasis). After reading Reynaud's *Earth and Sky*, she reaches a more reconciliatory position: "I have believed in this idea for such a long time that I am most pleased to see a great mind go about proving to my reason that my sentiment is right" (*Correspondance*, XII 618. See also: *Correspondance*, XII 608). Sand now understands this process both on an instinctual and rational level. In her memoir, *Story of my life (Histoire de ma vie*, 1855), she further states that "[Reynaud], already a great figure, has ascended to greater heights still by revealing the infinite number of worlds both in the name of science and faith, of Leibniz and Jésus" (*Œuvres*, II 461). Sand is attracted to *Earth and Sky's* union of science and spirituality, a combination which she will take further in *Évenor et Leucippe*.

Sand's position on life might be termed spiritualist if we consider that immortality, reincarnation on earth, and the transmigration of souls to other planets were key elements in spiritualist cosmology (Kselman 155–156). "Spiritisme", however (which paralleled the "spiritualist" movement in Britain and America), became predominantly concerned with accessing the next world from this one. Whereas some writers such as Balzac and Hugo were keenly interested in such developments, Sand was less concerned with the possibility of communicating with the afterlife than with the implications of reincarnation for this one, especially in relation to human morality and progress.

Évenor et Leucippe pursues these questions by examining mutations between life forms, a topic on which there is a great deal of confusion and lack of precision amongst scholars as to Sand's precise views. Bernard Hamon refers to her interest in "Darwin's theories, published in the *Origin of Species* in 1859", but does not note when Sand read the *Origin* (289). Barbara Dimopoulou also asserts that in a Sandian article of 1857, "evolution and transformism are, in a certain way, popularized by Sand" (275), but she does not explain the differences between these positions or note Sand's sources. The first French translation of Darwin's *Origin* was published by Clémence Royer in 1862. The copy in Sand's library catalogue is the second edition of 1866 and the first direct mention of Darwin in her writing appears in 1868 ("Pays des anémones" 100). Until the 1860s, Sand's handling of mutation between species was informed by theories other than those of Darwin. This is a significant point due to the different way in which Darwin approached the issue of species change.

A range of savants before Darwin had suggested that species are not fixed and instead gradually transform from one into another. One of the first to offer a comprehensive theory of the process was Jean-Baptiste Lamarck in his *Zoological Philosophy* (1809). Although there are no references to this text in Sand's letters or library catalogue, her wide reading makes it highly likely that she would have come across his transformist position, and she did also own a copy of his *French Flora* (1805–1815). Lamarck placed particular emphasis on adaptation within organisms as a response to changes in environmental conditions. He also refused the possibility of

extinction and characterized transformism as voluntarist and inherently progressive (Corsi 243, 230; Bowler, *Evolution* 81–90). Darwin, on the other hand, emphasized “‘spontaneous’ organic variability”, with the environment “selecting among a number of unpredictable variations, leading to the survival and increased reproduction of advantageous variants” (Tort 331). Darwin’s theory is difficult to reconcile with straightforward, linear notions of progress. Indeed, in Peter Bowler’s view, “to the extent that he accepted a progressive trend in evolution, Darwin saw it as an indirect and highly irregular by-product of natural selection” (*Fossils and Progress* 12).

The savant whose work Sand read in most detail was Étienne Geoffroy Saint-Hilaire, who revived and developed Lamarck’s transformism in the 1820s and 30s and debated the issue in a quarrel of 1830 with Georges Cuvier. Whereas Cuvier separated species into four separate, fixed “branches”, Geoffroy considered there to be one model for all organisms. His “signature concept” (Tresch 162) was the principle of unity of composition, focusing on the image of a chain of being linking all organisms. Geoffroy Saint-Hilaire’s work offered a transformism that was muted, vague and rather inconsistent, but he clearly advocated a series of links between life forms, and his position on the mutability of species was progressive and optimistic (see: Laurent 351; Appel 184). Especially in his work from the 1830s, he repeatedly refers to the “unity of organisation” and “a successive and progressive creation” (*Études progressives* 110, 109). There is, therefore, a marked difference between the transformist theories Sand was reading and the later theory of Darwinism in terms of their implications for thinking about progress. Such distinctions were not necessarily grasped by all audiences, and Peter Bowler has argued that Darwin’s theory only came to be accepted in late-Victorian Britain because it was misrepresented and misunderstood (*The Non-Darwinian Revolution*). A similar point can be made for France’s delayed acceptance of Darwinian thought, as such a position was simply seen as a throwback to Lamarck and Saint-Hilaire (Henry G. Fremman). But certainly in the case of Sand she favoured Saint-Hilaire’s position, and by the 1860s, when she had read Darwin’s work, she was well aware of the potential misinterpretations of his theory (“Pays des anémones” 100).

One of the reasons why Geoffroy was regarded as the loser in the debate with Cuvier was the fact that he did not possess the verbal agility and eloquence necessary to convince his audience. For this reason, Geoffroy sought literary authors to disseminate his ideas, and he wrote to Sand in 1835 asking her to popularize his research through her novels. Sand declined, citing her own inadequacies (*Correspondance*, III 823), and Geoffroy eventually turned to Balzac. But Sand’s letters convey her knowledge of and admiration for Geoffroy’s work, specifically “the continuous progress of creation which you have revealed within the material realm” (*Correspondance*, III 834, 30 April 1837). Many of Lamarck and Geoffroy’s theories are explained in the *Encyclopaedic Review* (*Revue encyclopédique*) and in the *New Encyclopaedia* (*Encyclopédie nouvelle* 1839–1842), both edited by Reynaud and Leroux. Sand read these publications and owned a copy of Geoffroy’s *Progressive Studies of a Naturalist during the Years 1834 and 1835* (*Études progressives d’un naturaliste pendant les années 1834 et 1835*, 1835) and his *Synthetic, Historical and Physiological Notions of Natural Philosophy* (*Notions synthétiques, historiques et physiologiques de philosophie naturelle*, 1838). She singles out for praise his wideness of perspective: “There is something greater, bolder, more sincere and (permit me to speak the language of my profession), more poetic in your wide views on what we call *creation*” (*Correspondance*, III 832, original emphasis). What Sand seems to be referring to is her perception of Geoffroy’s work as something that goes

beyond the material. She compares him with "the prophets of truth" (*Corr.* III, 833), for example, joining her contemporaries such as Leroux, Balzac and Quinet who also read Geoffroy as the more progressive and metaphysical figure in the debate with Cuvier (see: Tresch 185, 226, 232; Appel 192). Geoffroy himself also claims to offer a "philosophie géologique" (*Recherches* 41).

In a draft chapter for her novel, *Lélia* (1839), Sand does explore Saint-Hilaire's theories in a letter where the heroine discusses books which might undermine her religious convictions. *Lélia* discusses Geoffroy's *Études progressives*:

Within this new overview of Creation I have discovered what is most worthy of faith, most satisfying to the human spirit, what is most in keeping, for its noble instincts, with its unquenchable thirst for order and harmony: the universal and uninterrupted chain, the equilibrium and the harmony that join inert nature with animated nature through innumerable links and through an imperceptible sequence, from stone to plant, insect to bird, beast to man, man to the whole, and the whole to God. ("Soi pour soi" 548–549)

Union, harmony, and balance are emphasized here through images of chains and links, and these concepts are all explicitly tied with spiritual belief. It is this possibility of combining science with spirituality that excites *Lélia* in the letter. By extending the chain of being up to God, she goes beyond what is found in Saint-Hilaire's own theories. Indeed, the position put forward here sets Sand apart from the work of major contemporary French savants. Unlike in Britain at this point, where the tradition of natural theology continued to combine religious mysticism with empirical detail, in France, those figures who considered themselves as professional savants privileged empirical research over religious speculation. Many nineteenth-century commentators, as well as more recent scholars, have considered Cuvier's theories of the early earth as a defence of Genesis, but as Dorinda Outram argues, "Cuvier was attempting . . . to reorientate the sciences of geology and palaeontology away from reference points provided by speculation on Biblical geology", and the first stage in this enterprise was "the argument that geology and palaeontology existed in their own rights as sciences . . . and that this epistemological autonomy must especially exclude religious speculation" (147).³ But whether *Lélia*'s letter offers an accurate summary of Geoffroy's work or not, what is clear is that she finds in the work of this "prophet" ("Soi pour soi" 550) a confirmation of eternal truths, in contrast with what she sees as the atheism and materialism of contemporary society.

By the 1850s, Sand was therefore well read in a transformism that was progress-driven and intentionalist, one that offered "an intuitive, organic, progressive vision of the cosmos and the place of humanity within it" (McCalla 160).⁴ We know that Étienne Geoffroy Saint-Hilaire provided Sand with inspiration in her writing of *Évenor et Leucippe* as the savant is explicitly mentioned in early drafts (Le Guillou, "Genèse" 304). Critic Franck Bourdier, however, refers to a "conflict" between Sand's spirituality and Geoffroy's materialism, and he claims that after 1837 Sand abandoned all plans of discussing Geoffroy's theories (58, 47). The few to have commented on Sand's later text, *Évenor et Leucippe*, also interpret her commitment to spirituality and immortality as separate from, and in opposition to, her interest in the transformation of species. Albert Le Roy affirms that in *Évenor et Leucippe*, "Darwinist theory is refuted more on moral grounds than through scientific argument" (481), and Wladimir Karénine argues that in *Évenor et Leucippe*, the author goes

against Darwin (IV, 352). Since *Évenor et Leucippe* was published before the *Origin*, it is anachronistic to talk of Darwinism in this context. Further, whereas these critics read Sand's spirituality as an obstacle to her commitment to species change, this aspect of her thought is in fact a central element in her approach to organic development, or what I call here her "reincarnatory transformism".

This is an expression adapted from Claire Le Guillou, who suggests that Sand offers "un évolutionnisme réincarnatif", but does not explain or develop the concept ("Marginalité" 350). Le Guillou's use of "évolutionnisme" is also problematic since it would not have been used in France at this point. As Robert Stebbins observes: "To a Frenchman, even in the 1880s, 'Darwinism' and 'evolution' were still basically foreign terms. The preferred French word was *transformisme*" (117). This article refers to "transformism", the term used by French savants at the time, to differentiate between the forms of mutation envisaged by Sand and the evolutionary theory later developed by Darwin. Whereas Darwin saw "progress towards perfection" as the result of external factors acting on random variations, Sand developed a transformism in which all life forms possessed an inherent progressive tendency (Darwin 376).

Évenor et Leucippe is one of the least studied texts within Sand's canon, and before the 2016 edition of the Complete Works it had been out of print since 1889. The novel was not well received in 1856 and editor Claire Le Guillou notes that it seems "out of place both in its own time and within Sand's œuvre" ("Genèse" 327). There was great interest in the 1850s in the origins of the earth and its creatures: Jules Michelet observes, for example, that "one need only open . . . the *Bookseller's Journal* since 1856 to see that a whole literature came out of this period", and "since this period the public has taken a particular new interest in natural history" (91). However, the literary sphere was increasingly dominated by a form of writing termed "realism", hardly applicable to *Évenor et Leucippe* with its other-worldly portrayal of the early earth. Many major writers at this point such as Hugo, Flaubert, and Baudelaire were engaged in aesthetic exploration rather than adhering to any narrowly prescribed realism, and other poetic and pantheistic works exploring natural history were also being published. But such texts, including Michelet's nature books of the 1850s and 1860s,⁵ Edgar Quinet's *Creation* (1870), and Flaubert's *Temptation of Saint Anthony* (*La Tentation de Saint Antoine*, 1874), attracted relatively small audiences. Le Guillou suggests that readers during the second half of the century were simply "not well inclined towards this type of text" ("Marginalité" 354). Certainly by today these are not well known.

As Mary Orr has shown, however, texts such as Flaubert's *Tentation* can be read as "critical prisms on key debates within the nineteenth-century French history of ideas", including comparative religion, natural history and science (19–20). In the case of *Évenor et Leucippe*, the contempt towards this text⁶ may be due to "certain theories and beliefs displayed in this work which go against the usual image of this novelist" (Le Guillou, "Genèse" 324). Le Guillou does not follow up on her suggestion but this article will go some way in showing why this text was so disturbing for many readers.

In planning *Évenor et Leucippe* Sand was clearly thinking of tackling the progress of life forms, and the ways in which love "is perfected and completed in line with the increasing perfection of [all beings on earth]" (*Les Amants illustres* 229). Sand had begun to consider such questions in *The Poem of Myrza* (1835) and *Lélia* (1839), and continued to explore debates around transformism in *Laura, Journey into the Crystal* (1865) and *Grandmother's Fairytales* (1874–1876). All these texts combine a range of genres such as myth, poetry, popular science, and cosmogony.

Generic fluidity seems to be an essential part of Sand's reworking of the Biblical narrative to offer new ways of thinking about creation.

Évenor et Leucippe is also generically "ambiguous" (Gillet 47), often referred to as a novel but also reading in parts as a piece of popular science writing, and featuring poetic and epic qualities, such as its twelve-part structure and epic topoi. The text opens with an "Introduction" which provides an overview of the earth's history and the appearance of humankind. During a series of reigns, creatures appear with increasing levels of complexity: when mammals emerge, for instance, "a multitude of types, increasingly highly organized, link together along a chain of progressive combinations" (32). This introduction is seen by some as an arid scientific explanation set apart from the "story" proper (Karénine IV, 352, Le Guillou, "Marginalité" 347). But this section is itself highly exploratory and experimental. The narrator, for example, repeatedly asks questions such as "are we therefore pre-Adamite?" (60) or "is man not the descendant of monkeys?" (36), and frequently intervenes to offer an opinion (42, 51). This narrating voice switches between first person singular and plural, and calls on the reader to participate in the creation of the new myth: "before witnessing, through our imaginations, the flowering of human life on our planet . . . , let us try to visualize this natural process which transforms the vital principle from one type to the other, like the alchemist transmutes his metals" (32, added emphasis). The reader is constantly addressed and asked for her/his opinion on matters such as the nature of life (30) or the origins of humankind (36).

The reader then follows the story of Évenor, whose curiosity and ambitions lead him to leave his comfortable life with his fellow men and to discover Eden. Moving away from the Biblical narrative, Sand presents Évenor not as the first man on earth but the first to follow "a special destiny" (63). She also rejects the concept of Original Sin, as Évenor voluntarily leaves the "sublime and terrible" (92) Eden and discovers Leucippe and her mother Téléïa, a survivor of an earlier race. Téléïa initiates Évenor and Leucippe into a form of religion based on love and awareness of the infinite, which they will ultimately access through death. The principle of stellar reincarnation is represented in the text through Téléïa's own death as she dies stating that "my soul will soon be on a more beautiful planet" (194). Évenor and Leucippe return to Évenor's people to disseminate the new way of life and establish an egalitarian community in the safety of Eden.

The critical assumption that Sand denies transformism in *Évenor et Leucippe* in favour of her religious beliefs is largely based on the section in which the human race first appears. Sand considers two versions of Creation here, and in the version offered by "the naturalists" man is seen to be descended from the monkey. Sand rejects this position (39) and moves on to consider the Biblical version which she also criticizes, this time for its focus on the fall of man. Were she forced to choose between the two, however, she notes that she would plump for the Biblical narrative. Le Guillou thus argues that "a more exacerbated spiritualism incites [Sand] to refute the ultimate conclusions of transformism" ("Marginalité" 350). Le Guillou also posits that Sand decided not to include Saint-Hilaire's name in the final manuscript since she had firmly moved away from his theories by the 1850s ("Genèse" 305).

Sand may not have wished to associate herself explicitly with Saint-Hilaire after the infamous 1830 quarrel with Cuvier, and indeed she was not in agreement with all his conclusions. What Sand is rejecting in the naturalists' position, however, is a particular type of ancestor: "within this genesis *Adam* is one of those horrifying savages from the South seas who insults every woman he meets, after half killing her" (38, original emphasis). Sand rejects a transformism in which man and woman are not

equal. Further, Sand's preference for the Biblical version is based on the view that "if it makes God unjust and cruel, at least it leaves him in the state of all-powerful God, whereas the other hypothesis makes him nothing more than an active law of matter left to its own reproductory whims" (40). She rejects a version of life development that obviates the need for God's intervention, a transformism that is purely materialist.

Sand does, however, put forward a different transformist vision in *Évenor et Leucippe*. When organic life begins to develop, aquatic plants are followed by increasingly large and complex animals followed by the final period, "the age of Jupiter, father of the human race" (36). In her earlier *Poème de Myrza*, the emphasis was on the convulsions of the early earth and the strange nature of its inhabitants rather than on the processes involved in the development of life (*Myrza* 209–210). In *Évenor et Leucippe*, by contrast, the living organisms transmute from one into another. This is noted, for example, at the beginning of the third period in which the first beings "float between vegetation and animality" (32). The process of increasing perfection is further indicated through images such as "a scale of progressive combinations" (32) and the fact that the human race is placed within this "chain of beings" (36):

the only mould is the one that nature has used to try out its successive attempts, modifying the mould itself after each type, but in such a delicately progressive way that, from one type to another, we perceive a continuity, even though there exists a chasm of several centuries and many differences between the starting point — say, a small pebble — and the final result, man. (34)

Sand highlights the unimaginable stretch of time between our existence and that of the most basic species, but also stresses humankind's unbroken link with these other organisms. Furthermore, the transformations between species are presented throughout the text as a form of progress and perfection: "Through a process of *continuous progression*, Pan's reign is established on earth which has become not the biggest but the most interesting receptacle of *perfectible life*" (32, emphasis added). The emphasis in Geoffroy and Lamarck's theories on progression is central to Sand's text. Whereas Darwin's theory of evolution is not uniformly directionalist, Sand theorizes the process of species development as one in which organisms are continually improving.

Geoffroy wrote to Sand in 1838 that "God created matter predisposed to organization, by attributing the virtual conditions required to pass through all the possible transformations" (*Correspondance* IV, 454). Geoffroy considered the material world to be capable of producing its own new forms over time, independently of God. But Sand was capable of combining the savant's focus on the dynamism, variety and progression of nature with her own spiritualist position. She claimed in 1837 that she could not disseminate Geoffroy Saint-Hilaire's theories because "I . . . do not possess much of that form of logic which can accept and reject ideas as necessary, supporting certain affirmations by negating the opposing arguments: indeed, opposite sides join hands and get along very well inside my head" (*Correspondance*, III, 832). It is precisely this syncretism that is demonstrated in *Évenor et Leucippe*, in which the cosmos, the earth, and humans are simultaneously spirit and matter (70, 82). There is a transformism in *Évenor et Leucippe* but it is one that is overseen by God. For instance: "It is with the universal substances animated by infinite love that God, moving from one type to another, created the interlinking forms

of life" (35). Death is understood as the rebirth of the soul and is part of this transformatory process: "Death is only a semblance and a *transformation*" (132, emphasis added). Sand focuses on the processes of development, putting forward a position which incorporates reincarnation and brings her closer to Lamarck and Saint-Hilaire who both rejected the possibility of extinction. Sand's readings in the natural sciences thus confirmed rather than undermined her belief in eternal life.

Naomi Schor claims in her seminal study of Sandian idealism that the oppositions between the detail and the whole and between spiritualism and materialism "constituted the epistemological horizon within which [Sand] and her contemporaries . . . necessarily and inescapably conceived the world" (12). Much of Sand's early writing indeed struggles with problematic dichotomies. But in her later work, Sand no longer regards the ideal and the material as polar opposites and in her neglected later essays on art and metaphysics, she distances herself from dualism as a "suffocating" concept ("À propos de botanique" 187). Instead she elaborates "the notion of *trinité*" ("À propos de botanique" 184, original emphasis) according to which the human soul comprises three distinct elements. Sand's neologism illustrates her rejection of dichotomies by this point and her embrace of a reconciliatory position.

The syncretism of *Évenor et Leucippe* is mirrored in its form, which caused some interest from the outset. A critic, writing for the *North American Review* in 1862, for instance, found it difficult to label the text, noting that it was "half allegory, and half theological romance" (see: Le Guillou, "Marginalité" 345). Twentieth-century critic Wladimir Karénine also heavily criticized this "failed novel" as "a hodgepodge of scientific facts, mythological creatures, an idyll . . . , and interminable philosophical digressions" (IV, 351–352), and Jean Gillet terms it a "bad novel" and "failed work" because of its "hesitation" (54). Not since *Lélia* had critics reacted with such perplexity and disapproval to one of Sand's works. The motivations behind the reactions are suggested in the comments: Karénine, for instance, admits that she prefers the more "innocent and vivid" Biblical version of creation and refers to *Évenor et Leucippe*'s "excessive strangeness" (IV, 352, 351). Gillet also finds the text "infinitely complex" and "destabilising". These critics fail to grasp the text's innovatory qualities and consider its formal and conceptual challenges as a deterrent rather than an attribute.

Évenor et Leucippe's generic hybridity is intentional, as Sand makes clear in the preface: "*Évenor et Leucippe* is not . . . a novel or a poem in the true sense; . . . the book is perhaps rather prosaic for those who are looking for a mere fantasy, and very daring for those who would take it too seriously" (27). For the new edition in 1862 she changed the title in ways which drew attention to its genre: the new title was *Évenor et Leucippe, The Love Affairs of the Golden Age*, and a subtitle was added: "antediluvian legend". Sand had also signed off a letter in 1856 with "your antediluvienne" (*Correspondance*, XIII 521). The term "antediluvian" places the work in the context of geology and palaeontology, whereas the references to a golden age and to legend seem to tie it to the mythical and the epic. For Sand, however, the Golden Age was not necessarily bound in the past. Certainly, "the state of nature" (*EL* 66) as a condition of "complete innocence and insufficient civilization" (46) was to be left behind, but if understood as "a state of enlightened virtue" and "a more complete understanding of life" (46), then the Golden Age could be rediscovered in the future. Indeed, the community at the end of *Évenor et Leucippe* is conceptualized as a "new golden age" (added emphasis, 201). Thus Sand rewrites the Classical concept to offer

a progressionist, future-driven model, in keeping with her distinct mode of idealism presenting alternatives societies.

In its combination of different genres, *Évenor et Leucippe* is close to Reynaud's *Earth and Sky* which is also a hybrid text, drawing on the deductions of geology and palaeontology whilst also offering a form of religious philosophy. However, whereas Reynaud offers what he terms a religio-scientific philosophy or "study",⁷ Sand writes a work of fiction, a point that she highlights. She refers to her text, for example, as a "reverie" (*Correspondance*, XIII, 331), "a work of my own imagination" (*EL* 54) and "my own personal fiction" (38), and she stresses the role of the creative mind: "I am writing a novel of my own fantasy which I am setting in a terrestrial paradise of my own design" (*Correspondance*, XIII, 272–273). Sand also chose *Évenor* and *Leucippe* as her heroes rather than Adam and Eve because Plato gives little information on these characters in *Critias*, allowing Sand to imagine her own creations (*Correspondance*, XIII, 272–273).

Évenor et Leucippe further diverges from *Earth and Sky* in that it offers its own vision of early human communities in a way which leads to comparisons with the society of Sand's day. Whereas the first section of *Évenor et Leucippe* draws on Reynaud in its outline of the earth's creation, the text then breaks away from *Earth and Sky* and follows the fortunes of *Évenor*, "one of the first men" (60). Sand refuses the premise that the earth started with one male and one female and insists on the inherently social nature of humans. *Évenor* reaches emotional and moral maturity only on discovering a member of the earlier race, *Téleïa*, and her adopted human daughter, *Leucippe*. It is essential for *Évenor* to join *Leucippe* since, remaining in solitude, he could not "progress to the angelic state" (89). Sand thus advocates human solidarity. Further, *Leucippe* is initially superior to *Évenor* and can access ideas beyond his reach, but, "whereas she was better able to cultivate the poetic ideal, she found in him a greater aptitude for social wisdom and understanding" (104). Their complementary strengths make them equals, a point that is impressed upon *Évenor* by *Téleïa*: "take care not to believe yourself to be more gifted than her and to want to dominate her physical weakness. . . . *Leucippe* is your equal" (139). *Évenor* and *Leucippe* work together to reform the human race in light of the spiritual and moral guidance received from *Téleïa*. They are deeply aware of their "solidarity" with the rest of humanity and their duty to devote their lives to "the education of their brothers" (147). Sand offers a new Creation narrative promoting both social and gender equality.

In this rewriting, Sand also uses her text to comment on literary and cultural trends. In *Évenor et Leucippe*, the pre-Adamite race, termed "les dives", has died out due to a natural catastrophe. However, there remains one survivor, *Téleïa*, and through the portrayal of this character, Sand highlights the flaws of contemporary French society. Although convinced that humanity is on the path to progress, Sand considers the people of her time to be temporarily adrift in moral and spiritual terms, and in *Évenor et Leucippe* she highlights the positive qualities of the earlier race which have been lost with material and technological progress. *Téleïa* lacks an awareness of practicality (98) and a capacity for action (117, 123), but she possesses a deep capacity for internal contemplation (98, 117) and a gentle, benevolent attitude towards her surroundings (123). She is shocked, for example, by the human race's "tendency towards the avid and blind appropriation of the real world" (98) and she reproaches the fact that "everything is preparing itself to be appropriated and modified by man": "everything here seems to be an instrument to be used in his life and nothing more" (122). Society is based on the material manipulation of the world's resources.

The prehuman "dives", in contrast, lived in harmony with nature, and Téléïa is associated with contemplation and reflection rather than appropriation. More specifically, it is said that her language lacks "realism" (103) or precise connections with "the real world" (104). These comments echo the references made earlier in the text to nineteenth-century naturalists as "realists" (37) who conclude from "the realism of their observations" (36) that matter is left to its own whims. It was this materialist position that Sand rejected, and it is therefore striking that she associates it with "le réalisme".

Sand is using the term "realism" here to criticize the savants of her time for their narrowly empirical approach, and to posit the absence of realism from Téléïa's worldview as an indication of her moral superiority. In epistemological terms, then, Sand associates "realism" with a reductive and utilitarian standpoint. The mid-1850s was also a central moment in France for discussions of realism as a form of artistic representation, and Sand actively contributed to these debates through numerous letters and articles, including "Le Réalisme" (1857). In such a context, it is significant that she chooses the term "le réalisme" in her text, particularly since *Évenor et Leucippe* seems irrelevant to discussions of this aesthetic. The opening, for example, is in stark contrast with the realist convention of introducing clearly delineated characters in an identifiable location, period and social context. Sand positions the story instead on a cosmic level, "at the centre of the great universe" where comets come together and a set of laws exemplify an infinite and eternal order (29). Before beginning *Évenor's* story, the narrator explicitly draws attention to authorial decisions and calls for the reader's opinion, asking, "do you wish the first ancestors of the human race to be called *Évenor* and *Leucippe*?" (47); "which name shall we give him? *Alorus*, *Adam*, *Kaioumaratz*, *Protogonos* or a hundred others?" and "where shall we place his *Atlantis*, his primitive forest, his garden of *Eden* or of the *Hesperides*?" (60). Sand refuses to be pinned down to a specific place and answers the last question with: "absolutely wherever you wish". The theory of reincarnation itself also ties in with Sand's narratological playfulness, as it enables the ultimate freedom for readers to imagine their own stories. Positing that we have all lived previous lives and that it is these earlier existences that we remember whenever we experience *déjà vu*, the narrator suggests that in placing the story, we all "search through our memories of that time before birth" (60).

In some of her novels, Sand draws on realist techniques, such as a focus on the ordinary or a precise geographical location, in the service of her political and moral idealism (see: Schor, 83–132). In her later writing, however, and its exploration of links between science and spirituality, Sand challenges what she terms scientific realism as a means of theorizing her own, defiant position on literary realism. By espousing a broad epistemological position which conceptualizes reincarnation as part of species development, Sand rejects the narrow empiricism she perceives in nineteenth-century science and ties this in with her own resistance to the conventions of formal realism.

Sand's text ends, for example, by highlighting its fictional status, with the narrator claiming no knowledge of the rest of *Évenor* and *Leucippe's* lives and stating that "it is *probable* that the newly established society in *Eden* was prosperous" (201, added emphasis). The events which took place in early civilizations are said to be shrouded in "an impenetrable shadow" (202) and the history of these ages is "only a poetic tradition" which "varies according to legend." The focus is on inaccessibility and mystery, and Sand thus makes it clear that, although she is writing about humanity's past, this new society is yet to be achieved: she is showing us what can be.

Like *Lélia*, which has been read as "a refusal of realism" (Harkness 161), *Évenor et Leucippe*'s break with the conventions of literary realism – the depiction of a recognizable social reality anchored in a contemporary political and social context – can in itself be read as dissatisfaction with this form of representation, as suggested by the veiled references to realism in the text. Sand criticizes literary realism for its inability to appreciate the material world: realists are no more than "so-called lovers of the material realm" (*Correspondance*, XVI, 33, 30, added emphasis), for example, and she asserts in an article on Flaubert that she would willingly term realism "simply a science of the detail" ("*L'Éducation sentimentale*" 405). Such an understanding of realism as a restricted form of representation, specifically tied with science, is reinforced in a later comment: "It seems to me that people are going too far at the moment in support of a realism that is narrow and rather unsubtle both within science and in art" (*Correspondance*, XXI, 12). Sand perceived a narrowness of perspective within the art forms of her time and considered this development to be intertwined with advances in the sciences.

That *Évenor et Leucippe* might be read as a commentary on nineteenth-century cultural practices is also revealed on a political level. Leucippe and Évenor's attempt to convert the disparate human camps to a religion based on equality echoes the social experiments of the 1830s such as the Saint-Simonians' attempts to found a new collective in Egypt (see: Levallois and Moussa 19–31). Moreover, the novel's focus on human communities is relevant to the fragmented social structures of Second Empire France. The young men in the text break away from their parents ("the old men") and form a new group, "the new men" (165) but due to inequality and internal divisions, this set unravels and a breakaway group is formed: "the exiles" (169). The young ones still remaining are now "the free ones". Such terms are resonant in the post-1848 context: the "free ones", for example, pointedly understand freedom "only for themselves" (196), and a further criticism of the new men is their reliance on violence and thirst for power, central aspects in Sand's condemnation of the 1848 revolution. The humans left behind rely on the superficial values of glory and charm (163), leading them to desire "the possession of things" (164): the earth itself, for example, seems too small and miserly to them (164). They also develop discernment and the notion of choice, but in doing so they lose "the spirit of fraternity" (164). At a time when materialist and individualist tendencies were arguably becoming prevalent within an ever more capitalist, industrialist France, Sand's portrayal of these social groups in *Évenor et Leucippe* is on one level a means of criticizing her age. As it develops, however, her tale of reincarnatory transformism also offers a powerful response to the preoccupation with the physical at the expense of the metaphysical and the spiritual.

Unlike the "narrow realism" (*Correspondance*, XXI, 12) that Sand perceives in the literature and science of her period, she offers what we might term a scientific idealism: drawing on Lamarckian and Saint-Hilairian theories of transformism, Sand develops a vision of how societies can improve and progress. One of the main problems for human societies in *Évenor et Leucippe* is that material progress leads to evil if individuals are not guided by "a superior ideal" (164). Leucippe herself provides such an ideal in that she is a potent symbol of humanity's perfectibility. Herself a member of the human race but raised by one of the pre-Adamite "dives", Leucippe represents "a sort of intermediary between earth and sky" (98). Taking up Reynaud's title – *Earth and Sky* – Sand's visionary text transcends the binaries between the material and the spiritual and creates an individual who brings the spheres together, "a token of the alliance between yourselves and heaven" (181).

Leucippe is human like Évenor, but at the same time there are multiple references to her superiority and her affinity with the sublime: she is "inspired" (137), "angelic" (175), and "celestial" (195. See also: 92, 94, 98, 104, 181, 189). Unlike the dive who remains in the realm of the abstract, Leucippe can negotiate between the two realms, dreaming of "leaving the rocks behind" and flying "like a cloud, into a lighter air" but then finding herself "back on the ground" (131). Whereas Sand's earlier heroines of the 1830s presented their ideal and were then stoned (Myrza) or killed (Lélia), Leucippe highlights the importance of moral and spiritual improvement but also implements practical change: she helps Évenor build a raft, for example, and goes with him to persuade the exiles to begin a new life.

Together Évenor and Leucippe teach their fellow humans about "the infinite future" and "the immortality of their souls" (142), with the ultimate aim of ascending to the level of angels (143). If we understand idealism as an aspirational, elevating poetics, in alignment with Isabelle Naginski's key definition of Sandian idealism (*Writing for her Life* 230–231), then the term is particularly apt for *Évenor et Leucippe* which is suffused with images of ascension. The universe, for example, is to be understood through an internal vision "which strengthens and purifies life forms and elevates them, with increasing swiftness, towards the summits of immortality" (108). Évenor and Leucippe's saintly union enables them to "ascend to the idea of the infinite" (136) and death itself is a form of elevation: "what did death matter to those who saw the glorious dwelling-place of their vast domain sparkling up in the ether!" (120).

Sand's scientific idealism challenges the conventional view of her writing as a literature privileging the abstract at the expense of the physical. It also undermines the perception of post-1848 writing in France as a literature of despair, anxiety and disenchantment (see: Paulson, 4–7). Inspired by Reynaud's stellar metempsychosis to develop her own position on the origins and development of the human species, Sand ultimately goes beyond Reynaud and also offers much more than a straightforward dissemination of Étienne Geoffroy Saint-Hilaire's transformist theories. In her original, syncretic and visionary text, Sand weaves together the biological and the spiritual in a way that carries significant resonances for the challenges of her century, delivering a bold response to the growing preoccupation with materialism both in the science and literature of the period.

Notes

1. The support of the British Society for the History of Science in preparing this article is gratefully acknowledged.

2. All translations are my own.

3. For the British context, see Ralph O'Connor, especially 41–42, 245–246.

4. McCalla is referring to Étienne Geoffroy Saint-Hilaire here.

5. Jules Michelet published a series of texts on the natural world: *The Bird* (1856), *The Insect* (1857), *The Sea* (1861) and *The Mountain* (1868).

6. Annarosa Poli, for example, dismisses *Évenor et Leucippe* as "a mediocre novel" (301).

7. The original title for *Terre et ciel* was *Religious Philosophy: A Study on Immortality* (*Philosophie religieuse, étude sur l'immortalité*, Griffiths 346).

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