



Pen and ink on vellum. The surviving fragment represents a vertical strip taken out of the lower left quarter of a dismembered chart, and covers half that chart's height. The coastlines shown include the lower half of the Iberian peninsula and the north African coast, almost from the usual termination point in Western Sahara, as far east as Oran in Algeria. The size of the original chart can be estimated at 640 by 1050mm. The fragment survived because it was re-used in the binding of an unidentified volume measuring 164 by 108 by 65 mm.

A FOURTEENTH-CENTURY CATALAN CHART FRAGMENT

[Portolan chart fragment]

Author

[?Soler, Guillem (fl1368-1402)]

Publication date

c.1380].

Publisher

Publication place

[Palma, Majorca,

Physical description

Pen and ink on vellum. The surviving fragment represents a vertical strip taken out of the lower left quarter of a dismembered chart, and covers half that chart's height. The coastlines shown include the lower half of the Iberian peninsula and the north African coast, almost from the usual termination point in Western Sahara, as far east as Oran in Algeria. The size of the original chart can be estimated at 640 by 1050mm. The fragment survived because it was re-used in the binding of an unidentified volume measuring 164 by 108 by 65 mm.

Dimensions

312 by 209mm. (12.25 by 8.25 inches).

Notes

The full chart would have had two rhumb line networks, with the centres of the hidden circles placed, respectively, in northern Spain (just off the top of the fragment) and the Aegean. The twin centres would have met north of Sicily. The bottom of the fragment may well represent the original lower edge. On the analogy of the 1385 Soler chart discussed below, the line running beneath the scale bar would represent the lower margin of the chart's central section. At the west the chart would have continued further to the south so as to include Cape Bojador and the Canary Islands.

It is argued below that this chart would originally have included the signature of the Catalan chartmaker Guillem Soler (fl. 1368-1402), who worked in Palma, Majorca. He is known from two, visually very different, signed productions, representative of the range of Catalan work: one a plain chart dated 1385 in Florence, the other an ornate version with an undated inscription in Paris. The fragment must come from a work of similar size to that of the 1385 chart. The double-page illustration in Pujades (2007 pp.158-9) gives a very good idea of what the fragment would have looked like in its original context.

Significant features

The fragment has four distinctive features which help confirm the Soler authorship: sadra, the "Plages arenoses..." inscription, the scale bar, and the single town vignette.

At the bottom of the chart, set into the unknown interior of Africa, is one large name, written exactly thus sadra:- It appears in precisely the same way on the 1385 Soler chart but the relevant area is missing from the undated one. Sadra was not seen on any other fourteenth-century chart, although, being close to the edge of the vellum, this area is sometimes missing. Nearby is a truncated inscription. This appears in full on the 1385 Soler chart but only its right-hand section is preserved on the undated Soler chart. The folding table in Ramon Pujades's study of the 1439 Vallseca chart transcribes 29 legends from 11 Catalan charts between 1330 and 1439. Several start "Plages arenoses... [Sandy beaches]" and a few have a similar wording. However, the Soler inscription is unique, and the fragment follows that form exactly. The missing sections of text are supplied here in square brackets from the 1385 chart; the contractions are filled out in italics:

[*"Plages arenoses desertes si*]no de peschados los quals dien sisotz X milles en mar [*trobaretz X passes de fons per*] tota esta costera segons que seretz en mar mes homeny's"

Two small sections - involving milles and per tota esta coster - could not be clearly read on the 1385 chart but are here confirmed. The eight surviving words in the equivalent inscription on the undated chart are the same as the other two, underlining that this wording is specific to Soler and was carefully repeated by him.

The scale bar, with its double line above filled in with light yellow-brown wash, is typical of Catalan work of the second half of the fourteenth century [see Pujades, 2007 p.220 for a composite display]. What is not found other than on Soler's work is the way that the long scale strip running across the middle of the bottom of the chart is bounded by north-south rhumb lines to create a block of empty space beneath. This represents the central portion of the chart's lower border. We can therefore assume that the fragment's truncated scale bar would have run across to the equivalent position at the right side and that it would also have been repeated at the top.

The fragment is unusually devoid of decoration. It does not even contain the name for the south-west wind, Libeccio, within the usual circular frame. The fragment's lack of non-functional ornament

makes it more likely that this was a very rare survivor of the type of unadorned chart designed for use at sea. As such, it would have been priced down for the large seafaring market. Far more than the highly ornamented landmen's productions, which survive in disproportionate numbers, this is faithful to the practical purpose of a portolan chart. Like so many other once rare but essential objects, this should be treated as a highly valuable piece of ephemera.

The fragment's sole decorative feature, the stylised vignette of trimssi, denotes Tlemcen in northwestern Algeria. This was a major trading centre in the Middle Ages, both for the cross-Saharan traffic and for that along the Maghreb littoral. Soler's almost equally plain chart of 1385 added equivalent vignettes for Marrakech (marochs) and Granada, which could have appeared here. Had a more elaborate model been followed, such as Soler's other, undated chart, the fragment would have had several flags, the Atlas mountain range and river courses as well.

Soler's formula for Tlemcen – since the three versions are indistinguishable – was to place a pair of towers either side of a central building with a tall minaret, all within a walled enclosure. This was viewed from a slight elevation, allowing the back of the inner wall to be picked out in red. An equivalent view had appeared on the earliest Catalan charts but neither that, nor the contemporary productions of the Cresques atelier, matches Soler's style. Typically, and surprisingly, after the Catalan Atlas had shown just a single internal tower, three of the four charts assigned to that atelier [see Pujades, 2007, p. 63] place the central tower outside the town and behind it. The fourth has a different design, as does later work.

Toponymy

The fragment includes southern Iberia, from Porto in Portugal to Valencia in Spain. For north-west Africa, it runs from [allue]t nul, five names short of the usual terminal point, Cape Bojador (buyetder), in modern Western Sahara, up to Seuta and then east as far as tigus[mach], just beyond Oran in Algeria.

It is unfortunate that the area covered by the fragment barely overlaps with the two regions whose toponymy has been studied in detail by Pujades, i.e. the coasts of Catalonia & Valencia and the Adriatic. Only twelve names south of Valencia itself can therefore be checked against his composite listing. For the remainder, the names on the fragment have been assessed against a composite listing of significant toponymic innovations (in process of preparation by Tony Campbell).

Any dating conclusions derived from place-names alone need to be prefaced with a note of caution. First, on account of the small size of the sample, second, because neither Iberia nor North Africa were areas of great toponymic development in this period, and, third, since Catalan chartmakers were slow to adopt the Italian names introduced in the early fifteenth century. That said, some interesting conclusions can be drawn.

Like the two signed Guillem Soler works, this fragment contains no place-names so far noted as having been introduced from 1367 onwards. The only exception relates to the Catalan Atlas of c.1375 (on which see more below). The twelve names south from Valencia to Guardamar are sufficient (with the supporting evidence given above) to show that this is not the work of Soler's contemporaries and neighbours in Palma, Majorca, those thought to have been associated in a joint workshop with Cresques Abraham, the supposed author of the Catalan Atlas.

Soler's alteya form (repeated here) is otillia on the Cresques atelier charts, and his cantera is given by them as alacant. Though that is only partially legible here it certainly starts with C not A. Most significant is the omission on this fragment and the two Soler charts of the flum de segura, found on almost all Catalan charts between 1339 and the second half of the fifteenth century. Among the few other charts to omit this are the two produced by Soler's successor Rafel Soler. The omission of the

Riu Segura is thus one of the defining characteristics of productions of the Soler family. (For a general comment about the distinctive toponymy of the Cresques group of converts from Judaism compared to that of the Christian Soler family see Pujades, 2007 p.492b and follow the reference at the end of note 87.)

With the attribution to Guillem Soler established, how can we relate the fragment to the two signed charts already known: the one in Florence reliably dated 1385 and the other, in Paris, assumed to be earlier, conceivably as early as 1368? What place-name differences can be observed between the three works?

Three of the toponymic forms suggest that the fragment could be the earliest of them all. Cullera, next to Valencia, was conveyed as *cugera* on Catalan charts from 1330, until, from the late fourteenth century and on through the fifteenth, it changed to *cuyera* or, more usually, *culera* (Pujades, 2007, pp.394-7). The two signed Soler charts use the later form; this fragment has *cugera*. Another name, Riffiene, conveyed by *rif*, next to Seuta at Africa's north-west tip, seems to have appeared first on the Catalan Atlas. It is included on both the signed Soler works but not this. Another Catalan Atlas innovation, *vacar* (between Cadiz and Tarifa, as distinct from *torre de vaca*, just east of Algeiras) is certainly absent from the fragment but the two signed works are not clear enough to read. Choria, a little to the west of Cadiz, is the only one of three relevant names first seen on the Catalan Atlas definitely to appear on both the two signed Soler works and on this partial chart.

The final, and most significant indication comes from the name to the east of the Algerian town Honaine (one). Generally, from early in the fourteenth century onwards, the toponym that appeared at that point was *gordanea*. It seemed to have been Soler who introduced a relatively short-lived alternative, *muguron*, identified by Pujades (2009, p.155, no.69) as *Ile Mokrane*. Some variant of that – in neither case is the reading clear – was included on the two signed Soler charts, but the fragment displays the earlier *go[z]da[—]* form. That *muguron* formed the standard for Soler in his later career is evident from its perpetuation in the work of Rafel (certainly on the signed work in Berlin and apparently on the attributed Paris chart). This is the strongest evidence pointing to the fragment being earlier than either of the Guillem Soler charts already known.

Handwriting

The fragment is evidently 'by' Soler, in the sense of the authorship of its style and content. Its handwriting confirms those findings. Dr Ramon J. Pujades i Battaler has examined a scan of this fragment and has made the following statement: "This fragment was copied by the same hand that wrote the nameplaces and legends on the two charts signed by Guillem Soler".

Dating

What can be said about the fragment's likely dating? One of Soler's two charts is clearly dated 1385, the other never had a date. That Pujades gave it such a large possible window, 1368-85, reflects, on the one hand the earliest evidence of Guillem's activity in 1368 (Pujades, 2007, p.491b) and, on the other, the date of one of his charts. But in what ways can the two charts be chronologically distinguished and why might the complete undated chart not be later than 1385, given that Guillem could theoretically have continued working to the end of century?

The dated chart is plain, like the fragment; the undated one is visually quite different, being ornate and using gold leaf. But the toponymy of the two signed charts, as set out by Pujades for the Adriatic and Valencia (2007, pp. 374-85, 394-5), shows no significant differences. Why could both not be close to the same date, i.e. 1385?

The fragment's few toponymic variations (discussed above) lead logically to the conclusion that it is

earlier than either of the others. On the understanding that the undated Paris chart could be re-dated to c.1385, the suggested date for this partial survivor might be c.1380 or even a little earlier.

Rarity

Early portolan charts very rarely appear on the market, especially those that can be assigned with confidence to the fourteenth century. Just two have come to our notice in the past 30 years: one is revealed in the current issue of *Imago Mundi* (and was extracted from a binding in the Lucca library); the other, first sold at auction in 1980, was incorrectly attributed to Vesconte, and is still unreliably dated. See 'Census of pre-sixteenth-century portolan charts: Additional entries', <http://www.maphistory.info/portolanextra.html#E18>.

Most of those now slowly emerging are cut down fragments and some are unfinished or perhaps apprentice pieces. This is the first work of which Tony Campbell has become aware – since publication of his 'Census of pre-1500 charts' in 1986 – to be reliably attributed to a known chartmaker. It is also a very rare example of an early functional chart, probably discarded after being worn out from use at sea.

It is a sobering thought that there could be at least another seven such sections from that original chart, perhaps used for the bindings of related works. Maybe one or more might appear in future.

We are grateful for the assistance of Mr Tony Campbell in cataloguing this item.

Bibliography

References

Ramon J. Pujades i Bataller. *La carta de Gabriel de Vallseca de 1439* (Barcelona: Lumenartis, 2009)

— Les cartes portolanes: la representació medieval d'una mar solcada. (Barcelona: Institut Cartogràfic de Catalunya; Institut d'Estudis Catalans; Institut Europeu de la Mediterrània; Lunweg, 2007). [With a DVD featuring scans of the charts and atlases cited]

Both the above include an English version of the Catalan text.

Provenance

Price:

Inventory reference: 1163