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## **Conceptualizing *Sensory Relativism* in Light of Emotioncy: A Movement beyond Linguistic Relativism**

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### **Abstract**

Given the significance of *relativism* in molding our worldview and uncovering the nature of truth, this study using the newly-developed concept of *emotioncy*, attempted to introduce *sensory relativism* as a new perspective based on which senses can relativize our understanding of the world. To espouse the theory, 24 individuals were interviewed on their experiences of phlebotomy. The results were analyzed in light of the six-level emotioncy model and five major themes were extracted. Overall, the outcomes of the study showed that, unlike the *Exvolved* individuals (Auditory, Visual, Kinesthetic emotioncies) who used more hedges and had shorter talk time, distal emotion, limited vocabulary size, and more use of associations, the *Involved* individuals (Inner and Arch emotioncies) employed fewer hedges and had longer talk time, proximal emotion, wider vocabulary size, and more use of analogies. The findings providing empirical support for sensory relativism, revealed that, deeper than language, senses can relativize cognition.

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## 1. Introduction

Man's quest for truth has a long history of considering it as something absolute or relative. Debates characterizing the distinctions between realism and relativism have caught the attention of philosophers for centuries; however, it seems that with the advent of postmodernism, interest in absolute and universal claims has waned, giving rise to different types of relativism (Pishghadam & Mirzaee, 2008; Rorty, 1982), including Whorf's (1956) cultural and linguistic relativism. These trends of thought celebrate contextual and local views of reality, maintaining that cultural and linguistic contexts can be vital to understanding peoples' beliefs, values, and practices (Whorf, 1956). In fact, this relative view of reality is to a considerable extent in line with the major tenets of constructivism based on which people construct their own understanding and knowledge of the world the way they experience it (Piaget, 1954; Vygotsky, 1978).

The very idea of experience is also of utmost importance to empiricists, who hold the view that the source of all knowledge is senses. Empiricism or sensationalism rests upon the assumption that senses lay the foundations of all thoughts (Benton, 1977; Dewey, 1906). The idea even gained further momentum when some psychologists (e.g., Bruner, 1986; Piaget, 1954) argued that, sensory experience is vital to children's mental growth. To them, when children learn how to collect information via their senses, control their body movements, and develop some practical skills, their cognitive abilities may be nurtured. Moreover, with respect to the emotional aspect of senses, Pishghadam, Tabatabaeyan, and Navari (2013) inspired by Greenspan's (1992) Developmental Individual-differences Relationship-based (DIR) model, coined the term *emotioncy* emphasizing that senses can be hierarchically intertwined with emotions to shape cognition.

Considering sensory experience as the cornerstone of emotional and cognitive abilities and believing that reality is relative, changing within and across individuals, this study attempts to develop the new concept of *sensory relativism* to underscore the role of senses in relativizing the reality. In fact, in this study we intend to introduce a new type of relativism which is different from the cultural/linguistic

ones, hypothesizing that reality can change based on the senses from which individuals receive inputs. Thus using a qualitative study, we attempt to provide empirical support for the newly-proposed concept of *sensory relativism*.

## 2. Theoretical Framework

### 2.1. Linguistic Relativism

For long, anthropologists, linguists, and philosophers have shown a burgeoning interest in whether language shapes the way individuals perceive the world (Boroditsky, 2001). This has been largely fuelled by the fact that languages differ to a considerable extent from one another in the way they capture the world (Politzer, 1963). Cross linguistic differences in terms of lexicon and grammar appeared to end in non-linguistic mental representations though the underlying cognitive processes were deemed universal (Whorf, 1956). Provoked by this very idea of diversity, Whorf (1956) pioneered linguistic relativity hypothesis, maintaining that "all observers are not led by the same physical evidence to the same picture of the universe, unless their linguistic backgrounds are similar, or can in some way be calibrated" (p. 214). This so called meaning-based hypothesis indicated that, rather than being mere symbols of referring to reality, every language sketches the reality in an idiosyncratic fashion, developing the components of reality which are exclusive to that given language only (Politzer, 1963). The proposal basically holds that, 1. Language is a robust means of forming thought about abstract entities which do not rely upon sensory experiences, and 2. Each individual's native language serves a substantial role in shaping, or even entirely determining one's habitual thought (Boroditsky, 2001).

The strong Whorfian view that languages absolutely determine thought and action (linguistic determinism), used to be one of the primary research topics. The early studies targeting to put the theory into practice, mainly delved into the domain of color, assuming that people from different language communities, have different perceptions of colors (Kay & Kempton, 1984). Further investigations likewise bore out the influence of language on the way people tended to perceive shapes, numbers, and events (Brown, 1976). A number of similar studies extended this conclusion and came up

with the view that the categories made available by each language seemed to affect a number of various aspects of human cognition including time, space, and objects (Scott, 1989). Overall, Berlin and Kay (1969) delineated that, the perceptual differences do not stem from radical differences in thought but emerge once languages fail to characterize the concepts to the fullest extent.

Be that as it may, around the middle of the century, the theory faded away due to meager empirical evidence (Hickmann, 2000). Again, after some years, in the 1990s, its literature witnessed the milder hypothesis of the concept being revived in some language-related disciplines with several lines of fresh evidence on the impact of language on thought (e.g., Bloom, Peterson, Nadel, & Garrett, 1996). Drawing upon the tenets of this hypothesis, Slobin (1996) reformulated the effect of language on thought during “thinking for speaking” (p. 72). In a similar attempt, Wolff and Holmes (2011), provided recent evidence on the role of language in giving rise to certain “schematic mode of thinking” (p. 253). Boroditsky, Schmidt, and Phillips (2003) further held up the Whorfian effect and concluded that, grammatical gender frames individuals’ mental representations of different objects. Some other studies (e.g., Munnich & Landau, 2003) have otherwise argued against the principles of relativism and renounced the possible role of linguistic categories in thought.

In conjunction with the view that people with different linguistic backgrounds may think differently, people coming from different societies may also experience a particular object or event in a much different way owing to their cultural discrepancies (Wellman, 1963). While one’s cognition, perception, and worldview, or in a nutshell ‘culture’, are defined by the language they speak (Gumperz & Livinson, 1991), different cultural practices can form beliefs and regulate cognition, leading to distinctive conceptual repertoires. Human cognition develops in a cultural context (Vygotsky, 1978), in such a manner that enculturation, as Wellman (1963) believes, shapes human beings’ cognitive capabilities, however to a limited extent. Having its thread in linguistic relativism, the current Whorfian view, technically referred to as cultural relativism, was induced by anthropologists to

celebrate the differences. A clear manifestation of this premise relies on the assumption that there exists no absolute truth or exclusive way to evaluate various cultures (Gellner, 1985). In a broader sense, no culture is superior to the others since social ethics and values are totally unequal and context-bound (Costall & Still, 1989). Certain things which used to be absolute are, indeed, relative to culture (Wellman, 1963). The most frequent result of such a view is to have individuals with culturally-specific conceptual behavior.

By and large, the current review lays the groundwork for presenting a complementary view of relativity, whose chief impetus is the emotional aspect of sense more than its cognitive one. To this end, in the following section, we shed some light on sensory and emotional experiences so as to ultimately uncover the origins of the gap and enrich the Sapir-Whorf relativity hypothesis.

## **2.2. Sensationalism and Emotionalism**

Sensationalism, widely known as empiricism, is a doctrine according to which our ultimate knowledge of the world arises from our impression of the senses or scrutiny of sensational experiences (Matthews, 1992). John Locke as a pioneer empiricist of the early modern period, developed the idea of ‘tabula rasa’ indicating that the mind is a blank slate at birth (Matthews, 1992). He centered his primary investigations on colors, shapes, tastes, and smells to dig out truth. The conclusion he drew was that, the knowledge compiled up in our minds is actually of two types: sensation which embraces the ideas perceived directly from the outside world, and reflection (introspection) which indicates our own mental transactions. To explicate, ideas received from our sensory organs fire up our thought based on which an array of mental operations are executed (Rosen, 1994). As Locke admits, convoluted thoughts evolve from the basic ideas of sensation and reflection. While Locke is labeled as a reflective empiricist, Dewey (1906) views empiricism from a sensationalistic perspective construing that, sense experiences are substantial to the extent that the past experiences set the basis for the future reality. Preserving the assumptions of empiricism, Piaget (1954), likewise argued that, sense data, as the first schemas formed in a child’s mind, emanate from the child’s nourishing ability to

act, see, hear, and touch an object in the first stage of his/her cognitive development, namely 'sensory motor'. The groundwork of Bruner's (1986) model of learning was similarly laid upon the notion that "one learns from experience" in such an order that exists in the world (p. 199).

While there is almost no argument that there are different views towards empiricism, and a number of theoretical approaches (e.g., structuralism, Gestalt psychology, etc.), which prioritize the analysis of sensation and perception as the core of their argumentations, what ties them all together is the premise that experience is the foundation of learning (Benton, 1977). A recent approach which makes a different use of sensory experiences holds the idea that, individuals experience various kinds and degrees of emotions through their senses, while encountering different words or concepts in a language (Pishghadam, Adamson, & Shayesteh 2013; Pishghadam & Shayesteh, in press; Pishghadam, Tabatabaeyan et al., 2013). While, Pishghadam, Tabatabaeyan et al.'s (2013) and Pishghadam, Adamson et al.'s (2013) concern is not the source of knowledge to share notable commonalities with empiricists, their *emotionalism* merely takes advantage of one's senses to give life to language-based emotions.

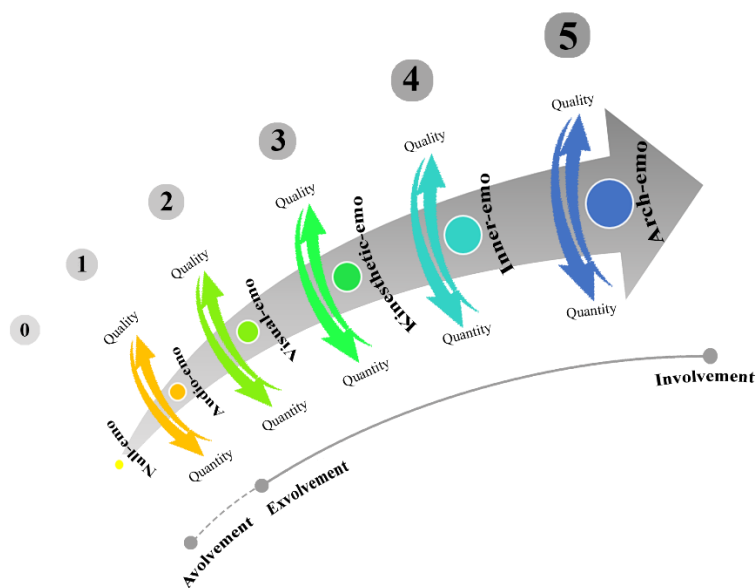
Grounded in Greenspan's (1992) model of DIR, which is a full-fledged form of behaviorism, cognitivism, and emotionalisation, Pishghadam, Adamson et al. (2013), adopted a broader view and gave prominence to the saliency of learners' emotional abilities, particularly the ones conveyed from their first language experience, believing that emotional involvement establishes meaningfulness which facilitates language learning. They introduced *emotion-based language instruction (EBLI)* as a fresh approach to second/foreign language learning and maintained that, individuals, in general, hold varying degrees of emotions (coined as *emotioncy*) toward different items of a language depending on whether they have heard, seen, smelled, touched, or experienced that item. Emotioncy is in fact reinforced by the idea of *sensory constructivism*, which may complement cognitive (Piaget, 1954) and social constructivism (Vygotsky, 1978), claiming that individuals can construct their idiosyncratic understanding of the world through their senses. In an attempt to further develop the concept, Pishghadam (2015) devised a six-level emotioncy matrix (Figure 1), labeled with different types and measures of emotioncy: Null emotioncy (0) (i.e., Avolvement), Auditory emotioncy (1), Visual emotioncy (2), Kinesthetic emotioncy (3), Inner emotioncy (4), and Arch emotioncy (5) (See Table 1).

**Table 1**  
*Emotioncy Types*

Type	Experience
Null emotioncy	When an individual has not heard about, seen, or experienced an object or a concept.
Auditory emotioncy	When an individual has merely heard about a word/concept.
Visual emotioncy	When an individual has both heard about and seen the item.
Kinesthetic emotioncy	When an individual has touched, worked, or played with the real object.
Inner emotioncy	When an individual has directly experienced the word/concept.
Arch emotioncy	When an individual has done research to get additional information.

Scrutinizing Figure 1, we can see that, the Exvolvement-Involvement thread begins with Auditory emotioncy. During the Exvolvement phase, constituting Auditory, Visual, and Kinesthetic emotioncies, learning is the result

of indirect involvement which yet has not been perfectly internalized. Moving gradually toward the Involvement phase covering Inner and Arch emotioncies, the learner gets directly involved in learning a word/concept.



**Figure 1**

*Emotioncy Levels*

(Adapted from “*Emotioncy in Language Education: From Exvovement to Involvement*”, by R. Pishghadam, 2015, October, Paper presented at the 2<sup>nd</sup> Conference of Interdisciplinary Approaches to Language Teaching, Literature, and Translation Studies. Iran, Mashhad).

The example of ‘asparagus’ provided by Pishghadam (2015) draws a better picture of the hierarchy of emotioncies. To investigate where individuals stand with regards to their emotioncy for asparagus: if one is not at all familiar with asparagus, his/her emotioncy equals 0; if one has heard the word asparagus, his/her emotioncy equals 1 (Auditory); if one has seen it, his/her emotioncy equals 2 (Visual); if one has touched it, his/her emotioncy equals 3 (Kinesthetic); if one has tasted and eaten asparagus, his/her emotioncy equals 4 (Inner); and if one has researched it to obtain further information, his/her emotioncy equals 5 (Arch).

Given that emotions relativize our receptivity of the world (Ross, 2006; Zhu, in press), the chief contribution of this study is to put flesh on the emotional dimension of Sapir-Whorf hypothesis through surpassing its cognitive boundaries and to broach the idea of *sensory relativism* accordingly. In this respect, we believe that, there are some non-cognitive features (i.e., sense and emotion) which differ across languages, yet have their modern roots in empiricism and linguistic relativism. Inspired by the empiricist’s view of sensory experience and quite in line with the constructivists’ view of reality, plus Greenspan’s (1992) DIR model and Pishghadam, Tabatabaeyan et al.’s (2013) proposal that

senses take along unequal degrees of emotions for the entities individuals learn and use in a language, we deem emotional facet of senses, a likely language-driven feature which may likewise calibrate individuals’ conceptualization of the world. In essence, sensory relativity assumes that senses can diversify and relativize our understanding of the surrounding world. In order to elucidate the concept, we move ahead with an example, putting it on the six-level emotioncy matrix of Pishghadam (2015), and present the theoretical underpinnings of our newly-proposed view of relativity by interpreting the major themes elicited from the interviews on the participants’ degree of emotion for a specific experience.

### 3. Methodology

#### 3.1. Participants

The participants of the study comprised 30 individuals at the outset. Subsequent to the interviews, for the ease of analysis and interpretation, we decided to have an equal number of 4 participants in each group which we are going to clarify later in this section. Therefore, they were reduced to 24 individuals (M=10, F=14) ranging from 23 to 50 years old (M=32.4), from Mashhad, a city in the eastern part of Iran. Their first language was Persian

and their academic background varied from high school diploma to doctorate. Coming from different socio-economic backgrounds, they held different positions in the society as a government employee, university professor, or businessman. They were selected based on their willingness to participate in the interview. Interviews continued until data saturation was reached.

### 3.2. Procedure

In order to show how sensory experience can relativize cognition, we analyzed the word *phlebotomy* (bloodletting). There are two lines of reasoning behind choosing this word: first, *phlebotomy* is done in the Iranian culture and due to its religious and traditional background, it is practiced by some specific people only. Second, since *phlebotomy* is something that not all people are engaged in, the participants could be better categorized into different groups.

To collect the required data, face-to-face semi-structured interviews were conducted in Persian

(participants' mother tongue) by two of the authors familiar with the concept of emotioncy, within a period of 3 months. The participants were asked to explain, in the first place, what they knew about *phlebotomy*; and thereafter to express their personal emotions and understandings of the concept. The interviews lasted practically from 2 to 16 minutes and were recorded and transcribed for later analysis. Content analysis was performed to draw out the probable patterns related to each specific emotioncy level.

Based on the results obtained from the interviews, the participants, employing the six-level emotioncy matrix proposed by Pishghadam (2015), were classified into 6 groups of 4. As it was already mentioned, in this model, emotioncy ranges from Exvolvement (Auditory, Visual, and Kinesthetic) to Involvement (Inner and Arch). Thus, based on the kind of emotioncy the participants had of *phlebotomy*, they were assigned to different emotioncy levels (Table 2).

**Table 2**

*6 Groups of Participants Based on their Emotioncy Levels*

Phlebotomy	Degree	Emotioncy Levels	Experience
	0	Null-emo	The participants in this group had never encountered this word in their lives.
	1	Audio-emo	The participants in this group had just heard about it.
	2	Visual-emo	The participants in this group had seen it themselves.
	3	Kinesthetic-emo	The participants in this group had been in close contact with the people who had done it and touched the spot on the back of people once or more.
	4	Inner-emo	The participants in this group had experienced it once or more in their lives.
5	Arch-emo	The participants in this group had studied or conducted some research on it.	

## 4. Results

Scrutinizing the results of the interview analysis, the authors deduced the following major themes:

1. The participants who belonged to the lower levels of emotioncy groups (i.e., Audio, Visual, and Kinesthetic) made use of more hedges compared to those from the higher levels. The hedge words and phrases they mostly employed in their descriptions were: I think..., it seems that..., I feel that..., apparently..., probably..., etc. For instance, one of the participants in the Audio emotioncy group expressed his view of the concept this way: "*apparently, our blood*

*becomes purified when we have phlebotomy*". Another participant in the Visual emotioncy group maintained that: "*I think that the impure blood becomes clean when blood oozes from capillaries, but I don't know how*". Moreover, a participant from the Kinesthetic emotioncy group stated that: "*it is said that phlebotomy is used to refine the blood of those whose blood is thick*".

Unlike the participants from the lower emotioncy groups, those from the two higher emotioncy levels (i.e., Inner and Arch), put their emotions into words with more certainty. As an instance, a participant who was categorized as a member of Inner emotioncy

group explained the benefits of *phlebotomy* contending that: "*phlebotomy is very useful for our body; it has many benefits... You don't feel any pain and the cuts will not leave any scars*". In a similar manner, the participants of the Arch emotioncy group talked about its role in the health and physical well-being. A case in point was a student of traditional medicine who regarded *phlebotomy* as a treatment: "*For all kinds of illnesses, after diagnosing the disease, we use phlebotomy for the relative alleviation or the absolute treatment of that disease*". Yet, in some cases the participants of the Arch emotioncy group employed hedges in their speech, which, we believe, may be due partly to the contradictory results reported on *phlebotomy*.

2. The participants with higher emotioncy levels were seemingly more willing to communicate about the concept than those of the lower levels. They generally, talked longer than the participants with lower emotioncy levels. To pinpoint, the participants of the Arch emotioncy group talked about *phlebotomy* for about 8 to 16 minutes (M=12min), while the maximum talk time in the Audio emotioncy level, for instance, was 4 minutes only. Thus, in contrast to the participants of the Exvolvement side of the emotioncy hierarchy, those who were directly involved, tended to talk more about the concept and could picture what *phlebotomy* was exactly.

3. Emotionally speaking, the individuals with lower levels of emotioncy, generally let out negative emotions for the concept. They associated *phlebotomy* with blood, stating that it is "*barbaric, full of pain, and useless*". In contrast to this negative outlook, individuals with higher levels of emotioncy were of the view that *phlebotomy* is something "*useful and joyful*", which can make people "*happy*". Taking these contradictory views into consideration, it seems that, the *involved* individuals have some *proximal* emotions which are close to the reality; whereas, the *Exvolved* ones own *distal* emotions which can be far from the reality itself. In fact, proximal emotions can be better in line with the reality, while distal and exaggerated emotions are more likely to be associated with hyper/hypo realities that individuals build in their imaginations. For instance, a participant of the Arch emotioncy level technically elaborated on the concept:

*Before the act of bleeding, a cupping therapy is done to stimulate the immune system of the body and to better activate the blood system so that blood sediments become apart from the vessels. Then, phlebotomy is done through scratching the very superficial layer of the skin at the top back part of one's body between the shoulders by means of some fine blades. Actually, phlebotomy does not damage the veins... therefore, no pain is felt.*

Quite differently, a participant of the Audio emotioncy level confessed that:

*I've decided so many times to have a phlebotomy but I'm afraid of it. I feel that it should be very painful. I don't know how the impure blood comes out of the body by means of making several cuts on your back! I think I can't lie back on the bed because of feeling the pain in my shoulders....*

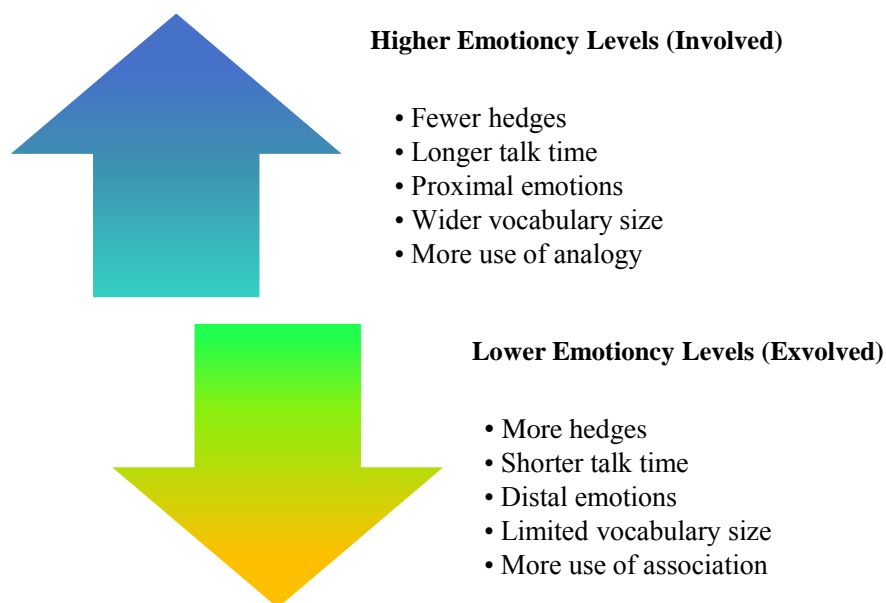
4. With respect to vocabulary size, the participants of higher emotioncy levels incorporated a wider variety of words in comparison to those of lower emotioncy levels. To explicate, Arch-emo participants brought numerous technical words into play about the concept of *phlebotomy* such as cupping therapy, inoculation, immunization, blood sediment, etc., which participants of lower emotioncy levels were actually deprived of.

5. While the participants of higher emotioncy levels exercised analogy to verbalize their emotions regarding the concept of *phlebotomy*, in lower emotioncy levels, participants took more advantage of associations. To exemplify, participants from the lower levels of emotioncy drew on a number of associations such as "*primitive*", "*HIV*", "*savageness*", "*needle and blades*". On the other hand, participants with higher emotioncy levels made the most of analogy and exemplification that was an indicator of their rather thorough and comprehensive comprehension of the concept. As an illustration of the issue, consider the statement made by a participant of the Arch emotioncy group:

*A gardener embellishes the trees by cutting their branches twice a year; once in spring and once in autumn. This way the trunks will remain healthy and new and fresh branches will blossom again*

*after a short time. The same happens to our body when we have phlebotomy. By having phlebotomy in the beginning of autumn, our body becomes vaccinated against the illnesses in winter...and the body starts to recuperate and your health condition will improve.*

Finally, it should be mentioned that, the participants in the null-emo group had no idea of the concept, showing a blank expression on the concept of *phlebotomy*. Figure 2 encapsulates the findings.



**Figure 2**  
*The Themes Derived from the Interviews on Phlebotomy*

## 5. Discussion

Senses were assumed to be the origin of knowledge of language (Matthews, 1992). The idea that language forms the way we perceive and conceptualize the world, finds its best expression in the Sapir-Whorf linguistic relativity hypothesis. Research into linguistic relativity made us extend the hypothesis to the emotional aspect of linguistic items suggested by Pishghadam, Tabatabaeyan et al. (2013), believing that Whorfian sense has ruled out the possibility that emotions, tied with language, may govern thought and action. Such an extension, which draws equally upon the tenets of constructivism, is central to our new view of relativity, namely *sensory relativity*, presented in this study; one that transcends conventional linguistic categories as the probable former of relativity and with a more detailed look, propounds that emotions, resulted from our

sensory experiences, can impose structure on cognition.

In order to open up our view, the word *phlebotomy* was chosen owing to its cultural and traditional history, which makes it familiar to a specific group of people only. The interview results concerning the participants' emotion and knowledge of the word provided us with 5 major themes. With respect to the first theme, it was revealed that, unlike the participants of higher emotioncy groups who expressed their ideas with sufficient certainty, their counterparts in the lower emotioncy groups employed more hedge words and phrases. A possible justification may be that, since the members of the latter groups could establish limited emotional connections with the concept, as a result they were not able to draw a full-fledged picture of the word in their mind. This left them with the idea that, their



shaky knowledge does not have the necessary quality to be shared with others. As Lakoff (1975) also contends, hedged statements are not only a gender-based communication characteristic, but may indicate uncertainty and impreciseness as well. The shadows of doubtfulness, can in like manner, explain the second elicited theme in relation to the duration of talk time and willingness to communicate. Based on the results, in comparison to the participants of lower emotioncy levels, the ones owning higher degrees of emotioncy, showed more willingness to lengthen their talk. While talking, participants presented different interpretations of their sensory experiences. Believing that talking is in fact a means through which individual's knowledge could be judged (Sousa, 2010), the participants of the lower group tended to keep their talk time short, not to give away their lack of emotional knowledge and ultimately their narrow cognitive ability. As for the crux of the third theme, different types of emotions the participants used in their remarks were discriminated. Most often, distal and proximal emotions were employed by the members of lower and higher emotioncy groups, respectively. A possible line of reasoning may be that, the density of the emotional nexus for an experience can determine the individual's proximity to reality. In other words, the *Involved* participants could enjoy their more complex network of emotions blended with senses and stay closer to reality; yet, the *Exvolved* ones would see a masked image of the reality in the sense of hyper/hypo reality, building upon their less complex network of emotions. Quite similarly, paucity of sensory information was also emphasized by Bonanni (2006) as a feature which evokes hyper/hypo reality. Apart from the impression of emotions on one's view of reality, they could influence the variety of vocabulary items incorporated by the participants. According to our fourth theme, participants with higher emotioncy levels made use of a wider list of vocabulary items to opine on the concept. It seems logical to infer that, since emotions are reliant on our sensory experiences, one with a higher degree of emotioncy may have more experiences of a concept, and therefore an increased number of vocabularies to put those experiences into words. This finding corroborates Pishghadam and Shayesteh's (in press) recent study in which they concluded that individuals with higher degrees of emotioncy have better access to

different lexical items. To uncover the ways these lexical items were mapped in the participants' expressions, our fifth theme, weighed the strategies utilized. The participants with lower degrees of emotioncy gave prominence to word associations; whereas, the ones with higher degrees, were inclined towards metaphors and analogies. Linking the strategies to the participants' cognitive functioning, it is predicated that, analogical thinking is the essence of effective learning and intelligence (Geake, 2009). That is, by relating back to previous knowledge and capturing the parallels across different domains, the *Involved* participants manifested their full comprehension of the concept gained through sensory experiences and satisfactory emotional engagement. On the other hand, the *Exvolved* members formed mental associations as a superficial rote learning strategy and relied substantially on their working memory, indicating inadequate understanding of the concept.

Looking from the theoretical point of view, unlike linguistic relativism which rests on the assumption that language can change thoughts and the ways individuals perceive information (Whorf, 1956), our findings reveal the fact that deeper than language, sensory experience can impact our emotions, relativizing cognition. This finding does not refute the claims made by the proponents of linguistic relativism (e.g., Rorty, 1982), but by espousing the theory of emotioncy (Pishghadam, Tabatabaeyan et al., 2013), it sheds more light on the intricate interface between the levels of emotioncy, emotion, and cognition. The point behind all of the foregoing is that, even in one society and with one specific language, people based on the sensory channels they receive inputs, may have different emotions and interpretations for one particular concept. Thus, although we may know the meanings of words in a language, based on the Exvolved and Involved in our surrounding world and activities, we may form different realities and develop different ways of understanding the world.

Moreover, as per linguistic relativism, different languages may portray similar concepts differently, and hence one particular concept in a language becomes more difficult to be understood by speakers of other languages unless one learns that specific language. While

this view of relativism is more prone to a fixed and static understanding of the world, *sensory relativism* with its focus on different levels of emotioncy, emphasizes on the open and dynamic nature of cognition. It implies that, individuals can easily move from the Exvolvement (Auditory, Visual, and Kinesthetic) to Involvement (Inner and Arch) levels of emotioncy, coming to a closer and more similar understanding of reality. As the outcomes of the study demonstrated, hyper/hypo realities become more of realities when individuals have Inner and Arch emotioncies.

Overall, this study attempted to transcend the Sapir-Whorf hypothesis and to some extent make it clear that, senses speak their own idiosyncratic language which, alongside different languages of the world, may perhaps shape habitual thought. An interesting contribution of this study may be that, *sensory relativism* is philosophically rooted in different approaches, and hence applicable to different domains. Although the current empirical demonstration is hitherto suggestive, further research into the theory may help develop it in a broader empirical framework.

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