Time, Truth and Modality

The purpose of the project is to investigate the relations between truth and time-sensitive modality (necessity and possibility). We use these time-sensitive modalities when we say that in 1920 it was still *possible* to prevent the Second World War, but by August of 1939 the War was already a *necessity*.

The link between truth and time-sensitive (or "historical") necessity was forged in philosophers' minds by Aristotle (*On Interpretation*, chapter 9). He argued that a sentence can be true only if it is historically necessary (and false if it is historically impossible). This general observation, together with some fundamental principles of logic, allowed him to construct two arguments to the effect that nothing ever happens by chance—the actual course of events has always been inevitable. This general conclusion, if true, has serious consequences for our ideas of action, freedom, and autonomy. Since determinism is all-encompassing, the course of our entire life was fixed long before we were even born. This in turn undermines our impression that our fate is in our own hands.

In reaction to Aristotle's arguments, many medieval philosophers and theologians questioned some of his assumptions. Some of them rejected certain principles of logic, but many tried to sever the apparent link between truth and historical necessity. This line of thought was largely abandoned and it is now mainstream in the philosophy of time and philosophical logic to assume that truth essentially involves historical necessity. The central purpose of my project is to defy the mainstream, revive medieval ideas, and preserve the contingency of the future.

My approach is multi-dimensional. Firstly, I plan to inspect the essence of Aristotle's ideas by constructing what I call "the simplest" deterministic argument. I believe that when the argument is seen in its purest form, it is easier to identify the weakest link, which in my opinion is the assumption that truth requires historical necessity. I intend to argue that the notion of truth itself is free from modal connotations; they are introduced (often implicitly) by external additions.

Secondly, I supplement the logical investigations with supporting metaphysical considerations: I plan to study how temporal truths are related to the temporal reality. One intuition supporting logical determinism is the view that truth is "local", which means that whatever is *currently* true needs to be true in virtue of what *currently* exists (some positions in the metaphysics of time seem to support this view). I intend to argue that this local notion is not obligatory and it can (or even should) be replaced with a trans-local idea: what is presently true may depend on what will happen in the future.

Thirdly, I plan to inspect how the everyday usage of language sheds new light on the old philosophical debate (and supports my general conclusion). I investigate the practice of future-oriented assertions (i.e., predictions) and argue that true but contingent propositions are required to rationalize our linguistic behavior. I plan to undermine alternative approaches and defend the truth-based account of predictions against chosen counterexamples.

Finally, I plan to explore a neighboring field of research and check what linguists think about the link between truth and necessity. Many of them seem to follow Aristotle's insight, but there is a school that denies that future tenses involve any form of necessity. My plan is to explore their arguments and check if the ideas and arguments in the field of linguistics transfer to philosophical logic (and *vice versa*).

I hope the effects of my research will lead philosophers (and, by extension, the general public) to rethink the relations between time, truth, and necessity. As soon as we admit that truth involves no form of necessity, we can preserve the central tenets of logic without sacrificing the contingency of the future, which seems so central to our autonomy and freedom.