

SECTION 8: Generalisation of Map Detail

Generally, the amount of detail which can be included on a map is determined by the map scale—only on very large scale plans is it possible to include every feature. The amount of detail which can be depicted decreases rapidly as the map scale becomes smaller.

Maps which contain too much information become cluttered and difficult to read, and are of little use. The cartographer must therefore use a process of simplification and selection to ensure that the map contains a maximum amount of information but at the same time remains readable. This process is known as 'generalisation'.

SIMPLIFICATION

Cartographers commonly simplify data by smoothing outlines and making shapes less complex so that they are more easily read; by aggregating data so that a number of small features are represented by a single symbol; and by grouping categories of data to reduce the number of categories shown.

SELECTION

Selection is undertaken by ranking the map data in order of importance. The least important can then be omitted or amalgamated as map scale decreases. For example, a large scale map may show all six categories of a particular road classification whereas on a smaller scale map of the same area only the two most important categories might be included, or the four most important categories may be combined into two and the lesser two categories omitted.

The size of features is also an important selection criteria; larger features are retained whereas smaller features are omitted as map scale decreases.

Other factors, such as the large amount of space required by braille and bold type, and the necessity to leave enough space between features on a map so they can be identified by touch, impose severe limitations on the amount of detail which can be shown on tactual and low vision maps.

Figure 7 gives examples of generalisation for different map scales. Figure 7.1 depicts the same section of a town map at two different scales. You will notice that the less important streets and street names have been omitted at the smaller scale and that the railway station symbol has been simplified.

Figure 7.2 depicts a series of lakes at two different scales. On the smaller scale map the two largest lakes are unaltered but the smallest lakes have been omitted and the small lakes close together have been combined into one. However, the three lakes remaining at the small scale still indicate that more than one lake in fact exists. Also the overall shape of the series of lakes has been preserved.

Figure 7.3 illustrates how toilets on maps at two different scales may be depicted. The large scale map shows the layout of the toilets with their entrance on Main Street and the individual cubicles. At the small scale a single symbol is used to show the location of a toilet facility in relation to the street.

Figure 7.4 depicts how a stream pattern has been simplified by omitting the smaller and less important streams shown at the larger scale.

Figure 7.1

Town Map — large scale

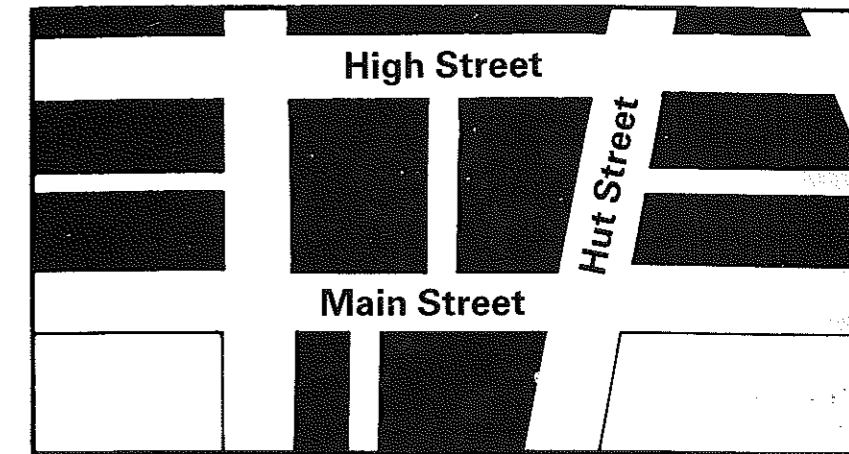


Figure 7.2

Lakes — large scale

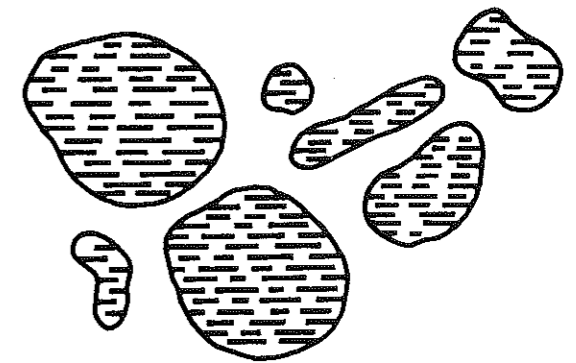


Figure 7.3

Toilets — large scale

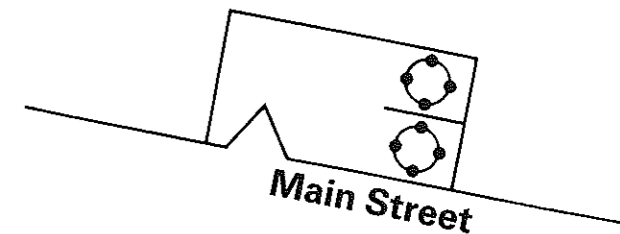
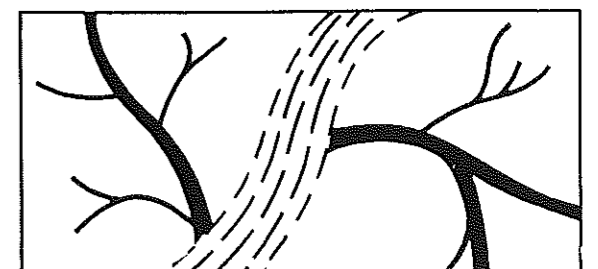


Figure 7.4

Rivers — large scale



space required by braille and bold
 e between features on a map so
 re limitations on the amount of
 v vision maps.

different map scales. Figure 7.1
 wo different scales. You will notice
 es have been omitted at the
 mbol has been simplified.

fferent scales. On the smaller scale
 he smallest lakes have been
 ve been combined into one.
 all scale still indicate that more
 shape of the series of lakes has

wo different scales may be
 out of the toilets with their entrance
 t the small scale a single symbol is
 n relation to the street.

been simplified by omitting the
 the larger scale.

Figure 7.1

Town Map — large scale Town Map — small scale

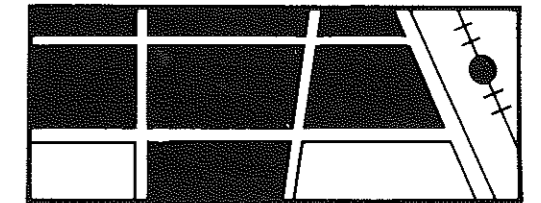
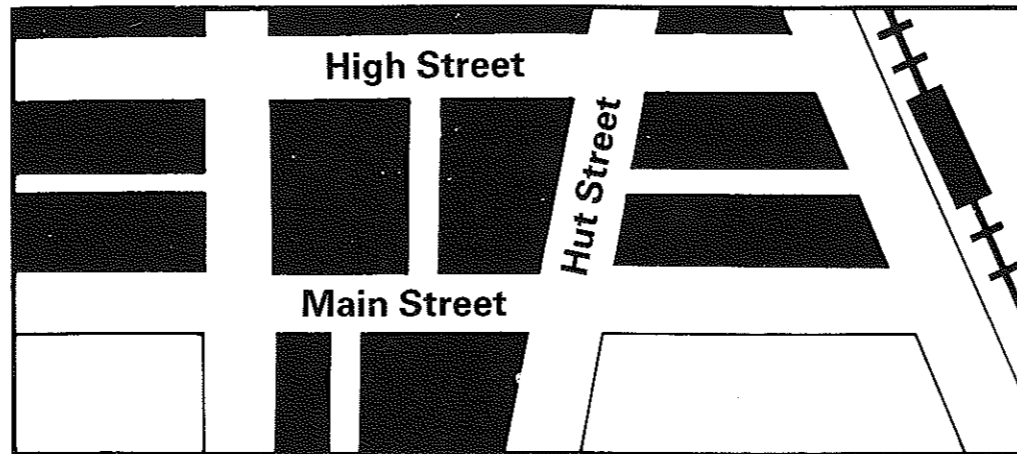


Figure 7.2

Lakes — large scale Lakes — small scale

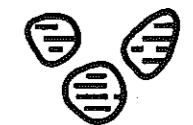
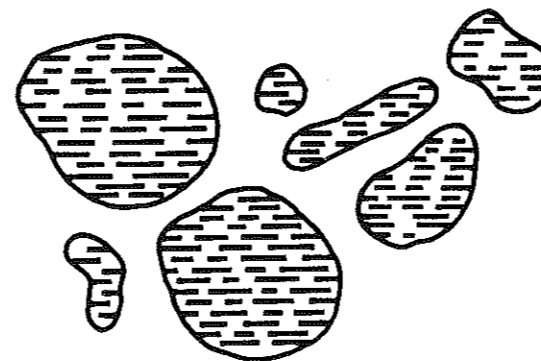


Figure 7.3

Toilets — large scale Toilets — small scale

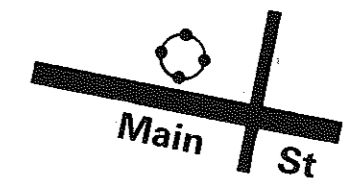
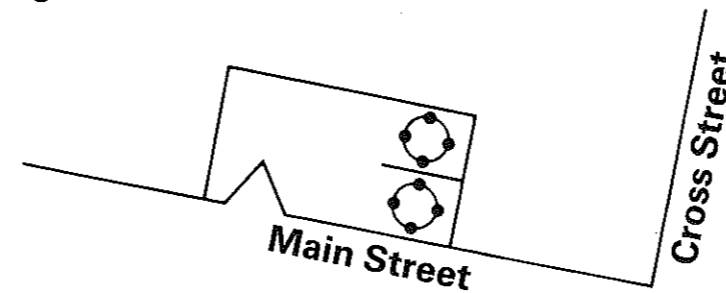


Figure 7.4

Rivers — large scale Rivers — small scale

