The Sacred, Secular, Scholarly, and Scientific

John Deely Weaves Biological and Cosmic Evolution with Semiotics

Abstract: Following the 1967 untimely death of co-editor Raymond Nogar, in 1973 young John Deely bravely proceeded to publish *The Problem of Evolution: A* Study of the Philosophical Repercussions of Evolutionary Science. In the utopian vision of philosophy and theology, drawing on Teilhard de Chardin together with Dewey's psychological theory, and buttressed by Darwin's theory of evolution, the co-editors and authors would argue against the popular paradigms of Existentialism, Marxism, and Communism thriving in that era. Deely focused on the spiritual condition of humankind, but with a crosssectional perspective acting as a web-like fabric of evolutionary man (and woman). Man is subject to free choice in cultural traditions, but does not conform himself to a religious program or ethical policy. According to the further contributors to Deely's volume (Adler, Dobzhansky, White, Steward, Bidney, Ayala, Waddington, Huxley, Eiseley, and other thinkers), man can grow from "primitive", less sentient animals into the rational mind of humanity. Man has moral and theological principles proclaiming, in the face of evolution, revolutionary terms for the semiotic doctrine that comes to dominate Deely's life.

Keywords: cultural traditions; evolutionary science; semiotic doctrine; theology

Dinda L. Gorlée: University of Bergen, Norway, E-mail: gorlee@xs4all.nl

Article note: Deely, John N., and Raymond J. Nogar: *The Problem of Evolution: A Study of the Philosophical Repercussions of Evolutionary Science.* New York: Appleton-Century-Crofts, 1973, 470, Hardback, ISBN: 390-25998-5.

^{*}Corresponding author, Myrdene Anderson: Purdue University, USA, E-mail: myanders@purdue.com

1 Cosmic Ray and other voices

Following the unexpected death of his university teacher and colleague, Raymond Nogar (1916–1967), the young John Deely faced alone, without his collaborator, the task of editing and completing the anthology to be published in 1973 as The Problem of Evolution: A Study of the Philosophical Repercussions of Evolutionary Science. The Dominican priest-scientist Father Raymond Nogar, John's teacher of philosophy, was affectionately called by his students "Cosmic Ray" (Deely, 2001: 505, 799). In the years following Nogar's departure, John's sadness over the loss of his master must have led to his experiencing a ghost of loss. That mobilized a tenderness akin to vulnerability, evidenced in the completion of this book. Deely's epitaph here reprinted was an allegory from the beloved "Cosmic Ray":

The intellectual attrition of the sea of the timely crashing against the craggy rocks of the timeless may result in a polished marble of great value. The strength of both the tradition and contemporary thought may emerge in harmony and counter-balance the grave weakness in each view. (Nogar, in Deely and Nogar, 1973: v)

The drifting prelude of the sea is a sustained note of mourning, beginning in the biblical wilderness of desolation to embracing the sways and turns of the ravaging sea. In the dangerous *Umwelt*, that he could neither foresee nor articulate, John must have experienced an intense longing for somewhere to alight. In the storm of life, Peirce's maxim "Do not block the road of inquiry" (CP: 1.135; see 6.273) would have shifted his attention to the feeling, doing, and studying the cosmology of the evolution of nature. In Deely's understanding, the evolutionary process starts with a vague sense of nothingness (firstness) to the intense actuality of the sense (secondness) to increase, through habit-taking and habit-leaving, the multidiversity of the flow of nature (thirdness) (Turley, 1977: 64–78).

The emotional and intellectual cosmology ended, so far, with human beings, originating from the historical process of nature. It started in Aristotle's *Metaphysics* as the idea of the "biopoesis", with the cultural reference to the "spontaneous generation to the power of the heavens, which is the universal regulating power of generations and corruptions in earthly bodies" (Aristotle, in Deely and Nogar, 1973: 44).

In the volume's accordion-like collection of essays composed of different voices, the excerpts from John Dewey and Père Pierre Teilhard de Chardin deserve to be highlighted in philosophy and theology, since they have a special place in this collective book about the problem of evolution. The cosmology was

pantheistically renamed in the evolutionary path of the paleoanthropolist and Roman Catholic priest, Teilhard de Chardin. In his notion of the "noosphere", the intellectual brain of our species acted with the underlying "biosphere" as the emotional being of humans with spiritual energy to be manifested in the divine revelation of The Future of Man (Teilhard de Chardin, 1964). Following the geological, biological, and anthropological eras, can humankind reach God's spiritual energy? (Teilhard de Chardin, in Deely and Nogar, 1973: 323-330). Does this utopian vision mean that cosmic history works as an active agent against the theory of evolution, and even against the Christian Gospels as a human movement in our world? The pros and cons of the possible growth of human spirituality in the dynamism of religious faith were directed against the "religious" abuses of Existentialism, Marxism, Communism, and probably indirectly against the Christian church itself. The protest brought Teilhard de Chardin's priestly life into controversy and his books were not always published. But did the unorthodox ideas indeed bring the orthodox thought and worship of Catholicism into danger?

John Dewey's essay revived Charles Darwin's theory of evolution by discovering afresh the relations between biology and psychology (Dewey, in Deely and Nogar, 1973: 255-264). Darwin reached his climax with On the Origin of Species (1958 [1859]) centering on natural selection, only to find that his countryman Alfred Russel Wallace (2009[1870]) had come to the same conclusions in the same period (Darwin and Wallace, 1858). Yet Darwin implied that evolution was a kind of revolution, because "such problems as the existence of God, creation, direction or end in the cosmic unfolding, are futile and unrewarding, to say nothing of culturally obsolete" (Deely, 1973: 255; continued in Deely, 2001: 502-509). Devotional life is abandoned, or even rejected, from the Christian theological project, meaning that "Dewey's reply is in the negative" (Deely, 1973: 255-256; continued in Deely, 2001: 508). The contemporary creed for the "death of God" is not taken literally, but means for theologians, anthropologists, and other scholars the removal of the idolatrous worship to symbolize the religious symbols (rituals, hymns, sacraments, and prayers of religious life) as cultivated in the tribal populations of the Biblical narratives as well as in contemporary cultures (Neville, 1996: xiii).

Dewey's position was ambiguous or contradictory, when he wrote that "there is a difference between religion, *a* religion, and the religious" (1934: 3). Contrasting with the religious release of the signs of agnostic faith (Dewey, 1934: 86), the habitual behavior of symbolizing the natural world was limited to Dewey's pragmatic understanding of the biological "struggle for survival", echoing also Herbert Spencer's "survival of the fittest" (1898[1864]). This construct leaves out any supernatural vision of God the Creator, as today's

objective criticism of semiotics. The evolutionary worldview has become frightful for a theology that has lost itself in the *bricolage* of anthropology! (Lévi-Strauss, 1966[1962]: 16–36). As if the real world is nothing more than logic could measure or intelligence explore!

2 John Deely's emerging cosmology

In retrospect, The Problem of Evolution was Deely's personal journey for selfawareness as a Christian scholar, by way of exploring the evidence and proof for the theory of evolution for the orthodox and unorthodox faith. Could the official declarations of *Nihil obstat* save the Catholic morality? Nogar had pejoratively asserted that "Most human insights are fragmentary" and "Not every tradition is wholly authentic" (Nogar, 1973: 370) but Deely in his "The emergence of man" (Deely, 1973: 119–145) argued for or against the belief in one God in nature, the love of human creation, sparkling within the insights of "philosophical anthropology to bear within the context of man's evolutionary origins" (Deely, 1973: 119). Deely was enlightened by the light of the Gospel and wanted to give definite form and shape to the future of the evolutionary process against the prevailing cultures of Existentialism and Marxism. The Christian church realized that the gift of salvation inspired the communal and corporate movement not only with God but also with other believers. The koinonia bonded together the radical churches in the 1960s and 1970s in political and social actions. Man (included, surely, the same equivalent of woman) had been thought of and analyzed as the unique and exceptional species evolving from other animals, "alloanimals", but gradually transfigured, or even glorified, by humanistic insights from thought. Does intellectual and emotional thought serve as the entrée from the old covenant to the new one, as Saint Paul explained, by replacing dogma by personal faith?

The biological background of humankind became a mixed question of differences and *différances* between "hominoid and hominid, animal and man" (Deely, 1973: 119). The "differences" of the biological nature of our species were determined primarily by Nogar's and Deely's "Rationale" announcing the section "The uniqueness of man" (Deely and Nogar, 1973: 85–88). But Deely himself transformed the idea of evolution further in the "Rationale" for the section "The moral issues" (Deely, 1973: 185). In the old covenant, written by Mortimer J. Adler (another of Deely's mentors), the formal perspective between human and animal behavioral systems rested on the "highest" primates, human beings.

In The Difference of Man and The Difference It Makes (Adler, 1967), Adler defended the thesis of "difference" saying that the origin of species is contained in the triadic structure of the human brain, challenging the dyadic structure of the conventional Cartesian differences of mind and matter. In this intellectual battle. Adler argued for three differences between humans and alloanimals; the differences in degree, since some individuals evolved and others not; then, the superficial differences in kind noting the absence and presence of brain; and subsequently, one might infer an element of conceptual thought, present in humankind and absent in other animals. The differences evolve from the superficial difference to the radical difference between humans and other animals (Adler, in Deely and Nogar: 86–88). The critical threshold of differences proposed by the Jewish philosopher Adler, profoundly attracted to Catholicism, trespassed and intermediated toward Charles Peirce's prior assessment of the three categories. However, Peirce's categorial system had a different nature. Instead of expressing not-identical things or events, the categories suggested the universal and ontological sequences of all things or events, indicating in the logical stages not only the actual sameness but also the play of all kind of differences.

3 From late modern virtues to postmodern morality

The expression of differences was re-formulated by Jacques Derrida's Speech and Phenomena (Derrida, 1973: 129–160, translated from the French original in 1967). His semiotic ideas arose in the move from personal speculation to semiotic beliefs or even linguistic "fashion" of philosophy. The differences were seen as the semiotic "structure of interlacing, a weaving, or a web" knitting together "different threads and different lines of sense or force" into the hidden "middle voice" (130, 132) of any creature. Derrida's project was different in the concentration on the play of différances. He was not interested by the formal of enumerating biological differences, but differentiations in linguistic logic and cultural rhetoric as stylizing a radical object in the textual activity of the world of culture. Derrida divided and subdivided the version of differences in the variety of social, intellectual, moral, and aesthetic behaviors of humankind. We can critically "animate" the oppositions between the human's and the animal's cry, giving it a normative meaning, moving from knowledge and experience to textuality (Gorlée, 2015). But the literary meaning of Derrida's textuality is rooted in the particular human culture that creates the postmodern subculture (Deely, 1994). Derrida's new covenant must be more than the ordinary idea of difference, but turns into the radicalized idea of *différances* to adapt what speech could possibly stand for.

Deely focused on the "spiritual" decision of Adler, but as a liberated thinker he stressed different behaviors of rational "man" and the so-called "raw" and "primitive animals". During the old covenant, Deely noted the expansive energy of physiobiological concomitants of humanity growing into the biological evolution of what is called the "animal rationale" (rational animal, Deely, 1973: 121-123) to achieve the cognitive "supercreation, or as Leibniz puts it, a transcreation" of our species (Deely, 1973; in Père Sertillanges, 139). In Derrida's avant-garde line of the 1970s, the otherness (difference) of future science acknowledged the Peirce-like emotional, real, and intellectual varieties of human language to show the sameness of the open "detours, phrases, and syntax" of human language uprooted in the différances of "animal language". Indeed, Deely's cross-sectional perspective of the human approaching other animals argued in a positive sense the mental and spiritual differences of these species. In fact, without mentioning Derrida, the emergent philosopher Deely changed the history of evolution including the difference and *différance*.

In the section "The moral issues", evolution was placed on the agenda of Deely's "Evolution and ethics" (Deely, 1973: 187-209). The natural world of cosmology must have something like the mores of right (or wrong) reasoning reflecting the just (or unjust) conduct of what is called the "ethical animal" (Waddington, in Deely and Nogar, 1973: 198). The "ethical animal" is a general position for rational grounds of humanness, but now presumed to train and judge the moral values of every individual man-animal. Deely's chaos and order was under pressure to define the criterion of the behavior of hominids to be more radical, "in evolutionary terms what it means to be human" (Deely, 1973: 128). The differences and différances between the "synthetic" and the "analytic" approach of God's creatures seem today a paradoxical proposition, given the huge flow of time of many generations throughout evolution.

4 Closing the gap: More distant voices from anthropology

It is no surprise to find Deely, with or without Nogar, being well-grounded in philosophy as well as theology, from the classics right up to that moment in 1973 when this volume was published. Our review to this point largely draws from Part I: Historical Perspective about The impact of evolution on scientific method (1–82), and from sections written by Deely in Part II: Contemporary Discussions (83–404). To summarize the balance of the volume before coming back to more of Part II, Part III (405–436) is devoted to bibliography, exquisitely organized and documented, anticipating the rigor in semiotic referencing now largely associated with Deely's name; then a brief Retrospect (437–444); and finally a generous Index (445–470).

Our task has been to retrace the voice of Deely in this complex volume. His collaboration with Cosmic Ray in Part I precludes unraveling any singular voice for Deely, but Deely contributed other text and entire essays in Part II for his own revolution. Unpacking the sections of Part II, we face the following subjects:

- 1. The uniqueness of "man" [Deely contributing the third and final essay, "The emergence of man", after contributions by Theodosius Dobzhansky and Lesley White];
- 2. The humanness of man [essays by Julian Steward, Lesley White, and David Bidney];
- 3. The moral issues [Deely contributing the first essay, "Evolution and ethics", before those by Mortimer J. Adler and Francisco José Ayala];
- 4. The metaphysical issues [essays by John Dewey, Benedict M. Ashley, and C.H. Waddington];
- 5. The impact of evolution on Christian thought [as already mentioned, essays by A.-M. Dubaric, Teilhard de Chardin, and Raymond J. Nogar];
- 6. Toward an evolutionary world view [four essays by Julian Huxley, Theodosius Dobzhansky, Raymond J. Nogar, and Loren Eiseley].

Deely's synthesis and extensions of philosophy and theology do meet, in some fashion, the science of biology, revealing how prescient a contribution this volume was. Effortlessly, Deely anticipated many a strand of postmodern thought, just as Deely was to claim of Peirce, his newer but more historically distant mentor (Deely, 2001).

For readers to permit themselves to be surprised, they have to pull into the foreground – and in fact into the gap between philosophy-*cum*-theology-*cum*-biology – the very science of humanity in anthropological science. Deely managed to accomplish just that, well before others made these considerations routine. Deely does not share with us how he came to familiarize himself, and digest, the excerpted works of current anthropological and biological thinkers and public intellectuals, including, reciting some not already brought into discussion from the above lists: the philosophically-leaning evolutionary biologists Francisco José Ayala and C.H. Waddington (enduringly significant thinkers); and the cultural and biological anthropologists David Bidney, Theodosius Dobzhansky, Loren Eiseley, Julian Huxley, Julian Steward, Lesley

White (each one actively cited by professionals beyond the twentieth century in which they lived).

Deely allows these intellectuals to speak from their own turfs, just as he speaks from his own rapidly-expanding semiotic paradigm, which he, with others, by the end of the twentieth century explicitly expands to embrace biosemiotics. This volume of *The Problem of Evolution: A Study of the Philosophical Repercussions of Evolutionary Science* was set up to expand the minds of others, both professionals and students. Part II, for instance, provides a virtual lesson-plan from the past. The bibliography in Part III could provide a baseline in a number of disciplines today. The index specifically includes subjects, terms, and proper names, and is introduced by Deely as being "complete and accurate" for future generations. From experience, we know Deely intends this to apply to the volume as a whole, completed for Cosmic Ray in an exuberance of love and respect.

5 Wrapping up

The philosopher Deely's affirmative theory fused four disciplines: religion, ethics, biology, and anthropology. Briefly summarized, the first story of the moral order of evolution (129–133) was about descent with modification – the threads transmitted stochastically in blind waves of gene mutation, gene flow, and genetic drift, all touched by the non-chance of natural selection. The second story (133–134) was about the winnowing of selection rendering a cultural game with "open" signs to act as a web-like fabric in which the environment shapes genotypes into phenotypes, that in turn function in wider and deeper aspects of the ecology. The third story (134–139) concluded that biological and cultural components produce an infinite semiosis, activating itself with natural as well as artificial (that is, cultural) *Umwelts* that shape survival in any species. Can we conclude that Deely's philosophical repercussions of evolutionary science align with a Peircean system of categories?

Deely carefully vetted his contributors, and tested his own understanding, before the publication of this volume. He was concerned about the several years between the conception, the composition, and the collection of manuscripts and the publication itself (441). He concluded that there had been no paradigmatic ruptures. We will not subject his text to any similar test today, but we must note that biological and philosophical discourse continues to "evolve" and "develop" (cf. Salthe, 1993).

However, the reader of a publication from 1973 would not expect any sophisticated discussion of co-evolution, punctuated equilibrium, the microbiome internal to the organism, or the epigenome recording and passing on traces from interaction with an environment. However, these more contemporary discourses do not tend to tackle any of the religious or ethnical dogmas discussed by Deely. What will positively reward a contemporary reader, though, is Deely's broaching of epigenesis, ever so briefly (137–139; 199), echoing Nogar (372–274). Epigenesis, virtually the inheritance of acquired characteristics, so endemic in culture, has been compared with the properly discarded theories of Lamarck (1914[1809]) pertaining to developmental biology, not culture; today one can point to the epigenome wherein the DNA of the genome is tagged with modifications coming about from interactions beyond the organism. In even mentioning epigenesis, though oblivious of the epigenome, Deely anticipates future movements in biology.

Consequently, it seems to us that the main feature of *The Problem of Evolution: A Study of the Philosophical Repercussions of Evolutionary Science* that might date it, will be stylistic rather than substantive – namely, the thencommon use of "man" in the generic – that had contrasted humans with other animals while also subsuming the unmarked feminine gender. To make our review at all readable, we had to adjust our terminology, there being no mechanical substitution of "man"; context determined whether we referred to human, humans, humankind, the human species, or just plain people. Further, instead of the narrow "differences", we widened them into Derridean *différances*.

We suggest that just plain people, as well as philosophers, biologists, and anthropologists, will continue to value this volume, Deely's labor of love, for his mentor and for intellectual life.

References

ADLER, Mortimer J.

1967. The Difference of Man and The Difference It Makes (New York: Holt, Reinhart and Winston). DARWIN, Charles.

1958 [1859]. On the Origin of Species (London: J.M. Dent / New York: E. Dutton).

DARWIN, Charles, and Alfred Russel WALLACE.

1858. "On the tendency of species to form varieties; and on the perpetuation of varieties and species by natural means of selection", *Zoological Journal of the Linnean Society* 3: 46–50. DEELY, John N.

1994. The Human Use of Signs or: Elements of Anthroposemiosis (Lanham, MD: Rowman and Littlefield).

2001. Four Ages of Understanding: The First Postmodern Survey of Philosophy from Ancient Times to the Turn of the Twenty-First Century (Toronto Studies in Semiotics) (Toronto: University of Toronto Press).

DEELY, John N., and Raymond J. NOGAR.

1973. The Problem of Evolution: A Study of the Philosophical Repercussions of Evolutionary Science (New York: Appleton-Century-Crofts).

DERRIDA, Jacques.

1973. Speech and Phenomena and Other Essays on Husserl's Theory of Signs (Translated from the French by David B. Allison) (Evanston, IL: Northwestern University Press).

DEWEY, John.

1934. A Common Faith (New Haven: Yale University Press).

GORLÉE, Dinda L.

2015. "From words and sentences to interjections: The anatomy of exclamations in Peirce and Wittgenstein", Semiotica 205: 37–86.

LAMARCK, Jean-Baptiste.

1914 [1809]. Zoological Philosophy: An Exposition (Translated from the French by Hugh Elliot) (London: Macmillan).

LÉVI-STRAUSS, Claude.

1966 [1962]. The Savage Mind (London: Weidenfeld and Nicolson).

NEVILLE, Robert Cummings.

1996. The Truth of Broken Symbols (Albany: State University of New York Press).

PEIRCE, Charles Sanders.

1931–1966. Collected Papers of Charles Sanders Peirce, 8 volumes, Charles Hartshorne, Paul Weiss, and Arthur W. Burks (Eds.), (Cambridge, MA: Belknap Press of Harvard University Press). (cited as CP: vol# paragraph#).

SALTHE, Stanley N.

1993. Development and Evolution: Complexity and Change in Biology (Cambridge, MA: The MIT Press).

SPENCER, Herbert.

1898 [1864]. Principles of Biology; Volume 1, revised and expanded edition (New York: Appleton and Company).

TEILHARD DE CHARDIN, Pierre.

1964 [1959]. *The Future of Man* (Translated from the French by Norman Denny) (London: William Collins / New York: Harper and Row).

TURLEY, Peter T.

1977. Peirce's Cosmology (New York: Philosophical Library).

WALLACE, Alfred Russel.

2009 [1870]. Contributions to the Theory of Natural Selection: A Series of Essays, 2nd edition (Cambridge: Cambridge University Press).

Bionotes

Dinda L. Gorlée

Dinda L. Gorlée (b. 1943) is a Research Associate of Wittgenstein Archives at the University of Bergen. She was Visiting Professor at the University of Helsinki (2001–2005). Recent books include Wittgenstein in Translation: Exploring Semiotic Signatures (2012), From Translation to Transduction: The Glassy Essence of Intersemiosis (2015). Recent articles include "Peirce's Logotheca" (2012), "From words and sentences to interjections: The anatomy of exclamations in Peirce and Wittgenstein" (2015), and "Wittgenstein's persuasive rhetoric" (2015).

Myrdene Anderson

Myrdene Anderson (b. 1934), anthropologist, linguist, and semiotician at Purdue University, currently focuses on Saami reindeer management, ethnographic methodology, cognitive theory, and the Peircean notion of habit. Publications include "Sharing G. Evelyn Hutchinson's fabricational noise" (2000), *Cultural Shaping of Violence* (2004), "How qualification and quantification meet, or don't, in ethnography" (2012), "Musing on nomadism: Being and becoming at home on the reindeer range" (2015).