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# The Gift: Synesthesia in Translingual Texts

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This interdisciplinary article explores the relationship between multilingualism and synesthesia (neuro-psychological blend of senses) using textual data from several translingual authors—writers who write in their non-native language (L2). I briefly summarize the existing research on synesthesia, primarily its relationship to language, cognition, and emotionality, and share my own multilingual synesthetic perceptions exemplified in my published work. I theorize that 'translingual synesthesia' is a complex cross-modal metaphor and a spontaneous imagistic 'device,' possibly enhanced by or concurrent with multilingualism, which allows writers to transcend cognitive and linguistic realms and to embody L2 with personal imagery while simultaneously creating an aesthetic effect of "de-familiarization of the word." Applied to language learning and teaching, synesthesia lends a view into learners' diverse subjectivities and their lingua-cultural and lingua-emotional dispositions, which can be modeled by language teachers.

"A noir, E blanc, I rouge, U vert, O bleu: voyelles, Je dirai quelque jour vos naissances latentes:
A, noir corset velu des mouches éclatantes
Oui bombinent autour des puanteurs cruelles..."

—Arthur Rimbaud, Voyelles (1973, p. 78)

#### "HOW DID IT BEGIN WITH YOU?"

In his novel, *The Gift* (1991), one of the greatest writers of the 20<sup>th</sup> century, the multilingual Vladmir Nabokov, describes his synesthesia in the following dialogue:

How did it begin with you?

- When my eyes opened to the alphabet. Sorry, that sounds pretentious, but the fact is, since childhood I have been afflicted with the most intense audition colorée.
- So that you too, like Rimbaud, could have—
- Written not a mere sonnet but a fat opus, with auditive hues he never dreamt of. For instance, the various numerous 'a's of the four languages which I speak differ for me in tinge, going from lacquered-black to splinter-gray—like different sorts of wood. I recommend to you my pink flannel 'm'. I don't know if you remember the insulating cotton wool which was removed with the storm windows in spring? Well, that is my

Russian 'y', or rather 'ugh', so grubby and dull that words are ashamed to begin with it... (p. 74)

These evocative and nostalgically tainted lines do sound elaborate and pretentious—and indeed excessively tedious for an unenlightened reader, who might attribute that fictional conversation to one of those Nabokovian "delights of stereolinguistic and visual stereoscopy" (Beaujour, 1989, p. 102). While Nabokov's "recommendations" of his "auditive hues," especially of his "pink flannel 'm'", might be interpreted as a literary device, I must admit that the above-quoted dialogue did not sound figurative, literary, or unauthentic to me. The fact of the matter is that Nabokov expressed the 'reality' of my mind as well: only his colors were all "wrong!"

In 1994, in the process of writing my doctoral dissertation, a collection of autobiographical narratives of a language learner combined with Second Language Acquisition theories, I discovered a word to call my life-long inner experiences, similar to Nabokov's: Synesthesia. In line with this paper's discussion, I undoubtedly owe this revelation to my own "gift for tongues" and to what might be called the multilingual advantage, which allowed for this "out-of-body experience." Once, in a casual conversation with a friend, also a linguist and a remarkable erudite, I tentatively mentioned, sounding to myself like a lunatic, that my A is magenta, B is bright blue, and number 'two' (2) is green—that my words, letters of the alphabet (or sounds), and numbers are colored...I was prepared to be laughed at, but instead I was directed to my former compatriot Vladimir Nabokov's memoir, *Speak Memory* (1989).

Reading and re-reading Nabokov's novels and studying his introspective account of synesthesia led to several transformative intellectual and personal affinities in my life: one of them was the discovery of Elizabeth Beaujour's Alien Tongues (1989), both the book and the person, which marked the beginning of my emerging interest in translingual literature. Another was a pressing need to investigate my own synesthesia and an intuitive belief that there may be a connection between my colored perception of language and multilingualism, in one way or another. So, from Nabokov and Beaujour I dug into Barton Johnson's Synesthesia, Polychromatism, and Nabokov (1974), which in turn took me to Alexander Luria's Mind of a Mnemonist (1968) and to Oliver Sacks's essays on unusual neurological conditions, Anthropologist on Mars (1995). Sacks led to neuroscientist Richard Cytowic's The Man Who Tasted Shapes (1998) and to historian Kevin Dann's Bright Colors Falsely Seen (1998). The synesthesia quest culminated with the discovery of a group of people, my fellow synesthetes, who took their colors of the days of the week so seriously that they founded The American Synesthesia Association<sup>1</sup> and I have been a member ever since.

Like with Nabokov, "it began" with me "when my eyes opened to the alphabet (1991, p. 74)," but I became aware of synesthesia, of the term and the phenomenon, and of its omnipresence in my life in languages during my adulthood —from tentative conversations described above to epiphanies like this one, in my second year of immigration during a teaching contract in Canada:

I thought everybody knew what I meant when I said in Russian six is yellow (shest'), but my Canadian students whom I was teaching Russian in a "crash course" did not seem to understand. They looked at each other, perplexed: what a crazy teacher they had! She did not know how to drive, she spent her life reading, and she firmly stated that six is yellow. I guess they referred that one more oddness to the general "exoticism" I represented for

them and never took this weird idea seriously. Only much later I realized that my color associations did not necessarily coincide with other people's, and that for the most part people don't think in colored words at all, like I do. Once, driving among canola fields all covered with bright yellow flowers with one of my Canadian cowboys, I heard him saying, "Look, Russian six is growing! (Lvovich, 1997, p. 11)

As in the case of Nabokov, my numbers/letters/phonemes are colored, varying in hues, textures, and spatial characteristics in every language I speak, producing images with an emotional undertone. Thinking of a particular word makes me spontaneously visualize a colorful image (completely unrelated to its semantics), like this one: "In English, six is whitish, fuzzy, dull glass; in French creamy in color and substance. In French, Lundi is pale wax pink; in Russian, Ponedel'nik is grayish and dull, and Monday is in orange-red-brown gamma" (1997, p. 12). Working on my dissertation, later published as a book of personal essays, *The Multilingual Self* (1997), it became clear to me that synesthesia played an especially palpable role in what is commonly called a "talent for languages" –language aptitude—serving the function of a natural and individually crafted mnemonic device, an idiosyncratic tool to store and retrieve words. In the chapter, *Confessions of a Synesthete*, I am attempting to articulate my conjectures:

The colored images accompanying my...language learning must have facilitated the language acquisition, "sensorily" providing extra support to this creative process. Memory, among other mental activities, is the obviously affected area since the synesthetic ability could be used as a mnemonic device. I figured that out long ago, long before I learned the word *synesthesia*. This capacity to recall words thinking of their color or imagining them pending in the air, while examining their shape, smoothness, position in space, or feel at touch I termed "good visual memory."...For example, I recently learned the word, *resilient*: a brownie with a cutting silver edge. Its sensory image will call for the word. The semantic meaning, like in my dreams, seems to be living its own life and is not really connected to the image of the word form. (1997, pp. 13-14)

I attended annual American Synesthesia Association conferences and meetings, I networked with scientists and researchers from various disciplines, and I read their work, while continuing my own scholarly and creative pursuits. Over the course of more than a decade I started nursing ideas on the relationship between synesthesia and multilingualism and to lay some tentative ground for theorizing these conjectures.

#### WHAT IS SYNESTHESIA?

Synesthesia is a highly idiosyncratic neuro-psychological phenomenon defined as a blend of senses, which could be displayed in a variety of cross-sensory combinations: depending on the specific senses involved, synesthetes "taste" shapes, or "see" music, or attribute color to personalities, to name just a few examples. The synesthetic perception described by Nabokov (1991) of a "pink flannel 'm" or my "yellow six" is perhaps the most common synesthetic case called *color-lexical synesthesia* (grapheme/phoneme/digital)—and it is the one that most directly relates to language. According to the latest estimate by San Diego's Center for the Study of the Brain and Cognition, color-lexical synesthesia's incidence is one in 200 people (Ramachandran, 2003).

Although the phenomenon has been known for centuries, it was first mentioned by the nineteen century scientist Sir Francis Galton (Duffy, 2001, p. 25), then glorified by French symbolists, proclaimed as "the spiritual in art" by Wassily Kandinsky (1977), and finally it is in the last two decades or so that synesthesia has been studied by neuroscientists and has become a cutting-edge research topic. Using functional MRI and experimental methods, neuroscientists have found that synesthesia is not a "nebulous" poetic or mystical apparition but a consistently experienced life-long perception—hypothetically the effect of cross-wiring in the brain. More specifically, color-lexical synesthesia may be the result of cross-activation between the areas of the brain processing language and those processing color (see, for ex., Ramachandran & Hubbard, 2001).

Fascinating studies of types and individual features of synesthesia have been proliferating in research centers and universities throughout the world; I will mention here only a few relevant areas. Developmental psychologists point to the role of neonatal synesthesia during brain maturation in infancy, when senses begin to separate from "the sensory soup" (Van Campen, 2008, p. 30) in the process of "pruning" (Maurer & Maurer, 1988, Maurer & Mondloch, 2004). Studies in genetics (see, for ex., Baron-Cohen et al., 1996) indicate that synesthesia is hereditary, as in Nabokov's case. New ideas on synesthesia and creativity in art and music, in multi-media and computer technology and in many other fields have been multiplying, and multi- and inter-disciplinary research involving synesthesia is growing. The unanimous consensus is that although neuro-psychological synesthesia is an endowment of only a few, it is an invaluable window into complex workings of the human mind (see, e.g., Cytowic, 2002, Cytowic & Eagleman, 2009).

In the absence of studies and literature focusing directly on the relationship between synesthesia and multilingualism/second language acquisition, there is little, if any, understanding of synesthesia as a psycho-linguistic phenomenon. I have recently come across a citation to my book, The Multilingual Self (1997), where my synesthesia has been called "increased synesthesia" (Tokuhama-Espinoza, 2000, pp. 92-93)—clearly, an oxymoron—presented as some conscious mental manipulation in which multilinguals like me "assign color" to words (ibid). The author then poses a question as to whether or not this mnemonic device comes naturally with multilingualism or must develop as an "aid." While I am grateful for some attention to the issue from the L2 profession, it is my sincere hope that the "stained glass" of synesthetic perception will allow for a rich, simultaneously broad and subjective, view of the multilingual mind. Textual data from translingual writers and their explicit descriptions and insights on synesthesia, from their autobiographical accounts as well as from other genres, appear to be the only available data and resource, at this point. I will complement these resources with my own synesthetic history, as a multilingual and a writer, and use the experiential/heuristic methods to explore these phenomena from the inside and outside, for synesthesia is an inalienable part of my "multilingual self."

# BEYOND MNEMONICS: SYNESTHESIA AS PERSONAL CODING FOR LANGUAGE PROCESSING

My discussion of synesthesia will be undoubtedly dominated by the "czar" of translingual writing, Vladimir Nabokov—not only because of his synesthetic "Gift" and his imaginative work with language(s), but also thanks to his genius of intro- and retro-spection and to his keen scientific mind as an entomologist/lepidopterist, who observed, collected, classified, and analyzed data. Along with his butterfly collection and his work as a phenomenologist

and a natural scientist, Nabokov described and analyzed his own mental workings: eideticism (rare "photographic" or sensorial memory), dreamwork, and other (para)psychological phenomena he experienced, including synesthesia. Growing up multilingual—English, Russian, and French—was a natural part of his experiences embedded in his mental life, and his multilingualism is omnipresent in his autobiographical narrative and his fiction, whether in creative or in analytical form. Akin to his butterfly classification, here is how he describes/classifies his 'translingual synesthesia' in *Speak Memory* (1989):

...a French a evokes polished ebony. This black group [of letters] also includes hard g (vulcanized rubber) and g (a sooty rag being ripped). Oatmeal g, noodle-limp g, and the ivory-backed hand mirror of g take care of the whites. I am puzzled by my French g which I see as the brimming tension-surface of alcohol in a small glass. Passing on to the blue group, there is steely g, thundercloud g, and huckleberry g. Since a subtle interaction exists between sound and shape, I see g as browner than g, while g is not the light blue of g, but a curious mixture of azure and mother-of-pearl... g is a fold of pink flannel... (p. 34)

In this and other descriptions of his synesthesia, Nabokov the writer uses personable and emotionally imbued images, such as 'y' as "sooty rag," "I am puzzled by my French 'on" and the "fold of pink flannel" as 'm'. At the same time, Nabokov the scientist systematically classifies and organizes his synesthesia, by color groups and languages. In his memoir, he also emphasizes that his synesthetic images are differentiated by letter shapes and capital versus lower case letters and explains how Russian letters representing the same sound as English or French ones are of "duller tone," for example the Russian II is described as "gouache" green while the Latin 'p' is "unripe apple' green (p. 35).

To this he adds an account of his first synesthetic "aha" moment when, as a child, he was playing with alphabet blocks and declared that the colors of the letters were all "wrong"—a statement familiar to every synesthete—which led to his mother's acknowledgement of her own synesthesia (Nabokov, 1989, p. 35). Nabokov implies that his synesthesia may be hereditary, but he also makes a connection to his learning environment and emphasizes that his mother validated and encouraged his sensory experiences and exposed him, from his early childhood, to various visually creative activities, such as playing with her jewelry and painting (Nabokov, 1989, p. 36).<sup>3</sup>

All that being said, Nabokov himself did not overtly discuss the relationship between his synesthesia and his linguistic development or his memory processes. However, in the Russian version of his memoir, *Drugie Berega* (1954), he classified his synesthetic perceptions of letters as a rainbow system corresponding to the colors of his Russian alphabet, for which he coined his own acronym, BËEIICK3 (B is red, Ë orange etc.), and in *Speak Memory* (1989) its parallel in English letters/colors is KZSPYGV. In his analysis of Nabokov's synesthesia, Johnson concludes that, just like in nature there are two kinds of rainbows, the primary and the secondary, Nabokov's rainbow acronyms represent mirror images of each other, with the Russian rainbow symbolically representing his primary literary creation and the English one—his secondary (Johnson, 1974, p. 94). That hermetic, almost cabbalistic view of the workings of his bilingual mind point to the significance the writer attributed to synesthesia in his linguistic and creative performance.

Nabokov's insights into the colors of his languages are echoed by other bilingual synesthetes. Alexander Luria's subject, the multilingual mnemonist Solomon Shereshevsky

speaks about the Yiddish word 'mutter' as producing "an image of a dark brown sack with folds, hanging in a vertical position" (Luria, 1968, p. 89); Daniel Tammet, an autistic savant and a polyglot, "Born on a Blue Day," describes his synesthetic images as directly related to his "gift of tongues," (2006), and Pat Duffy, the U.N. Language Program teacher and writer, herself a synesthete, reports several accounts of language learners who use synesthetic images for learning or translating (2005). She describes, for example, the visual-kinetic experience of Laurent Schlemmer, a journalist and a translator: "Whenever I translate a sentence from French into German...I inwardly see the sentence and also fly above it with the verb that has to move to accomplish the translation." (p. 17). A surprisingly similar experience involving the connotation of this German structure is echoed in Claire Kramsch's report of a multilingual student ("...because of the verb at the end...it just has this beauty in it..." (2009, p. 38), as well as of a few others who perceived "sound shapes" (Jakobson & Waugh, 1987) of their foreign languages with "emotional entanglement" (Kramsch, 2009, p. 37).

Curiously and by all means not coincidentally, these highly emotional synesthetic images of language have been used by bilinguals who are not necessarily writers, in texts that may not be considered literary or poetic. Regardless of the type or degree of strength of these individuals' synesthesia, these examples demonstrate their awareness of synesthetic imagery as a way to process, memorize, and recall language, as a cognitive tool or a mnemonic method used for various language-related tasks. However, if psychological synesthesia can be considered a tool or a method, it is not a tool consciously used, but perhaps a mental call for a heightened *awareness* of what is already there, the software of the hard-wired synesthetic mind.

Although synesthesia's role as a mnemonic tool appears obvious, its significance for language processing definitely surpasses mnemonics in complexity, going beyond the role of "memory aid." During creative mental processes exemplified above, synesthetes' minds spontaneously create colored (and colorful) personal imagery in the form of elaborate synesthetic metaphors that Duffy calls "personal coding" (2005). Most importantly, she goes on to ask the following question: If a few individuals code language with personal imagery, how do all human beings code language? After all, as Raymond Wheeler and Thomas Cutsforth note, "...There is no such thing as image-less, sensation-less meaning..." (as cited in Duffy, 2005, p. 43).

#### SYNESTHESIA, METAPHOR, AND TRANSLINGUAL CREATIVITY

We often forget that synesthetic metaphors are commonly used in every day language to describe sensations via cross-modal associations, for example, sharp cheese, velvety voice, or white noise. Cross-modal metaphors are not eyebrow raisers; somehow they make perfect sense to us. Most recently, the study of neurological color-lexical synesthesia has revealed its links to language processing in significant ways and paved the way for our understanding of why it is so. Via his study of synethesia, the neuroscientist Vilayanur Ramachandran (2003) hypothesized that cross-sensory synesthetic connections are universal, which led him to believe that there might be a neurological basis for emergence of abstract conceptualization and metaphoric language.

He replicated an experiment first performed in the 1920s by investigating a possible link between visual patterns and word sounds and showed his subjects (non-synesthetes) two visual shapes, one smooth and rounded and another sharp and angular calling them 'booba'

and 'kiki' (see Appendix). When he asked subjects which one was 'booba' and which one was 'kiki', the overwhelming majority assigned the rounded shape to 'booba' and the angular shape to 'kiki'. Therefore, they connected the visually sharp inflexion with the sound, as the brain performed a cross-modal abstraction. Ramachandran hypothesized further that this connection may be related to motor and facial functions (pronunciation) and concluded that the brain's perception of the sharpness of the sound and the sharpness of the shape could be at the origin of abstract thinking and language (2003).

Another highly regarded researcher of synesthesia, Lawrence Marks, and his team at Yale University, make a similar conjecture about the visual and auditory correspondences found in synesthetes and non-synesthetes (Martino & Marks, 2001). He points to the theory of phonetic symbolism (that suggests that the sounds of speech have meaning) and concludes that in some sense, we are all synesthetes, for we share a universal foundation for meaning making, abstraction, and encoding language, and that synesthetic metaphor creates these correspondences (Martino & Marks, 2001).

If synesthetic metaphor is indeed paleo-linguistically universal, then its idiosyncratic function in cognition, thinking, learning, and writing is especially significant for creative process, in particular creative writing in L2.

In that vein, it is important to make a distinction between what is called 'literary synesthesia,' used as a literary device, and synesthesia proper, called 'psychological synesthesia,' or 'neuro-psychological synesthesia', specifically color-lexical synesthesia (or chromesthesia) exemplified by Nabokov, a spontaneously occurring mental phenomenon. While this distinction seems clearly delineated, it may be more fluid when we consider linguistic creativity.

For example, in *Bend Sinister* (1973), Nabokov makes a synesthetic claim on behalf of his protagonist, Krug, who "...mentioned once that the word 'loyalty' phonetically and visually reminded him of a golden fork lying in the sun on a smooth spread of pale yellow silk..." (p. 87). Since we already know for a fact that Nabokov was a natural (sometimes called 'congenital') synesthete, we can assume that these images are the ones that Nabokov experienced "neurologically," in his mind's eye. However, we can only speculate about how the visual sensory pictures were rendered into language, the writer's L2, and how they were transformed into layered alliterations designed to evoke in the context of the novel a positive, trustworthy feeling about an old reliable friend (Maximov), honest but simple and stiff, whose own definition of loyalty, by contrast, "...was limited to its dictionary denotation" (p. 87).

In his unique piece on Nabokov's synesthesia (1974), Barton Johnson (1974) theorizes that Nabokov used his psychological synesthesia in his creative writing rather rarely—and instead he emphasizes the writer's use of *polychromatism* (the usage of sensory images), of which his literary synesthesia was a part. He further states that Nabokov's innate psychological synesthesia may be a cognitive tool for the expansion of his creativity, all of which is closely related to his other gifts, which fed into it, such as his exceptional eidetic memory. Deeply preoccupied with the subject of memory and introspection, Nabokov himself thought of his synesthesia as a central mechanism and the genesis of his creative imagination, as it is reflected in the title of Nabokov's novel, *The Gift* (1991).

Transcending senses in the imagistic play with language, translingual writers are also transcending languages. Parallel to the awareness and synchronic use of sensory options, Nabokov's unique use of language, his "stereolinguistically "meshed world" and "word golf"

is described by Beaujour (1989) as "polyglot synthesis": "Nabokov's great advantage was his bilingual's awareness of option and his sensitivity to the potential for de-familiarization provided by even the slightest variants in levels of usage and vocabulary" (p. 105). She speculates further that Nabokov's "psychological synesthesia...may be heightened by bilingualism" (p. 103) and attributes it to the principle of "dual coding" approach to language and cognition—an image system and a verbal system—and its three-store bilingual version: one store for conceptual representations and knowledge of the world, the "image system," and a "verbal system" for each language (Paradis, 1981, as cited in Grosjean, 1984). This hypothesized three-store system organizes the information "in a synchronous or spatial manner, combining visual, auditory, kinesthetic, and other sensory components of nonverbal information into integrated wholes so that different components of a complex thing or scene are available at the same time in memory" (Beaujour, 1989, p. 21). Echoing Paradis (1981), Beaujour adds that the bilingual model might be more complex, that there may be parts of the linguistic system beyond the level of meaning which may be "blended, subordinated, or coexist in various proportions" (p. 22)—some sort of multi-layered geology in which languages, images, and senses form what Nabokov called "the foam of the brain-wave," the metaphor of the distance traveled from thought to words (Nabokov, 1973).

Data from recent neurolinguistic research on mental representation of language in bilinguals certainly reflects this subjective complexity. In her comprehensive review of several neuroimaging and behavioral studies and representational models, Ellen Bialystock (2001, p. 103) warns against "simple dichotomies" of mental representation of language in bilinguals, specifically regarding the relation between the languages and the meaning system. Her discussion of several models of the "three-store" solution, with variations in subsets (independent vs. integrated lexicons and separate vs. combined representations) includes an important one by Kroll and her colleagues (as cited in Bialystock 2001, p. 102), which proposes that lexical representations for two languages are independent, but conceptual systems are shared, with the first language functioning as a mediator that diminishes with increased L2 fluency. Given the shortcomings of available research methods and the diversity of individual variables, types of bilinguals, levels of language proficiency, and so on, Bialystock emphasizes the significance of multidimensional models and not "simple dichotomies" (two languages, one semantic system) and suggests that "multiple arrangements can even coexist in the mind of an individual speaker" (p. 103).

This underlying idea of "multiple arrangements," reflecting layers, blends, and geology that transpire through Beaujour's (1989) analysis of translingual writing and through the voices of L2 writers themselves, finds a similar reflection in the 'blended space theory' advanced by Gilles Fauconnier and Mark Turner (2002) which sees the conceptual mind naturally working as a metaphor, with mental spaces from different strata (for example, moral and political) blending and merging. For bilinguals, these concepts may come from different lingua-cultural, social, historical, interactional, and personal scripts, with new conceptual structures emerging as a result of this blending, forging networks and blended spaces to signify new, idiosyncratically connotated and embodied realities in L2. Translingual synesthesia—not coincidentally a metaphor—may be a cognitive path to a blended space or the blended space itself—the system of 'personal coding' for language (see p. 6). Although we will never know for sure, it is possible that for Nabokov the path for embracing 'loyalty' in English lay via the word's synesthetic perception: an image of a mythical un-attainable 'golden fleece' shining on the elegant royal silk—several archetypal scripts from childhood stories and fairytales blending into a vision of friendly, human, and "humane America"

(Nabokov, 1989, p. 38) and of the world. To validate these and similar speculations about language, thought, and creativity in synesthetic bilingual minds, more research using experimental and qualitative methods is needed in cognitive and neuro-science.

# SYNESTHESIA AND LANGUAGE EMOTIONALITY: FAMILIARIZATION/DE-FAMILIARIZATION

Situated in the blended liminal space—that we will tentatively call translingual writers' interlinguality (Zoric, 2010)—is the linguistic form itself whose effect is often poise, "oddness," "foreignness," "over-correctness," or the feeling of somewhat archaic use of language<sup>4</sup>. In her elaborate discussion of Nabokov's language, Beaujour (1989) makes a crucial correction: it is not the "foreignness" but his bilingualism, the conscious usage of his multiple linguistic repertoire that creates the stylistic effect we call Nabokovese, with the twists, the neologisms, the alliterations, the arresting seemingly incompatible vocabulary combinations, the transplantations of (Russian) wordings and of morphology, the bilingual puns, often in heavily loaded cultural context (p. 105). See for example the following line from *Bend Sinister* (1973): "Yes, of course—how stupid of me," thought Krug, the circle in Krug, one Krug in another one" (p. 39) ['krug' means 'circle' in Russian]. Artistic/linguistic code-switching in Nabokov's texts is often accompanied by sensory code-switching: "The car vanished while the square echo of its slammed door was still suspended in mid-air like an empty picture frame of ebony" (p. 60).

What is the nature of this creative perceptual-polyglot practice? Given that writing is by definition a deeply emotional and creative process, writers who make a choice to write in their non-native language are often, quite paradoxically, motivated—and not restrained—by the emotional estrangement and liberation that the "step-mother tongue" provides. Some unconsciously shy away from political trauma, like the National Book Award laureate Jerzy Kosinski, who, as a child, got separated from his family in Nazi occupied Poland and eventually suppressed Polish and Russian, the languages of his childhood (Teicholz, 1993); some others, like Nancy Huston, who left Anglophone Canada to become an acclaimed French writer, had to escape personal/family circumstances. These writers evoke 'clean' words of the second language, devoid of anxieties, memories, and self-loathing—the freedom that Steven Kellman (2000) calls "emancipatory detachment" (p. 28) and Eva Hoffman (1999) terms "fertile detachment" (p. 50), which spurs their creativity and allows them to 'play' with meaning and linguistic form using to their advantage their position as "outsiders"—of history, language, culture, and of lingua-cultural scripts. The interplay of inside-outside, of detachment and engagement, and of exilic drama is a great advantage, what Hoffman calls "the bonus" (p. 50) of translingual writing, epitomizing the general notion of literary creativity deriving from the sense of estrangement—from being a generic "émigré de l'intérieur."

The aesthetic effect of this psychological and linguistic exile expressed in multi- and inter-lingual inter-sensory code-switching is akin to what Russian Formalists of 1920s led by Viktor Shklovsky (1965) called "ostranneniye slova"—the "de-familiarization of the word"—the poetic effect produced by the word's 'foreignness', famously adopted as a poetic device by Russian futurist poets, such as Vladimir Mayakovsky and Velimir Khlebnikov and the absurdist Daniil Kharms. In Shklovsky's (1965) conceptualization, this 'foreignness' would occur as a result of existential displacement and would manifest itself in using tortuous language or in placing situations in incompatible semantic or cultural contexts. He

stated that the "...poetic language must appear strange and wonderful; and in fact it is often actually foreign: the Sumerian used by the Assyrians, the Latin of Europe during the Middle Ages, the Arabisms of the Persians, the Old Bulgarian of Russian Literature" (p. 22).

Curiously, the word "ostranneniye" (slova) is in itself a double-entendre, for its etymological origin derives from two Russian roots: 'stranniy' (strange, odd) and 'strana' (country). Thus it is possible to trace back in Russian history this semantic overgeneralization from 'foreign country' to 'country' with its underlying connection to displacement and oddness.

Although Shklovsky's method has not survived as a literary technique, its principle of estrangement and of linguistic "unhomeliness" is widely applied to modernist poetics and arts. Translingual writers' expression of 'ostranneniye slova' (which I earlier called 'interlinguality') carries this form of estrangement, in a variety of ways, as individuals develop "verbal strategies unique to their own experience rather than follow a predictable pattern of creativity" (Zoric, 2010, p. 204). The use of synesthesia, from this perspective, appears as an idiosyncratic form of stylistic de-familiarization—an arresting effect achieved by the ludic function of opening up a second-order semiological chain where the word's signifier (the acoustic or graphic image) together with the signified (its semantics) acquire a new "tridimensional pattern" (Barthes, 1972, p. 114). If 'six' is not only a numerical concept (1) and a graphic/phonetic form (2), but also an image of something yellow (3), then the Saussurian dyad, the first system, becomes a mere signifier in the second one. Similar to the semiotic interpretation of myth by Roland Barthes, synesthesia creates two semiological systems, but as opposed to myth, whose meaning must be appropriated, synesthesia is idiosyncratic and therefore "neologistic." To use one of my earlier examples, my Canadian students were puzzled by my "yellow six" and were only able to make sense of it (and appropriate it) using their own associations (yellow canola fields). The semiotic system created by synesthesia is more akin to psychoanalytic dream interpretation where 'latent meaning,' the signified in a Freudian semiological system, underlies the second-order meaning—behavior.

In translingual texts, the latent meaning of a synesthetic image is perceived as "estranged," i.e. it is de-familiarized and stands out for the reader, while the multilingual author is simultaneously familiarizing him/herself emotionally with the "unfelt" second language, 'embodying' it in the process of affective connotation—via synesthesia.

In her book, *Emotions and Multilingualism*, Aneta Pavlenko (2005), using the available data from neurolinguistics and the research on multilinguals' autobiographical memory, conceptualized the theory of *language embodiment*. She theorized that words, sounds, and other units of the native language in the process of first language acquisition and socialization, become not only denotated conceptually but also connotated emotionally with what she calls 'affective linguistic conditioning'. In other words, they become associated with sensory images and personal memories, and acquire an idiosyncratic personal meaning—i.e. they become "embodied." As for the learned second language, Pavlenko explains further that adult second language learners may not develop an emotional representation of L2 unless they become immersed in it and emotionally and socially invested, which may eventually "elicit strong visceral responses" to L2 words in "a life-long enterprise" (p. 156). See, for example, this description by Luc Sante:

In order to speak of my childhood I have to translate. It is as if I were writing about someone else. The words don't fit, because they are in English...The word 'boy' could

not refer to him; he is 'un garçon'...Similarly, maman and papa are people; 'mother' and 'father' are notions. La nuit is dark and filled with fear, while the night is a pretty picture of a starry field... (1999, p. 261)

Along similar lines, Eva Hoffman (1990) explains how her native Polish (embodied) concept of 'river' was "a vital sound, energized with the essence of riverhood..." and how her English (un-embodied) 'river' seems "cold" by comparison, "a word without aura" (p. 106).

Symptomatically, these examples involve the most basic concepts of the surrounding world in relation to self, whose linguistic relativity preoccupies multilingual writers to the point that it "may threaten sanity" (Besemeres. 2002, p. 50). Because of this, Hoffman (1990) calls herself a "living avatar of structuralist wisdom" (p. 106) whereby she implies that the Saussurian semiotic principle of the union between the signifier (form) and the signified (content, semantics) has been severed and she describes her linguistic fragmentation as the disjoining condition in which the L2 word is drained "...not only of its significance but of its colors, striations, nuances—its very existence" (p. 107) (please notice here the word "colors").

Because of this torturous condition, in the course of their lives, translingual writers pursue the "life-long enterprise" of the "deepening investigation through familiarization" (Hoffman, 1990, p. 62) attempting to break through the second language "numbness," which entails hard work and emotional investment into their writing and identity, pursuing the "familiarization" toward L2 embodiment. In this process, translingual synesthesia may be an idiosyncratic interlingual mechanism of emotional "translation"—second language embodiment. Since synesthetic images are consistent and stable, as confirmed by numerous experiments conducted by neuroscientists, color and word "correspondences" may turn out to be the affective conditioning, which Pavlenko (2005) describes as a way for L2 to be viscerally "appropriated" at the neurological, psychological, and emotional levels: "unfelt" disembodied words are coded into a familiar personal "colorful" imagery. Whether or not synesthesia as affective conditioning/tool of familiarization indeed "embodies" L2 mediated by the "colored" native language "spreading" to it, or L2 is "chromesthesized" independently, only more research will reveal.

# MODELING SYNESTHESIA: IMPLICATIONS FOR APPLIED LINGUISTS AND TEACHERS

In his recent book, My Dyslexia (2011), poet Philip Schultz, winner of the Pulitzer Prize for Poetry, described his torturous childhood as a dyslexic who couldn't read or transform words into sounds; learning a foreign language was out of his reach. When he was eleven, Schultz invented a character that could read and write—a boy like himself. He describes imagining the taste and the sound of letters and creating rhythmic units as meaningful sentences. Infatuated with the musical form of language while "translating" words into sounds (embodying language), Schultz learned to read and later turned this creative method to teach others.

Early in my language teaching career in Moscow, I used to play a game of "Chinese portrait" with students in my French class. Students had to think about a person, usually a classmate, in terms of music, color, literary genre, weather, or even furniture. I would have

them practice hypothetical structures ("Si cette personne était un animal, quel animal seraitelle?") and I would write on the board the list of answers, creating an imaginative "portrait" of compounded personal associations—psychological and cross-modal metaphors and connotations. As "Chinese" as it sounds, with just enough components coming from a variety of symbolic cues, we constructed a perception of a person that was quite recognizable (the game ends when students guess the person).

In retrospect, I understand that even before I was consciously aware of the workings of my synesthesia, it had always been a quiet but omnipresent companion in my journey with languages—and in my attempts to invite others on board. Although natural (congenital) synesthesia is a gift offered gratis to a few selected individuals and cannot be taught, induced, or proposed as an artificial mnemonic device, it is an invaluable insight—a gift not to miss—into 'multilingual dasein,' being in the world at the intersection of language and self. Can we turn the gift—or the idea of the "gift"—into action?

In her *Multilingual Subject* (2009), Claire Kramsch discusses published translingual texts and language narratives written by students which make a convincing case that learning a language is a deeply intimate personal journey, filled with individual metaphoric representations of language and of learning and with psychological, visual, and often sensory symbolic forms, which help learners re-signify and re-negotiate meanings between languages and "selves." Curiously, students' samples in her qualitative study are often reminiscent of synesthetic metaphors, demonstrating idiosyncratic, often emotional ways to code language, in parallel to the examples of translingual synesthetes discussed in this article. Kramsch calls on the profession to pay attention to learners' "subjectivities," that must be developed and modeled by teachers as "symbolic action" (p. 191), which would propel them onto the path of lingua-cultural and 'lingua-emotional' introspection, language awareness, and literacy.

Recently I witnessed a fascinating multi-modal educational experiment at the New York School of Visual Art entitled, Found in Translation: A Typo-Philharmonic Conference, where SVA graphic design students and NYU music students demonstrated the fusion of arts, senses, and of artistic literacy performing a typography class assignment called 'visual music.' Their teacher, a musicologist and a graphic designer, Olga Mezhibovskaya (not surprisingly, a bilingual), asked her students to represent their favorite songs in typographic design and to "...return to the un-separated media, back to the beginning of thought, before the word was formed, before language recognized itself as language, before the printing press, before calligraphy, before pictograms...back to acoustics, raw perceptions, to the blurry vibration of thought and emotion, back to gesture, back to sound..." (Mezhibovskaya, 2011). The result was a creative performance of visual and musical languages merged in cross-modal metaphor, which looked and sounded as naturally as Nabokov's (1989) "pink flannel M" or loyalty' as a "golden fork," with a colorful typographic "notation" on the screen and the corresponding musical composition, featuring the "typographic sound" produced by music students on violin, flute, guitar, and bassoon.

"Listening to the printed page" (Mezhibovskaya, 2011) was an exercise in multimodal and multilingual imagination in the spirit of true "semiodiversity" (Halliday as cited in Kramsch, 2009, p. 21), where the Vygotskyan "aesthetic zone of proximal development" (Vygotsky, 1971) fostered the creation of personally coded cathartic meanings, transcending senses and cognitive realms—transcending conventional languages.

The Found in Translation project is an excellent model for interdisciplinary, multi-media, and ecologically-oriented pedagogical scenarios in our language programs, where learners

would be encouraged to delve into literary and poetic forms and write language narratives to examine their linguistic selves reflectively and creatively and use diverse non-verbal, possibly artistic, ways to create and to represent their language identities.

Such an approach would not be possible of course without inspiring language teachers, true believers and role models themselves. An illuminating modeling example of this kind is described by Brigitta Busch (2010), an Austrian applied linguist, who researched a complex multilingual situation in South Africa and was instrumental in teacher training and reexamination of school language policies. She used a multimodal approach called 'language portraits' which consists of a questionnaire, a personal narrative, and of coloring in a body silhouette, where different colors would represent 'linguistic dispositions' defined as "knowledge of language varieties, registers, and pragmatics...emotions linked to linguistic practices" (Busch, 2010, p. 284). This "personal language profile" activity was used with teachers, to elicit the awareness of their multilingualism and of their complex language identities, and then with children, who thoroughly enjoyed the coloring activity and were able to represent symbolically the literal embodiment of their languages/codes in the silhouette. Color and its location in the body, representing languages, attitudes, and often hard to express emotions, become bearers of meaning, creating an additional semiotic dyad, similar to the one we have seen in synesthesia. Having to think about language visually and not only linguistically shifts the attention from pre-conceived linear definitions and pathways to truly open, imaginative personal discourse.<sup>6</sup>

Synesthesia models just such a path.

#### **NOTES**

<sup>1</sup> American Synesthesia Association (http://synesthesia.info) was created in 1995 to promote education and research of synesthesia and to provide means for the people who experience and/or study synesthesia to be in contact with each other.

<sup>&</sup>lt;sup>2</sup> "Stained glass" motif is one of Nabokov's favorite childhood memories and one of the main tropes in his autobiographical writing.

<sup>&</sup>lt;sup>3</sup> Developmental psychologists believe that all children experience synesthesia but lose that ability in the process of "pruning." However, it is possible that children who are exposed to visual arts and are engaged by their parents in conversations and activities that validate and encourage their synesthesia would keep it throughout adulthood. Luria (1968) notes that all children may perceive days of the week as colored—which coincides with my very first memory of synesthetic perceptions. Like Nabokov, in my childhood, I was exposed to visual arts, painting, drawing, art museums, and theatre—activities noted as concurrent with synesthesia.

<sup>&</sup>lt;sup>4</sup> The perception of translingual writing as simultaneously "native" and "foreign" may have something to do with monolingual readings of multilingual texts and with "the symbolic power exercised by the use of this and that language variety..." (Kramsch, 2008, p. 322). In her discussion of Kafka's multilingualism, Kramsch identifies Kafka's "idiolect" and word play that come from his creative and cultural "de- and reterritorialisation" (Deleuze and Guattari as cited in Kramsch 2008, p. 324) as a way of using German language as a "third language," thereby creating an effect of alienation for monolingual readers.

<sup>&</sup>lt;sup>5</sup> Originally 'language portraits' was developed by Krumm (2008) as a language awareness exercise.

<sup>&</sup>lt;sup>6</sup> For the extension and implications of this view to the educational context, see: Cenoz, J. & Gorter, D. (Eds.). (2011). Multilingualism in school contexts. *The Modern Language Journal*, 95(3).

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### **APPENDIX**

### Booba and Kiki

