**PSY 2310 - Homework #3**

By Connor Guarino

Vigo’s “A Dialogue on Concepts” opens with a discussion about the definition of ‘thinking’. Though the discourse quickly moves to the topic of ‘concepts’, I thought it was significant because it established that having a complete and true understanding of any component of the cognition is as enigmatic as the mind itself.

The first representation of concepts discussed is the ‘membership rule’ idea. Within the mind, there exist some number of sets that are capable of containing entities extant there. An entity’s membership within a set is then determined by a series of rules; rules being a series of ‘if and only if’ statements. However as cited by Dionys during the introduction of this idea, this representation has two major heels. The first of which is the issue of rules being strictly operant on the properties of an entity, which is then illustrated through the question “Is a futon a chair?”. The fact that there is no consensus on whether a futon is or is not a chair is significant because given any set of ‘if and only if’ statements, it should be impossible to not have consensus. Rules based on properties are mechanically bound by the fact they only depict differences between entities inside and outside of a set. The second heel is that the membership rule representation implies that every set has fully-defined members, upon which rules are written, which is in disagreement with the purpose of concepts being a way of categorizing new entities. It is also made apparent by both the futon example and Hermes’ note that “Some [sic] Bs are more B-like than other Bs”, that there is clearly some intervening mechanism affecting set membership, re: weirdness in quarks. However, they wrap this representation up with a chat about primes. Primes and similar mathematical concepts are unique in that their set is defined, yet unknown, because their set is constructed from a rule.

After membership rules, or concepts-as-rules, the notion of concepts-as-prototypes is brought into the dialogue. In this representation, concepts are aggregate models of some set. Each set being consistent of some number of entities with varying degrees of typicality. Using the prior example of the letter ‘B’, this model accounts for ‘B-likeness’ by allotting an analog definition of set membership as opposed to the digital definition present in the concepts-as-rules model. With this approach, set membership is determined by similarity to some non-extant prototype or entity of averages. During the depiction of the representation, Dionys intervenes by describing their experience seeing smoke clouds above Mt. St. Helens. The importance of this being that their experience exists as a single-member set upon which no rules or prototypes can be constructed. It is briefly debated whether memories are concepts, but with Hermes injection of Kant’s work, this assertion is validated by means of concepts inherently being derived from or organized collections of memories.

This transitions the conversation to the exemplar model of concepts which depicts concepts as being similar to memory hyperlinks. An exemplar then serving as a broadened access point for some root memory with relevant information. Instead of imagining concepts as sets of entities with some means of discrimination, the exemplar model provides a web-like network of related properties or qualities. Under this construct, the conflict surrounding whether or not a futon is a chair exists as a result of the degrees of separation between futons and the exemplar chair, per individual.

The fourth and final representation in the writing is concepts-as-analogies. Playing on the idea of concepts being intrinsically linked to memories, concepts are methods in which memory is randomly accessed. By pulling on a single ‘cognitive thread’, a complete set of experiences relevant to the prompting stimulus can be retrieved. Or more plainly put by Fuzio “an analogy is the [sic] evocation of [sic] concepts”.

Overall, I’m not sure which representation I would acknowledge as the most accurate. I don’t relate to the concepts-as-analogies representation very much, but I think it is novel because it is the only framework that is defined by a function instead of a property. I feel I align closer to the concepts-as-rules understanding but took issue with set membership being based on descriptive statements instead of functional requirements. Though it is likely the result of having a father that was both a programmer and on the Autism Spectrum, I have a very functionalist understanding of the world and see concepts as something akin to classes (the programming structure). A chair for me is an object that can bear the weight of a human and is capable of providing moderate relief on the knee joints by offsetting the force of gravity. While it can be debated whether or not a futon is a chair, there is no debate on whether or not you can use a futon as a chair. Furthering that, I suppose I operate under the subtext of ‘an object that performs the function of another object, is that object’.

In summation, I think a futon would be a chair because I can use it as a chair.