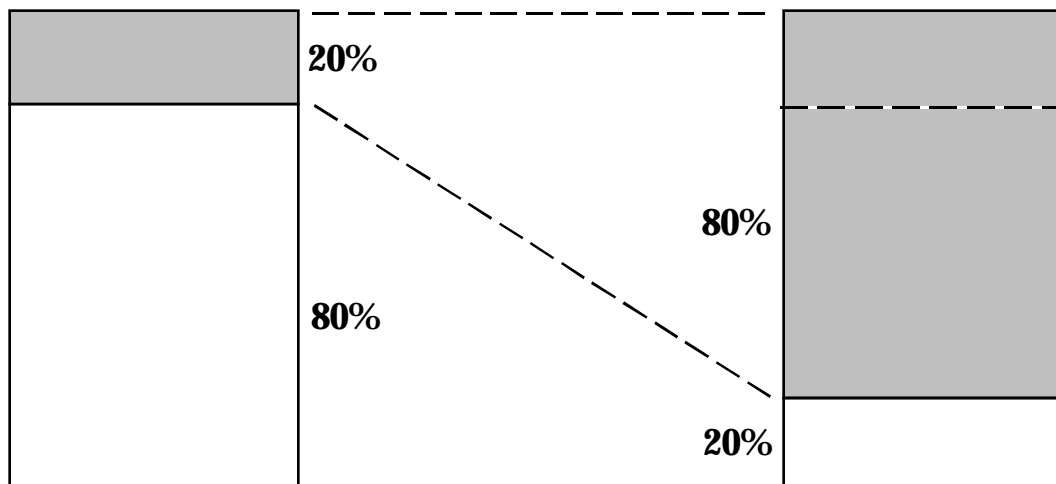


The Pareto Principle

The Pareto Principle was propounded by Vilfredo Pareto (1848-1923) when he observed that 20 percent of the people of Italy owned 80 percent of the wealth. This concept of disproportion often holds in many areas. The exact values of 20 and 80 are not significant; they could actually be 10 percent and 60 percent. What is important is that there is a considerable disproportion. The values of 20 and 80 just have a simple symmetry. This principle of concentration, inequality, or inverse proportion can be seen from the following diagram, where the smaller first part increases to the larger second part as shown in gray.



Other such situations follow; there are many in real life.

- 20% of the time expended produces 80% of the results
- 80% of your phone calls go to 20% of the names on your list
- 20% of the streets handle 80% of the traffic
- 80% of the meals in a restaurant come from 20% of the menu
- 20% of the paper has 80% of the news
- 80% of the news is in the first 20% of the article
- 20% of a home collects 20 percent of the dust
- 20% of the people cause 80% of the problems
- 20% of the features of an application are used 80% of the time

These Pareto-type observations are not necessarily bad, or good. For example, if only 20% of the roads in a town handle 80% of the traffic, then that could be good for a maintenance crew who can concentrate mainly on the fewer roads; but it could be bad for commuters who take the busy roads. Such Pareto observations could lead to strategies; road crews could try to move commuters off of the busy roads, or commuters could move off on their own.

The important thing is to notice any such disproportions, and then possibly act on such observations.