

Class Seventeen: Time and Fate

Philosophy and Science Fiction - Ryan Simonelli

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1 Smart's Four-Dimensionalism

- **The Natural View of Time:** Intuitively, we think that the flow of time is an objective feature of the universe as a whole. It's a basic metaphysical fact that it is now 2022, that 2015 was in the past, and that 2036 will be in the future.
 - This, Smart claims, is anthropocentric, not entirely unlike seeing ourselves as being in the center of the universe.
- **The Four-Dimensionalist View:** Think of time analogous to space, as another dimension. The idea that only the present—the *now*—is real then becomes analogous to the idea that only *here* (Cobb 319) is real, which is clearly absurd.
 - **The Flatland Analogy:** You can get yourself in the four-dimensionalist mindset by thinking of the analogous view about time with respect to the goings on in "Flatland," a two dimensional world.
- **Smart's Plan for Replacing Anthropocentric Temporal Language:** Temporal terms like "past," "present," and "future" are implicitly *indexical*, making reference to the temporal location of the utterance, just like "behind," "here" and "ahead" make reference to the spatial location of the speaker.
 - "is past" → "is earlier than this utterance"
 - "is present," "now" → "is simultaneous with this utterance"
 - "is future" → "is later than this utterance."

Some things aren't translatable:

- "This utterance was future, is present, and will be past." → ???

But Smart sees this as a feature of the translation schema, rather than a bug, since such statements, he thinks, are confused.

- **Empirical Explanation of the Apparent Flow of Time:** Smart goes into a bunch of physics towards the end of the chapter, but the short of it is that temporal assymetry of the universe is due to the assymetry of entropy (disorder) of the things in the universe.
 - If we imagine we're in non-expanding universe in which the direction of entropy reverses after a certain point, time will appear to flow in the opposite direction, once the direction of entropy reverses.
 - * Given what we know about the laws of physics, this scenario is likely not nomologically possible, but it's metaphysically possible, and it makes perfect sense on a four-dimensionalist view.

2 Applying Smart's View to "Story of Your Life" and *Arrival*

- **Louise's Description:** "[O]ccasionally I have glimpses when Heptapod B truly reigns, and I experience past and future all at once; my consciousness becomes a half-century long ember burning outside time. I perceive—during those glimpses—that entire epoch as a simultaneity," (141).

- “I experience past and future all at once” → I experience all events earlier than this utterance and all events later than this utterance “at once”
 - “at once” and “simultaneous” here need to be heard not as denoting a point *in* time, but as expressing a standpoint from *outside* of time, a timeless consciousness of one’s life as a whole.
 - By analogy, consider a four-dimensional being, surveying our universe as a whole, understood as a four-dimensional object. They would see all the events “at once,” but “at once” here doesn’t have the same sense as it does when we say, *in* time, that we experience two events “at once.”
- **Could the Story be Metaphysically Possible?:** Insofar as the apparent flow of time is not due to a *metaphysical* fact about the nature of the universe as a whole, but, rather, *empirical* facts about the things in the universe such as our brains, it seems that it is not *metaphysically impossible* for there to be brains, different than our own, that do not experience a flow of time.
 - **Perhaps Even (Partly) Nomologically Possible?:** Bracket the question of whether a human brain could come to also function this way, as Louise’s does in the story, and just consider, for the moment, whether it’s possible for *some* brain (e.g. that of a Heptapod) to function this way.
- **The Hollywood Ending of *Arrival*:** In the movie *Arrival* (and not “Story of Your Life”), Louise uses her unique atemporal experience as a kind of superpower. When China is on the verge of starting nuclear war, she calls the Chinese general Shang—at time t_1 , say—and tells him his wife’s dying words, which convinces him stand down. Shang only tells Louise these words several months later at a peace summit—at time t_2 , say. So, Louise must know *at* t_1 what she will only find out at t_2 and be able to use this knowledge at t_1 to influence the course of events.
 - Here, it seems that we have to imagine that Louise flips between her perspective as a self-consciously four-dimensional being outside of time, in which she perceives all things at once, and her perspective as a three-dimensional being in time, at which she acts in the present.
 - * We might be able to make sense of this scenario on Smart’s view, but it presents complications that aren’t present in the book.
 - In the book, Louise doesn’t use her apparent foreknowledge at all to influence the course of events—she just becomes less and less of an agent (in our sense of the term).
 - * One of the details they change in the movie is how her daughter dies. In the book, her daughter dies in a rock climbing accident whereas, in the movie, she dies from an unpreventable, untreatable disease.
 - * The decision of the filmmakers to change this detail clearly reflects the fact that, given what she does in the movie, the audience would wonder why she wouldn’t just tell her daughter not to go rock-climbing. In the book, it makes sense that she doesn’t.

3 Taylor on Fate

- **Fatalism:** The view “that whatever happens is and always was unavoidable.”
- **Divine Omniscience:** Suppose that God exists and is omniscient, meaning that he knows everything that is true. Suppose further, as Smart argues, that the future exists no less than the past. In such a case, since God knows all the facts that there are, and God knows all the facts about the future (i.e. all the facts later than this utterance), God knows everything that is going to happen to you.
- **The Life of Osmo:** Taylor has us imagine a person named Osmo who finds a book perfectly describing the whole of his life, even the parts that he hasn’t lived yet. His argument for fatalism proceeds in four steps.

- Osmo became a fatalist because there existed a set of true statements about his future, and he came know this set of true statements existed.
- Osmo's fatalism consisted just in his belief that whatever was going to happen to him was unavoidable.
- Osmo was justified in this fatalism.
- We're just as justified as Osmo.
 - * Though what *caused* Osmo to become a fatalist was his encounter with the set of true propositions about his life, what *justified* his fatalism was the mere existence of such a set. But there exists such a set for all of us (at least if the sort of theory of time proposed by Smart is true)!
- **The Similarity of "The Life of Oslo" and "Story of Your Life":** We're led to believe that Louise could write "Story of Your Life" upon her daughter's birth. That would lead to a situation for her daughter that's exactly like that of Osmo. But, if we're in the *Arrival* scenario, the only difference between us and Louise's daughter is that Louise hasn't spent as much time with us!
- **Smart Against Fatalism:** The idea that the future is "already laid up," hinges on thinking that future events exist *now*. But they don't exist now (i.e. simultaneous with this utterance)—they exist *in the future* (i.e. later than this utterance).
 - It's not clear how this is supposed to resolve the problem. Might we acknowledge they exist *later*, but still think that the mere fact that they *exist* is sufficient to raise the worry of fatalism?

Taylor: "Osmo's biography was expressed in the present tense because all that mattered was that the things referred to were real events; it did not matter to what part of time they belonged," (62)
- **The Common "Refutation:"** The fact that something is *going* to happen doesn't mean that it *must* happen—so it doesn't mean it's *unavoidable*, just that it *won't*, as a matter of fact, be avoided.
 - Taylor isn't persuaded.
- **The Agency Objection:** The fact that there are definite facts about the future can't rob us of our conception of agency precisely because these facts obtain *because of our actions*.
- **Ted Chiang's Solution:** "The heptapods are neither free nor bound as we understand those concepts; they don't act according to their will, nor are they helpless automatons. What distinguishes the heptapods' mode of awareness is not just that their actions coincide with history's events; it is also that their motives coincide with history's purposes. They act to create the future, to enact chronology.

Freedom isn't an illusion; it's perfectly real in the context of sequential consciousness. Within the context of simultaneous consciousness, freedom is not meaningful, but neither is coercion; it's simply a different context, no more or less valid than the other. It's like that famous optical illusion, the drawing of either an elegant young woman, face turned away from the viewer, or a wart-nosed crone, chin tucked down on her chest. There's no "correct" interpretation; both are equally valid. But you can't see both at the same time.

Similarly, knowledge of the future was incompatible with free will. What made it possible for me to exercise freedom of choice also made it impossible for me to know the future. Conversely, now that I know the future, I would never act contrary to that future, including telling others what I know: those who know the future don't talk about it. Those who've read the *Book of Ages* never admit to it (*Taylor's obvious reply*: But isn't the fact that you *could* enough to spoil the illusion of freedom for all of us?)."