2. CONCEPT FORMATION

In order for the process of thought to be effective, we must be able to make sense of and understand concepts. *Framing* and *categorization* are two methods in which the human mind is able to perceive and understand the meanings of varying concepts, objects, and words we encounter on a daily basis in the world around us.

Framing

A frame is a context for understanding or interpretation. Framing is the process of selective influence over an individual's perception of the meanings attributed to words or phrases. In the process of framing, the information being presented is based on the same facts, but the 'frame' in which it is presented changes, thus creating different perception. We do not look at an event and then "apply" a frame to it; rather we see the world itself through our pre-existing frames.

Frames are generally considered in one of two ways: as frames in thought, consisting of the mental representations, interpretations, and simplifications of reality; and as frames in communication, consisting of the communication of frames between different actors. Framing in communication can be viewed as positive or negative depending on who the audience is and what kind of information is being presented.

Framing is a very effective process because it is a *heuristic*, or mental shortcut, and it provides people with a quick and easy way to process information. Individuals constantly project into the world around them the interpretive frames that allow them to make sense of the world. Each person's frame is a set of interpretations, a collection of anecdotes and stereotypes, that they rely on to understand and respond to the world around them. When one seeks to explain an event, the understanding will often depends on the frame referred to. If a friend rapidly closes and opens an eye, we will respond very differently depending on whether we attribute this to a purely "physical" frame (she blinked because she had dust in her eye) or to a social frame (she winked because she wanted to communicate something). People only become aware of the frames they use when something forces them to replace one frame with another, or the frame is explicitly called to attention.

The way something is framed can have significant implications on society. This is because different results can be produced from the same selection choices when the selections are described differently. Framing can refer to the social construction of a social phenomenon often by mass media sources, political or social movements, political leaders, or other actors and organizations.

Categorization

Categorization is the process in which ideas and objects are recognized, differentiated, and understood, implying that objects are grouped into categories for easier mental access and understanding.

Categorization and framing

We frame new information in a context we understand, and categorize this information in a manner that is easily accessible to our minds.

Simple categorization is the process of sorting or arranging things into categories. A category illuminates a relationship between the subjects and objects of knowledge, with a set of properties that are shared by its members. Categorization is fundamental in language, prediction, inference, decision making, and other

environmental interactions. The classical view of categorization states that categories should be clearly defined, mutually exclusive, and collectively exhaustive so that any subject or object of the given classification belongs unequivocally to one, *and only one*, of the proposed categories.

Miscategorization

Miscategorization can be a logical fallacy in which diverse and dissimilar objects, concepts, entities, classes, etc. are grouped together based upon illogical common denominators, or common denominators that virtually any concept, object, or entity have in common. Miscategorization occurs when an individual does not create structured, rational, and meaningful designations for categories, and the relationship of the varying subjects and objects within each category is unclear.

Conceptual Clustering

Conceptual clustering is when different groups of information are generated by first formulating their conceptual descriptions, and then classified according to the descriptions. A concept is an understanding of a subject or object retained in the mind from experience, reasoning, or imagination. Conceptual clustering involves recognizing inherent commonalities in objects and grouping them together because of these similarities. Thus, conceptual clustering creates a classification structure, which can then be used for categorization.

Hazards of Categorization

The pitfall of categorization, as many have experienced, is that many things in life defy categorization. Our constant attempt to categorize concepts in the world around us can lead us to stereotype or judge people, concept, and ideas in order to make them "fit" into a certain category in our mind. When we encounter something that does not easily fit into a pre-existing category, we become uncomfortable and unsure of how to interpret this new information.

<u>Reason</u> is the capacity for consciously making sense of things, applying <u>logic</u>, establishing and verifying facts, and changing or justifying practices, institutions, or beliefs based on new or existing information. It is closely associated with such human activities as philosophy, science, language, mathematics, and art, and is normally considered to be a definitive characteristic of human nature.