Contents

Signification

We return to the sign's inception. The binding of its terms. The snapping of its relata. There is an act that ignites a search and brings forth the readily available conceptual object. An evocation of the signifier towards its emerging signified. It is likely the same algorithm that fires neurons across synapses. Signification is the birth of the sign. In this essay I'll elaborate on the solid line between x2 and y2. What does this relation imply, and how is it made?

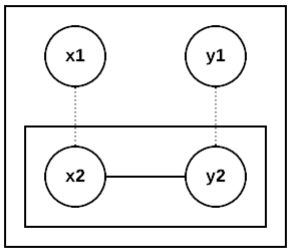

Figure 1: a dyadic sign with ontological consideration

Experience

We infer a chain of events using past experience. A simulation of our future events come through the extrapolation of our past events. We can choose to relate a signifier to a signified because they were related once before. Observations of events through time will define these relationships. Experience gives rise to signification. Experience also correlates to the interpreter's reality and through different types of reality, different kinds of relations will form.

How Real are Realities?

I will discuss three distinct categories of reality that appear to emerge and form relations on signs. These categories will have differently perceived ontologies, or rather their ontological status can be laid out on a gradient of perceived realness. From a Cartesian perspective one may claim that the only true reality one can be certain of is the reality in which consciousness operates. As accurate as that claim may be, an interpreter will still make a distinct cut in their semiotic reasoning due to perceived realms. We are more concerned about perceived realities exhibited by actual interpreters and avoid constraining ourselves on extreme Cartesian skepticism. Given that an interpreter can create their own realities fictitiously, and perhaps justifiably so given repeated exposure of evidence, they can also label these realities on a gradient of realness. In the mind of an interpreter, some realities are more real and yield higher confidence toward objective reality than other artificial realities that yield less confidence. Carefully constructed artificial realties may accurately reconstruct another reality, and although a fiction, yield high confidence due to its constructed similarity. This would be the case for mathematics.

Realities and Realms

As an aside, I'd like to address the terminology of "reality." Traditionally defined as "the state of things as they actually exist", the term inevitably raises contradiction within our metaphysical analysis. The word has had an unfortunate incorporation and adaptation into the techno-scientific era with oxymoronic phrases like "virtual reality" and "artificial reality." I use "reality" here not to claim physical existence but to encompass the totality of a system of signs, known and unknown within that system. That system may or may not be representative of a physical reality, and its perceived realness remains dependent on the interpreter (whom may or may not be in the system themselves). From a sign's perspective, the diagrammatic realms that encapsulate them are their reality. I will continue to use "reality" when inferring a sign's existence within a sign system and use "realms" as the diagrammatic term for an instantiated sign reality. Signs in the same realm can be said to share the same reality.

Base Reality

Base reality correlates most closely to the phsycial and objective reality we appear to exist in. This reality is leveraged by an interpreter to form signs. If we have seen fire make smoke before we can later observe smoke over a horizon acting as a signifier, and choose to derive fire as its signified. This is an example of an **indexical relation**. These relationships are directed through our understanding of the base reality. The existence of the signifier in reality acts as the indication. I will give more examples now for clarity. A compass needle indicates a direction.

The setting sun indicates the evening. Dark clouds indicate pending rain. A shadow indicates an object near by. A honk indicates a car nearby. Note that these constructed signs do not need to be accurate, but only justifiable by the interpreter. The interpreter can be wrong objectively, but they are not wrong according to their base reality. If their interpretation were corrected it would also be a correction of their base reality. In all of these cases the signifier indicates the signified. It would seem that the properties of the signifier carry a stimulus. Its a stimulus that guides our attention. These attention guiding stimuli, acting as properties of the signifier, are neither conventional nor arbitrary in their conception. They carry natural implications of a genuine related quality. The quality of these relations arise through spacial co-occurrence, temporal sequence, and causality within our understanding of the base reality.

Copied Reality

Next comes our ability to re-imagine base reality via similarity. A photograph of a person is not the person, but it stimulates a strong indication of that person and acts as a signifier to that person in the base reality that the photograph represents. Although the individual pixels of the photograph have no base reality correlation to the photographed subject we are able to collectively interpret them as the signified through their distinct similarity. These are **iconic relations**. The interpreter is able to form signs using the proxy representation, but are also able to distinguish that the proxy exists in a copied reality and is not a substitute for the base reality representation. An interpreter aware of the copied reality will not be surprised when they try talking to the photograph and receive no response in return. Copied reality and iconic representations often leave behind some of the less essential properties that are not critical to form the desired sign relation. In turn, their qualities are reduced and ultimately different. Returning to the photograph example, the image's size may not be the same size as the photographed subject. The representation has gone from three dimensions to two dimensions. Even the difference in colors and medium do not hinder the quintessential qualities of likeness that exhibit the desired signification. We can say that the copied reality brings the expectation of including essential likeness while intentionally excluding or augmenting the nonessential likeness. The primary example of rigorously copied realities is applied mathematics which we will investigate in more detail later.

New Reality

New reality emerges most distinctly when compared to base reality where the properties of the relations in new reality are both conventional and arbitrary. There is no reason for signs in new reality to be generated in signification but they are because the interpreter has chosen to follow a set of relations that were predefined for the semiotic representations. These are **symbolic relations**.

These relations are fundamental to language. They are the letters, and words, and sounds of our utterances. They are the symbolic representations of numbers {1, 2, 3, . . . } which act as signifiers to the mathematically defined conceptual numbers. Symbols remain the key semiotic abstraction for higher level signification. The sentence you are reading here is a collection of symbolic words made up of symbolic letters that correspond to symbolic sounds which when uttered and interpreted can be conceptualized by the arbitrary and conventional rules that govern their usage. As a species, we thrive in our symbols. The composition and abstraction capabilities of symbolic signs will be explored later. It would appear that symbolic relations dominate human thought and in some sense, leave the opportunity to accurately or inaccurately correlate back to base reality.

Subjective Reality

We will say that signification takes place in a subjective reality which is a combination of properties from the base reality, copied reality, and new reality. Although subjective reality may label properties by the quality of their reality, the interpretation processes during signification need not accurately acknowledge this. Signifers themselves can evoke relations to different realities simultaneously; aka mixed mode relations. I mention this as it will be critical to reasoning and sense making. Signification in new reality may yield results that are misattributed to relations of base reality. Let us also say that subjective reality is allowed and often will operate under allusions. In the case of the human mind this allusion is prominent and most likely a necessity for its function due to its biological confinement. We formalize subjective reality as our previously defined interpretation realm.

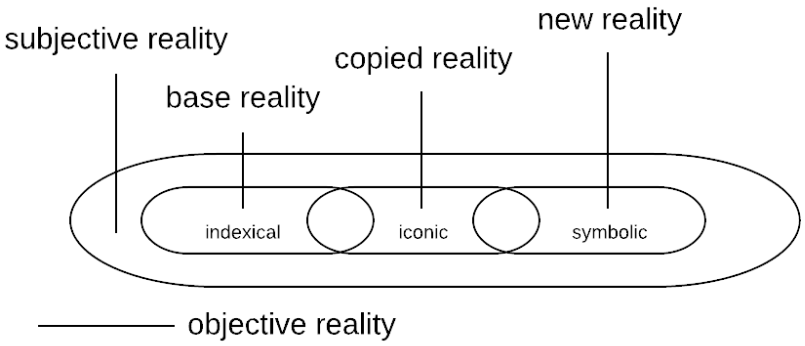

Figure 2: subjective reality with the three sign-related realities composed

Outside the interpretation realm, whether we even choose to acknowledge it, may situate an objective reality. Within subjective reality is the interpreter's realness gradient defined through overlapping base, copied, and new realities.

Adjusting the Model

We add the signification process (S) which takes the signifier as input, and uses knowledge built through experience (K) and encompass it as the interpreter (I). The interpreter generates a relation to form a sign as the output. The relation holds a 3 value tuple, in which we'll consider a percentage of reality contribution for each of the three distinct realities discussed. The signifiers and signifieds of the ontological wrapped signs exist in realms the same as before. A potential objective interpreter, the very instantiation Descartes questioned, is correlated back to objective reality.

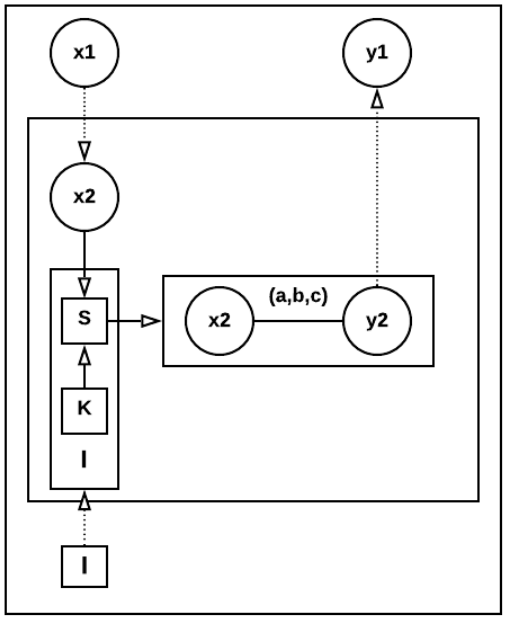

Figure 3: dyadic model with an interpreter

We will adjust the diagram so that the arrow of time functions from top to bottom. We remove the realm enclosures and just draw the boundary for when it is crossed.

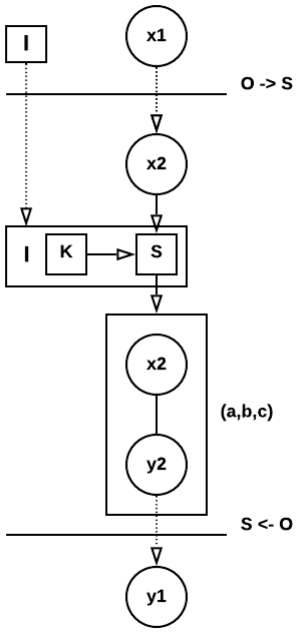

Figure 4: dyadic model adjusted with an interpreter