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# PRELIMINARY ASSESSMENT OF A POCKET SUNDIAL EXCAVATED AT ROUND CHURCH STREET, CAMBRIDGE, IN THE SUMMER OF 2019

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In the summer of 2019, the Cambridge Archaeological Unit recovered a sundial (RCS19 <1191> [035] sf.126) from a dig site adjacent to Round Church Street, Cambridge, during excavation in preparation for the construction of a new block of student accommodation. The excavations revealed archaeological evidence for Roman period occupation and then the development of Cambridge from the tenth century onwards. The sundial was found in what would have been an open garden area associated with some houses that lay behind the Round Church. It appears to have been deposited within a soil layer in the garden.



*Fig. 1. Dial RCS19 <1191> [035] sf.126 shortly after its recovery from the dig site (image © Cambridge Archaeological Unit).*




*Fig. 2. Details of Dial RCS19 <1191> [035] sf.126 (image © Cambridge Archaeological Unit).*

The piece is a portable diptych sundial, composed of two hinged leaves made from animal bone (not ivory), both 49–51 mm in diameter (see Figs 1–3). The horizontal leaf holds a compass box (compass needle missing), with some gold leaf remaining from the compass rose. The glass cover to the compass box survives, though broken into two pieces and heavily discoloured. The brass ring that holds the glass cover in place also survives. What remains of the metalwork around the hinge suggests that the dial originally came with a retaining hook and stud to hold the leaves open at 90°. At the open end of the dial, a hook and stud for holding the dial closed survives, as does a small metal ring, perhaps for hanging the dial from a belt. The string gnomon that would be held taught between the two leaves does not survive, though both anchor points are still evident. A best effort to measure the angle between these points suggests that the dial was made to be used at or around a latitude of 48°, commensurate with northern France and southern Germany and a typical result for non-adjustable diptych dials manufactured in these countries.

The outside surfaces of the dial's leaves are blank and appear to have been polished and varnished. The chapter




*Fig. 3. Dial RCS19 <1191> [035] sf.126 following conservation (image © Cambridge Archaeological Unit).*

ring of the dial carries punched Roman numerals, suggesting that the piece is not a one-off as the maker had access to a suitable set of punches. The inside of the vertical leaf appears blank, though there is evidence from under the microscope that it was originally painted. A hole in the vertical leaf seats onto a small metal pin below the dial face to align the leaves on closing. One small design flourish is telling: to the north and south of the chapter ring are decorative circular arcs. These appear most typically on portable diptych dials from 17th- or early-18th-century France, in particular the dial-making centre of Dieppe.[1] However, this form of flourish is also present on at least one dial from the German centre of ivory dial-making, Nuremberg.[2]

No ivory/bone diptych dials are known to have been made in Britain, so this object is almost certainly a continental import (an assertion that is corroborated by the measured gnomon angle). The dial is unusual in being made from bone; dials from Dieppe and Nuremberg are almost always made in ivory. However, a very few bone examples do survive and presumably represent the cheaper end of the market for such devices. Taking the above into account, the object appears to be a bone diptych dial, probably French 17th century.

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## REFERENCES

1. See, for example, the French diptych dial, c.1620, illustrated on p.58 of: Mike Cowham: *A Dial in your Poke*, 2nd ed., M.J. Cowham, Cambridge (2011).
2. Diptych sundial by Hans Tucher, 1597, Nuremberg, inv. WLM 2884, Landesmuseum Württemberg, Stuttgart: *https://www.landesmuseum-stuttgart.de/sammlung/sammlung-online/dk-details?dk_object_id=10070*

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