Why

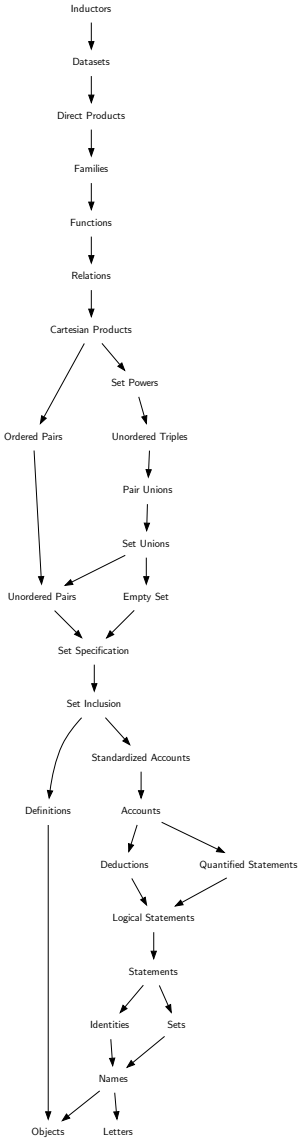
We want to talk about learning associations between perceptions in time or space.

Definition

An *inductor* is a function mapping a dataset of records in a cartesian product of two sets to a function between the two sets. We call the first set the *precepts* and the second set the *postcepts*. 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 maps datasets to predictors.

Notation

We introduce no new notation, but rather express the new concepts in the old notation. Let A and B be non-empty sets. Let D be a dataset in $A \times B$. Let $g : A \to B$, a predictor, which makes prediction $g(a)$ on precept $a \in A$. Let $f : (A \times B)^n \to (A \to B)$, an inductor. Then $f(D)$ is the predictor which the inductor associates with dataset D.


Inductors
Datasets
Direct Products
Families
Functions
Relations
Cartesian Products
Set Powers
Ordered Pairs
Unordered Triples
Pair Unions
Set Unions
Unordered Pairs
Empty Set
Set Specification
Set Inclusion
Standardized Accounts
Definitions
Accounts
Deductions
Quantified Statements
Logical Statements
Statements
Identities
Sets
Names
Objects
Letters