

"Perception, Taxonomy, and Creation in Nabokov", A review article inspired by Stephen H. Blackwell and Kurt Johnson, *Fine Lines: Vladimir Nabokov's Scientific Art*. New Haven, CT: Yale University Press, 2016. ISBN 978-0-300-19455-5. 75 color + 94 b/w illustrations. \$50.00.

Vladimir Nabokov's corpus of novels, autobiography, essays and interviews offers the reader a seemingly inexhaustible source of knowledge about the creative process, exercised on some of the most sensitive subjects ever explored in literature, including incest, pedophilia, and censorship. As such, serious inquiry into his writings leave readers with the impression that he is testing the very limits of what is sayable, and even thinkable, and that we, through reflection on his insights and approach, become willing -- or perhaps even unwilling -- participants in thought experiments that can, in such texts as *Lolita* or *Ada*, make us feel both exhilarated and guilty by association for crimes committed or contemplated by characters and narrators. He is merciless, in this regard, as Marquis de Sade is in *Philosophie dans le Boudoir*, in that he leads us into monstrous scenarios with elegance, wit, and creative reflection, and then, when the tension or the sheer activity described becomes positively unbearable, he pauses, ruminates, asks us to consider implications and historical precedents. In this respect, there's overlap between those scenes in *Philosophie* that demand how unreasonable would be a God who denies us the pleasure that he himself has programmed into our very flesh, and in the Nabokov investigations into the culpability of Humbert Humbert against a backdrop of historical and legal precedents, such as marriage between underage girls and older men, that contextualize the actions of this character-narrator within a very uncomfortable history of matrimony and seduction.

Part of the pleasure of reading Nabokov is the confrontation with uncomfortable truths, both in a kind of raw form, but also in forms of puzzles, so that the reader is often uncertain as to what kind of questions are being posed, or which links are being made, until careful consideration of the situation at hand. Readers are quite literally seduced by luscious prose, provocative images, and fantastical juxtapositions, a kind of Barthes-like "jouissance" that begins with some level of uncertainty as to what precisely is occurring in any given scene, and follows up with titillating, provocative and sometimes shocking revelations. The puzzle-like quality of the text also leads readers into the processes described by Umberto Eco, in *Lector in Fabula*, whereby the careful cataloguing of detail, arranging of facts, and inquiries into meanings of particular words or events, gives the reader a task for which she is rewarded with scientific, historical or literary insights that are satisfying, both in themselves, and for the ways that they propel the narrative forward. In this respect, the science of Nabokov's art underlies the whole project, and this new and magnificent work, *Fine Lines: Vladimir Nabokov's Scientific Art*, carefully explains why this is so; in so doing, it brings readers to recognize with awe the breadth and depth of Nabokov's genius by providing the kinds of detail that is required in order to explain and valorize his scientific accomplishments.

Nabokov's scientific art can be situated in a long line of work that has been inspired or informed or explained or even motivated by research in science, or at least research deemed scientific at the time, and two examples help illuminate the breadth of Nabokov's achievement: Lord Byron, and Émile Zola. For Lord Byron, scientific works seem to have held a particular interest on account of his rejection of purely imaginative literature or wildly speculative philosophy in favour of a poetry of fact, based on observation and experiment, tested by reason and claiming a purpose and function similar or equal to that of science. His letters and poems reflect this bias for the verifiable and logical. In a letter of April 1817 to John Murray he wrote: "I hate things all fiction.... There should always be some foundation of fact for the most airy fabric -- and pure invention is but the talent of a liar." Of particular interest are biology and geology, and in particular the works of Louis de Buffon and Georges Cuvier. Buffon's scientific and philosophical theories were well-known during Byron's time, and most of his works were translated throughout continental Europe and in England. The monumental *Histoire Naturelle* (1748-1788) was translated into English and appeared in 1791, and the 1816 sale catalogue

summarizing the contents of Byron's library indicates that he owned a copy of this work. Cuvier is of central concern because he, too, was a highly respected and naturalist to whom Byron makes several references, most notably in the preface to *Cain* where he says he has "partly adopted in this poem the notion of Cuvier, that the world had been destroyed several times before the creation of man." These images and ideas are catalysts to Byron's art, and his readings offer a mine that he explores for nuggets, in the same way that his own dramatic lifestyle provided narratives for the raucous adventures of his heroic narrative-self.

Zola isn't looking so much for creative bullion as he is for a general framework to justify his approach to heredity and society, as they interact in complex ways within and beyond the characters directly related to the Rougons and the Macquarts. Sandoz, the fictionalized version of Zola written into *L'Oeuvre*, describes a process whereby science is recruited to the service of literary production, consciously and intentionally, but to indeterminate effect: "It is certainly to science that poets and novelists ought to address themselves, for it is the only possible source of inspiration to-day. But what are we to borrow from it? How are we to march in its company? The moment I begin to think about that sort of thing I feel that I am floundering. Ah, if I only knew, what a series of books I would hurl at the heads of the crowd!" Those books, twenty in all, come to be informed by the speculative work by Claude Bernard on the dialogic relation between nature and nurture, engaged through relations that come to be known under the banner of naturalism. But it's not just Sandoz who seeks such inspiration and explanation, so too does the fictionalized version of Paul Cézanne, the tortured genius he called Claude Lantier, who seeks in the story a different way of seeing the world, and portraying that reality:

Thus science entered into painting, there was a method for logical observation already. One only had to take the predominating hue of a picture, and note the complementary or similar colours, to establish experimentally what variations would occur; for instance, red would turn yellowish if it were near blue, and a whole landscape would change in tint by the refractions and the very decomposition of light, according to the clouds passing over it. Claude then accurately came to this conclusion: That objects have no real fixed colour; that they assume various hues according to ambient circumstances; but the misfortune was that when he took to direct observation, with his brain throbbing with scientific formulas, his prejudiced vision lent too much force to delicate shades, and made him render what was theoretically correct in too vivid a manner: thus his style, once so bright, so full of the palpitation of sunlight, ended in a reversal of everything to which the eye was accustomed, giving, for instance, flesh of a violet tinge under tricoloured skies. Insanity seemed to be at the end of it all.

The insanity of his scientific insights will ultimately be fatal for Claude, even as the science of behavior was at the very heart of Sandoz's ultimate success as a writer.

Fine Lines tells a related, but rather different kind of story about Nabokov's debts to science, which seem to the reader of, for example, *Ada*, to be multifarious, because the volume makes the case that it is science that is in Nabokov's debt, on account of the rigorous research and provocative theories about butterflies that helped him make some rather remarkable contributions to the field of lepidopterology, including over 1,000 drawings, of which 148 are reproduced in this magnificent volume. Many of the details of these drawings, and the descriptions thereof by the distinguished editors and contributors, are highly-specialized; but for someone interested solely in Nabokov's literary and cultural work, there are some amazing insights throughout this volume, along the lines of the following:

Jotted notes accompanying many drawings reveal details of his discovery process, showing how he sought to understand the evolutionary diversity of Blue butterflies by means of

morphology. The notes clarify Nabokov's uncanny sense of the interplay of temporal, spatial, and developmental factors underlying the major evolutionary and taxonomic questions of his day. Viewed in extended sequence across many cards, the drawings allow an understanding of how he sought to trace the temporal – indeed the evolutionary – history of the species he studied. Aesthetically, too, they present an unusual temporal picture – one that brings to mind Nabokov's habit of writing his novels on similar note cards, working in nonlinear fashion, and thinking of novelistic time as a painted canvas or foldable magic carpet (ix).

His use of note cards, on which he (beginning at age 49) notes his observations, mental efforts, inspiration, documentary facts, philosophical opinions, and scientific details, extends beyond the artistic realm, and the scientific one, when we see him in, for example, a November 26th, 1958 CBC television show called "Close-Up, in which he discussed *Lolita* [with Lionel Trilling and Pierre Berton](#). It's clear from this footage, [despite claims to the contrary](#), that Nabokov was never "spontaneous" publicly, and always insisted upon receiving questions in advance, to which answers were written on his famous note cards. The images of him reading from them during this interview are intriguing, but it's what he says of his Humbert Humbert in relation to himself is truly fascinating, and typically ludic. The line between life and art, and, as we learn in the current volume, between art and science, is challenged, and often by the ludism that makes his work so rewarding -- and confounding.

I must confess to deriving particular pleasure in this volume from the literary and cultural insights, but a lepidopterist would undoubtedly gain much more than I could; and if there's a message that runs throughout this book, and Nabokov's oeuvre, it's that human knowledge is infinite, unquenchable, unattainable, as is the effort to document it in science or art. And as Blackwell and Johnson assert, with their usual flare and insight: "This affinity between Nabokov's views of artistic and scientific knowledge should give pause to those who feel that he intended, desired, or even believed it possible to control every facet of his works' form, meaning, and interpretive history. His views also suggest that – to the extent that he loved nature, its complexity and its elusiveness – he would wish his novels to participate and stimulate similarly unquenchable adventures" (1). This overlap in ambition and theme between science and art is provocatively posed as well when Blackwell and Johnson wonder if there's something to the fact that Nabokov's "renowned" 1945 article, "Notes on Neotropical *Plebejinae*", focuses upon the evolution of butterflies' genitalia, at the very time when he is busy writing his first treatment of pedophilia (*The Enchanter*), or, more interestingly perhaps, whether *sexuality* is the central theme and trope in Nabokov's corpus, writ large: "it may be, in fact, that Nabokov's profound study of butterfly evolution through genitalic mutations heightened his already acute artistic interest in the complex, troubling, often disruptive place of sex in human affairs" (4).

As we read through this book, we're introduced, for those of us who had not thought of him in this way, to Nabokov the scientist, but for me so much confirms how his methods were suited to audacious, profound, titillating, complex and rewarding artistic practices. Blackwell and Johnson explain the bases for Nabokov's abilities, including the kind of diligence required to become a master of butterflies, in all of their magnificence and complexity. They are apt images for him to obsess on, given their metamorphosis from solid, creeping caterpillars into ephemeral, aesthetically-pleasing fragile beings, a process akin to that deliberate, plodding terrestrial work that the novelist undergoes in order to create great literary works, or that same type of work that scientists undertake for that occasional breakthrough or realization.

Following this wonderful introduction, the reader is presented with beautifully-annotated plates, in black and white and color, including some gorgeous images that Nabokov created for Vera, his lifelong companion. His artistry is inspiring, and his inscriptions wonderful, creating an effect of a Braque or Delaunay modernist work -- with symbols, numbers, names, dates and places, -- combined

with meticulous drawings of ornate and colorful patterns. The book also contains wonderful photographs of butterflies, the settings within which Nabokov found them, the tools of his scientific trade, as well as maps, marginalia and other images that recreate the force of these creatures for a mind like Nabokov's.

The volume concludes with a series of in-depth essays by specialists that contribute to the biography of Nabokov from a perspective that I imagine will be surprising to most readers, even if glimpses of the worlds described are offered in *Speak, Memory*, of course, and also *Ada* and *Lolita*. Robert Dirig writes on "The Toothwort White and Related Natural History Motifs in *Pale Fire*, with some remarkable insights about Shade's poem (including a wonderful reading of the end of the poem). Victor Fet provides "A Few Notes on Nabokov's *Childhood Entomology*, with an insight that is one of the leitmotifs of this book: "The tremendous attention to detail in his literary work, in my opinion, derives in many ways from the fact that such attention was a required professional skill for any systematic zoologist. Nabokov's fictional Ada was not an exception as a precocious entomologist: on Antiterra, with her "larvarium" and her hybrids, she merely elaborated further on the dreams and occupations of Nabokov when he was the same age in Vyra" (223). Victoria N. Alexander writes on "Chance, Nature's Practical Jokes, and the 'Non-Utilitarian Delights' of Butterfly Mimicry", and once again, the kind of scientific insights that can be inspired by a book like this one are highlighted with wonderful acumen:

The novel whose plot turns on fantastic luck is eschewed (likewise artistic and allusive writing). Things incidental rather than coincidental are preferred – that is, the numerous mundane causal factors, which are more or less expected to occur most of the time, are favored over the unusual intersection of unrelated causal chains: no Armageddon meteorites, no cataclysmic floods, no fortuitous meetings at the crossroads. Gradualism, not catastrophe, is what geologist Charles Lyell recommended and what Darwin accepted. Likewise, according to literary naturalists, narratives should relate everyday phenomena and avoid the unusual luck one might attribute to a deity. (226)

James Mallet offers a careful examination of "Nabokov's Evolution", and notes therein the fact that although Nabokov became a great and famous novelist, "there is no reason, had he not given up active science and had *Lolita* not sparked a huge new readership, why he might not have become much more revered as a butterfly taxonomist instead" (236-7). Dorion Sagan writes a work on Fictional /realism: scaling the Twin Peaks of Art and Science" that delves into Nabokov's "antitotalizing stance", and makes some fascinating observations, again linking his science to his art, about the broad Nabokov project, that intertwines, quite literally, Old Europe with new America through the persons of Humbert Humbert and Lolita: "This vengeance of the old and Old World and stamping of its impress on the new and New World might be interpreted as a simultaneous attraction-repulsion for the mob individualism and crass commercialism of America, which in real life provided Nabokov with sanctuary and meritocratic ladder with which to rescale the social heights of which he and his family were deprived by the Russian Revolution when he was eighteen" (247). And finally, the volume ends with "Mountains of Detail", quite literally, as Lucas, Forister, Fordyce and Nice combine forces to go "On the Trail with Nabokov's Blues". Their essay begins with a truism, that "walking in the footsteps of a master is always a humbling experience in science". Walking in the footsteps of those who have so carefully traced these "Fine Lines" is equally humbling, and inspiring. This is a magnificent work, worthy of intensive study, and it is an aptly brilliant accompaniment to the entire corpus, --scientific, literary, critical, and autobiographical, -- of Vladimir Nabokov.