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# Fine Lines

Vladimir Nabokov's

Scientific Art



EDITED BY Stephen H. Blackwell and Kurt Johnson

## A Few Notes on Nabokov's Childhood Entomology

#### VICTOR FET

The marvelous compendia by Brian Boyd and Robert M. Pyle, Kurt Johnson and Steve Coates, and Dieter Zimmer present exciting reading to anyone interested in Nabokov's butterflies.<sup>1</sup> The main emphasis in these volumes, however, is on the double passion of Nabokov in his adult age. Nabokov's childhood activities in lepidoptery were so brilliantly described by the writer himself (chapter 6 of *Speak, Memory / Drugie berega* [Other shores]) that one finds it hard to add anything to his own account. Here I sketch possible lines of inquiry that surround childhood involvement in natural science—an issue of a great importance in Nabokov's case—that interested scholars could pursue.

A lay reader, I suspect, still readily conjures an image of a Victorian child with a butterfly net and perceives lepidoptery to be a trivial, childish activity—a less serious form of child's play than that of more technically inclined, adult-imitating children who build engine models and computers. In modern Western culture, a boy with a butterfly net is perceived as engaging in an old-fashioned, though excusable, activity. Steve Coates, who cowrote *Nabokov's Blues* with Kurt Johnson, offers a perspective from his own childhood: "I grew up in rural western North Carolina, and a lot of the boys in the neighborhood had fabulous, well-organized insect collections and knew a great deal about entomology. As I grew older and came to think of myself as more 'sophisticated,' I dismissed the whole thing as an unhip, rustic pursuit, but this of course was exactly what Nabokov was doing at the turn of the century."<sup>2</sup>

Nabokov's lepidoptery long posed a question: Was he an amateur or a professional entomologist? Today, it has been amply demonstrated that he was a professional. Kurt Johnson says, "For Nabokov, as with many, fascination with the big picture books of butterflies as a young child grew to concerted collecting as a youngster. As with many scientists, these impressions of youth become a driving life force."<sup>3</sup> Nabokov started collecting butterflies in 1906, at age seven, and never ceased; he published his first book of poems ten years later, at age seventeen; his first research paper on butterflies, at age twenty; and his first novel, *Mashenka* [Mary], at age twenty-six. To quote Dieter Zimmer, "For Nabokov lepidoptery was not a mere hobby. It was a lifelong passionate interest that began when he just turned seven, eight years before he began to compose his first poems, with his first Old World Swallowtail in Vyra."<sup>4</sup>

Entomological work for Nabokov started very early and included not only self-training but also the careful guidance of his polymath father, who was also a butterfly collector—in this case, a well-informed amateur. Precocious Nabokov, with his early English and French, could read serious scientific volumes (such as the *Entomologist*) in those languages; his childhood notes on butterflies (which do not survive) were written in English.<sup>5</sup> We witness the early "imprinting" that those voluminous books had on his visual and linguistic memory by finding lepidopterological names, allusions, and puns scattered throughout his ouevre in both Russian and English. As Brian Boyd relates, "Even before he read and reread all of Tolstoy, Flaubert, and Shakespeare in the original languages as he entered his teens, he had mastered the known butterflies of Europe and [by 1910] 'dreamed his way through' the volumes so far published of Adalbert Seitz's *Die Gross-Schmetterlinge der Erde.*<sup>\*6</sup> Johnson and Coates comment further on the classic foreign entomology books Nabokov had close at hand and on the beauty and importance of Seitz's monumental work.<sup>7</sup> Although Nabokov studied German at the Tenishev School, he enrolled only in January 1911; therefore he was evidently self-trained in technical German of the *Schmetterlingenbüche* (having had no early tutoring in German).

Dieter Zimmer reminds us that most of the basic knowledge in entomology (as well as other areas of zoology and botany, I should add) until recently "was collected by amateurs who either possessed the means to devote themselves to a consuming hobby or who earned their living in some other way."<sup>8</sup> This is still the case in the twenty-first century: as in Nabokov's time, quite a lot of descriptive work is done, reasonably well, by self-trained zoologists who do not earn a living from this activity. Collecting, moreover, is commonly done by amateurs: there is simply not enough funding to support such extensive fieldwork.



IN AFFLUENT FAMILIES OF THE GENTRY in Europe, including imperial Russia, children could spend their time and allowance on collecting. Expensive foreign butterfly books were readily available to young Nabokov; his own collections of Russian fauna were augmented by exotic specimens purchased through mail-order catalogs.<sup>9</sup> Of course, money always mattered for funding zoological research, collecting, and travel. The largest museums of the European empires—British, German, French, Austrian, Russian—were founded and supported by the royal dynasties, as was the case with the famed Imperial Zoological Museum in Saint Petersburg (now the Zoological Institute of the Russian Academy of Sciences, just across the Neva River from the Winter Palace). Nabokov's favorite imagery of minor, fictional European royalty (see *Pale Fire*) includes references to a few historical figures who were naturalistically inclined, not always just as amateurs. The foremost figure in this regard was the Grand Duke Nikolai Mikhailovich Romanov, one of the great Russian lepidopterists fondly mentioned in *The Gift*, "Father's Butterflies," and elsewhere throughout Nabokov's works. The grand duke was murdered in 1919 by the Bolsheviks, along with many other Romanovs.

Another curious personage appears in *Pnin*, where we read that "the figure of the great Timofey Pnin, scholar and gentleman, . . . acquired in Victor's hospitable mind a curious charm, a family resemblance to those Bulgarian kings or Mediterranean princes who used to be world-famous experts in butterflies or sea shells."<sup>10</sup> Similarly, in *Pale Fire:* "How often is it that kings engage in some special research? Conchologists among them can be counted on one maimed hand."<sup>11</sup> Brian Boyd explains that both Emperor Hirohito of Japan and Prince Albert I of Monaco were marine biologists.<sup>12</sup> But Bulgarian "kings," technically speaking, never existed (except in Voltaire's *Candide*), and Nabokov surely meant here the first Bulgarian tsar of the twentieth century who was also an avid amateur naturalist—Ferdinand I of Bulgaria, aka Prince Ferdinand of Saxe-Coburg-Gotha (1861–1948).

I am not sure what Nabokov knew of this truly Ruritanian ruler, but Ferdinand was a very visible figure on the European scene before World War I. He became the first ruler of independent Bulgaria, first as prince [knyaz] beginning in 1887, and then, from 1908, as tsar. On Ferdinand's ascent to the Bulgarian throne, Queen Victoria (his father's first cousin), stated to her prime minister, "He is totally unfit . . . delicate, eccentric and effem-

inate . . . . Should be stopped at once."<sup>13</sup> Ferdinand was a keen lepidopterist and botanist, and in his youth organized an expedition to South America. Alas, Ferdinand's flamboyant politics were less successful than his natural science: he was an active but often unsuccessful participant in all of the Balkan wars he could find a way into and was forced to abdicate in 1918; his son Boris became the next tsar.

Another noteworthy fact possibly linking Ferdinand to *Pale Fire* is that he was the first head of state ever to fly in an airplane—with the Belgian pilot Jules de Laminne, on 15 July 1910. It is highly possible that Nabokov was thinking of this Bulgarian royal lepidopterist-aviator when he invented King Alfin, who crashed his Blenda IV aircraft in 1918 (many European monarchies crash-landed that year). Later in 1910, Ferdinand and his children Kirill and Boris flew several times in Sofia with the famous Russian pilot Boris Maslennikov (one of the prototypes of Colonel Gusev in *Pale Fire*?) who in 1910 founded the first aviation club in Bulgaria, and then the first Russian aviation school, Oryol (The eagle), in Moscow.<sup>14</sup> Maslennikov flew in the first, disastrous, Saint Petersburg–Moscow flight contest by nine pilots on July 10 (23), 1911, widely covered in the journal *Niva* (of nine pilots, only one reached Moscow; three, including Maslennikov, crash-landed; one passenger died). The twelve-year-old Nabokov would have known about these important technological events. (Under the Bolsheviks, Maslennikov was exiled to Siberia and spent eight years in Stalin's gulags.)<sup>15</sup>

There is one significant historical episode involving Ferdinand of Bulgaria that to my knowledge has never been published in English. The episode most likely remained unknown to Nabokov but it originates from the same epoch and subculture of royal lepidoptery—and reads like a Pale Fire scene. My friend and colleague Alexi Popov, the former director of the National Museum of Natural History in Sofia, tells this story about his grandfather, zoologist Ivan Buresch (1885–1980), son of a Czech immigrant. In 1903, seventeen-year-old Buresch collected butterflies in the highest Bulgarian summit, Musala (elevation 9,596 feet [2,925 m]), where he came across the future tsar, then Prince Ferdinand. "Why do you collect my butterflies?" exclaimed the prince in anger, but then softened as he recognized in young Buresch a fellow entomologist. The prince invited Buresch to climb the ridge together and talk about butterflies, and he was so impressed with the young biologist that he gave him his royal cape as a gift. The very next year, Ferdinand appointed Buresch as a technician in his Natural History Museum that occupied one of the royal palace buildings (it is still there today). Ivan Buresch traveled with Ferdinand on his many expeditions, survived both world wars in Sofia, and continued as a director of the same museum under the Communists until his peaceful retirement in 1959. One fancies that a similar fate, under slightly different circumstances, could have been Nabokov's own.

Such "kingly" naturalists as Tsar Ferdinand or Grand Duke Romanov cut mildly Quixotic, often tragic, figures. There were other images of naturalists found in Nabokov's childhood reading in Russia. From Jules Verne, one recalls the absent-minded but heroic geographer Jacques Paganel from *Les Enfants du capitaine Grant* (The children of Captain Grant), and also the absent-minded but comical entomologist Cousin Benedict from *Un Capitaine de quinze ans* (A captain at fifteen)—a thoroughly ridiculed and pathetic figure. Alas, insect collection in European cultural and literary tradition was an oddity even in the enlightened nineteenth century. The public perception of an entomologist as a nut with a net (bordering on the more familiar modern cliché of the mad scientist) has hardly changed since Nabokov's *Lolita: A Screenplay.* Still, even Cousin Benedict stands among Jules Verne's many immortal scientists with a selfless passion for knowledge.



THE IDEA OF naming a new species "in that incompletely named world in which at every step he named the nameless" has been made famous through Nabokovian writings.<sup>16</sup> In Speak, Memory, Nabokov relates how, at the age of nine (!) he wrote to the great lepidopterist Nikolai Kuznetsov (1873-1948), proposing a new Latin name for a distinct form of Poplar Admirable he found. Kuznetsov, then already a mature researcher, "snubbed" the young entomologist.<sup>17</sup> This did not mean, however, that Nabokov's conclusions were wrong! "Proposing a new name" means that the nine-year-old Nabokov simply did not know all the existing research literature—this happens to mature taxonomists as well. In this case, Nabokov did not recognize that the subspecies in question was already described from Bucovina (now in western Ukraine, then in the Austro-Hungarian Empire) as Limenitis populi bucovinensis Hormuzaki, 1897. "How I hated Hormuzaki! And how hurt I was when in one of Kuznetsov's later papers I found a gruff reference to 'schoolboys who keep naming minute varieties of Poplar Nymph!"18 It is important to note that Kuznetsov did not reject the fact that the form Nabokov identified exists in reality—he just pointed out that it was already described by another researcher, in this case Constantine von Hormuzaki—an Austrian professor at Czernowitz University. Thus, at age nine, Nabokov already could, and did, observe the minute diagnostic features of butterfly varieties (subspecies) correctly.

I have not found the "gruff reference to schoolboys," but among Nikolai Kuznetsov's papers published within the same period is one that is indeed very gruff and quite relevant to the issue.<sup>19</sup> This "methodological" paper has no research content; it consists only of lengthy complaints against aimless Latin naming of varieties of butterflies by amateurs and irresponsible scientists due to high commercial interest and sheer vanity. It reads much like many similar statements today, in which authors lament the "taxonomic vandalism" of irresponsible namers and self-published journals. Clearly, young Nabokov had read this paper, as a lot of Kuznetsov's "gruff" comments are recognizable in "Father's Butterflies" and *Speak, Memory*. It is one of the sources for some of Nabokov's (and K. K. Godunov-Cherdyntsev's) opinions, incorporated in the same way as Central Asian explorers' texts are in *The Gift*, as Dieter Zimmer has shown.<sup>20</sup>

The issue of Poplar Admirable varieties appears in Kuznetsov, in a paragraph that translates: "The overproduction business has reached the point where not only among serious opponents, but also among the admirers of the nomenclatural enrichment of entomology, some already are perplexed about where their further activity in this direction will lead, as these authors no longer know what to do with the names and 'established' forms of their favorite *Parnassius apollo* L. or *Limenitis populi* L."<sup>21</sup> A reference follows to a paper by a splitter, A. A. Yakhontov, who in turn discusses butterflies described by another fellow splitter, Leonid Krulikowsky. Among those varieties we find a Siberian form *Limenitis populi fruhstorferi* (Krulikowsky 1909), which appears to linger in the background of *Ada*.

Brian Boyd has suggested that the name of Krulikowsky, a prominent Russian lepidopterist, was well known to Nabokov, and much later became a source of the "leporine" Dr. Krolik in *Ada*.<sup>22</sup> We see now that Krulikowsky's name could have been even more important to Nabokov at a very early period, for both fell under the same criticism from Kuznetsov as they tried to establish new "minute varieties of Poplar Nymph" at about the same time. It was Dr. Krolik who christened a butterfly species, *Antocharis ada* Krolik (1884)—"as it was known until changed to *A. prittwitzi* Stumper (1883) by the inexorable law of taxonomic priority."<sup>23</sup>

The "passion for naming," what Kuznetsov terms "German" *Namengeberei*, is still a great force that drives and plagues taxonomic research. Criteria by which a species is defined are constantly in flux—many different species concepts have been proposed in the hundred years since Kuznetsov's gruff remarks. The subspecies concept also continues to be murky; many modern taxonomists see no value in giving names to geographic varieties and want to operate only at species rank. (In fact, the jury is still out on the validity of the many *Limenitis populi* forms referred to above.) While experts may not agree on criteria of taxonomic delineation, they all rely on primary data, based on meticulous documentation of morphology—as well as on DNA marker data available today. Much has been said about Nabokov's keen attention to taxonomic delineations, many of which proved to be spectacularly true. Further, Nabokov appears to be the only trained zoologist who also carried this intuitive skill, honed in his formative years, into the highest ranks of literary art.



SERGEI AKSAKOV (1791–1859) was the first and only professional writer in Russia to describe butterfly collection by children of the gentry (*Sobiranie babochek* [Collecting butterflies], 1858). We know that Nabokov was highly critical of Aksakov's essay: in *Drugie berega* (chapter 6) he called it "extremely dull" (*bezdarneyshee*) (the passage is absent in *Speak*, *Memory*). Fyodor in *The Gift* dismisses Aksakov's nature writings in his imaginary dialogue with Koncheev: "My father used to find all kinds of howlers in Turgenev's and Tolstoy's hunting scenes and descriptions of nature, and as for the wretched Aksakov, let's not even discuss his disgraceful blunders in that field."<sup>24</sup>

Was it the genuine disdain of a professional toward a hopeless amateur? Probably. In his commentary on *Eugene Onegin*, Nabokov called Aksakov "a very minor writer, tremendously puffed up by Slavophile groups."<sup>25</sup> But then we know how caustic Nabokov often was toward many literary luminaries, most famously Fyodor Dostoevsky. In the sentence quoted above he did not spare Ivan Turgenev or even his beloved Lev Tolstoy, albeit via double-proxy opinion (Fyodor repeating his father's words). Maybe we should not judge Aksakov's earnest accounts of natural history as harshly as Nabokov did. Recently, I came across a note by the prominent Russian lepidopterologist Yuri Korshunov (1933–2002), who thought that Nabokov was completely unfair to Aksakov. Korshunov insists that Aksakov committed no "disgraceful blunders" in his texts addressing butterflies, contrary to Fyodor's claim. Perhaps the issue requires an impartial look by an expert on Russian butterflies into Aksakov's pages.<sup>26</sup>

In all candor, one just cannot compare Aksakov to Nabokov: for Vladimir, lepidoptery was not a mere collecting pastime but natural science, in which from the very beginning he followed the highest standards of the field as it was in the 1900s. Aksakov, on the other hand, was a true amateur who wrote his butterfly notes as an old man, reminiscing about his golden childhood in central Russia during a very different epoch. *Sobiranie babochek* was written a year before Aksakov died and addresses events that happened more than sixty

years earlier. Aksakov was born in 1791, which means he was hunting and rearing butterflies in the end of eighteenth century, even before Alexander Pushkin was born—more than a hundred years before Nabokov! Upper-class children in Russia, like those in England, were trained in the sportsmen's pursuits of hunting and fishing. It is fitting that Aksakov wrote enormously detailed treatises on both activities, and he is generally considered a great authority on Russian game hunting and serious fishing—both pursuits now largely extinct in central Russia, along with forest and river habitats.

For his time and milieu, Aksakov and his schoolmates were rather advanced in natural science training. At age fifteen, Aksakov was a student in the newly opened (1805) Kazan University. He learned natural history from Carl Fuchs (1776–1846), a medical doctor, ethnographer, and one of those German polymaths who moved to the vast imperial countryside of Russia. Fuchs's house in Kazan was an intellectual center that attracted visitors ranging from Alexander von Humboldt to Pushkin. A Göttingen alumnus, like Pushkin's Lensky, Carl Fuchs was the rector (president) of Kazan University until 1827, succeeded by the famous mathematician Nikolai Lobachevsky—whom Nabokov *did* admire!

Nabokov was not aware of another interesting point: for many Russian children of later (Soviet) generations, it was "wretched" Aksakov who introduced them to lepidoptery. In 1938, Aksakov's ancient butterfly essay was reworked for children into a small book by the inveterate Soviet-era popularizer of zoology, the entomologist Nikolai Plavilshchikov. It was one of the most popular entomology books then, with about 150 species illustrated by G. Orlov arranged on fifteen color plates and an appendix telling how to collect and spread butterflies. I used its later 1950s edition, as well as some very good zoology books by Plavilshchikov himself.



"I reserve for myself the right to yearn after an ecological niche: ... Beneath the sky Of my America to sigh For *one* locality in Russia."

THESE LINES FROM *Speak*, *Memory* are a revisitation of Pushkin's ironic dream "to sigh, . . . beneath the sky of my Africa, for somber Russia."<sup>27</sup> They point to a very specific "ecological niche" (a rather new scientific term, which was widely popularized only in the 1950s) for Nabokov, which he did not share with any other writer hailing from Saint Petersburg. His use of the word "locality" (rather than "place") in this context is another playful gesture toward the geographic precision of an entomological label. Nabokov's "*one* locality" for which he yearns is not the imperial city of Saint Petersburg itself but not far to its south, the few square miles of the Oredezh River valley around Vyra and Batovo. This is where he spent his ten formative collecting years of 1907–17.

Much has been said about the "Saint Petersburg text"—the semiotic concept developed by Vladimir Toporov and others. This "text" was generated by dozens of major Russian writers—Pushkin, Nikolai Gogol, Dostoevsky, Osip Mandelstam, Andrei Bely, Anna Akhmatova, Konstantin Vaginov, Joseph Brodsky, to name just the main ones. It was largely Saint Petersburg that defined Russian literature in the Silver Age of the early twentieth century, with its Symbolists and Acmeists. Pekka Tammi has demonstrated how this "text" influenced the "texture" of Nabokov's nostalgic poetry and prose, especially in his European years, but also later (for example, in *Look at the Harlequins!*).<sup>28</sup> Indeed, the Nabokovs' house was located in the heart of the imperial city, Nabokov went to school there, and he never had a chance to visit any other large Russian city south of Saint Petersburg—Moscow included. But the very personal space of Nabokov's "text," so tightly bound to butterfly pursuit, was well outside the city and its "text."

In the gallery of Saint Petersburg writers, Nabokov is marginal to the Silver Age not only by belonging to a different generation (he was nineteen years younger than Alexander Blok, ten years younger than Akhmatova) and not only because he left this "text" early, with his emigration at age eighteen. He is marginal in space, as well as in time. His nostalgic yearning was never for the "yellow government buildings" (Mandelstam) or the Bronze Horseman's empire, Westernized or Slavophile, but for the northern woods and bogs of Rozhdestveno and Vyra, the real, firmly geographic fringe of Peter the Great's ghostly capital. He is probably the only author whose work is deeply rooted in these northern countryside landscapes—and the one who undoubtedly best knows them, having traversed them for ten years, from age seven to seventeen, on foot and by bike. Tammi notes that "there is always winter in Nabokov's St. Petersburg" and that "Vadim in Look at the Harlequins! is obviously speaking for his creator when he says that he had 'never seen [his] native city in June or July."<sup>29</sup> Of course he had not, for he was busy in his ecological niche: June and July are the major butterfly collecting months, every sunny day being precious in a cold, northern climate, with dozens of species collected every summer, hundreds of specimens with carefully noted localities and other data.

We can clearly see how this so-called Boreal biogeographic zone (its southern boundary lies between Saint Petersburg and Moscow) extends to the imaginary Ultima Thule and Zembla. Always a naturalist, Nabokov carried into his exile the minutest details of Russian nature, which earlier writers generally neglected. Confined within their phantasmic city, Gogol and Dostoevsky cannot be imagined outside of it or expected to know much about the natural environment surrounding the imperial capital. Others who ventured to the countryside had a generic, Rousseauian approach to local nature and its "Finnish rocks." They rarely knew their trees or flowers—recall Chernyshevsky's opinion (reported by Fyodor in *The Gift*) that the flowers of the Siberian taiga "are all just the same as those which bloom all over Russia."<sup>30</sup> One can occasionally find a cliché like "a spruce, this sad trademark of northern nature" (Pushkin, *Travel from Moscow to Petersburg*), but Russia's classic writers were more comfortable praising lush Mediterranean nature, which many of them observed in person in France and Italy—or at least the Crimea, in the case of tightly controlled Pushkin, who was never allowed to travel abroad.

Not so with young Nabokov. He carried with him the imprint of the Oredezh countryside, its ecological niches, with a true naturalist's passion, which was much deeper than any bond of Turgenev-style or Tolstoyan gentry sportsmen to their coveted game. In *Speak*, *Memory*'s famous lines, Nabokov steps directly into the American ponderosa pine forest from Vyra's *sphagnum bog*. The very use of this precise botanical term—hardly even known to most other Russian writers—gives away a scientist who had known this distinction already as a boy when he pursued his butterflies through just such a bog.



IN HIS 1946 INTRODUCTORY LECTURE on Russian literature, Nabokov explains to his Wellesley students: "Suppose a schoolchild picks up study of butterflies for a hobby. He will learn a few things about general structure. He will be able to tell you . . . that there are innumerable patterns of butterfly wings and that according to those patterns they are divided into generic and specific groups. This is a fair amount of knowledge for a schoolchild. But of course he has not even come near the fascinating and incredible intricacies invented by nature in the fashioning of this group of insects alone."<sup>31</sup> This passage talks about various levels of depth in knowledge. Nabokov gently but slyly depicts here, not himself, but a quite ordinary schoolchild who has not mastered his skills at identifying "innumerable patterns" and their importance in systematics. In stark contrast, Nabokov himself already at age eight or nine could skillfully use these patterns to identify and classify those "generic and specific groups" of butterflies.

Nature needs to be documented and described. Zoology, undertaken at an early age, provides an active early training of memory and attention, focused on minute detail. Such a connection, I suspect, is underappreciated by most readers and researchers since it requires a firsthand childhood experience, as well as emotional involvement, in biological systematics. After a specimen is obtained and preserved, the subsequent zoological work is not limited to using technical literature such as species keys. It always includes other, more active research components, with constant feedback and iterative actions. It combines reading, writing, drawing; it requires observational and analytical skills. Published materials (research papers, books, keys) and one's own notes allow one to compare specimens. The work goes on, and it never ends.

The sheer amount of this work is likely not appreciated by noncollectors. One collects large series of specimens of the same species to reflect ecology and observe variation. Currently 107 species of butterflies (and many more moths) are recognized in Leningrad Oblast (province), about 30 percent of the eastern European faunal list. Nabokov's collecting around Vyra over several seasons must have yielded thousands of specimens.

Nabokov's entomological training was extremely rigorous, and it produced tangible, professional results. Along with extensive field experience, it included technical reading of specialized literature, as well as technical writing—starting with primary field notes, containing data on habitat distribution, phenology, food plants, reproduction, and so on, and ending with taxonomic descriptions of species. 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.

What I have tried to convey here—obvious and perhaps trivial to an expert but less well known to the average Nabokov reader—is that his early concentration on entomological work provided young Nabokov with a very specific training, which other writers simply did not have. Such was, for example, his labeling activity, itself the first mark of a professional zoologist.<sup>32</sup> I think that Nabokov's genius was fed from an early age not only by his artistic sensitivity to the diversity and wonders of natural objects but—first and foremost—by his

zoologist's need to distinguish their details in order to describe this diversity. Nabokov's case, probably unique in the modern history of both science and art, demonstrates how a childhood emotional involvement with nature's elaborate diversity and beauty may form and inform both a scientific and an artistic response.

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### Notes

1. NB, NBl, and D. Zimmer, Guide. 2. NABOKV-L, October 26, 1999. 3. Ibid. 4. D. Zimmer, Guide, 4. 5. NBl, 115. 6. NB, 4. 7. NBl, 114. 8. D. Zimmer 2001, Guide, 11 ("Writer and Scientist"). 9. SM, 127. 10. Nabokov, Pnin, 88. 11. PF, 75. 12. Boyd, Nabokov's "Pale Fire," 81. 13. Groueff, Crown of Thorns, 26. 14. Negenblya, "Pervyi," 48. 15. For a general discussion of early aviation in Russian culture, see Leving, Vokzal. 16. Nabokov, Gift, 119.

- 17. SM, 133.
- 18. SM, 133.

19. Kuznetsov, "O stremlenii."
20. See D. Zimmer and Hartmann, "Amazing Music," and D. Zimmer, *Nabokov*.
21. Kuznetsov, "O stremlenii,"364.
22. Boyd, "Pinning down Krolik."
23. Nabokov, *Ada*, 57; dates placed in parentheses appear to be Nabokov's or his editors' error, contrary to the conventions of zoological nomenclature.
24. Nabokov, *Gift*, 73.
25. Pushkin, *Eugene Onegin*, 3:139.
26. Yuri Korshunov's note can be seen at http://jugan.narod.ru/nabokov.htm.
27. Pushkin, *Eugene Onegin*, 1:117.
28. Tammi, "St. Petersburg Text."

- 29. Tammi, "St. Petersburg Text," 126.
- 30. Nabokov, Gift, 244.
- 31. First published in VNAY, 110.
- 32. See Fet, "Zoological Label."