

A Cyrenaica earthquake *post* 364 A.D.: written sources and archaeological evidences

Lidiano Bacchielli

Istituto di Archeologia e Storia dell'Arte Antica, Università degli Studi di Urbino, Italy

Abstract

An earthquake *post* 364 A.D. involved towns in Cyrenaica. Key elements in the establishing the date are two coin-hoards, one found in 1956 in a dwelling built in the Sanctuary theatre of Asclepius at *Balagrae* (El Beida) and the other found in 1916 inside a small house along the south side of the Lower Plateau of Agora in Cyrene. Most of the small bronzes belong to the series issued between 350 and 361 A.D. under the emperors Constantius II, Constans Gallus and Julian Caesar, but one coin from *Balagrae* was issued in 364 A.D. This year, therefore, gives a sure *terminus post quem* to date the Cyrenaica earthquake. This earthquake could be the one recalled in several literary sources, in particular two letters by Sinesius, and in the Demetria inscription, dated in the second half of the IV century A.D. and traced in colour on a tomb at the Necropolis of Cyrene that recalls the death of Demetria and her son Theodoulos during an earthquake. Moreover, a number of buildings and monuments in Cyrenaica suffered damage attributed to the same quake: the Palace of Columns and the «Via Monumentale» in Ptolemais, the House of Jason Magnus, some Agora buildings, the *Strategheion*, Apollo's Temple and the Baths of Trajan in Cyrene.

Key words *Cyrene (Libya) – earthquake*

The first laborious openings by Italian archaeologists in Cyrenaica in the earth that covered the ancient cities of the *Pentapolis* (fig. 1) revealed destruction and collapse. Some of this had occurred in architectural structures which could not have been *conlapsae vetustate* and, above all, they had the tragic character of unexpectedness. It was inevitable that a seismic event should be offered as the interpretative key of these phenomena and it was immediately found recorded among the observations collected in the excavation diaries and in the first editions of Cyrenaica monuments (Ghislanzoni, 1916).

In the following years, this theory was developed and widened (Stucchi, 1965; Goodchild, 1966-1967; Stucchi, 1975; Bacchielli, 1981) in the number of seismic events and in

the recognition of the buildings destroyed, but also drastically reappraised (Roques, 1987).

A single earthquake, dated by scholars in 365 A.D., enjoys general consent (Lepelley, 1984; Jacques and Bousquet, 1984; Di Vita, 1990) supported as it is by reliable archaeological documentation and recalled in literary and epigraphic sources. But I believe that also for the earthquake of 262 A.D. the elements in favour are sufficient to guarantee wide margins of possibility (White, 1984; Lloyd, 1990; Cameron, 1992; White and Monge, 1992).

Key elements in the process of acknowledging a cyrenaican quake in the second half of the IV century A.D. are two coin-hoards. One of them was found in May 1956 in a modest dwelling of late antiquity that had been built in the *ambulacrum* of the Sanctuary theatre of Asclepius at *Balagrae* (El Beida) (Goodchild, 1966-1967). The small house was later been

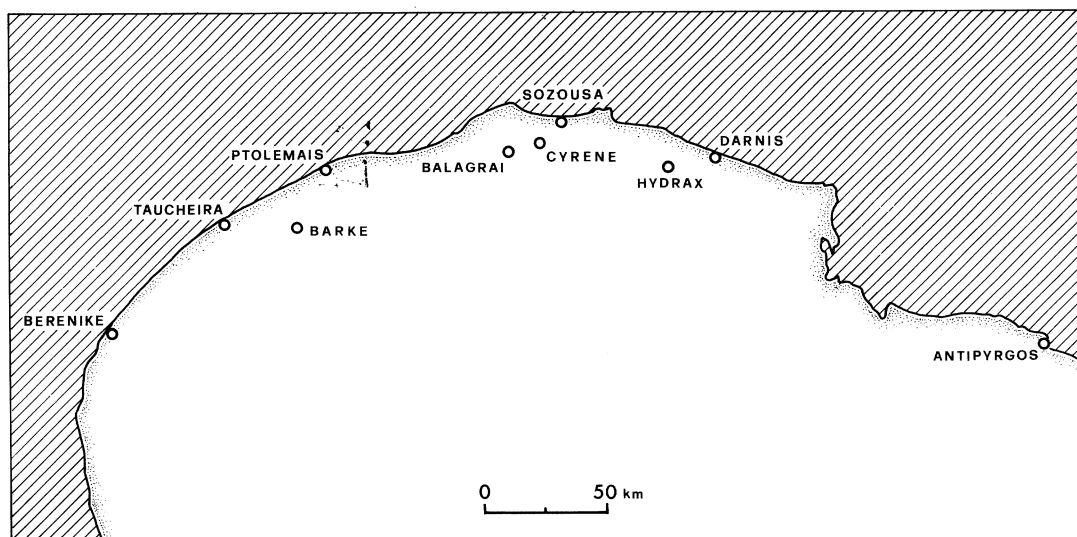


Fig. 1. The map of Cyrenaica during the IV century A.D. (sketched by G. Barozzi).

destroyed by an earthquake that had produced one victim, whose skeleton was found in May 1917 by Sinesio Catani (fig. 2).

Of the 259 small bronzes that make up the hoard, some are illegible and many have been cut, thus losing the obverse legend. Most of the legible coins belong to the two series «*Spes Reipublicae*» and «*Fel Temp Reparatio*», that were issued between 350 and 361 A.D. under the emperors Constantius II, Constans Gallus and Julian Caesar. But a coin of Valentinian I, with the legend *Securitas Reipublicae* and the figure of Victory facing left with a palm and a crown in her hand allows us to reach, at last, as far as 364 A.D. This year, therefore, gives a sure *terminus post quem* to date the Cyrenaica earthquake.

The second coin-hoard, of 243 small bronzes, was found on 14 October 1916, again by Sinesio Catani, inside a small house that in late antiquity had been built along the south side of the Lower Plateau of Agora in Cyrene (Stucchi, 1965; Goodchild, 1966-1967; Stucchi and Bacchielli, 1983). The coins, unrecognizable in the collection at Cyrene Museum, were in a terracotta vase and were 11, 16 and 18 cm in diameter. Catani's description and further

information held in the Museum archives allows us, however, to recognise in them a high percentage of issues under Constantius II, in the «*Fel Temp Reparatio*» and «*Spes Reipublicae*» types. Therefore the coin-hoard must have been accumulated in the same period as that of *Balagrae*. And once again the causes of abandon must be identified in an earthquake, as several skeletons would seem to show found, again in 1916, a few dozen metres from the modest dwelling, under the columns of the Northern Stoa (Stucchi, 1965) (fig. 3). Their position under the drums of the columns may in fact allow a connection with Building B6 – destroyed by an earthquake in the second half of the IV century A.D. – since in all the successive reconstructions of the monument the columns were excluded.

Clearly, the earthquake must have been the one recalled in the well-known passages that have been discussed so many times (Goodchild, 1966-1967; Rebuffat, 1980; Roques, 1987; Di Vita, 1990) of Libanius (*Orat.*, XVIII, 291-293), Ammianus Marcellinus (XXVI, 10, 15-18), Saint Jerome (*Chronicon*, ed. Helm, p. 244) and another ten or so historians of late antiquity. With regard to the involvement of

Cyrenaica in the quake, the mention of *Libya* by Libanius as being in the stricken area is not enough, because the term indicates the entire African continent rather than the two provinces of *Libya Inferior* and *Libya Pentapolis*. But there are two letters by Synesius (Roques, 1987) written at the beginning of 412 that tell of a quake that preceded the scourge of Andronicus' governorship in 412 A.D. (*Epist.* 42) and reduced a fortress in *Hydrax* to ruins (*Epist.* 66). The moment of its efficiency, interrupted suddenly by the earthquake, dates further back in time (*πάλαι*) and therefore the catastrophe can most likely be related to that documented by the *Balagrae* coin-hoard, also in consideration of the fact that the Bishop of Cyrenaica makes no references in his corre-

spondence to any earthquake he had personally witnessed.

Decisive confirmation of Cyrenaica's involvement is finally given by Demetria's inscription (fig. 4), traced in colour on a tomb at the Necropolis North of Cyrene (Comparetti, 1914; Bacchielli *et. al.*, 1992), that recalls the fact that Demetria and her son Theodoulos died in an earthquake. Paleographic analyses suggest strongly that the text dates back to the second half of the IV century A.D. and the history of the funereal monument seems to support this.

There are a number of buildings and monuments in Cyrenaica that have suffered damage that can be attributed to the earthquake post 364 A.D. Among the most certain and meaningful examples (Roques, 1987) is the Palace



Fig. 2. *Balagrae*: the excavations of the *ambulatory* in the Sanctuary Theatre of Asclepius (photo Antiquity Department of Cyrene, Libya F 101).



Fig. 3. Cyrene: the excavations in the North Stoa in Agora (photo Antiquity Department of Cyrene, Libya E 68).

of Columns in Ptolemais that collapsed in this period, crushing the fleeing inhabitants under heaps of rubble; their bones have been found at the bottom of the swimming-pool in the great peristyle (Pesce, 1950). Still in Ptolemais it is reasonable to believe that the colonnade in «Via Monumentale» was damaged by the quake, since its restoration was authorised by Valentinian I and Valens and then by Arcadius and Onorius (Kraeling, 1962).

At Cyrene, in the House of Jason Magnus, the collapse of the columns, with the drums found in succession, is due to this catastrophe, as a coin of Constantius II found under the blocks confirms.

The damage recorded in the Agora complex

has already been referred to; other damage is reliably documented in Apollo's Sanctuary. In the *Strategheion*, at the moment of excavation, most of the blocks were found around the building, falling to the ground «making a half turn on themselves» (Gismondi, 1951); in Apollo's Temple the colonnade partly collapsed to the ground, compact and homogeneous and «many fragments of the columns still upright *in situ* have their drums out of place and turned on themselves» (Pernier, 1935); in the Baths of Trajan the excavators found the columns, the walls and the vault lying on the ground, giving the impression that the building had «collapsed because of a violent seismic movement» (Ghislanzoni 1916; Guastini, 1916).

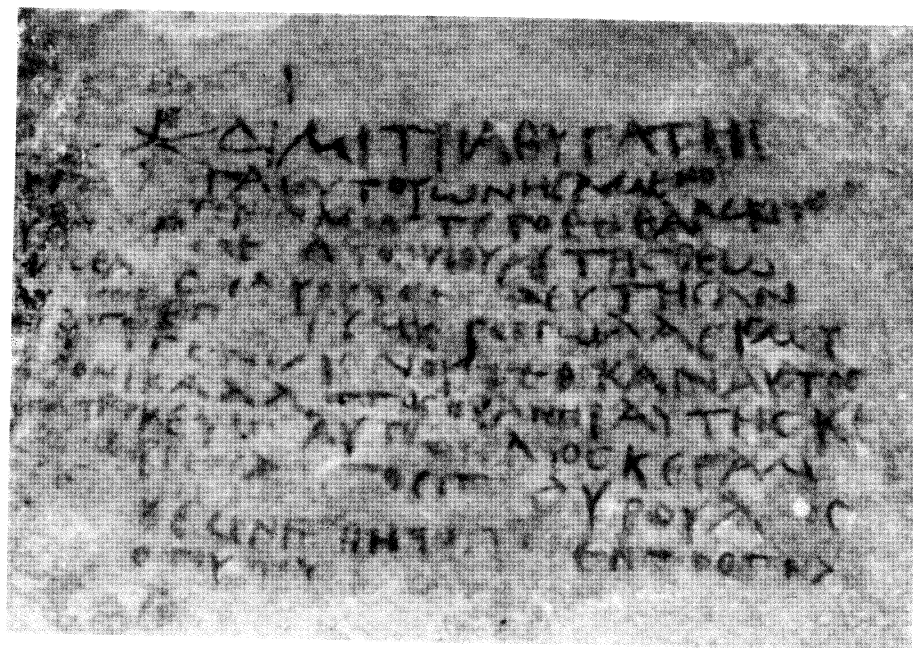


Fig. 4. Cyrene: the inscription on Demetria's Tomb (photo L. Bacchielli, in Guidoboni *et al.*, 1994).

REFERENCES

- BACCHIELLI, L. (1981): *L'Agorà di Cirene, II, 1. La Parte Settentrionale del Lato Ovest della Platea Inferiore* (L'«Erma» di Bretschneider, Roma), 183-191.
- BACCHIELLI, L., J. REYNOLDS and B. REES (1992): La Tomba di Demetria, *Quaderni di Archeologia della Libia*, **15**, 5-22.
- CAMERON, A. (1992): Synesius and late Roman Cyrenaica, rec. a D. ROQUES, *Synésios de Cyrène et la Cyrenaïque du Bas-Empire*, *Journal of Roman Archeology*, **5**, 419-430.
- COMPARETTI, D. (1914): Iscrizione cristiana di Cirene, *Annuario della Scuola Archeologica d'Atene*, **1**, 161-167.
- DI VITA, A. (1990): Sismi, urbanistica e cronologia assoluta. Terremoti e urbanistica nelle città di Tripolitania fra il I secolo a.C. ed il IV d.C., in *L'Afrique dans l'Occident Romain. Actes du Colloque Organisé par l'École Française de Rome sous le Patronage de l'Institut National d'Archéologie et d'Art de Tunis*, Rome, 3-5 décembre 1987 (École Française Rome), 425-494.
- GHISLANZONI, E. (1916): Gli scavi delle Terme Romane a Cirene, *Notiziario Archeologico*, **2**, 13-14.
- GISMONDI, I. (1951): Il restauro dello Strathégheion di Cirene, *Quaderni di Archeologia della Libia*, **2**, 7-25.
- GOODCHILD, R.G. (1966-1967): A coin-hoard from «Bala-grae» (El Beida) and the earthquake of A.D. 365, *Libya Antiqua*, **3-4**, (= *Libyan Studies. Select Papers of the Late R.G. Goodchild*, P. Eleck, London), 203-211.
- GUASTINI, G. (1916): Prime note sulla struttura ed architettura delle Terme di Cirene, *Notiziario Archeologico*, **2**, 129-151.
- GUIDOBONI, E., A. COMASTRI and G. TRAINA (1994): *Catalogue of ancient earthquakes in the Mediterranean area up to 10th century* (ING, Bologna), p. 281.
- JACQUES, F. and B. BOUSQUET (1984): Le raz de marée du 21 juillet 365. Du cataclysme local à la catastrophe cosmique, *Mélanges École Française de Rome*, **96**, 423-461.
- KRAELING, C.H. (1962): *Ptolemais. City of the Libyan Pentapolis* (The University of Chicago Press), 22 and 74-83.
- LEPELLEY, C. (1984): L'Afrique du nord et le prétendu séisme universel du 21 juillet 365, *Mélanges École Française de Rome*, **96**, 463-491.
- LLOYD, J.A. (1990): The Cities of Cyrenaica in the Third Century A.D., in *Archeologia Cirenaica, Atti della Giornata Lincea*, Roma, 3 novembre 1987 (Accademia Nazionale Lincei, Roma), 41-53.
- PERNIER, L. (1935): *Il Tempio e l'Altare di Apollo a Cirene* (Istituto Italiano d'Arti Grafiche, Bergamo), 130-141.
- PESCE, G. (1950): *Il «Palazzo delle Colonne» in Tolemaide di Cirenaica* (L'«Erma» di Bretschneider, Roma), p. 108.

- REBUFFAT, R. (1980): Cuicul le 21 juillet 365, *Antiquités Africaines*, **15**, 309-328.
- ROQUES, D. (1987): *Synésios de Cyrène et la Cyrénaïque du Bas-Empire* (Éditions de CNRS, Paris), 41-52.
- STUCCHI, S. (1965): *L'Agorà di Cirene, I, I Lati Nord ed Est della Platea Inferiore* (L'«Erma» di Bretschneider, Roma), 284-308.
- STUCCHI, S. (1975): *Architettura Cirenaica* (L'«Erma» di Bretschneider, Roma), *passim*.
- STUCCHI, S. and L. BACCHIELLI (1983): *L'Agorà di Cirene, II, 4. Il Lato Sud della Platea Inferiore ed il Lato Nord della Terrazza Superiore* (L'«Erma» di Bretschneider, Roma), p. 113.
- WHITE, D. (1984): *The Extramural Sanctuary of Demetra and Persephone at Cyrene, Libya: Background and Introduction to the Excavations* (The University Museum, Philadelphia), 63-64.
- WHITE, D. and J. MONGE (1992): Statue breakers and spirit exorcists, *Expedition*, **34** (1-2), 76-85.