



# Inductors

## 1 Why

We want to talk about learning associations between perceptions in time or space.

## 2 Definition

Consider two sets and a relation between them. Consider a finite sequence of elements from their product. An *inductor* is a function from the set of finite sequences of elements from the product of the two sets to the set of functions from the first set to the second set.

We call the first set the *precepts* and the second set the *postcepts*. We call the finite sequence of elements the *record sequence* and an element of it a *record*. We call a function from the precepts to the postcepts a *predictor*. We call the result of a precept under a predictor a *prediction*.

An *inductor* is a function from record sequences to the set of predictors