Communication and Meaning

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Abstract

Human beings are creatures of difference. We are different from other humans and the environments we find ourselves in, yet we maneuver through and operate within these environments, paving the way through the world, using the tools we have at our disposal to make sense of not only the world we operate in but the internal world that operates within us. Our greatest tool is our ability to communicate and engage with others in a communicative system. The ability to communicate allows for us to externalize the internal and to ascribe meaning to the abstractions that find their way into our path through life. We are the makers and tenders of not only our environment, but of reality, truth, and meaning.

Communication

The words we use are symbols that have meaning thrust upon them; characters and words are agentless concepts that are created by us, and as creatures with the ability to imbue meaning to otherwise meaningless symbols, we are well within our right to become the makers and pruners of our own epistemological framework. This is meant to encourage others to feel empowered and justified in their interpretations; not only within the confines of examining artwork, but also in our lives and within our lived experiences. It is a call to not accept the limits placed upon you, but to be self-determining in everything you do.

How Language is Acquired

Language, as we understand it, is a set of spoken, written, or signed words and they take on their utility, based upon the way in which we combine them within a grammatical and syntactic structure, to communicate to others. Language is broken into three different and distinct building blocks. In its smallest unit, language consists of “phonemes” which are short, distinctive sound units; “morphemes”, the smallest unit that still possesses a semblance of meaning; and “grammar”, the system of rules that functions as a skeleton for our speech and provides an avenue for communication to be enacted (Language: Crash Course Psychology #16, 2014).

Language is our tool to navigate through the world. It allows for the transference of thoughts, feelings, expressions, and beliefs to another person. It is a mark of cultural identity and an artistic vehicle. It provides us entry into the back and forth game of the exchange of abstract thought that is conversation. This ability to communicate seems to come naturally to us. It is so fundamental to our daily experience that it often fades into the background of our conscious

experience, quite often to the point where we don't think about it, or we forget to think about it. It is something that is present in us from an extremely early age.

Theories of Language Acquisition

In the field of linguistics, there exist many prominent and often conflicting theories of language acquisition, but there are two in particular which stand out as the most relevant. The Nativist/Innatist Theory, most widely known to be associated with the American linguist, Noam Chomsky, states that humans possess what is called the Language Acquisition Device or LAD -- a linguistic tabula rasa of sorts. According to Nativists, this device provides us with a theoretical "organ" that processes grammar, syntax, and allows for us to learn language (Language: Crash Course Psychology #16, 2014). Chomsky believes that all languages share a universal grammar with the same basic elements such as nouns, verbs, and adjectives. The LAD allows a child to pick up on nouns, verbs, and adjectives within a sentence and organize and contextualize them within said sentence. Nativists believe that the LAD is only operational during the critical period of language development, between infancy and the age of five, and once it has begun to be used, it becomes hyper-specialized to the language an individual is around, thus becoming unable to detect other sounds and grammar (Theories of Language Development: Nativist, Learning, Interactionist | MCAT | Khan Academy, 2013).

Chomsky, in his Theory of Generative Grammar, states that "language is a set of sentences and a sentence is a string of symbols generated by an algorithmic production system of formal rules defining well-formedness over strings of symbols" (Language: Crash Course Psychology #16, 2014).

B.F. Skinner's "Learning Theory" states that language can be acquired through mechanisms of operant conditioning. This theory believes that children are not born with mental organs for language such as a LAD. Rather, Learning Theory asserts that humans only acquire language through reinforcement (Theories of Language Development: Nativist, Learning, Interactionist | MCAT | Khan Academy, 2013). According to Skinner, children learn language through operant conditioning, a technique in which desired behaviors are encouraged by pairing performance of the target behavior with a reward.

Throughout early social development, children receive rewards for using language functionally to achieve a desired response. For example, when a child says "bottle" to their parents and receives a warm drink of milk as a result, the child will find this outcome rewarding. This interaction reinforces the child's use of the word and thus, enhances the child's language development (Sturdy & Nicoladis, 2017).

These theories are interpretations of observed processes but are also allegorical in the sense that they tell us about how knowledge, in general, is acquired. We possess an inborn inclination to certain knowledge, such as the knowledge of language, but like anything else, reinforcement and refinement are needed to achieve mastery of this knowledge. This simultaneously speaks to the incredible proclivity to knowledge that human beings possess and also our fallibility and need for reinforcement of said knowledge. We can use this remarkable ability to acquire knowledge to behave meaningfully and to impart meaning into the world. To embark on our journey to impart meaning, we must first develop the skills to communicate this meaning, and this development begins very early in our lifespan.

How Language Develops

Before we can speak, we must first listen, and before we teach and encourage others to interact with their surroundings in a meaningful way, we must first learn to do so ourselves. Through the listening process, we begin to understand, and with our understanding, we can begin to mimic, recreate, and then finally, we can produce language that is meaningful, on our own. As infants, our ways of communicating are limited: we cry and scream to communicate a multitude of things to our caregivers, whether it is hunger, fear, or any other unpleasant or unfamiliar experience. It is simply the only way we communicate when we are first introduced to the world, and despite that, our caregivers are able to understand the meaning of our wailings and attend to our cries accordingly. Through listening and learning, we eventually begin to grasp words and their meanings and we are able to use them for our own purposes. This process of listening is one that occurs before we ever take our first breath of air.

20 weeks after conception, the fetuses' inner ear has developed and at this point, it can hear the rhythm and beat of its mother's heart. The loudest voice the fetus will hear is their mother's and as the months of gestation continue, the fetus starts to become familiar with the voices of both of their parents (To Talk, 2014). The communication process has started and it signals the beginning of the ongoing conversation between the baby in the world of the womb and the strange, unseen world of the outside.

While in the womb, babies begin to learn the properties of language and have shown to have a preference for the rhythms of their native languages. At 6 months of age, babies can differentiate sounds, an ability that is unique to humans. At this age, babies respond better to things like nouns, as opposed to parts of speech such as "to" or "of", meaning that babies

possess a capacity to distinguish words that are representational and convey a concrete meaning, over more abstract words, which do not (To Talk, 2014).

As babies, we are born ready to communicate, first with crying -- the involuntary and universal signal of distress that not only informs the caregivers of the baby's needs but also informs the baby that crying is one of the many modes of communication available to them to use at their discretion.

At 4 months of age, babies begin to recognize minute differences in speech and can read lips; this is the starting point for what is called the receptive language stage, the stage within which infants are able to begin understanding, to a very limited degree, what is being said to them (Language: Crash Course Psychology #16, 2014). This stage of language development is naturally followed by the next stage called the productive language stage (Language: Crash Course Psychology #16, 2014). It is at this point that human beings develop the ability to produce and reproduce language on their own. Speech production, at this stage, is still quite limited, but as it begins with babbling at around 4 months of age, it slowly develops into more concrete sounds, which then develop into a small, rudimentary vocabulary of words.

At around one to two years of age, children are well within the stage of speech development that produces a deeper vocabulary. At this age, children will then enter the “2 word stage”; they will mostly speak in 2-word statements referred to as telegraphic speech, due to the utilization of primarily nouns and verbs (Language: Crash Course Psychology #16, 2014).

According to research from Sturdy and Nicoladis (2017) in order to learn new words, children require a combination of physical gestures, along with reinforcement of those words. Observation of this phenomenon follows B.F. Skinner’s account of communication as a learned

system, rather than an innate ability. Linking the learning of verbal language and physical gestures to repetition, encourages us to consider the impact of the environment on language development. It is from their surroundings that children learn how to interact with their surroundings, and this cyclical feedback creates unique cultures and social identities, with distinct forms of nuanced communications.

In a series of 4 studies conducted by the Darwin Muir Lab at Queen's University, researchers demonstrated that babies recognize, understand, and rely heavily on facial expressions for communication (To Talk, 2014). They were shown to become increasingly distressed when the tone of conversation did not match with the facial expressions of the person speaking or when there was little to no facial expression at all. These details reveal to us that on some level, humans at an early age can understand meaning. Facial expressions often indicate the internal emotions of the person speaking, so when infants recognize an incongruity in the speech and the facial expressions, they become deeply unsettled.

The way babies communicate and use language in their infancy is very rudimentary and simplistic, compared to the rapid-fire intricacies occurring in the brain while these communicative actions are taking place. Our brain is a well-oiled machine -- a factory that works and directs its various sections and partitions together to understand and produce language. The complexity of these automatic functions which occur during our most unrefined stages of language development, should instill us with a sense of wonder, when we consider what goes on when we achieve mastery over the linguistic systems that allow us to maneuver through the world.

The Brain and Language Processing

Within the cerebral cortex, the section of the brain responsible for many of the higher-order functions such as perception, memory, thought, and voluntary action, there are neural networks that facilitate the passage of messages from one area of the brain to another (Carter, 2019).

The brain regions for language processing; however, do not work in isolation. According to Carter (2019) the left and right hemispheres work in tandem with not only the language processing centers but also areas like the hippocampus, to draw from memory by recalling past usages of certain words and the hemispheres also utilize areas such as the amygdala for emotional content, to impart words with richer context and meaning.

It is a well-integrated and highly interconnected network of sections and partitions that work hand in hand to make up this complex, multimodal processing organ we call our brain. These brain regions work diligently to provide us with a conception of the world that makes sense; they are the engineers tending to the complicated operations of the ship that is our mind which leads us through the murky untreaded waters of uncertainty. These rapid-fire brain functions allow us to imbue words with meaning and thus, establishing clarity where there was none. We should feel empowered in our ability to alter such states of being without consciously thinking about it.

Key language areas only become active when language is turned into meaning. One of the brain's language regions is called Broca's area. Named after the French neurosurgeon who discovered its function, Paul Broca, this region of the brain is directly involved in the production of speech. Also contributing to the brain's language functions is Wernicke's area. Named after

the German neurologist and psychiatrist Carl Wernicke, this area is directly involved with the comprehension of language.

Damage to either of these areas results in what's called "aphasia." Aphasia occurs from damage to portions of the brain responsible for language, such as from a stroke, injury, or progressive neurological disease. Depending on which area of the brain is affected, this disorder can impair the expression, as well as the understanding of language. Damage to Broca's area results in Broca's aphasia, often referred to as expressive or nonfluent aphasia. Individuals with this aphasia may understand speech but have trouble producing grammatical sentences (What Is Aphasia? — Types, Causes and Treatment, 2020). For example, a person with Broca's aphasia may say "Walk dog" instead of "I will take the dog for a walk."

An individual who suffers from damage to Wernicke's area; however, may speak in long, complete sentences with no meaning. In Wernicke's aphasia, sometimes referred to as receptive or fluent aphasia, the ability to produce well-connected speech remains intact, but the ability to grasp the meaning of spoken sentences is impaired (What Is Aphasia? — Types, Causes and Treatment, 2020). Persons with Wernicke's aphasia can produce grammatically correct sentences, yet they may add non-existent or irrelevant words. A person with this disorder may say "I couldn't get out the dinkered foodle and you took him back when I take it home later."

Disorders such as these remind us that the brain's complex neurological systems are fine-tuned towards our ability to communicate. Critical disruptions in our neural anatomy cause obvious deficits in language comprehension and production, but in studying these, we are reminded that there is no true "normal" or "standard." Communication is multifactorial, dynamic, and presents itself uniquely in each user.

Another area in the brain's language region is called Geschwind's territory. Named after the American neurologist Norman Geschwind, it is located in the lower part of the parietal lobes, where information from sound, sight, and body sensation come together. It is notable because it surrounds Wernicke's area, so the two areas work in conjunction together. According to Carter (2019) Wernicke's area matches sound to their meaning and Geschwind's territory assists by combining the many different properties of words to provide a fuller comprehension of the words being heard.

Brain Functions During Speech Production

The brain's information processing emphasizes that communication is an undertaking that uses far more than just the areas typically associated with language, such as Broca or Wernicke's area. In the field of neuroanatomy, there are structures called "gyri", the singular form of this word being "gyrus." These gyri are ridges on the cerebral cortex and they serve a variety of functions, respectively (Carter, 2019). The inferior frontal gyrus (IFG) is primarily concerned with the processing of speech in Broca's area. The superior temporal gyrus (STG) contains several structures important to the brain and language processing in general, such as Wernicke's area and the auditory cortex which is responsible for the processing of sound.

According to Carter (2019) when speech is being processed, the speech stream first reaches the auditory cortex, and then the adjacent areas of the temporal lobe, the area of the brain involved in transcribing sensory input into meaning. This area also deals with language comprehension and emotion association. During speech processing, the sound undergoes an acoustic-phonetic analysis, in which these areas pick apart the content of the sounds, things such as grammatical structure, emotional tone, and syntax; this process occurs at an incredibly rapid rate.

During the ebb and flow of a conversation, it takes about 150 milliseconds (MS) for spoken words to pass from the speaker's mouth to the listener's ear and for those words to be turned into electric signals, to be processed as sound by the auditory cortex (Carter, 2019). About 50-150 MS after words are spoken, sound registers in the auditory cortex and is distributed to areas concerned with decoding the words, as well as to other areas of the brain involved with emotion, tone, and rhythm (Carter, 2019). At 150-200 MS, the emotional tone is pulled from the speech, with the assistance of the amygdala and subsequently, an appropriate emotional reaction is produced.

By this time, the information is integrated into a phrase structure that builds upon itself, creating an association with the continued incoming information from the speech, to form something meaningful and sensible. At 250 to 350 MS after the speech is produced, the structure of the word stream is analyzed and meaning is extracted and by 400 to 550 MS, there is a semantic content-related analysis which allows for the meaning to be consciously comprehended (Carter, 2019). Simultaneously, syntactic information is processed beyond the initial phrase structure formation, providing an interpretation of the sentences spoken and the analysis of the grammatical structure, as well as the identification of words in relation to each other and in relation to the context they’re being spoken in (Carter, 2019). Once meaning is fully comprehended, the brain begins to require more than the simple meaning extracted from the speech --- it also requires an association with memories to give full comprehension and context. This process takes place in a part of the frontal lobe.

All of these steps of language processing occur within layers upon layers of areas related to information processing, but overall, they are primarily relegated to the language network of the left hemisphere. This does not mean the right hemisphere is inactive in language processing.

Though the left hemisphere is dominant in language and information processing, the right hemisphere processes prosody -- things such as rhythm, intonation, or speech "melody" that emphasizes and highlights syllables, words, and sentences (Carter, 2019). Prosody analysis takes place in the right hemispheric frontotemporal network which is analogous to the semantic and syntactic processing centers in the left hemisphere. An analogously intricate process occurs when an individual is the one speaking, rather than the one being spoken to.

Information Processing During Speech Production

Speech production is a process that begins about a quarter of a second before words are uttered -- this is when the brain selects the words that are to convey what the person is saying (Carter, 2019).

When a person speaks, the sequence of information processing is reversed with slight differences. Before any words are uttered, Wernicke's area begins to find the correct words to match the thought that is trying to be expressed. The words chosen to be expressed then pass through a band of axons connecting Wernicke's area to Broca's area, and any words that have previously been heard and seen are pulled from the hippocampus, are understood within Wernicke's area, and finally selected for articulation (Carter, 2019). Similar to the process of listening, producing language requires distinct types of language tasks that activate a number of different areas in the brain.

In the realm of psycho-linguistics, there is a similarly intricate systematized process that occurs when producing speech. Dutch Linguist Peter Seuren proposed that the production of verbal language requires 5 levels of speaker-related methodology. These processes occur semi-consciously in the mind of the speaker.

According to Seuren, the first of these levels is called the intent level, it begins when the speaker checks the semantic input by asking themselves: “Is this what I want to say?” The second level is called the lexical level and this is where the speaker checks the vocabularic selections they have chosen and asks: “Are these the words I want to use?” The third level is the surface level and this is where the speaker puts the internal lexico-grammatical structure of the output in preparation and readies it for externalization; they do this by asking themselves: “Is this the correct and clear rendering of what I want to say?” Seuren (2015) continues by discussing that the fourth level is the internal perceptual level.

It is at this level that the speaker reevaluates the phonetic plan for the utterance in preparation by asking themselves: “Are these the right recipes for the physical realization of my planned utterance, properly adapted to the audience and situation?” The fifth and final level is the external output - where the speaker reflects upon the actually realized output in hindsight by asking: “Does this correspond to what I had in mind to say and how I wanted to say it, or do I have to correct it?” (Seuren, 2015). This process, of course, is theoretically what occurs when one is consciously aware of their verbal output.

Alongside this theoretical process, there is a measurable and physical process which occurs in the brain. At 200 MS before speaking, words are matched to the sounds in Wernicke’s area, which is adjacent to the auditory cortex where sounds are distinguished. At 250 MS, words are attached to memories and ideas which act as handles by which the brain can grasp the correct ones to express an idea (Carter, 2019).

Words are transmitted to Broca’s area via the arcuate fasciculus, and at 150 MS, Broca's area matches the sounds of the specific mouth, tongue, and throat movements required to voice them. At 100 MS, articulation begins: the mouth, tongue, and throat movements are directed by

the part of the motor cortex that controls them (Carter, 2019). At under 100 MS, the cerebellum is concerned with orchestrating the timing of speech production -- the right cerebellar hemisphere connects to the left cerebral hemisphere, and finally, the external output is made.

We often take for granted the incredibly delicate and specified processes that go into producing spoken language, so much so that we fail to analyze what language is and what it functions as beyond simply being a communicative device.

What Is Language?

Language, at its core, is an amalgamation of symbols to which we ascribe meaning. These symbols form what is called by Ferdinand de Saussure in his Course in General Linguistics, a “Langue” (Structuralism and Semiotics: WTF? Saussure, Lévi-Strauss, Barthes and Structuralism Explained, 2019).

The Langue is the linguistic system as a whole; it is a term that describes the abstract, systematic rules and conventions of a “signifying system.” Ferdinand de Saussure divided language into two terms: The signifier -- the sound or visual appearance of the word, phrase, or image in question and the signified -- its meaning; these are the symbols which make up the signifying system, or the Langue. Most importantly when understanding the Langue, -- is not only the system of signifying symbols, i.e. letters and words, but also the whole of culture (Structuralism and Semiotics: WTF? Saussure, Lévi-Strauss, Barthes and Structuralism Explained, 2019). Saussure believed culture, as a whole, was a signifying system with its own distinctive symbols that represented concepts or ideas.

This conception of words as signifiers of ideas is the foundation of semiotics, the study of signs. Within the English signifying system of written language, there are signifiers (letters) which are symbols for individual sounds used within the spoken version of the language. The

signifiers are comprised of phonemes, the smallest units of sound within the spoken language (Language: Crash Course Psychology #16, 2014). The sounds made by these phonemes are the baseline for the sound attributed to the consonants and vowels in the alphabet. These letters in the English spoken language system are only symbols signifying the sounds assigned to them. They then become the make-up of words which all are signifiers for their respective signified objects, ideas, or concepts.

Spoken and written languages are not the only kinds of signifying systems. Concepts can be embodied in a myriad of things and thus, communication can be had via anything that can be used as a signifier. The purpose for using communicating in this way is varied; communication through languages is about more than simply transmitting direct messages between persons. Language is a system that can be artistic, it can communicate shared feelings of culture and identity, or can evoke incredibly intense feelings of emotions. This is the beauty of language and the beauty of being creatures with the ability to communicate deep and rich meaning.

Visual Communication

The ancient Romans, among many other things, demonstrated how ideas and concepts could be communicated via different forms of language entirely. Statues erected to their gods served as community unifiers which communicated things implicitly.

With this mode of communication, iconography was essential. Key indicators of meaning were to be found in the depiction of posture, gesture, clothing, the relationships between the figures in space, material such as the use of bronze, marble, etc, all served to communicate specific things to its ancient Roman viewership (Talbert & Naiden, 2017).

Size was an incredibly important factor as well; whether an image was colossal, life-sized, or miniature, it conveyed what it represented and its purpose and to an extent, whether

audiences ought to respond with reverence, indifference, or contempt. To depict Jupiter, the "Zeus" or the king of the gods of the Roman Pantheon, as anything other than larger than life, would be a display of either ignorance or heresy.

Viewers had to recognize these cues; some required a significant amount of knowledge on the part of the viewer and some communicated such complex and overlaid messages that they were not meant for public consumption thus, some public monuments were designed for audiences with lower levels of visual literacy in mind (Talbert & Naiden, 2017). These iconographic signifiers and their use in public and community life are evidence of a language being used for more than the transmission of a specific message. In many cases, the meaning of the iconographic symbol was simply that of an emotion or feeling.

Image communication was not just about the iconographic content or intended meaning of an image; it often cemented itself in viewing experiences by contributing to awe and intimidation (Talbert & Naiden, 2017). Our general understanding of communication tends to imply the relay of some determined message, effect, or meaning but, this type of iconographic communication was done through what is called the "ritual model." The ritual model stands in contrast to a method of communication called the transmission model.

Talbert and Naiden (2017) reference a 1975 article written by James Carey, an American communication theorist and media critic, the transmission model is primarily concerned with the content of a message transmitted from a sender to an audience, whereas the ritual model is not. The ritual model's purpose is not to communicate a specific message, as much as it is to evoke a feeling of awe, reverence, intimidation, or any other litany of feelings. Searching for a concrete, specific message can at times "miss the point," especially within image communication.

Talbert and Naiden (2017) assert that "ritual models of communication strengthen communities by creating or affirming the existing social order and a collective understanding of the world." A ritual view of communication is directed towards the maintenance of society in time; not the act of importing info but the representation of shared beliefs. A ritual model of communication stimulates very specific parts of an individual's psyche than does a transmission model.

For a ritual model, the iconographic content or meaning of a given image is not necessarily its most important aspect; its effects of presence and the image's sensory and affective impact on the viewer matter much more. The presence and sensory affective impact are created outside the image, as well as by the image itself. Ritual communication can be analyzed for the ways they make visible, recreate, or reaffirm the symbolic order (Talbert & Naiden, 2017).

Language as a Source of Social Values

The relationship between symbols and what they communicate to us finds its way into our economic structure. Within our economic structure, we find the symbolic order recreated; it puts onto display the values of the society and how they are represented in the people within that economic structure and the society the people inhabit.

Lawes (2019) contends that in the push and pull of market demand and supply-side economics, this relationship is never more present. The foundation of marketing and consumption upon which our economic system is founded, utilizes semiotic symbols in many ways. Consumption is not just about buying items and enjoying ones' purchases. To consume is to take part in a semiotic game in which we communicate with each other and construct identities

for ourselves through consumer habits. “Facebook and Instagram users broadcast a stream of images in which everything -- clothes, accessories, hair, eyebrows, eyelashes, skin color, muscles, shape, fullness of lips, and visible markers of gender -- are carefully curated to give off a distinct and coherent message for both recipient and producer” (Lawes, 2019).

The idea of product consumption is more than just the buying of products. Particularly in the United States, the consumerist culture is so pervasive that some adopt it wholesale as a lifestyle and oftentimes this adoption is partially unintentional. There is a consumerist culture in which brands market themselves as being more “environmentally friendly” and “ethical” than other brands. Or there are brands that market themselves as being for a certain demographic to the extent that the demographic defines itself by the product. “Real ‘so and so’s’ only buy this product!” is a sentiment uttered by many communities and demographics. The symbols that products or brands have positioned themselves as have become wholly intertwined with the cultural identity of certain groups of people, almost more so than the actions, behaviors, or beliefs of the people themselves. To be a consumer of a certain product is to be ingrained into a culture, and for many, consumption and culture are inextricably linked.

But of course, this is not the end all be all of the culture, this is simply an example of how these symbols are present, not only within our traditionally understood culture, but also within economic systems, and how one impacts the other. This provides us cause to recognize the intention of products and brands when they try to co-opt a culture or tell us that to be something is to buy into their product. This is an opportunity to reject that meaning and to find your own or to create your own.

Culture is traditionally not thought of as being influenced by the economic system it was born from. But of course, it is; economics have a tangible hold on the lives of the people within

it, and upward mobility and downward trajectory are directly tied to one's economic standing. For example, the symbols so representative of hip-hop culture tell a tale of the economic structure that hip-hop was created in. Large, shiny, gaudy chains were signals of wealth and opulence. These chains, worn on local street-hustlers-turned-rappers, stood in stark contrast to the tattered clothes of poverty-stricken children living in the Bronx in the late ’70s, to early ’80s. When we look and see a rapper today with seemingly a million chains, it is simply a symbol of wealth that says “Look at me! Look how far from poverty and nothingness I am”. It serves as a clear separation and thus, becomes something to strive for and accordingly, becomes a goal to reach in the mind of your average up-and-coming rapper.

The language that the proverbial rapper speaks is that of an individual trying to distance themselves in relation to poverty. The same can be said for the variations of rock culture. The style and dress of a metal, punk, or goth rock performer are symbolic of rebellion and rejection of conformity and comfort. The mohawk, the long hair, and the unconventional makeup are all rejections of comfortable, middle-class, suburban life. The proverbial rock icon speaks a language of anti-conformity, underlying anger, disdain for the status quo, and a separation from oneself from the banality of the nuclear familial lifestyle. The rapper symbols are similarly opposed to suburban life, but they themselves are not condemnations or rejections of suburbia in the same way that the rock symbols are. Both cultures develop symbols that illustrate their message and their purpose and both are likewise dependent on and reactions to their respective economic beginnings, and are also embodied in the dress and look of the people who participate in those respective musical subcultures.

We create meaning and derive it from and in response to many different things. We, ourselves, operate and function as communicative devices, and at times we do so consciously

and unconsciously. We all project our messages to the external world as we maneuver through it and with all of these different message projections naturally, come different perspectives and interpretations. Because we are all subject to and shaped by our own experiences, our perception and ability to interpret messages are likewise shaped by our experiences. These clashing interpretations and worldviews inevitably lead to miscommunication.

Limits of Language as Communication

When language is used strictly within the transmission model as a communicative device, it is somewhat imperfect because it carves open many paths to misinterpretation. Language, of course, serves more purposes than to just be a tool for communication. In the realms of culture, art, and identity, it succeeds and excels and because of its multiple usages, language is made much more exhilarating. In the realm of communication, whether spoken or written, language often causes us to question intent, purpose and meaning. Things like body language, tone, or lack of tone in the case of writing, can lead to misinterpretation and confusion and that is solely because of the variety of languages and the variety within languages.

Body Language

We signal our thoughts, feelings, and intentions with gestural motions and with body language, in addition to speech. According to Carter (2019) at least half of our communication is nonverbal. Our eyes convey information through facial expressions and movement. The direction of the iris and pupil becomes symbolic of importance. The white of the eye being visible conveys to us where someone’s attention is directed and thus, what is of immediate importance. People have an almost unshakeable instinct to follow another's eye gaze. This mechanism becomes a

tool that allows one to manipulate another person's attention and share information without words.

Body language is mostly instinctive, consisting largely of unconscious “breakthrough” acts. Some of these are remnants of primitive reflexes when other living things were often seen primarily as predator or prey. These reflexes program us to approach small, soft stimuli, which suggests prey, and to withdraw from strong, hard stimuli, which suggests a predator. Displays of aggression, in certain cultures, are usually shown through tensed muscles and an upright or forward-leaning stance, indicating that a predator is ready to pounce (Carter, 2019). Fear can often be displayed by a softer body contour and backward stance, indicating that the prey is preparing to flee. When emotions are mixed, a person may take a midway stance from which they can shift quickly from one posture to another. These physical displays may vary from culture to culture and even person to person.

Giveaway eye, mouth, hand, and body movements, as well as deliberate gestures, are registered in the superior temporal sulcus, a brain area concerned with the self in relation to others within social settings (Carter, 2019). The amygdala notes the emotional content, and the orbitofrontal cortex analyzes it.

Body language is a mostly unconscious and automatic process. Carter (2019) writes that gestural motions are considered to be the more refined and conscious form of body language; over this form we have a much greater degree of agency. Many parts of the body can be involved with making gestures, but most tend to include hand and finger motions, which can display complex spatial relations, issue directions, and show the shape of imagined objects. Gestures can help convey emotions, thoughts, insults, and invitations (Carter, 2019). Gestures are used

worldwide but are by no means universally understood to be the same. A simple gesture in one culture may mean something completely different in another.

At times these visual cues can make or break an individual's comprehension of a concept and in some cases, it makes very little difference. In particular, a study conducted by Kaschak et al. (2017) observed bodily movement in the aid of the comprehension of abstract concepts. The study establishes that comprehension may fail for a variety of reasons and that students not understanding narrative structure or lacking background knowledge to understand the text, contributes greatly to their understanding of a concept. The study observed an intervention called Enacted Reading Comprehension (ERC) which is foundationally rooted in the idea of Embodied Cognition, which asserts that cognitive processes are grounded in our bodies' systems of perception and action planning.

The theory of embodied cognition believes that the individual's understanding of abstract concepts is tied to their understanding of concrete experience. This means that humans rely on a degree of external sensory stimulation to adequately process abstractions (Kaschak et al., 2017). This is seen in infants who rely heavily on facial expressions to assist with their interpretation of verbal communication (To Talk, 2014). The ERC intervention was meant to provide readers with concrete simulation strategies in order to comprehend texts involving abstract content, specifically "the notion of opposing forces that are present in a variety of literature, including scientific texts, persuasive texts, and novels that feature internal character conflicts" (Kaschak et al., 2017).

The ERC intervention was designed specifically for students with low reading comprehension scores. The study observed 129 students -- 74 third graders and 55 fourth graders. The study was conducted with small groups over the course of seven weeks, in which

students were read passages from a text. The control groups read the texts without the use of embodied cognition and the experimental groups read the same texts with embodied cognition. All of the groups were periodically tested on their comprehension of the content at the end of their sessions, over the course of the weeks of the study. The students in the groups utilizing the ERC intervention plan were found that it did not distract students from acquiring relevant target knowledge, and results showed that many students acquired, comprehended, and retained knowledge as a result of their participation in the ERC intervention program. (Kaschak et al., 2017)

This study speaks to the use of language systems generally as transmission models of communication. It illustrates that written or verbal language alone is inadequate as transmission models for specific messages and information. This study tells us that communication is multifaceted and should not be limited to one mode over another (Kaschak et al., 2017). Ultimately, it encourages us to take advantage of the communicative systems at our disposal and for our benefit, and it reveals to us that we can obtain deeper and richer meaning from texts and our daily interactions, by doing so.

Over the course of the 2021 spring semester, I was fortunate enough to conduct a study with John Tyler Community College, in tandem with the Mellon Research Fellows program. This study was inspired by the aforementioned study conducted by (Kaschak et al., 2017) regarding gestural motions, embodied cognition, and ERC. My study observed the effects of gestural motions in the aid of content comprehension, as mediated through a video remote learning platform. Two professors volunteered their classes to assist in the research. The study sought to determine to what degree the appearance of the professor contributed to the

comprehension of course material. This study took place during the SARS-CoV-2 pandemic aka Covid-19, which required the use of remote lectures.

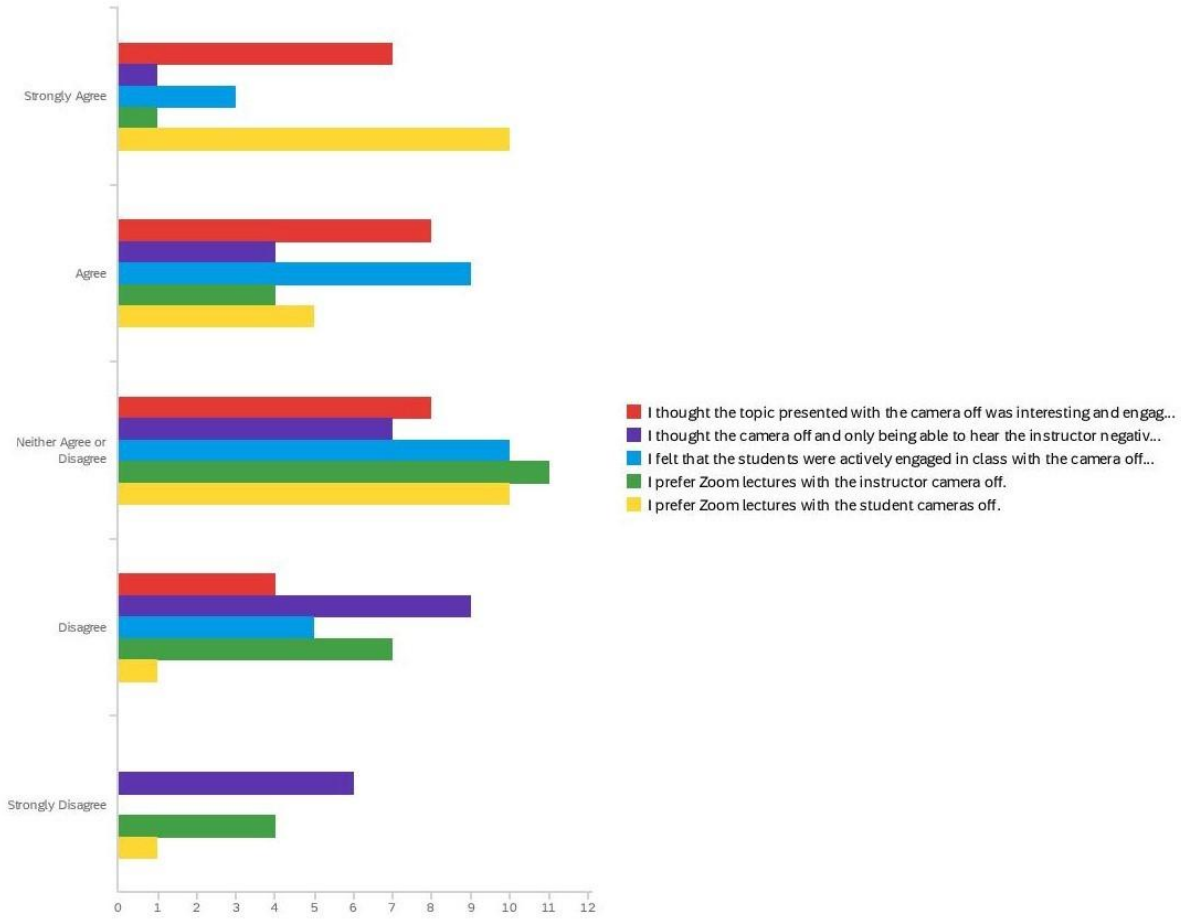
These remote lectures were hosted through a visual video conferencing platform called ZOOM (Zoom, 2011). ZOOM provides professors and students the ability to turn on and off their video broadcasts. Professors were asked to begin their lecture with their cameras on, as per usual and at the half hour mark, they were to continue their lecture with the cameras and subsequently, their video broadcast off. The professor was still allowed to speak with their mic on and to share their screen while lecturing. After the lecture was over, students were asked to take part in a voluntary survey regarding their experience in the lecture.

Students were asked to rate, on a five-point scale, their level of content interest, class engagement, content comprehension, and their preference towards cameras during remote learning in general. As displayed in the graphs below, in a class with a survey size of 27 students, 55.55% of students did not feel that having the professor's camera off negatively affected their ability to engage and comprehend the lecture material.

The reasoning for the professor's camera being on or off resulting in little difference to the student's perception of engagement and content comprehension, is likely due to the fact that professors were still able to utilize their screen-sharing capability, which still allows for a visual component to the lecture. This suggests that the removal of gestural motions, if supplemented with alternative visual content, will achieve a similar effect. It also suggests that comprehension of academic content, in the context of a remote learning setting, may not be wholly dependent upon human-centric visual cues and aids to comprehend and retain relevant information. Students when asked if they felt the content was engaging to them when the professor's camera was on -- 77.78% either agreed or strongly agreed. This suggests that despite human gestural

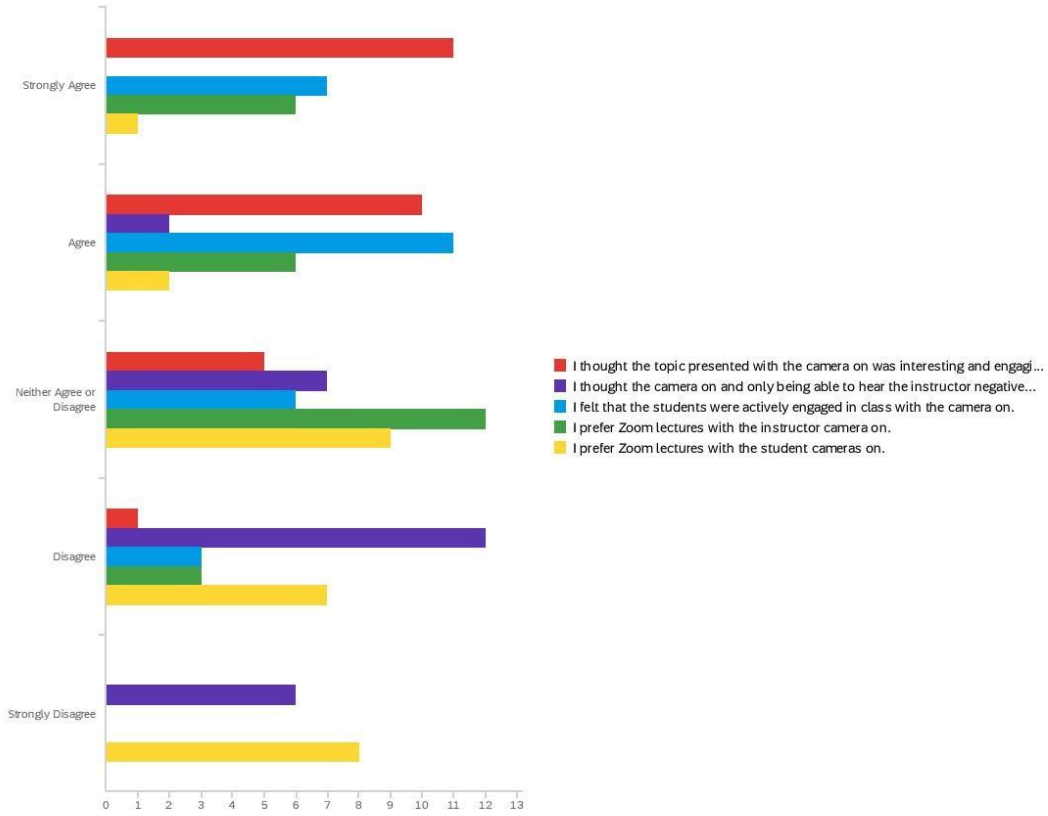
motions as a visual aid not being required, students seemed to feel more engaged if it was available to them. This may be attributed to a decrease in person to person, human interaction as a direct result of the quarantine onset by the SARS-CoV-2 virus. More research should be conducted to determine the effectiveness of gestural motion as an aid to comprehension in academic settings, as mediated via a remote learning video conferencing format. Figures shown below:

Q2 - Please rate your level of agreement with the following statements while the camera was OFF during the class session:



#	Field	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	Total
1	I thought the topic presented with the camera off was interesting and engaging to all students in the class.	25.93% 7	29.63% 8	29.63% 8	14.81% 4	0.00% 0	27
2	I thought the camera off and only being able to hear the instructor negatively impacted my ability to grasp the concept.	3.70% 1	14.81% 4	25.93% 7	33.33% 9	22.22% 6	27
3	I felt that the students were actively engaged in class with the camera off.	11.11% 3	33.33% 9	37.04% 10	18.52% 5	0.00% 0	27
4	I prefer Zoom lectures with the instructor camera off.	3.70% 1	14.81% 4	40.74% 11	25.93% 7	14.81% 4	27
5	I prefer Zoom lectures with the student cameras off.	37.04% 10	18.52% 5	37.04% 10	3.70% 1	3.70% 1	27

Q3 - Please rate your level of agreement with the following statements while the camera was ON during the class session:



#	Field	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	Total
1	I thought the topic presented with the camera on was interesting and engaging to all students in the class.	40.74% 11	37.04% 10	18.52% 5	3.70% 1	0.00% 0	27
2	I thought the camera on and only being able to hear the instructor negatively impacted my ability to grasp the concept.	0.00% 0	7.41% 2	25.93% 7	44.44% 12	22.22% 6	27
3	I felt that the students were actively engaged in class with the camera on.	25.93% 7	40.74% 11	22.22% 6	11.11% 3	0.00% 0	27
4	I prefer Zoom lectures with the instructor camera on.	22.22% 6	22.22% 6	44.44% 12	11.11% 3	0.00% 0	27
5	I prefer Zoom lectures with the student cameras on.	3.70% 1	7.41% 2	33.33% 9	25.93% 7	29.63% 8	27

Our ability to use our physicality when communicating, rather than just the use of verbal language, adds another layer of in depth expression. By combining the external motions of our body language and gestures with our internal abstractions, which are external, we are able to impart a deeper and more engaging level of expression. By using our internal and external faculties, we can quite literally embody the meaning we wish to communicate.

These studies detail how abstraction can be comprehended with the use of body language, in addition to verbal language. Literature, through the medium of written language, is simply another mode by which humans have been able to extract meaning from abstract ideas.

Written Language

Written language is that which is completely divorced from the influence of body language, tone, intonation, facial expressions, and other such visual and auditory cues. Because of this, there are those that feel that written language is the truest and most purest form of language, because it provides the words with an opportunity to stand on their own. Jacque Derrida is one of these many thinkers.

Jacque Derrida was a French philosopher who, in his lifetime, made enormous contributions to the field of literary theory in his critiques of linguistics and language, as used in public discourse. Derrida built his theory of language upon the deconstruction of Edmund Husserl's phenomenological theory of language (Harland, 2003). Husserl was a 20th-century German philosopher who also made great contributions to epistemology, ontology, and the philosophy of language in general. For Husserl, "true" language is necessarily and exclusively human and draws a distinction between natural and human signs.

Husserl saw “true” language in terms of ‘expression’ and meaning as willed or intended by the utterer. Derrida believed expression was meant, conscious, and intentional. To Derrida, language is its “truest” form when at its most divorced from humans and without human interference; self-sufficient. Derrida tilts toward writing being language at its purest; language, as it is, is completely independent of the person that wrote it. Writing exists not insubstantially in the mind, nor briefly and transparently in soundwaves; it exists tangibly as marks on a page and stands on its own (Harland, 2003).

Writing represents the passage of a thought out of consciousness. In the Saussurean school of linguistics, a distinction has been made between language and speech. According to Harland, (2003) Saussure asserts that speech is the active or passive use of natural human language in whatever medium. In the active sense, it can be speaking, writing, or gesturing in a “gestural language” such as sign language or body language, as previously mentioned. In the passive, it can be understood through the perception of linguistic sounds, or the reading of texts, or the interpretation of linguistically organized meaningful gestures (Harland, 2003). Thus “speech” is a term used in a wide sense of the actual, physical production and interpretation of linguistic signs.

Some linguists use the term “speaker” or “speaker/listener” for a person who produces and/or interprets linguistic output and only when the context calls for greater specificity do they use terms like writer, listener, reader, or speaker. Reading and writing are skills that must be developed. To read and write, a child must translate shapes into the sounds they make if spoken aloud. Writing requires more of the brain; in addition to the language areas -- the visual areas concerned with decoding text, involves integrating the activity in those areas concerned with manual dexterity, including the cerebellum, which is involved with intricate hand movements

(Carter, 2019). Text is processed in the visual cortex, which sends the information along the recognition processing route towards the language areas of the brain. The visual word-recognition area is evolved to make fine visual distinctions between different objects; this area is used by the brain when it is trained to recognize written text (Carter, 2019). In the auditory cortex, written words are broken into their phonological elements and "sounded" out so they can be heard; then the auditory cortex allows the reader to recognize each word by the way it sounds. Once a word has been recognized, it is also sounded out in Broca's area, linking the written word to the spoken word. The temporal lobe helps match the words to their meanings by retrieving memories and full appreciation of a text may involve recalling personal memories from the hippocampus.

The hippocampus makes this connection between personal memories and words, ultimately, to reveal and impart something deeper into the words as they're being absorbed (Carter, 2019). Writing is simply just one of the many modes of communication which also serve artistic purposes. Art in general is peculiar because it can function simultaneously within the transmission and ritual model of communication.

The model that an individual is best receptive to in relation to art is often dependent wholly upon them. Art often comes paired with an intended message; oftentimes it is pure spectacle, meant to shock and amaze; other times, art is created with the intention of evoking deep introspection that allows us to comprehend the ineffable parts of our internal being. Things like deep-seated pain, sorrow, intense reflection, and profound happiness can be extracted solely through the use of art. The ability to conceptualize the abstract is further illustrated within the intersection of philosophical musings and artistic mediums. Literature provides us with an

opportunity to extract cause and meaning from the words and lives of others and can bring us a deeper understanding of abstractions.

How Literature Deepens Comprehension of Abstract Concepts

Karl Wilhelm Friedrich Schlegel was an 18th-century German philosopher, poet, and literary critic. He believed in and explored what he called transcendental poetry (TP). Transcendental acquires its name from the Kantian use of the word “transcendental”, meaning it concerns itself with the knowledge of knowledge. It concerns itself deeply within the limits of human knowledge and by extension the limits of the expression of knowledge. Schlegel defines TP as: “poetry whose one and all is the relationship between the ideal and the real; it should thus be called transcendental poetry, according to the analogy to the technical language of philosophy” (Mualem, 2017).

TP aims to “represent itself in every one of its representations and to be everywhere, always poetry and at the same time poetry of poetry” (Mualem, 2017). This means that the art should be represented in every single one of its stages. From beginning, middle, and end, the poetry should be a representation of itself, exposed in all of its formations. This poetry demands the art itself be reflective of itself; self-aware in a way. It demands it be more than simply just art, but art that is aware -- transcendent. Art that reflects upon itself as art, but also is aware of the medium in which it exists and critiques the medium itself; this critique of the medium and the work itself is also, then, characteristic of the artistic work itself.

This kind of self-reflective poetry is based on the philosophical problems associated with knowledge of the Absolute (God). Because the Absolute will necessarily always be beyond the reach of human reason, any attempt to grasp the unconditioned via something as conditioned as

human reason must fail. The Absolute is indemonstrable and human reason simply cannot think that which is absolute. Human reason works by defining concepts and thus, de-limiting therefore, human reason cannot have access to something which is defined by its expansive and all-encompassing nature. “Any kind of demonstration is always and inevitably a delimitation, reason can only remain alien to the unity and all-ness of the Absolute”(Mualem, 2017).

Because the Absolute is unthinkable, it is also ineffable; meaning it is unrepresented through language because philosophical language, according to Schlegel, is based upon reflection. TP, as a system of creation, critique, representation, and reflection seeks to overcome the ineffable and come closer to a conception of the Absolute.

Schlegel attempts to bring the Absolute into the realm of effability by a negative method which resorts to an ambivalent use of language”(Mualem, 2017). This ambivalent use of language is most akin to irony. Schlegel asserts that words are tools that place confines on abstraction, or objects of which humans can possess no knowledge. He then goes on to ascribe to the Absolute things which it is not. The pursuit of some knowledge is perhaps unattainable to humans, yet this method of description of the Absolute, ex negativo, is an attempt to reel in the conception of the Absolute by “bringing it down to earth” through the use of TP.

“Because positively nothing can be said about The Absolute, it necessarily falls outside the realm of philosophical language" (Mualem, 2017). Schlegel suggests that it is possible to use literary poetic devices such as allegory, to avoid expressing the Absolute positively but instead, approaching it ex negativo, by way of reference.

"According to Kierkegaard, it is when considering the irreconcilable opposition between objectivity and subjectivity and more precisely, between objective knowledge, that language as a medium of communication becomes an issue" (Mualem, 2017).

Objective knowledge is irrelevant from an existential standpoint because it is not related to the existing individual which exists subjectively, meaning the individual exists under a series of terms and conditions, whereas objective knowledge just is; it is irrefutable, and simply is. The reality of existence is unthinkable because once an individual begins to think about it, it transforms into the form of possibility or hypothetical. It is impossible to gain access to the knowledge of reality and existence through reflection. The only existence by which anyone can have knowledge of is that which can be accessed by some means other than individual reflection; knowledge of reality and existence requires observation from outside of reality and existence.

This correlates directly with Plato's allegory of the cave. Our understanding of reality and existence is contingent upon the presentation of reality and existence via our sensory organs. If an individual were on the outside looking in, they would be able to clearly see the distinction between the cave and the rest of the world, and thus, understand reality extends beyond the confines of the cave. Those living inside the cave that see shadows dancing upon the wall as illuminated by the fire, will only come to understand that as the extent of reality and existence. Only when they exit the cave and reflect back upon the time spent within the cave, can they say definitively whether or not what they understood to be reality was truly reality. We can only attempt to make sense of the reality of our own existence.

It is impossible to know about the reality of another's existence. When one tries to seize it, the knowledge obtained is only reflected through knowledge. This is not knowledge of reality but of possibility. Without access to the existence of the other except as a possibility, one can

never directly address the other as objective. Kierkegaard concluded that in principle, it is impossible to communicate existentially between subjectivities.

Indirect communication, as proposed by Kierkegaard as a procedure of verbal language, takes into account the limits of effability in any attempt at direct communication and which, by reflecting the reflectivity of language, refers to what lies beyond linguistic communication and reflection: subjectivity (Mualem, 2017). Humans are a lot of things. We are creatures with limitations and many of these limitations are due to the physical construction of our bodies. The human spirit is that which seeks to break beyond the boundaries physically placed upon it. We try and fail to conceptualize and make concrete our understanding of the Absolute, which simply prompts us to pursue that goal even further.

We are subjective beings, we exist on the terms of the Absolute. We exist and perceive reality solely through the use of our corporeal vehicles. The Absolute is objective, it is paradoxically all things, and one at the same time, its very nature defies human understanding by transcending the confines of language itself -- the tool by which we reason and make sense of reality. Though we may not be objective and all-encompassing like the Absolute, we are similar to transcendental poetry in that we are representative of ourselves in every state and representation.

When we are at our lowest, we resort to the earliest form of communication we have -- crying. We walk through our lives believing that we become somehow separated from the people we were before when in actuality, we are building upon the foundations we are born with. We also communicate to others as semiotic symbols. We are the amalgamation of our experiences and therefore, the meaning of our message is varied, based upon who we are and at what point

we are at in our life. We are users of the tools and artistic modes of language, but at the same time, are those tools ourselves?

In this way, we all share a commonality - difference.

Structuralist Theory

There are thinkers who have searched for meaning within the world, by searching for commonalities which make connections that underline the whole of society. They see phenomena as springing up from a single, underlying structure that accounts for and gives rise to the meaning and cause for everything. These thinkers are called structuralists, and these thinkers have their own respective ideas of what those structures are but they all the same, have them.

The idea of difference is very important in the structuralist viewpoint. The structuralists believe that things find their meaning because of their difference from other things underneath a linguistic structure. The word cat is a signifier for the animal, not due to some intrinsic property of the cat, but because the word for dog exists within the linguistic system or structure and the two are not equivalent (Poststructuralism: WTF? Derrida, Deconstruction and Poststructuralist Theory Explained, 2019). The structuralists expanded this idea of difference and relations within signifying systems outward to society at large.

Because structuralism relies on this idea of binary oppositions, it places meaning within a very restrictive paradigm; X is thing X because it is not thing Y. Structuralism believes there is a fixed real-world with fixed ideas and meanings that exist upon a bedrock of material relations. It believes there is a coherent system on which meaning is constructed in a similar fashion for all individuals (Poststructuralism: WTF? Derrida, Deconstruction and Poststructuralist Theory Explained, 2019).

The structuralists developed their theory of structuralism in relation to literature and the understanding of cultural texts. They argued that there is an underlying structure of narratives that lies at the bedrock of all stories and texts. For example, the concept of a genre is a system by which the narratives inside them adhere to the tropes and standards consistent within said genre (Poststructuralism: WTF? Derrida, Deconstruction and Poststructuralist Theory Explained, 2019).

This conception of things as understood in relation to their broader systems, finds its way into the realm of sociology, politics, history, and philosophy. Structuralists assert that everything we do is informed by an underlying material structure that is, for the most part, deterministic (Poststructuralism: WTF? Derrida, Deconstruction and Poststructuralist Theory Explained, 2019). For example, Karl Marx would attribute the coming and goings of the individual to their relations to the material structure of the economic system they live under. Meanwhile, Sigmund Freud would argue that the individual's actions are tied to the structure of their unconscious impulses or their Id.

Structuralists believe in universal truths and they overlay their beliefs onto their perception of the world, in an effort to understand society at large, but these overarching systems place limits on truth, thought, and meaning (Poststructuralism: WTF? Derrida, Deconstruction and Poststructuralist Theory Explained, 2019).

Critiques of Structuralism

Structuralism finds criticism because the pursuit of uncovering a single structure that is responsible for the ebb and flow of everything, is absurd. If everything is a microcosm of something else, at that point, there is no purpose for further investigation (Belsey, 2002). The structuralist approach provides a simplistic and deterministic view of the world that accounts for

everything through its relationship to a single underlying structure, with no concern for the individual experience or singular agency. Thus developed a new interpretation in response to structuralism creatively named: "post-structuralism."

Post-structuralist Theory

The post-structuralist line of thinking maintains that meaning is more fluid than it is rigid; it develops constantly and there is not necessarily a grand overarching narrative or structure that underpins meaning, as meaning is developed. Post-structuralism is a reaction to the theory of structuralism. It is a literary theory/group of theories that believe language and other forms of communicative systems such as writing, iconographic images, spoken word, and video are less perfect at expressing thoughts and ideas than we might initially think.

Post-structuralist theory suggests that the transmission models of communication with intended messages are often prone to misrepresenting the message of the individual or encourage alternative and unintended interpretation. Post-structuralism also asks what it means for the practice of analyzing cultural texts and asks whether it is ever possible to arrive at a definitive interpretation of a given film, book, or otherwise culturally relevant piece of art (Poststructuralism: WTF? Derrida, Deconstruction and Poststructuralist Theory Explained, 2019).

It furthermore asks whether it is possible to arrive at objective truth. Ideas of race, sex, gender, and other biases present in linguistics and other communicative systems shape our world and understanding of it; it is nearly impossible to divorce ourselves from these biases wholesale, as they may or may not inform our beliefs and thought patterns. Similar to the structuralist approach, post-structuralist theory treats culture, society, and identity in the same way they would linguistic systems; these individual ideas of culture, identity, and society are Langues in

and of themselves (Poststructuralism: WTF? Derrida, Deconstruction and Poststructuralist Theory Explained, 2019).

The post-structuralist theory is concerned with the relationship between human beings, the world, and the practice of making and reproducing meanings. It asserts that meaning itself is not concrete, and in fact quite unstable (Belsey, 2002). Language and its symbolic signifiers exercise some of the most crucial determinations in our social relations, our thought processes, and our understanding of who and what we are.

The post-structuralist theory takes from structuralism the idea of meaning not being intrinsic to the signified, but being present because of its relations to other signified things (Structuralism and Semiotics: WTF? Saussure, Lévi-Strauss, Barthes and Structuralism Explained, 2019). The difference between these two schools of thought is that post-structuralism believes that meaning is context-dependent -- thus giving way to its fluidity and subsequently the individual's ability to determine it.

Conclusion

Many of the ideas concerning how we acquire language, is reflective of not only our linguistic development, but also our development as the makers of meaning. First we must listen to understand, once we understand we can mimic, and mimicry ultimately becomes creation. Refinement of this ability to create only allows for us to impart individual meaning.

When we enter the world, our ability to communicate is limited to basic reflexive emotions and feelings. We lack the ability to make sense of our internal goings on so we cry, yell, or scream and our caregivers extract meaning from these wails, understand what we need and tend to us accordingly. The back and forth game of communication is very complicated both

internally and externally. The interconnectedness of our neural networks is incredibly efficient and rapid both for the processes of listening and speaking.

The language system we use allows for us to communicate. What is notable about this is that our language system consists simply of symbols that we give meaning to. They exist within a much larger interconnected system of symbols with no intrinsic meaning on their own -- only when they are placed in relation to other symbols in the system do they take on their meaning.

We understand that communication is facilitated through more than simply words and letters as language, is more than simply a transmission model of communication. Language is artistic and artistic pieces such as statues, also function as communicative devices. Art as communication, can propagate ideas across a population. It can serve to unify communities by establishing and reaffirming their values. Art can communicate things by evoking emotional reactions among its recipients. In this way, art allows us to extend past our physical limitations. The art we make is a communicative tool that allows us to draw nearer to the grand abstractions that cannot be made concrete through a transmission model alone. Though art may not crystalize our knowledge of reality or our conception of God, it brings us closer to grasping it. Our ability to take steps closer to ineffable abstractions speaks to our ingenuity, creativity, and determination to uncover meaning wherever it lies.

We see this displayed in our modern consumerist culture with people showcasing themselves as symbols, by presenting themselves in a particular way to their audience. The way in which a person presents themselves communicates to the viewer who they are and what they stand for. We, the people who portray ourselves to an audience, become symbols and in doing so, we determine our own meaning.

Humans create meaning because they are creatures of difference; different from each other, different from their environment, and different in their reactions to the world. An individual presenting their ideal of beauty will differ from another, because of the difference in their respective experience within society - the meaning of beauty is determined and embodied within the individual presenting it. The identities and presentations that humans embody when they present themselves to the world is indeed in response to society at large, and it is at the intersection of the individual and society where true meaning lies.

The structuralists claim that society imparts meaning onto the individual. In the general structuralist literary analysis, the meaning of a text must be and can only be pulled from the wider context surrounding the piece, rather than the piece itself. In this same way, the structuralists contend that an individual's meaning is contingent upon the society that surrounds them. The post-structuralist ideal opposes that notion. They assert that the text is all that matters. They believe that everything within the text is more than enough to determine or interpret what it means; in this way, the meaning of the text is produced by the reader. This same post-structuralist idea applies to life; we are the makers and tenders of the garden that is our reality. We are agents of our own meaning and we can strengthen our resolve in the fact that we have the tools and the ability to carve meaning out of abstraction and uncertainty.

It seems paradoxical for one to assert the structuralist ideal of the individual's meaning being defined by the influences of society and the post-structuralist ideal of an individual's meaning being created by the individual themselves. Both theories and their main theses prove to be true to an extent. The truth is that the exchange is cyclical and symbiotic, and the endowment of meaning is a conversation that begins in the womb between the individual and the outside world.

References

Belsey, C. (2002). *Poststructuralism a very short introduction*. Oxford University Press. https://doi.org/10.1093/actrade/9780192801807.001.0001

Carter, R., Aldridge, S., Page, M., Parker, S., Frith, C. D., Frith, U., & Shulman, M. B. (2019). *The Human Brain Book* (Third). (pp. 142-152). DK Publishing.

CrashCourse. (2014, May 26). *Language: Crash Course Psychology #16* [Video].Youtube. https://www.youtube.com/watch?v=s9shPouRWCs

Harland, R. (2003). Superstructuralism : The Philosophy of Structuralism and Post-Structuralism. Routledge.

Horst, J.S. & Torkildsen, J.V.K. (2019). Neural Basis of Language Acquisition. In J.S., Horst & J.V.K., Torkildsen (Eds.), *International Handbook of Language Acquisition*. (1st ed., pp. 20-32) Milton: Routledge. https://doi.org/10.4324/9781315110622

Kaschak, M. P. Connor, C. M. & Dombek, J. L. (2017). Enacted Reading Comprehension: Using Bodily Movement to Aid the Comprehension of Abstract Text Content. *PLoS ONE*, *12*(1), Article e0169711. https://link-gale-com.ezproxy.vccs.edu:2443/apps/doc/A478287166/OVIC?u=viva23470&sid=OVIC&xid=f5b7f23b

Khan Academy Medicine (2013, September 17). *Theories of language development: Nativist, learning, interactionist |MCAT| Khan Academy* [Video]. https://www.youtube.com/watch?v=RRGwdfQV8kU

Lawes, Rachel. (2019). Big semiotics: Beyond signs and symbols. *International Journal of Market Research*, 61(3), 252–265. https://doi.org/10.1177/1470785318821853

Nicholas, T [Tom Nicholas]. (2017, November 16). *Semiotics: WTF? Introduction to Saussure, the Signifier and Signified* [Video]. YouTube. https://www.youtube.com/watch?v=0JtJu9HdQVM

Nicholas, T [Tom Nicholas]. (2019, July 25). *Structuralism and Semiotics: WTF? Saussure, Lévi-Strauss, Barthes and Structuralism Explained* [Video]. YouTube. https://www.youtube.com/watch?v=rkDb9Nt1EBQ

Nicholas, T [Tom Nicholas]. (2019, November 03). *Poststructuralism: WTF? Derrida, Deconstruction and Poststructuralist Theory Explained* [Video]. YouTube. https://www.youtube.com/watch?v=P2eb52fUgTk

Sell, R. D., Borch, A., & Lindgren, I. (2013). When philosophy must become literature: Søren Kierkegaard's concept of indirect communication. In E.Weigand & S. Feller (Eds.), (pp. 213-228) *The ethics of literary communication : genuineness, directness, indirectness*. John Benjamins Publishing Company. https://doi.org/10.1075/ds.19

Seuren, P. A. (2015). Unconscious Elements in Linguistic Communication: Language and Social Reality. *Empedocles : European Journal for the Philosophy of Communication*, 6(2), 185–194. https://doi.org/10.1386/ejpc.6.2.185_1

Suitt, R. (2014, June 30). *To Talk* [Video]. Youtube. https://www.youtube.com/watch?v=4-cUBMRXAas

Trimble, J., S. Naiden, Fred, & J. A. Talbert, Richard. (2017). Communicating with Images in the Roman Empire. In R. J. A. Talbert & F. S. Naiden (Eds.), In Mercury's Wings. New York: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780195386844.003.0007

Sturdy, C. B., & Nicoladis, E. (2017). How Much of Language Acquisition Does Operant Conditioning Explain?. *Frontiers in psychology*, *8*, 1918. https://doi.org/10.3389/fpsyg.2017.0191

U.S. Department of Health and Human Services. (2020, December 14). *Aphasia*. National Institute of Deafness and Other Communication Disorders. https://www.nidcd.nih.gov/health/aphasia.