

THE POWER OF DISTINCTIONS

Deconstructing an abstraction utilizing “what is” & “what isn’t”

When shown a five second video, in which the image below was flashed on a screen for one second, the vast majority of viewers recognized the marks below as the word “think”. The English (Latin) alphabet has 26 letters, and utilizes upper and lower case versions of each letter, for a total of 52 different marks. How such a feat was accomplished in such a short span of time is due in large part to the human mind’s capacity for lightning-quick distinction making. This process is worthy of some exploration.

“...20th-century German psychologists Max Wertheimer, Kurt Koffka and Wolfgang Kohler, ...sought to understand how humans typically gain meaningful perceptions from chaotic stimuli around them. Wertheimer and company identified a set of laws addressing this natural compulsion to seek order amid disorder, where the mind “informs” what the eye sees by making sense of a series of elements as an image, or illusion.” These laws are collectively known as The Gestalt Principles of Perception. The three laws that seem most applicable in this deconstruction are Proximity, Similarity, and Continuation.



If the Gestalt Principles of Perception are what the mind does, Distinction-making is how the mind does it. Distinctions are made so rapidly, and with such precision (and often imprecision), that determining the order in which they are made is pure conjecture.

In this example, in a complex process, that literally takes a second, the human mind engages in an astonishing amount of computation, and the cognitive pyrotechnics are a joy to witness. It’s possible that the viewer starts the process by engaging with the law of Proximity, that states that at some point things are perceived to be close enough together to be viewed as a whole, a system comprised of parts. That suggests a Distinction; **DISTINCTION: CLOSE ENOUGH TO BE READ AS A WORD/NOT CLOSE ENOUGH TO BE READ AS A WORD**. This spark map shows the components of the word to be too far from each other to quickly be perceived as a word. Similarity can lead the viewer to immediately recognize the image as having so much in common with a word, that an assumption is made. That in itself is a **DISTINCTION: WORD/NOT WORD**. If that is the case, then the brain tries to figure out what word it could be. This detective work happens in deciseconds. The next logical step is determining whether the word is upper or lower case. A quick observation is made (again using Similarity), this time perceiving two distinct kinds of letter forms: those with a common X-height, and those that extend vertically above that height. Knowing that upper case letters are of uniform height, the viewer can make some other Distinctions; **DISTINCTION: UPPER CASE/NOT UPPER CASE**, **DISTINCTION: LOWERCASE/NOT LOWERCASE**, and **DISTINCTION: UPPER CASE/LOWER CASE**. English readers process information on a page from left to right, top to bottom. If we believe that the brain first confronts the two abstract marks that make up the “t”, we can wonder whether some people simply jump to utilizing the law of Continuation, and perceptually connect the two elements, **DISTINCTION: T/NOT-T** or whether there’s an investigative process that happens to try to ascertain what letter it could be, based on the 26 remaining options of the alphabet. If the latter is the case, there are only two other letters that can be possibilities: “b” or “h”. Here we see the parts of the “t” superimposed on the “b” and “h”, the only two lower case letters that fit the partial description. These are possibly two more Distinctions that are made: **DISTINCTION: T/NOT-B** and **DISTINCTION: T/NOT-H**. It’s also possible that some people recognize the digraph “th”. Digraphs are two letters, that when put together make a sound completely different from the sounds of the individual letters, thus, another possible Distinction; **DISTINCTION: DIGRAPH/NOT DIGRAPH**. The “i” can only be mistaken for an “l”. However, given that there are no English words that start with letters “thl”, the brain either makes another Distinction; **DISTINCTION: WORD STARTING WITH THL/ WORD NOT STARTING WITH THL**, or moves on to the next deciphering task. It’s conceivable that some people make the **DISTINCTION: I/NOT-L**. It’s possible that Distinctions are made to confirm the identity of the letters “n” and “k”, and there’s also the chance that, in a cognitive version of the television game show Jeopardy, some people just venture a guess.

Another interesting question is whether there could be some elapsed time between Distinctions, meaning that some Distinction making can be measured in centiseconds or milliseconds.

Ponder for a moment what other conceivable Distinctions could be being made during this one second process. That Distinctions are being made is indisputable. That so many possible Distinctions can be made in the span of one second is a testament to the power of the human mind. Think!

