

Why Heracliteans Cannot Travel to the Past

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Concerning the no-past destination objection to time travel in regards to the Heraclitean conception of time, William Grey argues that the past is unchangeable and subsequently time travel is impossible. Phil Dowe replies that although the past cannot be changed, it can be causally affected; therefore, time travel is possible. I will argue that the problem with time travel to the past on a Heraclitean conception occurs because of ‘relative future determinism.’

In his paper “Troubles with Time Travel,” Grey asserts that time travel to the past requires that the past be changeable. However, assuming a Heraclitean conception of time, “[t]he past . . . is ordinarily taken to be fixed and determined and not subject to change” (Grey, 57). Therefore, as it is impossible to change the past, time travel to the past must be impossible.

Dowe replies to this objection in his paper “The Case for Time Travel.” He states that Grey’s no-past-destination objection to time travel applies equally to the Parmenidean conception of time. He finds it odd that Grey would restrict this objection to the Heraclitean view. While the Heraclitean view holds the past to be fixed, the same is true on the Parmenidean conception, which holds future truths as fixed as well. Assuming Grey’s objection to be correct, it would apply to both the past and future.

Dowe also says that Grey’s objection is “based on a confusion between causing and changing past events” (Dowe, 444). Per Dowe, past events cannot be *changed*, but they can be *caused*. So, the no-past-destinations objection applies neither to the Heraclitean nor the Parmenidean conception of time.

Travel to past does not require changeability of past. Just because the past is fixed does not mean that a time traveler cannot affect the past. Dowe consents that the past cannot be changed, as changing the past would bring about a contradiction; something would happen and not happen. “If a man lived through 1950, then one cannot go back to that year and kill that man.” But, he says, the past can be affected. “If it is true that a man died in 1950, then a time traveler can travel back and kill that man that year” (Dowe, 444).

	Traveler Time	Year	Observer Time	
Past	Time A	1950	Time A	Past 1
Present 1	Time B	2010	Time C	Present
Present 2	Time C	1950	Time A	Past 1
Future	Time D	1955	Time B	Past 2

Table 1: Traveler Time vs. Observer Time

While Grey and Dowe make interesting assertions about time travel to the past,

I contend that the real problem lies in the relative future of a time traveler arriving in the past (See Table 1). On a Heraclitean conception of time, once a time traveler arrives in the past, the past (Traveler Time B) will then become his present, and the relative future (Traveler Time C) for that traveler will already have occurred in the past on his personal timeline. Therefore, the traveler's relative future would be determined in such a way that the 'future' is no longer "genuinely open" as required by the Heraclitean conception of time (Grey, 57). I call this concept 'relative future determinism.'

I have no quarrel with the notion that past events can be caused but cannot be changed, and that this claim allows for time travel to the past. However, because of 'relative future determinism,' there remains an inconsistency. For this reason, I conclude that time travel to the past is not possible for Heracliteans based on their conception of time.



Figure 1: Tabitha Rides a Time Bike

References:

- Dowe, P. (2000). The Case for Time Travel. *Philosophy*, 75(293), 441-451. Retrieved from <http://www.jstor.org/stable/3751943>
- Grey, W. (1999). Troubles with Time Travel. *Philosophy*, 74(287), 55-70.

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