



# Distribution Selection

## 1 Why

We have a dataset in some set and want to summarize it by a probability distribution.

## 2 Overview

We have a set of outcomes  $A$ . We have a dataset  $(a^1, \dots, a^n)$  in  $A$ . We want to define a correspondence between the dataset and probability distributions over the set of outcomes  $A$ .

We will call proposals for such a correspondence *principles of distribution selection*.

Notice that we do not want a distribution on the record sequences. In other words, we want a distribution on  $A$  not a distribution on  $A^n$ .