An Overview of 'Charting 19th Century Australasian Whaling Voyages'

Background

In Australia the Pacific Manuscript Bureau (PMB) digitised microfilms of American whaling vessel logbooks/journals and the Australian National Library's online 'Trove Newspaper Archive', provide ready access to an extensive collection of maritime data. Over the last 50 years researchers have used these resources to compile comprehensive and extremely useful lists of vessel information. It is also well known that logbooks/journals for most 19th Century Australasian whaling voyages have not survived.

Today, researchers and the public are looking for and are expecting to see information presented in a different and more helpful way. Most people are familiar with the adage - *a picture is worth a thousand words,* which in our case means maps and charts. To date a small number of 'primitive' track charts have been produced by authors to set the scene in their books or articles. All of these track charts are based on extant logbooks.

With Geographic Information System (GIS) software we now have a relatively easy to use tool with rich features to produce complex maps. In the case study we will demonstrate that PMB and Trove materials can provide us with sufficient secondary source co-ordinate and event data to produce a useful indicative map for a voyage where there is no extant logbook. Secondary source data, where available, can also be used to supplement and enhance track charts produced from partial extant logbooks or where the extant logbooks contain little or no location information.

Mapping Software

GIS software has been available for nearly 20 years for the compilation and production of maps. The tools used for the case study are free. Open source QGIS (previously known as Quantum GIS) is combined with 'Natural Earth 10m coastline data' to produce the case study indicative voyage map.

Case Study

The case study will map the 1868-69 voyage of the barque *Runnymede.* This voyage has no known log and producing the indicative map is a 2 stage process i.e. data collection and map production.

Stage I involves searching the secondary sources for target articles and logbooks. After excluding clearance, departure, arrival, etc. advices, 19 newspaper reports as well as the Ships Log and Captains Journal of the *Europa (New Bedford)* were identified. Of these the primary sources are 2 arrival reports published in the 'Shipping Intelligence' columns of both *The Mercury (Hobart)* and *The Tasmanian Times* on 23 February 1869. After removing duplicates, 34 co-ordinates remained, 23 actual positions (19 from newspaper reports and 4 from the *Europa* logbook) and 11 derived from geographic information. From the newspapers 22 events were also identified.

Stage II involves using the GIS software to create a dot chart from which and an initial base map is produced. This is further enhanced by including event data and directional arrows showing the vessels actual or indicative transits. The placement of the transit arrows was checked by correlating the case study data with actual daily positions from 13 other documented *Runnymede* voyages to the same grounds.

Map Data

Both track charts and indicative maps require two types of data. The first is a latitude/longitude pair or a geographic location that can be converted to co-ordinates. The second is context information or events such as departure, arrival, anchoring, speaking, arrival on ground, departure from ground, etc. which have no co-ordinates but enhances a map by providing additional data to complete the picture. The main secondary source is a speaking or other sighting report from a spoken with or different vessels logbook. Also, newspapers often published voyage reports which normally included spoken vessels as well as brief or detailed summaries. Some reports also provided co-ordinates.

Data Issues

It will not be a surprise that the most significant issue is the lack of co-ordinate data. We have complete or partial logbooks as well as no or less than useful log entries and/or newspaper reports. In the extreme case the production of some voyage maps is pointless as the only available data is a departure and arrival record. The following examples demonstrate these issues.

The barque *Runnymede* of Hobart ventured on 27 whaling voyages from a launch in 1849 to its loss in 1881. The vessels extant logbooks encompass the largest number of voyages of any Australasian whaling vessel and document 11 complete voyages (40.7%) and 4 partial voyages (14.8%) or 55.6% of voyages covered by substantial documentation. Undocumented *Runnymede* voyages therefore number 12 (44.4%).

In the case study 1868-69 voyage, the *Runnymede* spoke the American whale ship *Europa* (New Bedford), twice on different grounds, and the *Louisa*, *Flying Childers* and *Offley* (all Hobart whalers), two of which were spoken twice on different grounds. In addition, a coaster reported the *Water Witch* (another Hobart whaler) as having spoken the *Runnymede*. Of the 5 spoken whaling vessels only the *Europa* (New Bedford) has known documents i.e. Ships Log and Captains Journal.

On voyage completion, the 4 Hobart whalers and the coaster were the subject of 9 newspaper arrival reports. However, 4 reports (*Offley* and *Water Witch*) do not mention any other vessels and not one of the remaining reports contains co-ordinate data applicable to the *Runnymede*. The *Runnymede* report of 23 February 1869 in *The Mercury (Hobart)* does not mention any *Europa* encounters and the report on the same date in *The Tasmanian Times* only mentions the middle ground encounter.

Recently, using just PMB and Trove material, 330 American whaling vessels covering ~498 voyages were identified with Australasian speaking's. Unfortunately, ~45% of the identified voyages are missing from the PMB catalogue. It must be noted that the number of documented *Runnymede* voyages is an anomaly for an Australasian whaling vessel and no inference can therefore be made that missing Australasian logbooks are also of the same order when the small number in Australian and overseas collections clearly shows a far higher loss.

Newspapers have always printed for their local audience. Most voyage reports are informative but of little use for mapping. This is especially true as owners were interested in the catch as an indicator of the voyages profit or loss. When or where a vessel was spoken was not of concern.

Some logbooks, including Australasian, do not include co-ordinates and others record co-ordinate data when transiting between grounds but not whilst cruising. Frequently co-ordinate entries were not entered when trying out. Fortunately, most vessels when operating close to land recorded geographic information from which co-ordinates can be derived from a chart with manual methods.

Mapping Issues

It is unlikely that a track chart can ever be created with secondary source data only as the number of co-ordinates for the target vessel will always be too small compared to the data available from an extant logbook, even for a partial voyage. Secondary source co-ordinates are disparate points in time that cannot be connected to form a continuous track. Therefore, any resultant map can only represent an indicative voyage.

Also, all track charts and indicative maps are bespoke. Indicative maps require considerable manual effort to identify, extract and create the map. All logbooks are hand written and currently there are no software tools to search and extract anything from this source. Trove materials can be searched but the software has limitations and if the scan has issues then relevant articles may not be found. The map creation process is also very manual even with templates.

Conclusion

The case study prototype demonstrates that secondary source data can be successfully used to create useful indicative voyage maps for vessels with no extant logbooks and that the method can also be used to supplement and enhance track charts for vessels with partial extant logbooks. At this stage the data collection, extraction and map production processes are manual and time consuming. In the short term mapping would be limited to extant logbooks and collecting data to identify future target voyages where useful maps can be produced.

References

All data from *Runnymede* Voyage Logs in the WL Crowther Collection, State Library of Tasmania. CRO82/1/44-47; 54-57

Log of the whaling ship *Europa* of New Bedford 1867-71. New Bedford Whaling Museum. Item ODHS 0323 PMB261.

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