From Oceanic Feeling to Image Schemata – Embodied Mind and the Construction of Identity through Binary Conceptualization

Mihailo Antovic

Faculty of Philosophy

University of Nis, Serbia

Correspondence:

Mihailo Antovic,

Department of English,

Faculty of Philosophy, University of Nis,

Cirila i Metodija 2, 18000 Nis, Serbia

mantovic@gmail.com

Abstract

This paper discusses the notion of identity against some fundamental concepts of modern

cognitive semantics. A Freudian perspective is first accepted, according to which

individual identity emerges when the child renounces its original oceanic feeling of

oneness with the world and begins to understand that there are some boundaries imposed

on the ego (where the first other object to be conceived of is, as a rule, that of the mother).

The school of cognitive semantics expands on this thesis claiming that early binary

discretisation of bodily interaction with the environment results in subsequent

conceptualisation of abstract domains. I discuss how these constructs, 'image schemata',

may influence the construction of adult concepts. In particular, the image schemata

VERTICALITY, SOURCE-PATH-GOAL and CENTRE-PERIPHERY are analyzed using examples of

visual, musical, and linguistic cognition (in Serbian and English). The analysis suggests

that early visual experience is of particular importance for the development of concepts,

many of which remain entrenched in the two languages, forming a part of native speakers'

identity.

Key words: oceanic feeling, image schemata, language, music, vision, Serbian, English.

From Oceanic Feeling to Image Schemata – Embodied Mind and the Construction of Identity through Binary Conceptualization

The problem of identity is central to human existence. As such, it is the focus of various fields in social sciences and humanities, from philosophy, over theology, to sociology, psychology and literary theory. As identity is typically expressed through the medium of language, the field of linguistics can also offer a contribution to the research of this uniquely human phenomenon.

This paper discusses a possible way in which linguistic semantics can contribute to the study of identity. It relates the Freudian notion of the *oceanic feeling* with *image schemata*, a central construct of modern cognitive semantics, which postulates a theory of how humans develop abstract concepts from early bodily interactions. The first section of the paper introduces the oceanic feeling and its possible elaborations in traditional semantics (1). The discussion then moves on to the embodied mind theory and image schemata from cognitive semantics, attempting to link this Freudian construct with more modern efforts in the study of meaning (2). The next section introduces three image schemata proposed by cognitive semanticists (VERTICALITY, SOURCE-PATH-GOAL, CENTRE-PERIPHERY), and illustrates them with some actualisations in the visual, musical, and conceptual domains, in Serbian and English (3). Finally, possible cognitive mechanisms underlying image schemata are set against the common call in literary criticism to 'return to the original oneness', i.e. restore the individual's prelinguistic and preconceptual identity. The conclusion is that, if the embodied mind theory is on the right track, this restoration would only be possible if humans were devoid of language (4).

The Loss of Oneness and Semantic Dichotomies

Ideas of 'lost oneness' have recurred in human thought for centuries. A typical such image presents human beings as having 'descended' from the original blessed state of

harmony with the world and 'fallen' into consciousness, which results in an unbearable existence and urge to get back to the original, preconscious condition. This fundamental existential split has found numerous iterations: from mysticism in the East to that in the West, from Prometheus' stolen fire to the Biblical Garden of Eden, from archetypal criticism invoking the forlorn Triple Goddess of Complete Being, to more modern literary conceptions, such as T. S. Eliot's dissociated sensibility.

An interesting notion in early 20<sup>th</sup> century psychology closely related to the idea is found in Freud's well known book Civilization and Its Discontents. Citing a letter by a 'friend', later disclosed to be the Nobel prize winner Romain Rolland, Freud talks of an oceanic feeling – that of an "insoluble bond, of being one with the external world as a whole" (Freud, 1929/1962: 12). Meticulous as always, though rigidly intellectualist in his approach and a bit wary of the concept, Freud considers the proposal in the following way: "Normally, there is nothing of which we are more certain than the feeling of our self, of our own ego. This ego appears to us as something autonomous and unitary, marked off distinctly from everything else. [...] Towards the outside, at any rate, the ego seems to maintain clear and sharp lines of demarcation". Elaborating on the conception of ego development, Freud contends that the first disruption of the oceanic feeling occurs when the child singles out one object from the omnipresent oneness that surrounds it. As a rule, this object is the mother – more precisely, the mother's breast: "[...] other sources evade him [the infant] from time to time – among them, what he desires most of all, his mother's breast – and only reappear as a result of his screaming for help. In this way there is for the first time set over against the ego 'an object' in the form of something that exists 'outside' and which is only forced to appear by a special action" (Ibid: 14). This seems to be the moment at which the very idea of 'otherness' appears, as before that moment the child had believed that all the world around it was a constituent part of its own ego. There was nothing else but the 'I'. The early binary

opposition ('I/other') hence disrupts the oceanic feeling. What is to become adult ego starts to emerge and the first gist of future identity appears. In a way, the 'fall' starts exactly at this point.<sup>1</sup>

If one is to trust most semantic schools of the 20<sup>th</sup> century interested in the study of individual concepts, from that moment on, the child goes on to conceptualise the world around it through a series of further dichotomies, or binary oppositions. Reality is continuous, we are taught, but our conceptualisation of it must be discrete. The process in which we discretise the continuous world is called categorisation. Another central epistemological problem closely related to the notion of identity, categorisation can be tackled from at least three groups of semantic theories (atomistic, probabilistic and exemplar, following the still fresh discussion in Smith & Medin, 1981). Whichever approach we embrace, in the West we tend to discretise sensations in binary fashion: in our conceptual system, and accordingly in our language, there is black and white, perhaps gray, even though we know that the number of shades located 'in between' is infinite. The same applies to numerous concepts: male and female, young and old, weak and strong, good and bad, left and right, big and small, high and low, and, perhaps most strikingly, and much discussed in 20<sup>th</sup> century philosophy, mind and body. In a sense, one is viewed against the other, and one cannot be properly defined without the other: there would be no light without darkness, literally and metaphorically. Thus, the structuralist theoretical construct of binary opposition seems to identify one of the key properties of Western thought, while dichotomies emerging from it constitute a significant part of our identity.<sup>2</sup>

\_

<sup>&</sup>lt;sup>1</sup> An interesting modern study on psychoanalysis and mysticism, reading the Freud-Rolland correspondence from a new angle, is *The Enigma of the Oceanic Feeling* (Parsons, 1999).

<sup>&</sup>lt;sup>2</sup> Of course, the poststructuralists were more concerned with value judgments and implicit hierarchies emerging from binary opposition (as perhaps best discussed in Derrida's *Of Grammatology*, 1967). A thoughtful discussion of the prevalence of dichotomies in all Western culture, from a more Anglo-American perspective, can be found in the book *The Argument Culture* (Tannen, 1998).

As in no other branch of linguistics, dichotomies have been prevalent in traditional 20<sup>th</sup> century lexical semantics. Somewhat elusive and bordering on non-linguistic disciplines, such as logic, psychology, or philosophy of mind, semantics has been forced to define even its subject matter and scope through binary oppositions. The tendency was prominent in early attempts to establish the study of meaning as a separate field, with the dualities of sense and reference (Frege, 1892: 23), connotation and denotation (Mill, 1900: 27), intension and extension (Russell, 1907/1996: VI, §66; Carnap, 1948/1989: 19-30), to name but a few. On a more particular level, dichotomies have also been a subject of extensive semantic debates. A hardly exhaustive list may include the problem of sense relations, presumably antonymy and relational opposites (e.g. Lyons, 1968: 407; Palmer, 1981: 97; in the cognitive paradigm also Croft and Cruse, 2004: 164-193), selectional restrictions in early generative grammar (e.g. Chomsky, 1965: 78 et passim), or the 'figure ground' Gestalt principle of perception organizing abstract domains of thought in conceptual semantics (e.g. Jackendoff, 1983: 43 et passim).

In spite of occasional attempts to relativise the excessive reliance on binary analysis, which began already in the prime of structuralism, with Sapir's notion of gradiency (Sapir, 1944: 93-116), one may still confidently claim that cognitive opposites are an important phenomenon in the human conceptual system. The natural question that one should ask, then, is — whither binary oppositions? In other words, are dichotomies mere theoretical approximations coming somewhat artificially from 'extrinsic' formal disciplines, for instance logic or mathematics, or are they inherent to our conceptual and/or neurological system, i.e. more deeply rooted in human nature? If we side with Freud with regard to the emergence of the first binary opposition, the latter option seems more plausible. Along that line, further text will present the principal points of the embodied mind theory of cognitive semantics, which

may help shed some light on the problems of the oceanic feeling, conceptual dichotomies and loss of original oneness.

Embodied Mind and the Construction of Binary Oppositions

Following centuries of reign of Aristotelian atomism, which found its final iteration in the 'first generation' cognitive science, artificial intelligence, computationalism and formal linguistics of the 1960s and 1970s, a radically different theory of conceptualisation developed in the work of the linguist George Lakoff and philosopher Mark Johnson throughout the 1980s and 1990s (Lakoff & Johnson, 1980; 1999; Lakoff, 1987; Johnson, 1987; Johnson & Lakoff, 2002). The breakup with atomistic and probabilistic theories derived from the two authors' contention that categories do not at all entail 'objective' properties of entities, definable in terms of extraneous mechanisms, such as the rules of logic or set theory. Instead, all our abstract concepts seem to be 'embodied' in the sense that they are based on the early experience in which our bodies interact with the environment. The theory of 'embodiment', 'embodied mind', or, more recently, 'embodied realism', has thus become one of the pillars of the semantic school led by Lakoff and associates, today usually labelled cognitive semantics.

The early bodily interactions of interest for the cognitive semanticist may include the sensation of things being 'up' or 'down', the notion of 'force' being exerted on our body or by our body, or the perception of entities being 'inside' our bodies and 'outside' of them, which is what, in his own words, Freud talks about in the paragraph on the ego quoted above. Such physical interactions that we experience as children result in abstract schematic patterns that underlie most of our adult categorisation. 'Up' becomes 'good' and 'down' becomes 'bad', 'physical force' is turned into 'mental force', while the physical sensation of things standing 'inside' and 'outside' is mapped onto numerous abstract domains, manifested in linguistic utterances such as "I can't get her out of my mind". Calling upon Kant's construct of *schema* 

from *Critique of Pure Reason*, Johnson (1987) calls these elementary patterns *image* schemata. In many respects, cognitive linguistics is based on two cornerstones: the construct of the image schema and its elaboration in which concrete physical sensations are mapped onto abstract domains, which is known as *conceptual metaphor*.

An image schema may be defined as "a recurrent pattern, shape, and regularity in [conceptual activities]. [...] I conceive schemas as structures for organizing our experience and comprehension" (Johnson, 1987: 29). Image schemata originate from bodily interactions. As a rule, they are represented visually, but this is done only for theoretical purposes and clarity of explanation. They thus stand as a functionalist construct and are by no means equal to rich images. Rather, they are 'preconceptual', i.e. their psychological reality is postulated on a level between neuronal activity and mental imagery. In striking difference to formal or computational semantics, they are 'analogue', not reducible to a set of formally computable relations. Finally, as Johnson claims, image schemata are systematic and tend to be universal, which is today a pressing issue in cognitive semantics (e.g. Kövecses, 2005). Using a more recent source, we may define image schemata as "highly schematic gestalts which capture the structural contours of sensory-motor experience, integrating information from multiple modalities" [which] "exist as continuous and analogue patterns beneath conscious awareness, prior to and independently of other concepts" (Hampe, 2006: 1).

Some typical image schemata are presented in Figure 1 (after Saslaw, 1996: 219). As they are a theoretical construct, authors do not always agree on how many and what kind of schemata should be postulated. There is some consensus in cognitive linguistics, however, on the ones presented here. Apart from FORCE and PATH, which seem to be fully analogue, the remaining seven schemata are explicitly or implicitly based on binary oppositions. In terms of explicit binarity, the CONTAINER schema represents the embodied notion of things being 'inside' and 'outside', reminiscent of the ego delineation of which Freud talks in the

beginning of *Civilization and Its Discontents*. The VERTICALITY schema conceives of things being 'up' and 'down'. CENTRE/PERIPHERY distinguishes between focal and peripheral areas in the spectrum, while PART/WHOLE and FRONT/BACK also define instances of dichotomous conceptualisation of bodily postures. In terms of implicit binary relations, the LINK schema connects two physically separated entities, though it does not imply a rigid separation itself, while SOURCE-PATH-GOAL is also conceived as an analogue straight line connecting the logical beginning and logical end of an action, thus also implying a hidden binarity (Figure 1):

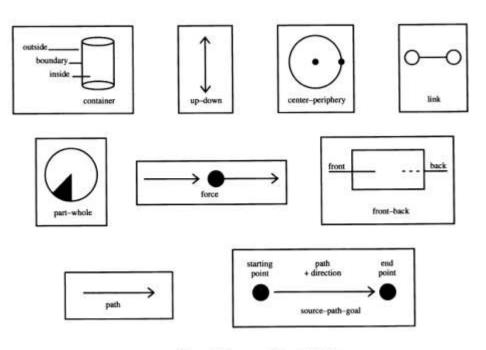


Figure 1: Diagrams of Image Schemes

Diagrams of Principal Image Schemata (after Saslaw, 1996: 217, reproduced by permission)

Having this hidden or explicit binarity in mind, I propose that image schemata may be seen as a logical continuation of the construct of the oceanic feeling. However, the question that is posed in any functionalist psychological proposal, such as the one relating psychoanalysis and cognitive semantics, is whether postulated constructs are merely theoretical assumptions or they are psychologically real, i.e. reflect the actual way the mind

works. Among numerous procedures to test the psychological reality of image schemata, two stand out:

- (1) attempts to study expressions from different languages and cultures which seem to share a common underlying image-schematic structure; and
- (2) attempts to study manifestations of underlying image schemata in various symbolical forms (i.e. forms not limited to the purely language faculty, for instance, visual and musical cognition).

The following section will discuss three fundamental, 'binary' image schemata in an effort to address these two questions. My goal is to provide a number of examples indicating that the three body-derived binary oppositions may be psychologically real because they are discernible in three domains of cognition (visual, musical, linguistic) and two languages (Serbian and English).

Binary Image Schemata in Three Conceptual Domains

In this section I analyze the image schemata VERTICALITY, SOURCE-PATH-GOAL and CENTRE-PERIPHERY, using some instances of visual, musical, and linguistic cognition (in Serbian and English). I first present the possible bodily basis of the concept, then the schema itself, and finally a number of manifestations of conceptual metaphors emerging from it in the three cognitive domains. My thesis is that some seemingly very disparate abstract conceptions may be viewed as having derived from these simple preconceptual structures, thus forming an essential part of native speaker's identity.

## VERTICALITY

This image schema, known also as VERTICAL ORIENTATION and UP-DOWN schema, was originally proposed by Lakoff (1987: 283) and Johnson (1987: xiv). The dichotomy of things being 'up' or 'down' may come from a variety of embodied sources, such as the child's binary conceptualisation of changed posture when it is lying or standing upright. Another

possible source behind this schema is the child's repeated impression that it is located hopelessly 'down' as opposed to the adults it is in daily contact with, who are, as a rule, 'up there'. The subsequent experience of movement, such as climbing up or down some stairs, or visual observation of spatial relations among other persons, where some are by definition taller than others, can also contribute to the cognitive entrenchment of this image schema. Sheer visual perception of static physical objects, such as trees, is also useful in the process. Whatever the exact source may be, it is the conceptual elaboration of the up-down dimension that provides for numerous abstract concepts, and it seems to be fundamental in a number of languages.<sup>3</sup> For instance, a child looking at a glass filled with liquid will quickly relate the notion of the rim going 'up' to the fact that there is now 'more' liquid in the glass than before. The association of MORE is UP (Johnson, 1987: xv) is just one step away from a full-fledged conceptual metaphor, which commonly assumes the form UP is GOOD, DOWN is BAD, as in "I'm feeling down" or "We hit a peak last year", after the well known proposal by Lakoff & Johnson (1980: 15-16). The roots of this metaphorisation are probably also image schematic. The most plausible embodied interpretation behind this common concept is that of the upright posture, which is associated with youth, health, and physical fitness, as opposed to the bent posture, reminiscing of sickness, old age, and, ultimately, death.

The VERTICALITY schema is present in numerous instances of visual cognition. Putting aside the obvious examples of trees, buildings or mountain peaks, one should recall more abstract conceptualisations fully aligned with the UP is GOOD metaphor. A fine example would be the religious hierarchy prevalent in countless works of art depicting the fundamentals of the Christian dogma. Indeed, any image presenting Christ at the top, his angels a bit below, followed by saints, righteous believers and the common folk is an actualisation of this visually based metaphor. As one goes down, the image changes to the

-

<sup>&</sup>lt;sup>3</sup> For a detailed contrastive account of the up-down conceptualization in Serbian and English, see Rasulic (2004).

gates of hell, various underground levels of sinners, the demons, to finally reach the devil himself. In terms of angelic hierarchy, for instance, *The Assumption of the Virgin* by Francesco Botticini is but one painting testifying to the visual metaphorical basis of this concept. More profane visualisations of hierarchy expressed along the vertical axis include, for instance, corporate, political or university diagrams, with general managers, presidents or deans at the 'top' of the graph. Situations in which important individuals are physically located 'above' others, where the physical location implies their social position, are also numerous. The common desire to live in a penthouse, or view a theatrical performance or a football match from the most elevated position, and thus prove one's social rank, may also be based on this fundamentally embodied verticality schema.

If one finds it difficult to see the schematic grounding of these visual hierarchies, for the simple fact that they are omnipresent, one should then recall instances of the same conceptualisation in musical cognition. We conceive of musical tones as being 'lower' and 'higher' than one another, i.e. as being in vertical space. A recently conducted experiment with musically educated and uneducated children from Serbian and Romani communities has testified to this tendency (Antovic, 2009)<sup>4</sup>. As it may be, the typical conceptualisation of music in the visual space, with pitches located along a vertical axis, provides room for a number of metaphors, typically that of MUSICAL MOTION (e.g. Johnson & Larson, 2003: 70). This is best experienced by laypersons when they listen to musical scales, such as C major moving 'upward' and then 'downward'. The vertical localisation is clearly represented in the notation, too. Naturally, the tones are physically not going anywhere, as they are all heard from exactly the same static source: the speakers, for instance. The notion of movement

.

s<sup>4</sup> Even though 'high and low' tones were the most typical conceptualisation, 'thick and thin' and 'big and small' were relatively common options, too. They are also interpretable as image schematic generalisations. Cultural differences, however, remain a pressing issue in the theory of image schemata.

is, thus, conceptual. Whether the conceptualisation comes from the notation, or, more likely, vice versa<sup>5</sup>, remains an issue to be further discussed by music psychologists (Example 1):



Example 1: C major scale providing the MUSICAL MOTION metaphor

In the domain of language, vertical conceptualisations are all-present. For instance, many metaphors based on this schema seem nearly equivalent in English, French, German, and Japanese (Knowles & Moon: 85-6). Expectedly, dichotomies such as 'high-low', 'updown', 'shallow-deep' translate literally from English into Serbian. Likewise, numerous metaphors based on this schema are almost identical, such as "You've grown in my eyes", "I've sunk", "I think highly of you", "I've touched the skies", "I fell into a depression", "He sank into a coma". Yet, there are sometimes differences in the two languages. Returning to the musical vocabulary, I suggest that notes that are called 'sharp' and 'flat' in English are also based on the verticality conception in Serbian: they literally translate as 'heightened' and 'lowered' and this provides some difference even at the basic level of the image schema. In terms of metaphorical constructs, there are also minor discrepancies. The English omnipresent "Things are looking up" does not occur in Serbian, for instance. The strict equivalent would be "Things are improving" (literally even "repairing") without the underlying vertical dimension. In spite of the occasional differences, which should be given due attention in further research, the verticality schema seems to be well rooted in both Serbian and English.

## SOURCE-PATH-GOAL

The second image schema of interest in this paper, implicitly also based on a dichotomous relation, is SOURCE-PATH-GOAL (originally proposed by Lakoff, 1987: 283).

<sup>&</sup>lt;sup>5</sup> The vertical system of note representation originates at least from the neumes used to write down the Gregorian chant (11th century), but it is probably much older (Parrish, 1978:3-8).

"This schema first develops as we learn to focus our eyes and track forms as they move through our visual field. From such experiences, a recurring pattern becomes manifest in tracking a trajectory from point A to another point B." (Gibbs, 2006: 91). If one views the embodied source from a different perspective, one may add that any physical movement that the child needs to undertake, for instance, crawling in order to get a toy on the floor, is a possible motivation for this image schema. Like VERTICALITY, the true power behind this structure becomes apparent when it is elaborated to create full-blown metaphors. As Johnson explains (Johnson, 1994: 166-7), even the very familiar concept of telling a story, or, appropriately, 'storyline', presupposes this fundamental image-schematic organisation. Either we 'follow' the characters in the story or the characters themselves 'follow' their own events and adventures. More importantly, and further into the abstraction, paths in stories are followed that are not always physical. Then they turn into metaphors such as PURPOSES are DESTINATIONS, as when a character says "I've lost my sense of direction". The metaphor is again found in numerous utterances of English: "Our relationship is heading in a wrong direction", "I need to find some purpose along my path", "Let's meet halfway and reach the solution". The origins of this metaphor are likely image-schematic, too: crawling to get a toy is a matter of a purpose, but in order to achieve the purpose some path needs to be taken and a destination set. Quite naturally, the two will blend into a single concept and pave the way for the metaphor.

This image schema seems to unequivocally originate from visual cognition. No wonder then that our visual experience contains numerous instantiations of the pattern and its metaphorical elaborations. Indeed the schema may be located in any physical activity in which objects move toward one another: rivers between springs and estuaries, skiers between start and finish lines, buses between two stops. In terms of related visual metaphors, one may recall the riddle of the Sphinx, who asks which creature in the morning goes on four legs, at

midday on two, and in the evening upon three, and 'the more legs it has, the weaker it be.' When one solves the riddle, and realizes that the trajectory in question exemplifies human life, one concludes that this concept may also be based on the elaboration of the path image schema. The metaphor can be called LIFEPATH or A (PURPOSEFUL) LIFE is a JOURNEY. Linguistic actualisations include expressions such as: "He's gone through a lot in life", "He just sails through life" (Lakoff, 1993: 223), or the common proverb "Life's a journey, not a destination" (as in the popular song *Amazing* by Aerosmith).

Likewise, one should think of the more contemporary image of evolution available freely on the Internet. It provides a simplified version of the Darwinian theory by presenting the trajectory of human evolutionary development. There are seven figures available, from left to right, an ape, a humanoid ape, a prehistoric man with a knife, a homo sapiens with a spear, a rake, a pneumatic drill, and finally a modern homo sapiens sitting at a computer screen, typing something on his keyboard. An important point is that the image physically resembles a trajectory: the first ape is bent, and the next three figures, up to the first homo sapiens, assume a more and more upright posture. The fifth, sixth, and seventh figure again take a gradually stooping position, where the last man is ultimately in the same bent shape as is the first ape. The moral is, perhaps, that modern technology is not helping us advance, but is rather bringing us back to the beginnings of evolution. There is little doubt, however, that the metaphor EVOLUTION is a PATH, firmly based on the PATH image-schematic representation, underlies this image.

Musical cognition abounds in SOURCE-PATH-GOAL image schemas, as well. Any tune has its natural beginning and natural ending, which in music often has to do with harmonic relations. In spite of the progressions, thematic elaborations and tonal modulations, the piece typically starts with a tonic triad and ends in it. In that respect, with some harmony added to the lower voices, the ascending and descending C major scale presented in Image 1 may also

be interpreted as an actualization of the SOURCE-PATH-GOAL schema. As for further elaboration, the typical metaphor emerging from the notion of the musical path is MUSICAL PASSAGE. Some didactical pieces used in music education, such as the piano practice etudes by Carl Czerny, may be used to strongly support this idea. In particular the piece called *The School of Velocity*, with its descending passages moving through two octaves in a quick succession of sixteenth notes may be used as an example of this pervasive musical metaphor. Again the notation itself is suggestive of the underlying image-schematic concept (Example 2):



Example 2: The MUSICAL PASSAGE metaphor in Czerny's School of Velocity

Finally, in terms of linguistic examples from Serbian and English, this image schema seems very noticeable. 'Source', 'path', and 'goal' translate literally into Serbian, while metaphorical elaborations of the schema often work in both languages with minor or no amendments. For instance, LOVE is A JOURNEY, a typical Lakovian metaphor, often finds similar actualisations in Serbian and English. Identical utterances include "Look how far we've come". "This relationship is going nowhere", "We are at a crossroads", "We have made progress", "We are approaching the end of our relationship". Again, some differences occur: "We've gotten off the track" differs a bit from the Serbian equivalent, which literally reads "We've moved away from the right path". In terms of love seen as a journey, and the conceptual structure of 'path', however, the differences between the two languages are quite small.

## **CENTRE-PERIPHERY**

The third image schema of interest in this paper is CENTRE-PERIPHERY which also seems to emerge from early visual experience. The fact that, while observing something, an

infant focuses on certain segments of the visual field, while the rest of the picture is blurred, may explain how this structure likely appears. The physiology of the visual system is such that total focus is impossible, and our conceptual structure may only extend these visual constraints into the abstract domain. Alternatively, this image schema might be based on an even more firmly embodied assumption: the sensation that our bodies have central and peripheral parts, the trunk and limbs, or the heart and fingers or toes. Whatever the exact source might be, the concept gradually moves away from the physical and enters the abstract domain. In this process we start from palpable objects with typical features of central and peripheral structures, for instance, apples or bicycle wheels, and ultimately get to central and peripheral parts of cities, stories, or problems. Metaphors based on the schema usually further suggest that centre is important and periphery irrelevant. Indeed, it is quite possible that numerous expressions such as "Let's get to the core of the problem" or "We'd better get into the heart of things" stem from this image schema. The metaphor may have an embodied basis, as well. The heart is physically in the centre, but it is also essentially important. One may survive without the fingers or toes, but not without the heart. Likewise, one does not physically disturb the heart or bones, but needs to trim one's hair and nails, which are located toward the periphery and obviously dispensable. Thus, the child infers rather quickly that whatever is in the middle seems to be important, while we can sometimes do without things towards the edges.

In terms of examples from the fine arts, one recalls that early artists did not know of linear perspective and thus presented characters in paintings according to their importance, as mentioned in the example of hierarchies of saints above. This however changed after the discovery of mathematical principles behind perspective by Filippo Brunelleschi in early 15<sup>th</sup> century. Essentially, objects on a flat piece of paper need to shrink if the observer's eye is to perceive them as being more distant. This was a purely visual discovery and had to do more

with physics and the physiology of the eye than anything else. However, soon it began to assume metaphorical significance. Less than 30 years after Brunelleschi's innovations, daVinci painted his famous *The Last Supper*. One of the most well known pieces in all art history, the painting presents Jesus and his twelve disciples at the last supper, as proposed in the *Gospel of John* (13:21). Among the many mysteries behind this painting, it is the metaphor of CENTRE is IMPORTANT that is most easily resolved. Indeed, the lighting and perspective all point to the figure sitting in the very centre of the picture – that of Jesus. All perspectival lines meet at this vanishing point and literally make the observer spend the most time looking at the Son of God. Perhaps better than any other example, the technical trick used by the author of this painting explains the path from embodiment over image schema to metaphor: the biological constraints of the human eye urge the spectator to interpret the image as an instance of the CENTRE/PERIPHERY schema, and this ultimately results in the subtle conceptual metaphor ascribing abstract importance to the figure located in the centre of the composition.

In musical cognition, too, this schema is ubiquitous and especially applies to chord progressions prevalent in Western music. It is known that tonality is often defined as a system of pitch relationships related to the 'centre', or, sometimes, a system of chords which 'gravitate' toward the tonic triad. "One of the most striking phenomena of music is the fact that, throughout its evolution — in non-Western cultures, in Gregorian chant, and in harmonized music — practically every single piece gives preference to one tone (the tonic), making this the tonal centre to which all other tones are related." (Apel, 1969: 855). The underlying conceptualisation implies forces drawing the remaining chords toward the tonic, which, if presented visually, shows this principal tone as the focal point in the centre of a circular system. The musical literature has often discussed elaborations of this conceptual idea outside of the musical domain (Norton, 1984). Similarly, in the more complex musical

construct of 'modulation', temporary deviation from the original key of the tune, used for numerous artistic and technical reasons, there is the well-known system of the 'circle of fifths', also often presented visually (Image 3)

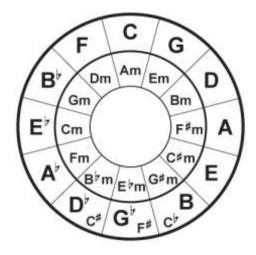


Image 3: The circle of fifths in the tonal harmony of Western music

This visual construct is used by composers to determine 'degrees of distance' between keys, and it results in the common metaphor of MUSICAL PROGRESSION, also based on the schema of centre and periphery.

In linguistic expressions this schema can be traced rather easily. A typical conceptual system utilizing the CENTRE-PERIPHERY image schema would be that of the political 'spectrum', where one can safely be in the 'centre', or rather moderately 'left' or 'right'. Belonging to the 'extreme left' or 'extreme right' is on the verge of acceptability, and such political options are often perceived as inessential for the system. This conceptual structure nicely reflects the physical, visual idea of focal and peripheral points, and it is used almost identically in Serbian and English. Other identical or similar actualisations are common in the two languages. "He lives on the social fringes", "This is the central point in our discussion", or "You need to focus here" translate literally. Again, there is some variation, as in English "You're right" which would translate into the Serbian "You are forward". The discussion of universality and variation in metaphor thus applies to Serbian and English, too, and one

should hope that the future will bring a more thorough research of the centre-periphery conceptualization in the Serbian language.

## Conclusions

Image schemata seem to be psychologically real structures. Apparently, the three 'dichotomous' schemata that I have discussed (VERTICALITY, SOURCE-PATH-GOAL, and CENTRE-PERIPHERY) occur in the visual, musical and conceptual domains, and have linguistic realisations in English and Serbian. Naturally, due to the rather general topic of identity in language, the number of examples in this paper was limited and served as illustration only. For stronger conclusions, more detailed studies are needed, where occasional cross-cultural and cross linguistic exceptions should be paid proper attention. Nevertheless, the construct of the image schema remains an important proposal in cognitive semantics which may shed additional light on the problem of development of human identity.

However, even if the construct is valid and may be related to numerous previous theoretical conceptions, among others the oceanic feeling as originally proposed by Freud, one should not refrain from asking at least two deeper questions: 1) What is the underlying cognitive mechanism working behind image schemata? and 2) What kind of perception/cognition typically results in binary discretisations, and their subsequent abstractisation by metaphorical extension? In other words, scholars need to investigate whether any perceptual modality, for instance, visual or auditory cognition, is in some sense 'primary' and more important than others during the construction of abstract concepts. Authors largely disagree on this matter, often irrespective of their sentiments with regard to cognitive semantics. Most concur that early sensory data strongly condition adult conceptualisation. Other than that – numerous options remain open. Some contend that visual

\_

<sup>&</sup>lt;sup>6</sup> Most, but not all. The key living intellectual figure in the domain of linguistics remains strongly in favour of the nativist position: "... though words may not match precisely across languages, the conceptual framework in

cognition is primary (Arnheim, 1969; Sweetser, 1991), others believe that the essence of concepts is to be sought in more abstract, largely 'spatial' relations (Jackendoff, 1987; Mandler, 2006), while still others insist on the perception of 'force' as the primary motivator behind conceptual abstractions (Johnson, 1987; Talmy, 2000). Wherever the answer may lie, if one wishes to test the deeper developmental and neurobiological status of the perceptual causes of categorisation, one needs to propose some sort of cooperation between competing semantic schools. Moving away from just one paradigm might be a good starting point for modern semanticists in general.

To return to the beginning of this paper, I close with the question of the possible restoration of the original oneness, which is often craved in religion, literature, and the arts. If mental structures akin to image schemata are indeed responsible for conceptualisation, then this process in itself destroys the original unity. On this view, it would seem that the construction of conceptual identity by definition disrupts the oceanic feeling... for good. One might then extend further hypotheses ad infinitum, for instance in claiming that perhaps the only way to restore oneness would be to rid ourselves of our conceptual system, and, ultimately, language. To an extent, this might be feasible through mysticism, not accidentally the principal method of reaching elevated spiritual states from east to west. He who attains this might not need image schemata and binary oppositions after all. For us mortals interested in conceptual development, this principal construct of cognitive semantics remains a useful tool. I have tried to suggest here that it might not only be important for the cognitive semanticist, but also instrumental in the more global study of human identity.

which they find their place is a common human property. The extent to which this framework can be modified by experience is a matter of debate, but it is beyond question that acquisition of vocabulary is guided by a rich and invariant conceptual system, which is prior to any experience." (Chomsky, 1988: 32).

References

Antovic, M. (2009). Musical metaphors in Serbian and Romani children: an empirical study. *Metaphor and Symbol*, 24(3): 188-202.

Apel, W. (1969). The Harvard Dictionary of Music. Harvard University Press.

Arnheim, R. (1969). Visual Thinking. University of California Press.

Carnap, R. (1949/1988). *Meaning and Necessity*. University of Chicago Press.

Chomsky, N. (1965). Aspects of the Theory of Syntax. MIT Press.

Chomsky, N. (1988). Language and Problems of Knowledge. MIT Press.

Croft, W. And Cruse, A.D. (2004). *Cognitive Linguistics*. Cambridge Textbooks in Linguistics.

Frege, G. (1892/1960). On sense and reference (Über Sinn und Bedeutung). *Translations* from the Philosophical Writings of Gottlob Frege. Blackwell.

Freud, S. (1929/1961). Civilization and Its Discontents. W.W. Norton and Co, New York.

Gibbs, R. (2006). Embodiment and Cognitive Science. Cambridge University Press.

Hampe, B. (2006). Image-schemas in cognitive linguistics: An introduction. In B. Hampe (Ed.). *From perception to meaning: Image schemas in cognitive linguistics* (pp. 1–14). Berlin: Mouton.

Jackendoff, R. (1983). Semantics and Cognition. MIT Press.

Jackendoff, R. (1987). Consciousness and the Computational Mind. MIT Press.

Johnson, M. & Larson, S. (2003). Something in the way she moves: Metaphors of musical motion. *Metaphor and Symbol*, 18(2), 63-84.

Johnson, M. (1987). *The Body in the Mind*. University of Chicago Press.

Johnson, M. (1994). Moral Imagination. University of Chicago Press.

Johnson, M. and Lakoff, G. (2002). Why cognitive linguistics requires embodied realism.

Cognitive Linguistics 13(3): 245-263.

- Knowles, M. & Moon, R. (2006). *Introducing Metaphor*. Routledge.
- Kövecses, Z. (2005). *Metaphor in Culture. Universality and Variation*. Cambridge University Press.
- Lakoff, G. & Johnson, M. (1980). Metaphors We Live By. Chicago University Press.
- Lakoff, G. & Johnson, M. (1999). *Philosophy in the Flesh*. Basic Books.
- Lakoff, G. (1987). Women, Fire and Dangerous Things. University of Chicago Press.
- Lakoff, G. (1993). The contemporary theory of metaphor. In: A. Ortony (Ed.). *Metaphor and Thought* (pp. 202-251). Cambridge University Press.
- Lyons, J. (1968). Introduction to Theoretical Linguistics. Cambridge University Press.
- Mandler, J. (2006). *The Foundations of Mind: Origins of Conceptual Thought*. Oxford University Press.
- Mill, J.S. (1900). System of Logic. Harper and Brothers.
- Norton, R. (1984). *Tonality in Western Culture: a Critical and Historical Perspective*.

  Pennsylvania State University Press.
- Palmer, F. (1981). Semantics. Cambridge University Press.
- Parrish, C. (1978). The Notation of Medieval Music. Pendragon Press.
- Parsons, W. (1999). The Enigma of the Oceanic Feeling. Oxford University Press.
- Rasulic, K. (2004). Konceptualizacija vertikalne dimenzije u engleskom i srpskohrvatskom jeziku (Conceptualisation of the Vertical Dimension in the English and Serbo-Croatian Language). Filoloski fakultet, Beograd.
- Russell, B. (1903/1996). Principles of Mathematics. Norton Paperback Edition.
- Sapir, E. (1944). On grading. A study in semantics. *Philosophy of Science*, 2, 93-116.
- Saslaw, J. (1996). Forces, containers, and paths: the role of body-derived image schemas in the conceptualization of music. *Journal of Music Theory*, 40(2), 217-43.
- Smith, E. and Medin, D. (1981). Categories and Concepts. Harvard University Press.

Sweetser, E. (1991). From Etymology to Pragmatics. Cambridge University Press.

Talmy, L. (2000). Toward a Cognitive Semantics. MIT Press.

Tannen, M. (1998). The Argument Culture. Ballantine Books.