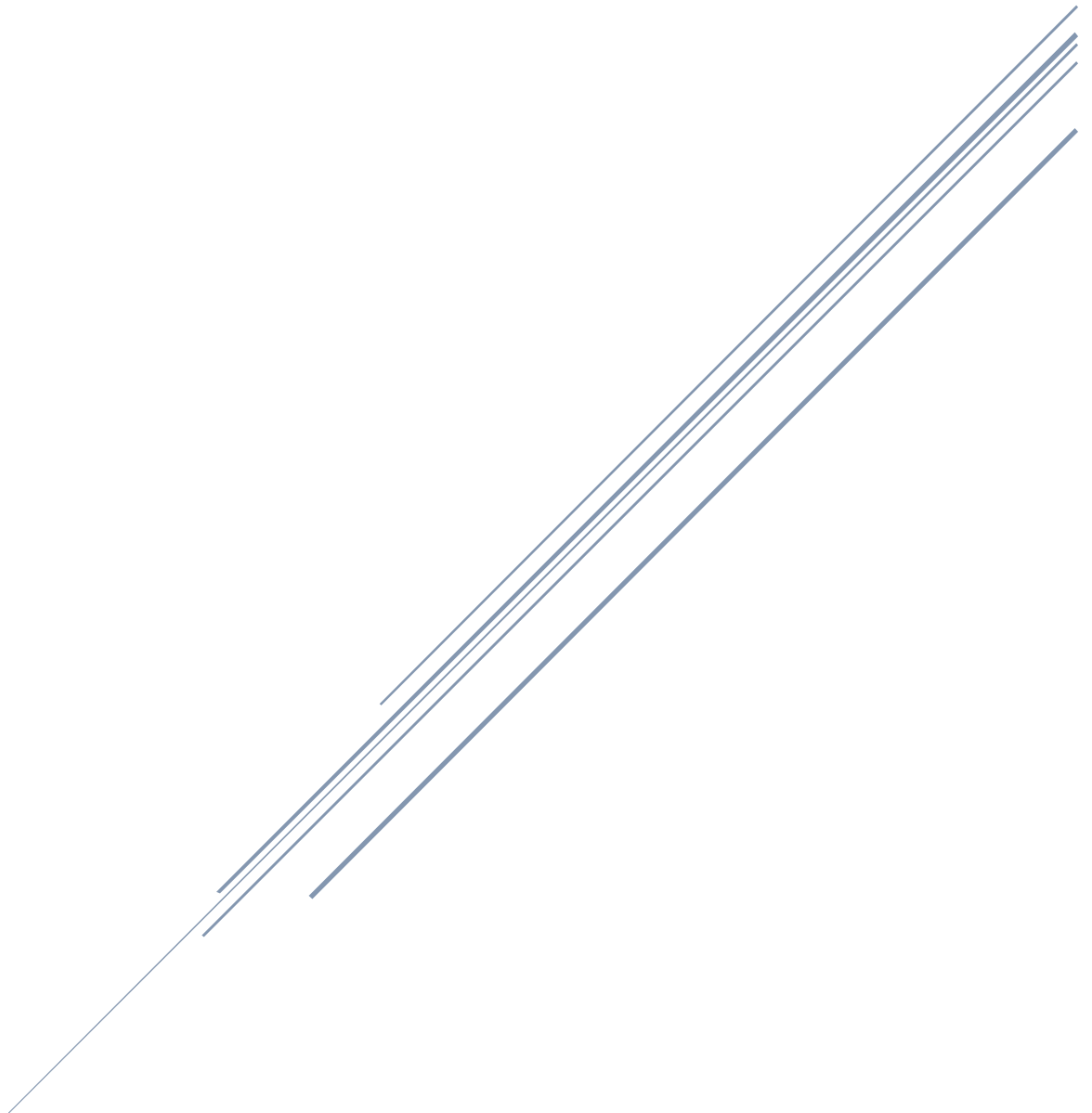


HUMAN REALITY UNCOVERED IN THE  
ALIEN: HEPTAPOD LANGUAGE IN  
“STORY OF YOUR LIFE” AND ARRIVAL  
Entry for the Betty G. Headley Senior Essay Award



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## Human Reality Uncovered in the Alien: Heptapod Language in “Story of Your Life” and *Arrival*

The notion that language has a connection to our existence, rather than simply being a tool or arbitrary set of signs, is vital to the Sapir-Whorf hypothesis, which proposes that our language can alter the way we think. Ted Chiang takes this hypothesis to the point where language alters our very perception of reality in his novella “Story of Your Life,” which was recently adapted into the film *Arrival*. In both versions of the story, the protagonist, linguist Dr. Louise Banks, begins to view time from a simultaneous, rather than sequential point of view, simply by learning the language of “heptapods.” These aliens, who hover above Earth in their ovular ships, seem to experience reality outside of time as we know it. While the story approaches its premise from a modern viewpoint that language is a tool, or even a weapon, its fantastical representation of the Sapir-Whorf hypothesis implies that the way language exists deep within the mind fundamentally changes our perception of, and participation in, reality itself. Such a representation of language hearkens back to the ontotheological synthesis that is foundational to the works of Augustine and Aquinas. Paradoxically, in regaining this worldview, the ability to become more like the aliens allows the human protagonist to become *more* human in an ontotheological sense.

Debates about the use and nature of language are at the forefront throughout “Story of Your Life” and *Arrival*. Dr. Louise Banks, the protagonist, is a linguist who views language from a utilitarian standpoint, approaching it “like a mathematician” (*Arrival*), and formulating the necessary steps she needs to take in order to ask the heptapods their purpose on Earth. When the American team of experts understands their response as “Offer weapon,” Banks notes that this could also be interpreted as “Offer tool,” because “our language, like our culture, is messy, and sometimes, one can be both” (*Arrival*). Later, Banks learns that the heptapods are offering their

language itself, as a gift, in return for humanity's help three thousand years in the future. This only further emphasizes the utilitarian view of language. As Terry Eagleton writes, "Language levels things down. It is normative all the way down" (14). In forcing many different things into the same arbitrary signifier, based on some likeness, language eliminates their inherent nuance. The major conflicts in the film version stem from this view of language, leading to violent consequences when another team interprets the heptapods' response as "*Use* weapon," and several countries prepare for war. However, as the heptapods' language shows, through linguistic determinism presented in fantastical proportions, the true nature of language directly contradicts the modern idea that it is a mere tool.

Linguistic determinism is another name for the strong version of the Sapir-Whorf hypothesis, which proposes that our worldview and cognitive differences are determined by the structure of our native languages (Kay/Kempton 66). The theory is taken even further in *Arrival*—when Louise Banks acquires the heptapods' language, her entire perception of reality shifts. Most linguists today support the less determinate version of the theory, known as linguistic relativity (Martinelli), and would disagree that learning a new language can "re-wire your brain," as stated in the film by Donnelly, a theoretical physicist. However, while the plot itself is more or less impossible, it focuses on something that is incidentally a large part of Whorf's research: our perception of time. Whorf noted that English speakers tend to quantify time into periods, and humans in general conceive time as "getting-later-and-later," which appears to be "just how [time] is, or at least how humans necessarily experience it" (Kay/Kempton 76). "Story of Your Life" and *Arrival* ask us, if we had the chance to learn a language from non-humans who experience time differently, would we be able to do the same? Being science fiction, it implausibly delivers the possibility of a simultaneous view of time.

This is where the story begins to depart from modernity and empiricism, reintroducing us to something like the ontotheological synthesis that the Enlightenment era more or less shattered (Dupré 1). The heptapods, with their non-linear writing system of circular logograms, form sentences “by sticking together as many logograms as needed into a giant conglomeration” (Chiang 10). At first, for the human characters, this writing system is completely incomprehensible; where word order doesn’t matter, the end of a sentence needs to be known before beginning to write it. The heptapods’ body shapes reflect this, as they “have no ‘forward’ direction,” (Chiang 9); consequently, neither does their language or their perception of time. As Banks learns the heptapod language, she begins to see sentences, in her mind, “fully formed, articulating even complex ideas all at once” (Chiang 22). Through linguistic determinism, her worldview ends up as “an amalgam of human and heptapod” (Chiang 30), with occasional moments where she views past, present, and future completely simultaneously—shown in the film with intercut flashforwards of her (currently nonexistent) daughter. By the end of the story, it becomes clear that the heptapods’ logograms are “something more than language” (Chiang 22) as we understand it from a modern viewpoint.

When considering the heptapods’ simultaneous view of time, we can look at how Augustine, from a theological standpoint, conceives of the simultaneity of time: from a human perspective, “there are three times: a time present of things past [memory]; a time present of things present [direct experience]; and a time present of things future [expectation]” (*Confessions* 11.20.26). For Augustine, “time is a mental phenomenon rather than a cosmic one” (Severson 42); existence is experienced by something in the mind deeper than thought, a view he emphasizes in his exploration of the inner word (*On the Trinity* 15). There was never a time ‘before creation,’ because in God’s view, all time enacts simultaneously. While humans view time as constantly

moving, “in order that all separate moments may come to pass,” for God, “years stand together as one” (*Confessions* 11.13.16). In *A Secular Age*, Charles Taylor suggests that, from this viewpoint, events that are far from each other chronologically can be “linked through their immediate contiguous places in the divine plan,” giving the example of the sacrifice of Isaac and the Crucifixion of Christ as simultaneous “in God’s time” (Taylor 55). Taylor also draws attention to Augustine’s comparison to a poem or a melody, in which “there is a kind of simultaneity of the first note with the last, because all have to sound in the presence of others in order for the melody to be heard” (Taylor 56). The fictional heptapods also view time mentally, in something approaching how Augustine thinks of God’s perception of time; they allow the human protagonist glimpses of time from the outside. In *Arrival*, Banks retrieves information from eighteen months in the future about how she stopped global warfare, so that she can carry out those actions in the current timeline; such events, far apart chronologically, can be “situated in relation to more than one kind of time” (Taylor 55). For a Medieval view of time, as with the heptapods, events are linked not by “when” they happen, but by what happens.

As she learns the heptapod language and sees her whole life simultaneously, Banks knows the heartbreak that her life holds: she will marry and divorce Donnelly, and they will have and lose a daughter, but she concludes: “Despite knowing the journey and where it leads, I embrace it” (*Arrival*). In trying to understand why she changes nothing about her life, we can consider a foundational aspect of Classical and Medieval understandings of reality: the notion that things in the material world “possess beauty [...] to the extent that they participate in the spiritual form” (Dupré 22). In other words, everything that is, and everything that happens, is beautiful simply because it exists—because it was made by God. In *Confessions*, Augustine observes creation and proclaims: “It was thou, O Lord, who madest these things. Thou art beautiful; thus they are

beautiful” (*Confessions* 11.4.6). Josef Pieper further explores this idea in *The Silence of St. Thomas*, countering common critiques that belittle Aquinas’ contribution to Medieval thought. Pieper emphasizes Aquinas’ doctrine of Being, which postulates that “things are good precisely because they exist, and [...] what exists is true by virtue of existence” (Pieper 48-49). For Aquinas, Being is truth, so we don’t need to have any further purpose to know or make meaning in things; in doing so, we attempt to manipulate reality, and therefore don’t fully know its truth. While there isn’t an explicitly spiritual or religious aspect of this science fiction narrative, it’s easy to draw a connection between Medieval appreciation of the inherent beauty and purpose in nature, and the way Banks approaches life: worth it, simply because she will have lived it. She is able to live in knowledge of her life and future; she can’t, and won’t, manipulate her reality, or act in a way that goes against her knowledge of the future. Instead, she “[acts] to create the future, to enact chronology” (Chiang 28).

Ultimately, then, Chiang’s story is about “enacting” reality, by participating in it—and doing so through language. Much like Aquinas’ viewpoint that truth and existence are synonymous (Pieper 49), the heptapods’ knowledge only becomes truth when they enact it: “For the heptapods, all language was performative. Instead of using language to inform, they used language to actualize [...] in order for their knowledge to be true, the conversation would have to take place” (Chiang 29). We see performative language as foundational to Augustine’s theology in *Confessions*: because God is outside of time, he already “knoweth what things [we] need before [we] ask him,” but it is the act of confessing them that allows God to free us from our struggles in life (*Confessions* 11.1.1). The purpose of prayer is the act of prayer itself. Additionally, in pondering how God created the world, Augustine writes “thou didst speak and they were made, and by thy Word thou didst make them all” (*Confessions* 11.5.7). In other

words, God brought everything into existence through performative language, just as the heptapods act and speak “to create the future” (Chiang 28). This moves beyond a simple utilitarian view of language that the film and story, at the surface, seem to present: language is not simply a tool or weapon to be used, but rather, our language and our rhetoric connect us to our reality.

Though it isn't explicitly stated as being divine, the heptapods do perceive a “purpose underlying” all the events that they perceive simultaneously, whereas humans, from their sequential viewpoint, perceive the relationship between events “as cause and effect” (Chiang 26). Banks longs to view time fully from the outside as the heptapods do, to “immerse [herself] fully in the necessity of events, as [the heptapods] must” (Chiang 32). However, as Zimmermann writes, “our finite reason cannot grasp a concept or idea in its entirety” (171); we can never grasp the entirety of the divine, underlying reason behind things, as much as we would like to. As humans, if we reconnect ourselves to nature and the divine as Classical and Medieval thinkers attempted to, we can grasp some level of divinity. Like Banks' apprehension of the heptapod language, we can catch glimpses of the divine plan, of “the necessity of events.” Our minds can become amalgamations of human and divine, though we will never never grasp the divine in its entirety. Bound by our own perception of the world, and our own human existence, we must find ways to participate in the divine through our language and our creativity.

According to Hans Ulrich Gumbrecht, our human existence has become separated from the world as we have transitioned from a “presence-culture,” capable of integrating our spiritual and physical existence, into a “meaning-culture,” that focuses solely on physical cause and effect (Umbrecht 319). In other words, “presence-cultures,” like the heptapods, retrieve a synthesis between body and spirit in a way that is characteristic of Medieval thinkers like Aquinas and

Augustine. They have no need to try and make meaning for themselves because they see purpose already inherent in things. In getting a glimpse of the heptapods' worldview, Chiang's protagonist does partially achieve this return to "presence-culture". In learning the heptapods' language, she "[rises] to participate in God's instant" (Taylor 57), gaining an understanding of eternity from her finite perspective. As Ria Cheyne writes, today's created languages in science fiction "bring the alien to readers" (Cheyne 399), but in doing so, they can allow the human characters to become more human. The heptapods gift Banks the ability to see the underlying purpose that comes with a simultaneous view of time. She is able to see an innate connection between things, and thus, is introduced to something much more human in an ontotheological sense.

In this fantastical portrayal of linguistic determinism, we see an alien language illuminating a more human existence through a simultaneous view of time and its consequential performative language. While presented from a utilitarian viewpoint in "Story of Your Life" and *Arrival*, a close examination of the story's premise reveals that its invented language allows us a connection to our reality. Although fictional languages have moved beyond their original purpose of discovering a pre-Babel language, and thereby uncovering "God's divine plan" (Cheyne 387), Chiang's fictional heptapod language does show us a connection to our existence that Classical and Medieval philosophers would consider vital to the understanding of God's purposes.



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