Is reality really real or is it just a colorful rainbow of sensations that we perceive as being real?

Vlad ISTRATE
"Ştefan cel Mare" University of Suceava, Romania

Abstract: The purpose of this paper is to analyse the methods which are used to mislead the public perception towards reality. I will discuss and try to determine the nature of the relationship between the language we use and the reality we create through words. The close examination of words, the correlation of different advised opinions and the study of particular aspects in language will become dominant features in this study. The linguistic relativity or the Sapir-Whorf hypothesis has as a primary concern the fact that the spoken language has an important and immediate impact upon the speaker.

Key words: reality, perception, Whorfianism, linguistic relativity, illusion

According to the *New Oxford Dictionary of English*, *reality* is a noun that stands for "the world or the state of things as they actually exist, as opposed to an idealistic or notional idea of them" or "the state or quality of having existence or substance"[1].

The above explanation suggests that the things that actually exist, are indeed real and that the sum of all these things and surroundings is considered to be our reality.

We perceive the world through our basic six senses: smell, taste, vision, touch, hearing and equilibrioception or the sense of balance, although some scientists think that humans possess up to 33 senses (Durie, 2005), including the sense of intuition, thermoception, kinaesthesia, chronoception, electroception,

---

[1] The New Oxford Dictionary of English, 1998, Oxford University Press

magnetoception, telepathy, premonition etc. The senses are channels that help humans to communicate with the outer or inner world with the help of stimuli and play a vital role in the process of decoding of our reality. The basic five or six senses that we have decode waveform information into electrical information and communicate this to the brain to be decoded into digital information (Icke, 2017: 22).

If our conception of these senses is altered, we could perceive them as being the only truth and reality that we can experience.

The "perception-deception" paradigm was first introduced in literature by David Icke in the early 2000s. The English writer explained in his homonym book how easy it is to enslave humanity, simply by altering what humankind considers to be real. He considers that if you change your perception, you change your reality and consequently, you can influence and modify the reality of others.

Albert Einstein said that the reality "is merely an illusion" and that "as far as the laws of mathematics refer to reality, they are not certain; and as far as they are certain, they do not refer to reality" (Einstein, 1921).

It appears that the reality is strongly linked with what we believe to be true and material. If we, for example, say: "The book I'm holding in my hands is real", we would have sufficient evidence to believe this statement as being true: I can see, touch, smell and even hear the book (if it falls from a desk or if we hear how the pages turn).

In this particular case, the sensorial organs in charge of transmitting the information are: eyes, skin, nose and ears and they move the information to my brain where the information is decoded and I can recognize these actions and states of matter as being real and concise. The problems appear when we scratch the

surface just a little bit and we find out that quantum physics says that more than 99,999999% of what we call "ordinary matter" is in fact, empty space. The very atoms that form the matter are non-solid, which means that the chances that something non-solid to convey our physical world are reduced to a minimum.

Strangely enough, humans are not able to experience the true nature of our world, unfiltered. Our senses and nervous system can only process a very tiny slice of this world, which appears to be less than 0,005% of all that exists in the Universe. In order to perceive our reality, humans made use of tools and concepts for decoding the reality. The scientists believe that in the near future it will be possible to simulate entire universes with the help of technology. This aspect has raised another question: is it possible that other more- developed civilizations to have knowledge of this technology and if so, did they make use of it?

Life on Earth wouldn't develop the way it did if it wasn't for an element that made it all possible: communication and its main tool, language. We will see that, when it comes to language, there is more than one way of presenting an event. Every individual or social group has its own specific characteristics and their own opinions about the "reality".

Chris Argyris, former Professor Emeritus at Harvard Business School, imagined a metaphorical model of cognition and action that was called *The Ladder of Inference*. He suggests the following stages: observations, data selection, data processing, assumptions, conclusions, beliefs and actions. The first stage is observation, when the subject gathers information, and after that he has to make a selection of what he observed and has to keep only the elements that are important for his experience.

According to this pyramid of actions, before jumping to "conclusions", we should first analyze, test and pay attention to

our assumptions. Our beliefs affect directly what data will be selected in the future, based on our experiences.

Tom Drummond believes that we can compress Argyris' diagram in only three stages: physical reality, socially constructed reality and personal reality (Drummond, 2020).

As an example, we have the following three sentences:
1. Mary's phone rang during the ceremony.
2. The priest was confused.
3. She should have turned it off.

The physical reality is what we observe at first hand and we think as being true. These are the cases that our senses have experienced as being facts: "I have smelled the fresh perfume of flowers in the morning" (the sense of smell was implied), "I have seen her buying that bottle of red wine" (the sense of sight), "Mary's phone rang during the ceremony" – this implies that I have heard the phone ringing because I was there and for that reason, this occurrence is real for me.

The socially-constructed reality in our case is when a few guests comment on the meanings and the assumptions that Mary had a rude behavior and didn't turn off her phone. This type of discussion changes from being about facts themselves to a conclusion or belief that is agreeable to all the participants at that very moment. Other individuals may not share this same idea or even the persons from the same group can change their opinion when they find out that, for example, Mary was waiting for news from her son that was severely injured in a car accident the day prior to the ceremony and was expecting updates from the hospital. As we can see, a group view is built by the group and follows the patterns of what the group thinks. Practically, the group has altered the reality and created a new kind of reality for the group, by using the group's beliefs and assumptions regarding

the occurrences. It is no surprise that this group will take actions according to what their mutual conclusions agreed upon.

The personal reality is the experience we have acquired during our lifetime and materializes through beliefs, assumptions, judgements or opinions about facts. The majority of people are more than happy to share these opinions almost automatically, making no efforts to be as accurate as they can be. "She should have turned it off! "might have been said by an individual that jumped to conclusions skipping the first stages of Argyris's ladder: observation, gathering data and adding meaning to the information he collected. As opinions aren't necessarily good, bad or neutral, we must ask ourselves who exactly can validate if an opinion is reliable or not. It appears that every individual has its own way of cataloging the information and will always refer to what he knows to be through, from his personal experience, and only after he will make assumptions and eventually take actions based on the information he has recorded as being true.

We might all agree that opinions and judgements are unreliable and cannot be validated by a competent authority.

John Joseph Mearsheimer, an American political scientist, believes that our language continuously shapes our reality and that there is no objective reality that could exist independent from language.

Another American, the linguist Benjamin Lee Whorf continued and modernized the debate with the help of his mentor, Edward Sapir. Therefore, the concept that language shapes reality is called the Sapir–Whorf hypothesis or, simply, "whorfianism".Whorf stated that 'language is not merely a reproducing instrument for voicing ideas but rather is itself the shaper of ideas' (Whorf & Carroll, 1956: 212). In Whorf's view, language determines not only the way we think, but also what we think. Being associated with this "linguistic relatively principle",

the "amateur" Whorf (Black, 1959:228-238) named as such as he lacked an advanced degree in linguistics, was strongly criticized by Noam Chomsky, Steven Arthur Pinker and Eric Heinz Lenneberg. His detractors concluded that he didn't have the right amount of clarity in his descriptions on how language could influence our way of thinking and seeing the surroundings.

Whorf studied Native American languages and he was hoping to prove his hypothesis that the grammatical systems and the language use of different cultures affect our perception of the reality. When he studied the Hopi tribes of the American Southwest, he realized that their culture and consequently their language and their way of perceiving reality, was consistently different from the one that the Anglo-Americans had. For instance, the difference of perceiving time between the two different cultures (the Hopi and the Anglo-Americans) was immense. On one hand, the Anglo-Americans have divided time in smaller or larger sequences for social convenience: in order to be able to attend work on time, not to be late for appointments, to count the days until spring and so on. The units used were the one we still use today: seconds, minutes, hours, days, months, years etc. On the other hand, The Hopi considered and still do that time is a continuous, never-ending stream of events and that it cannot be measured. According to this judgement, the phrase "wasting time", for example, cannot have any meaning and couldn't fit in their culture as they see time as never-ending.

Despite his amateur linguist-status, he managed to gain the sympathy of some important researchers in its field. Prominent figures such as Leonard Bloomfield, Alfred Marston Tozzer, Franz Boas and Edward Sapir were highly regarding him and his work.

Although he had some supporters, in 1994, one of his severest critics, the psychologist Arthur Steven Pinker, proclaimed

Whorfianism dead (Pinker, 1994: 35-88). The Linguistic Society of America believed that people are able to remember and experience things for which we have no words. For example, the smell of an unknown flower is no less pleasant just because we didn't attribute a name to that particular plant. Accordingly, we can say that we are going to explain our experience with the help of the words we already know and try to make analogies with flowers that we already recognize.

We should also take into consideration the interpretation of The Literary Society, which perceive thoughts, language, and culture as three intercommunicating organs that work together and make up human experience (Comrie, 2020). These are hard to examine, but it appears that Whorfianism is starting to see a revival among some in the linguistic community. This is due in part to the work of Professor Lera Boroditsky, an assistant professor of psychology, neuroscience, and symbolic systems at Stanford University. Whorfianism was considered untestable (Perry, 2016).

Boroditsky continued to research and make linguistic experiments trying to add value to Whorf's hypothesis and she is now considered to be one of the main contributors to the theory of linguistic relativity.

She believes that "when you're learning a new language, you're not simply learning a new way of talking, you are also inadvertently learning a new way of thinking" (Boroditsky, 2009). She wrote that "language is a uniquely human gift, central to our experience" and "appreciating its role in constructing our mental lives brings us one step closer to understanding the very nature of humanity" (Boroditsky, 2009).

This means that different cultures will have different experiences and all these aspects will lead to different ways of learning and perceiving a new language. That's probably why,

sometimes, people encounter hardship and great challenges when starting to learn a new language with new grammatical structures and new vocabulary: the experiences that they had in their own culture do not fit the profile of the language they are trying to learn.

Other investigations have brought to light effects of language on how people interpret events, "reason about causality, keep track of number, understand material substance, perceive and experience emotion, reason about other people's minds, choose to take risks, and even in the way they choose professions and spouses" (Boroditsky, 2009).

Prof. Boroditsky thinks that language transforms in line with a linguistic pattern called "pattern of metaphor". When it comes to symbolism, these aspects apply to art also. For instance, the German painters are more likely to paint death as a man, while the Russian painters will probably paint it as a woman. She thinks that responsible for this fact is the word "death" that in the German language is *Tod*, a masculine gender noun, while the Russian word for ''death'' is the feminine gender noun *смертb*. This implies that the language or the language structures themselves have shaped the perception of the painters which lead to a personal experience and they took actions according to the data and the meaning thy have observed, selected and stored in their brains. They didn't realize that they are being directed into a pattern or representation only because the word they used for "death" was of masculine or feminine gender.

For various reasons, it appears that there is always a degree of discrepancy between how we perceive reality for ourselves and how we describe reality for others.

Another researcher, Ralph Strauch insists that what we perceive as reality are actually images that we ourselves create as part of a great illusion that we participate in and maintain in an

involuntary manner. He believes that the saying "you create your own limitations" is quite true, but very important to mention that it's also YOU who can break and overcome these limitations. In practice, that would be very difficult to achieve, as it goes against a lifetime of conditioning (Strauch, 1983:27).

The nature of our perception is very misleading and tricky to understand that's why, it appears that we see more easily what our brain expects to see and we are determined not to see things which are outside our past visual experience.

Strauch explains that "we can understand spoken language across a broad range of speakers, accents and conditions because we have well developed auditory models of language against which to match incoming speech" (Strauch,1983:23).

It seems that reality is complementary to language and that the previous experiences of a person help him to create assumptions about what he thinks to be real.

According to the American author, Carlos Castaneda, we only have one major decision to make in our lifetime and just two options: the first option is to assume that everything we see and experience is real and the second option is when you consider that everything that perceive as being real is in fact your imagination and an illusion. If we follow the first, our lives will be simple, with no great surprises as we take everything for granted but if we take the second option and we forget everything about our personal condition, "we create a fog around us, a very exciting and mysterious state in which nobody knows where the rabbit will pop out, not even ourselves" (Castaneda, 1972: 19).

Erasing personal history will definitely increase our sensation of insecurity, but instead it will keep us awake, fresh, alert and it will be more exciting not to know what will happen next than to behave as if you know everything and have the illusion that you control the experience.

The cognitive psychologist Donald Hoffman believes that we are misunderstanding our whole relation with the objective reality (Hoffman, 2019). We think and normally we are pretty sure that our senses help us and transmit us the reality as we think it is, although it could all be just a great illusion masked by the true workings of quantum field theories and the collective consciousness.

Hoffman argues that our perceptions have very little or nothing in common with the "real reality" and that all these perceptions feed us a "collective delusion" in order to keep our survival skills awake (Dickinson, 2019).

Linguistic determinism is a concept that believes the language and its structures can limit and influence thinking and acquiring information. "The term implies that people who speak different languages as their mother tongues have different thought processes" (Hickmann, 2000).

If we follow this idea, we will see that our words can create our reality. Let's imagine that a group of people live in an area where everything is just in black and white. If one day, a green tree appeared, these people wouldn't be able to describe it or even to understand what it is. This fact doesn't mean that this group of people cannot see the green tree, but they will have problems in understanding the new concept and the new reality that was created in front of their eyes. As they haven't encountered anything similar before, they will have to create a word in order to refer to that object and, with it, at the same time, to create a small portion of a new reality.

Another example is the one that claims the Aleut language have as much as 50 different words for describing snow, ice and snow-related activities. The first observations on the subject were made by Franz Uri Boas (1858-1942), who was also called the "Father of the American Anthropology".

We mention bellow a few Aleut snow lexemes:
- ***Kaneq*** meaning "frost"
- ***Qanuk*** for 'snowflake'
- ***kanevvluk***: "fine snow"
- ***qanikcaq***: "snow on ground"
- ***muruaneq***: "soft deep snow"
- ***nutaryuk***: "fresh snow"
- ***pirta:*** "blizzard"
- ***qengaruk***: "snow bank"
- ***aputi***: **"**snow on the ground"
- ***pukka:*** **"**crystalline snow on the ground"
- ***aniu:*** **"** snow used to make water"
- ***siku***: **"**ice in general"
- ***nilak:*** **"** freshwater ice, for drinking"
- ***qinu:*** **"**slushy ice by the sea"

We can see from the examples above (Woodbury, 1991) that the Aleut languages not only has numerous words for defining ice and snow, but also different terms for referring to the same concept: "Snow on ground" is expressed, as far as we know, through various words, depending on the exact conditions from the field: "*qanikcaq*", "*aputi*" or "*pukka*". As we mentioned earlier, not knowing all these terms doesn't make an outsider less prepared or unable to understand these concepts. We can all observe and acknowledge these aspects, but we wouldn't be able to describe them properly without the proper words. This means that our reality about the phenomena and our understanding won't be so vast as an Inuit's view.

Some recent studies of a group of Uralic languages spoken by the Sámi people in Northern Europe (Jernsletten, 1997), have led to the conclusion that these languages have around 180 snow and ice-related words and as many as 300 different words for

types of snow, use of snow, tracks on snow, appearance of snow etc. (Magga, 2006: 25-34)

Another valuable example is the word "blue" that in Russian is translated by two different words: 1) *siniy*, meaning dark blue, navy blue, sapphirine and 2) *goluboy* that means azure or light blue. Again, the fact that the Russian vocabulary has two different words for two different shades of blue doesn't imply the fact the Russian are more educated or that they have a better sense of understanding the world. It simply means that they had the need to assign different words for these concepts with the aim of not creating confusion.

It seems that our reality is constructed with the help of words and senses which tell us what to think about the facts and about the true nature that we encounter daily. Our mind, taking into account our personal experience, tries to categorize and select the information by applying different known-patterns of thought. In the effort of making us to feel at ease, our perceptions have to correspond with what we have already accomplished.

What we have already learnt about life and reality plays a key role in constructing and shaping the future reality that we will witness. The language we use in shaping a future reality is also very important.

Using familiar, reliable, easy language improves the overall understanding of the terms described and helps creating a familiar, easy to recognize image for the receptors.

Choosing the right words and decoding correctly the signals that our senses detect, can make a world of a difference in how we perceive our reality.

As we could see, a large variety of perspectives were expressed and a lot of these perspectives converged toward the idea that our reality is not at all what it seems to be at a first glance. A common view among the researchers was that the

reality, with its subsidiary systems must beneficiate of more attention from the modern science and that there is a growing need for more research on this subject.

A recurrent theme in the research work of various experts suggest the fact that our sense of reality is being tricked or mislead as we don't have the necessary experience and knowledge to decode the natural facts as they are in the so-called real life.

Turning now to the experimental evidence on reality, the quantum physics, also known as quantum mechanics, describe the aspects of nature at an atomic or subatomic scale as a complementary to the theory of relativity which failed or was insufficient to explain these phenomena. The father of quantum theory, Max Planck, was interested in how the electromagnetic radiation emitted by a black body was related to the frequency of that radiation. His conclusions led to many philosophical debates and a lot of incorrect interpretations. Basically, many thinkers believed that according to Planck's hypothesis, the Universe is or at least, could be, a holographic projection, meaning that our reality is created and manipulated by external forces.

On the other hand, the results of the linguistic determinism and its most important aspect: linguistic relativity, also known as Sapir-Whorf hypothesis, show that Benjamin Lee Whorf's hunches that different grammatical systems and different language use conduct to different perspectives of reality within different society groups.

Another important view that was brought into discussion in this paper was that, according to John Joseph Mearsheimer, our language continuously shapes our reality and that there is no objective reality that could exist independent from language.

What is surprising is Ralph Strauch's opinion that reality is conveyed by the images we create and support with the help of our mind. If this assumption is correct, it could mean that every

individual is a Creator of its own distinctive reality and that, somehow, we are masters of our own destiny.

Together, these results provide important insights into what we think to be real and what is just our perception of reality.

Concluding, we can say for sure that a large part of the words we express become our reality and thus, our reality is interconnected and influenced by the language we use.

Bibliography:

B.L. Whorf and John B. Carroll (1956): *Language, Thought, and Reality: Selected Writings of Benjamin Lee Whorf*. Cambridge, Technology Press of Massachusetts Institute of Technology

BLACK, M. (1959): *Linguistic Relativity: The Views of Benjamin Lee Whorf. The Philosophical Review*

BORODITSKY, L. (2009): *How does our language shape the way we think?* https://www.edge.org/conversation/lera_boroditsky-how-does-our-language-shape-the-way-we-think, retrieved on 14th of July 2020

CASTANEDA, C. (1972): *Journey to Ixtlan: The Lessons of Don Juan*, Pocket Books

COMRIE, B. (2020): *Language and Thought*, https://www.linguisticsociety.org/resource/language-and-thought, retrieved on 30st of April 2021

DICKINSON, K. (2019): *Did we evolve to see reality as it exists? No, says cognitive psychologist Donald Hoffman,* https://bigthink.com/surprising-science/does-reality-exist, retrieved on 8th of July 2020

DRUMMOND, T. (2020): *Language and Reality*, https://tomdrummond.com/language-and-reality/, retrieved on 10th of July 2020

EINSTEIN, A. (1920): *Sidelights on Relativity*

EINSTEIN, A. (1921): *Geometry and Experience*, Adress to Prussian Academy of Sciences

DURIE, B.(2005)*: Sense special: Doors of perception, https://www.newscientist.com/article/mg18524841-600-senses-special-doors-of-perception/ retrieved on 29th of April 2021*

EVANS-WENTZ, W.Y. (1960): *Tibetan Book of the Dead*, London, Oxford University Press

HICKMANN, M. (2000): *Linguistic relativity and linguistic determinism: some new directions*, *Linguistics*, An Interdisciplinary Journal of Language Sciences, Vol. 38 , 2nd Issue

HOFFMAN, D. (2019): *Is Reality Real? How evolution blinds us to the truth about the world*, https://www.newscientist.com/article/mg24332410-300-is-reality-real-how-evolution-blinds-us-to-the-truth-about-the-world/, retrived on the 7th of July 2020

ICKE, Vaughan D. (2017): *Everything You Need to Know but Have Never Been Told*, David Icke Books

JERNSLETTEN, N. (1997): Sami Traditional Terminology: Professional Terms Concerning Salmon, Reindeer and Snow, Sami Culture in a New Era: The Norwegian Sami Experience, Ed. Karasjok

MAGGA, O. H. (2006): Diversity in Saami terminology for reindeer, snow and ice, International Social Science Journal, Volume 58, Issue 187, pages 25-34

MOODY, R. (1975): *Life After Life*, New York, Bantom

NEISSER, U. (1976): *Cognition and Reality*, San Francisco, W.H. Freeman & Co.

PERRY, P. (2016): *Does the Language We Speak Affect Our Perception of Reality?,* https://bigthink.com/philip-perry/does-the-language-we-speak-affect-our-perception-of-reality, retrieved on the 6th of July 2020

PINKER, S. (1994): *The Language Instinct*, Harmondsworth: Penguin

ROBERT, J. (1974): *The Nature of Personal Reality*, Englewood Cliffs, Prentice Hall

STRAUCH, Ralph E. (1983): *The Reality Illusion: How We Create the World We Experience*, Theosophical Pub. House

WHORF, Benjamin L. (1956): *Language, Thought, and Reality: Selected Writings of Benjamin Lee Whorf*, Boston, Press of Massachusetts Institute of Technology

WOODBURY, A. (1991): *Counting Eskimo words for snow: A citizen's guide* https://www.princeton.edu/~browning/snow.html, retrieved on 19th of July 2020