**Causality and Signaling**

In order to benefit from a signal, we need to have some knowledge of what it is that the signal is signaling. This knowledge need not be of the absolute cause of the signal nor of the intention of the signal, but simply some information carried by the signal. We simply need to know something that the signal carries information about.

This is a very easy to meet criterion for a number of reasons, the primary reason being that we do not observe signals in isolation, but alongside things that the signals may carry information about. If we observe a correlation between the occurrence of something and the occurrence of the signal, then we may infer that this signal may carry information about this occurrence. Of course there is a rich body of theory associated with how these relations are learned and what constitutes a legitimate causal relation as opposed to a spurious correlation, so we will leave it largely to this body to cover the details. For now suffice it to say that a signal only has meaning if it carries information about something.

In this definition of a signal, there are natural signals and artificial signals…

Go through a simple example of learning a signal about something in the world.

Explain that this generalizes to our entire epistemic experience. (prediction, correlation, modeling, signals, generalization, etc.)

But what about signals for things that we cannot observe? How do these work?

Argue that we have many of these and use them all the time, especially when communicating between humans.

Explain the epistemic structure of these signals.

Perhaps argue that all signaling and language related processes ought to be understood in terms of their underlying epistemic structure.

Talk about how this type of study sheds light on a number of phenomena such as:

* Epistemic flexibility (that coordination does not require absolute understanding and alignment
* That there exist cases where the meaning of a signal or the associated alignment is easier to reason about than in others
* That there exist cases where this alignment is entirely undetectable and where the meaning of the signal is entirely on faith
  + And discuss the implications of this for philosophy of mind

Also potentially bring in some other recent work that is effective due to its use of the epistemic structure principles motivated in this theory.