Olivier CALLOT, *Déhès II : Les pressoirs*

Dimitri Van Limbergen
REFERENCES


Based on twelve years of fieldwork in the village of Déhès between 1998 and 2010, Olivier Callot’s new book is an important contribution to the study of press technology in the late antique East in more ways than one. The volume is the first monograph to appear on wine and oil presses in northern Syria since Callot’s own Huileries antiques de Syrie du Nord in 1984 (BAH 118), and the first publication tout court to offer a full discussion of all known presses from a single village in the Limestone Massif. The book also includes never-before-published data on systematically cleared or excavated installations in the region – except for three presses from the village of Serğilla, discussed in the volume Serğilla. Village d’Apamène (BAH 203, 2013 1) – as such providing an unprecedented in-depth examination of many of these structures.

The biggest merit of the book is perhaps to finally settle the long-standing debate on the function of a category of installations that used stone rollers in processing. Once considered to be rudimentary oileries by Georges Tchalenko (1958) and Olivier Callot himself (1984), these installations were later found to strikingly resemble several identified wineries throughout the Levant. Subsequent work on the North Syrian roller presses by scholars such as Michael Decker (2001) and Jean-Pierre Brun (2004) further strengthened a re-interpretation of these structures as wine presses. Inspired by their criticism, and confronted with the reality of his own new fieldwork in Déhès, Callot started to correct his interpretations in a short contribution to the volume Villes et campagnes aux rives de la Méditerranée ancienne. Hommage à Georges Tate (Topoi, suppl. 12, 2013 2). With this comprehensive study, Callot now undeniably shows how the majority of the presses (24 out of 29) in Déhès were wineries, all characterised by quadrangular basins in which the grapes were commonly trodden by stone rollers. This is no small
achievement, as it turns the Limestone Massif into one of the greatest wine producing areas of the late antique East.

Another important outcome of the book is to deepen our insight into the biography of the North Syrian presses. In particular, it now appears that many installations have in fact two distinct phases: a first one in which the press was driven by a lever-and-windlass or a lever-and-weight device, and a second one that involved the conversion to a lever-and-screw mechanism. This seems clear from the presence of older lever niches and/or abandoned weights, or from the stone-cut negatives of wooden fittings that suggest a change in the manoeuvring frame of the lever. There exists of course variation – some presses were never transformed, while others were built with a screw device from the start – and the evidence is not always as conclusive as Callot wants it to be, but the pattern seems reasonably clear. There is also new evidence to suggest that the use of stone rollers was at one point abolished in some installations, as attested by the repeated discarding or re-use of these rollers as press- and building components. Callot’s study thus significantly increases our understanding of the functioning of these presses over time, at once raising awareness on the occurrence of similar processes in less preserved presses throughout the Roman world. This makes the book relevant beyond just the Limestone Massif.

Remain the fundamental questions of why and when all these changes took place, and this is where the book falls somewhat short. How to explain the widespread adaptation of screw press technology in Déhès? Callot states that the switch from lever-and-windlass/weight to lever-and-screw presses reflects a large development of local viticulture, and as such a marked increase in local wine production. To this reviewer, the available data only corroborate the first of these two statements. It is true that screw presses required – more than windlass/weight presses – good wood and skilled workers, and thus considerable capital to construct. The fact that investments of this kind were attractive to local farmers unequivocally shows the profitability of the North Syrian wine industry. It is also true that screw presses represent a technological improvement compared to lever-and-windlass/weight presses; that is, the lever becomes easier to operate and adjust, thus optimizing pressure control and speeding up processing. But the use of a screw per se does not increase the outcome of a single pressing operation. It only makes the extraction process less time-consuming. Likewise, the contemporary introduction of what seem to be longer and heavier levers in some North Syrian screw presses certainly affected the pressure exerted on a single press load, but not the amount of grapes that could be processed in one go. What really would have indicated an overall and sudden upscaling of local wine production, are notable changes in the number of presses or in the size of press infrastructure – e.g. larger treading basins and/or collecting tanks, or structural improvements that allowed for the placement of bigger grape loads under the lever – but clear evidence for such changes is yet lacking. In other words, we are definitely witnessing more efficient winemaking by financially robust farmers, but less so changes in the volume of wine production.

Another issue that merits discussion here is the diachronic use of heavy stone rollers in the North Syrian wineries. Callot argues that these rollers were introduced early on, in primitive wineries in which the grapes were trodden by foot, to render the grape treading process more efficient, and thus to increase the productivity of these installations. Later on, when the use of more perfected mechanical presses – first weight/windlass and then screw types – became diffused in these wineries, the slower and less effective treading
rollers were no longer required, and therefore gradually abandoned. Strictly speaking, an improvement in treading technology was given up in favour of an advancement in pressing machinery. This seems faulty reasoning. Underfoot treading may be a simple technique, but throughout Antiquity it always remained the most effective way to extract (superior) juice from grapes. First, treading promoted the contact between the grape juice and the yeast in the berries’ skins, as such ensuring the start of the alcoholic fermentation process. Second, the gentler breaking of the skins avoided the crushing of the seeds and stems, which contain bitter and unpleasant tannins. And third, treading could already extract about 80 % of potential must out of the grapes. Far from inefficient then. So why introduce stone rollers in treading? In a recent article in this journal (Syria 94, 2017, p. 307-323: https://journals.openedition.org/syria/5624), I argued how these rollers were essential tools for the production of wines made from semi-dried grapes or raisins, for which Northern Syria was once famous. As raisins have harder and thicker skins, and contain less water and more sugar, they are more difficult to break open; hence the use of heavy monoliths. Afterwards, just as in conventional winemaking, the remaining (inferior) juice was collected from the trodden grapes by pressing. The subsequent rise and fall of this practice may thus be more related to changing wine production procedures, rather than to efficiency and productivity.

6 When were these installations built and/or transformed? Callot sketches a picture of progressive technological innovation, from simple roller wineries and modest lever-and-weight presses in the Roman period (1st-3rd cent. AD), over bigger and better lever-and-windlass presses in the 4th-5th cent. AD, to highly efficient lever-and-screw presses in the Proto-Byzantine and Umayyad periods (6th-7th cent. AD). While not necessarily wrong, this reconstruction is based more on a stereotypical, outdated view of linear (press) technology development in the ancient world, rather than on conclusive archaeological data. Indeed, there remains a profound lack of datable (diagnostic) pottery in these rock-cut structures, as stated so clearly at the beginning of the volume: “Il nous faut encore dire un mot à propos du matériel trouvé au cours du dégagement de ces pressoirs. Il s’agit uniquement de tessons céramiques pour la plupart inutilisables allant de l’époque romaine à l’époque moderne, attestant une longue utilisation et un abandon encore plus long” (p. 23). This is not so much a criticism as a disappointing observation, and a strong reminder of the ultimately hypothetical nature of Callot’s findings.

7 Overall, with some 190 pages of detailed description, analysis and reconstruction, accompanied by over 170 figures and 280 black-and-white plates, this new study is a rich source of information for anyone interested in wine production and press technology in late antique Northern Syria, but Callot’s interpretations should be looked at with a critical eye.

NOTES

AUTHORS

DIMITRI VAN LIMBERGEN

Ghent University, Department of Archaeology