A major problem faced by librarians, historical geographers, historians, and all others interested in early maps, is to assign to them some date if this is not already printed on them. The problem may arise because the map held by the library was once part of an atlas (probably published in the United Kingdom, Europe or North America), or was contained in a book, periodical, parliamentary paper or some other official publication. Subsequently it has been torn out, and contains no indication of its source or date of publication. Such vandalism has been common (and possibly still is), not only among amateur collectors, but also among dealers who sold the individual maps to separate buyers at an inflated price. Although the original source of such maps may often be tracked down by reference to atlas and map bibliographies, such published bibliographies of New Zealand maps are as yet but few in number.

Dating a map is not always as simple as it may appear at first sight, even when a map does have a date printed on it. To begin with, even if a map appears in a book or report published say in 1866, there is no guarantee that the map was published in the same year, or even if it was, that the data portrayed apply to that year. This is true particularly of maps published overseas. For example, a chart of Banks Peninsula which appeared in the British Parliamentary Papers, 1850, actually showed features as they were in 1844-45.

Where a date is given on a map it is necessary to treat it with care, as this date may apply to (a) when the map was published and/or corrected, (b) when the base map was drawn, or (c) the date of the information portrayed. All three may be different, and obviously it is very important to know which of these a date represents.

In the first case, the data shown may apply to some years previous to the date of publication, as in the example given above, but this may not always be obvious from the map itself. Thus in the British Parliamentary Papers for 1860 there appears a map of Maori flour mills in the Waikato, but it is only by reading the associated paper that one learns that what is portrayed is the location of mills as they were some seven years previously, namely in 1853. If this is not realised completely wrong historical interpretations may result from the use of the map.

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In the second instance the base map data may be true of the situation some five or ten years previous to the overprinted material, and the former is merely used as a locational framework and rarely brought up to date. An example of this is a map titled "New Zealand Showing the State of the Public Surveys, 1901" (A.J.H.R. 1901 C.l. p. 232) for which the base map is dated 1891. Obviously the roads and railways on this map cannot be accepted as showing the position in 1901.

The third case, the date of the information shown, is the most significant and important date which can be noted about a map, and this is the one which should be used in cataloguing. (See S. W. Boggs and D. C. Lewis: *The Classification and Cataloguing of Maps and Atlases*, New York, 1945.) Generally this date is shown as part of the title or immediately beneath it.

On some maps three or even four dates may be printed, as is typical of many of the nineteenth century hydrographic charts of New Zealand. Although a date, or dates, are given in the title referring to when the original survey was carried out (e.g. 1851), a reference at the bottom of the map may note that the map was published in 1861 and corrected to 1868, while the compass rose gives the magnetic variation for 1886. Which date should be ascribed to the map? Although much of the coastline and other navigational data will be correct to 1868, other information shown, particularly on the land, will in all probability still apply to the position as it was in 1851 at the time of the original survey. Thus preferably both of these dates should be referred to in connection with this chart, i.e. "1851, corrected to 1868". The fact that the map was first published in 1861, and that the particular copy held was printed about 1886, is of little significance.

Where no date at all appears on a map the problem is more difficult and the result may often not be very reliable. If no reference to the map can be found in map bibliographies, an approximate date may be obtained by internal dating, that is by an examination of the data shown. However, R. A. Skelton, Map Curator at the British Museum, has pointed out in his book *Decorative Printed Maps of the 15th to 18th Centuries* (London, 1952, p. 22) that: "The geographical facts in a map are most suspect of all the evidence for dating it. Anachronism is common. A cartographer cannot draw details unknown to him, but he can—and frequently did—omit information known to him or his contemporaries. We may accordingly assign to a map a *terminus post quem* from what it includes, but are not justified in inferring a *terminus ante quem* from what it omits. A map which draws New Zealand as two islands, separated by Cook Strait, must be later than Captain Cook's first voyage (1768-71); a map showing only the west coast, with no strait, must be later than Tasman (1642) but may be later than Cook."

This is well illustrated by an example from an English school atlas which recently came into the writer's possession. No separate map of
New Zealand is included, but the country is shown on the map of the world. Here Stewart Island is joined to the South Island and Banks Peninsula is represented as an island just as Cook originally charted them. Thus a study of this evidence alone would suggest that the map had been drawn between about 1772 and 1815. The title page gives the date of publication as 1850! This anomaly has resulted from either the failure of the cartographer to correct the New Zealand section when copying from much earlier maps, or as commonly happened, old engraving plates being used over and over again in order to keep costs low despite the map's growing incorrectness.

Unfortunately, in a few instances Skelton's thesis, that we can give a terminus post quem from what a map includes, does not totally apply in the case of some maps of New Zealand published in the 1840s. Thus a map showing Dunedin is not necessarily post-1848, the year of the city's settlement, but may in fact have been published any time after the site for the future settlement was decided upon, namely 1844. Such exceptions are rare, however, and by means of towns, administrative boundaries, communication patterns and so on a map published after 1840 may be dated with a relatively small margin of error. The need to know many facets of New Zealand's political, social and economic history is obvious.

Maps which are already dated may be compared with undated maps, and by a comparison of the features shown a general guide as to when the latter were published may be obtained. This is an approximate date only, for the dated map may not in itself portray an accurate and complete picture. Even mistakes on maps may be used to assist in the task of assigning an approximate date. Thus any map of New Zealand on which a large "Taranaki Bay" is shown on the south Taranaki coast in all probability belongs to the period ca. 1827-1840, for these were the years when this mythical bay was thought to exist.

Many maps of the early 1840s may be accurately dated by the reviews of them which were published in the New Zealand Journal and in some of the early New Zealand newspapers. Unfortunately this practice of reviewing maps was not continued.

The dating of manuscript maps is the most difficult of all, particularly if they are not on a small scale showing a large area but rather form a large-scale plan of a small local district. These latter maps are the ones which often turn up in our libraries. Internal dating may prove difficult because of the paucity of data shown or because of the very specialised nature of them, such as the boundaries of a specific property. Maps of subdivisions may in some cases be dated by reference to local body records. If the author or surveyor is known, research will probably reveal the years in which he was active and thus give a clue to probable dates.

The use of watermarks has proved of great value overseas in helping to date manuscript (and printed) maps, but this method is generally of more limited application to New Zealand manuscript
maps with the exception of early ones. A note of warning is necessary, though, namely that the map being dated may possibly be a tracing or copy rather than the original, and thus a watermark dating may be misleading in that it could post-date the original by several years.

One fact which should be obvious to the reader is that dating a map is often not an easy matter, and should not always be left to the most junior librarian. Preferably one staff member should specialise in this aspect of library work. It is only by constantly handling maps, by having a detailed knowledge of New Zealand’s historical geography and economic history, and if possible by visiting such major map collections as that housed in the Alexander Turnbull Library, that proficiency in dating maps will be obtained. Unfortunately even in the Turnbull Library a number of maps are dated incorrectly.

A note of warning about the use of maps is in order. It must be recognised that a map is only one more source of historical information, not necessarily more accurate or truthful than any other, and they can be just as misleading as the printed word. Thus many urban street maps of the nineteenth century show New Zealand towns as they were planned to grow—not necessarily how they were at the time the map was published, nor indeed the pattern of expansion which eventually occurred.

Finally, may I make a plea for librarians to treat all historical maps with care, and to assist in their preservation. Maps are just as valuable as books; yet they are often mistreated. Recently I wished to consult an early map of Wellington, only three copies of which are known at present to exist, one of them in London. It was disheartening to find that the Turnbull Library reported their copy as missing, while the Evening Post copy was folded in half in a brown paper envelope and gradually disintegrating along the folds. Within a decade it is possible that no copy of this map will be able to be inspected in New Zealand.

If no space exists in your library for the storage of maps, or there is no interest in them, please deposit any obtained in a research institution such as the Hocken or Turnbull Libraries where trained staff and space are available to enable maximum use to be made of them.