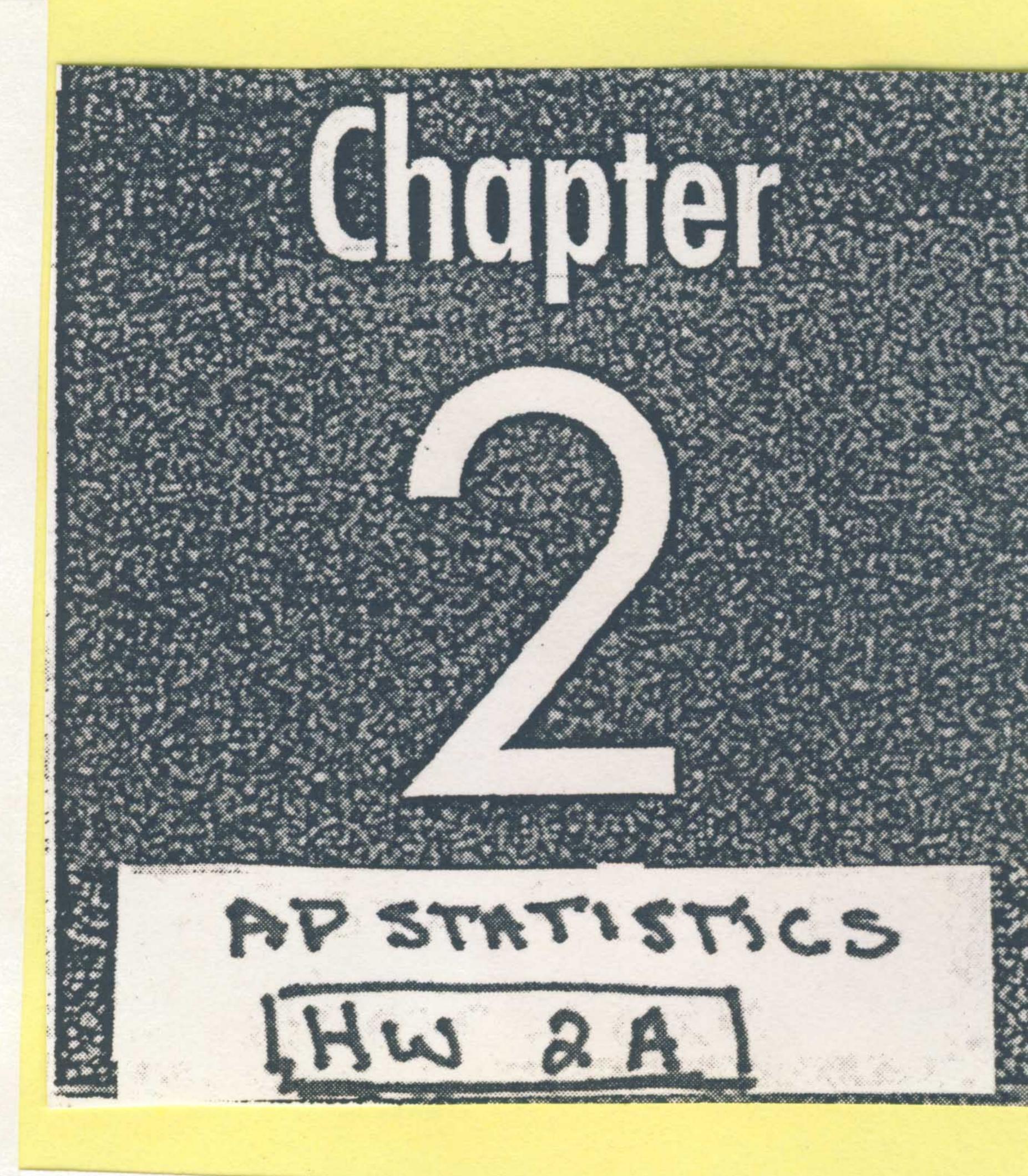


Sampling and Experimentation



Overview of Methods of Data Collection

There are four methods of data collection with which you should be familiar: census, sample survey, experiment, and observational study.

A census is a study that observes, or attempts to observe, every individual in a population. The **population** is the collection of all individuals under consideration in the study.

A **sample survey** is a study that collects information from a sample of a population in order to determine one or more characteristics of the population. A **sample** is a selected subset of a population from which data are gathered.

An experiment is a study where the researcher deliberately influences individuals by imposing conditions and determining the individuals' responses to those conditions.

An observational study attempts to determine relationships between variables, but the researcher imposes no conditions like an experiment. Surveys are a form of observational study.