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The early Turkish pottery productions in western Anatolia: Provenances, contextualization and techniques

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INTRODUCTION

The period dated from the 13th to the 15th centuries is related to the transition between the Byzantine period and the first Turkish ones - *Beylik* and later Ottoman - in western Anatolia. The arrival of these Turkish populations brought about the production of new ceramics types in the region such as: polychrome *sgraffito* with “green lotus leaves and purple-brown dots” decoration, moulded wares, turquoise glazed wares, and the so-called “Miletus Ware”.

PROVENANCES AND CONTEXTS

Archaeological studies and archaeometric analyses carried out in Lyon on the ceramics bodies have allowed to better define production centres of these new types of ceramics.



Polychrome sgraffito wares with “green lotus leaves and purple-brown dots”



Moulded wares



Turquoise glazed wares



“Miletus Wares”

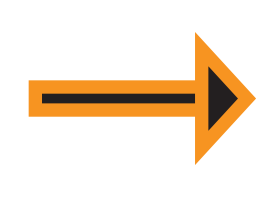


PRODUCTION TECHNIQUES: GLAZE AND SLIP

According to analyses using a Scanning Electron Microscope (SEM), the ceramics' glaze compositions and slip natures are as follows.



Byzantine tradition



Transparent high lead glaze
Clayey slip



New tradition



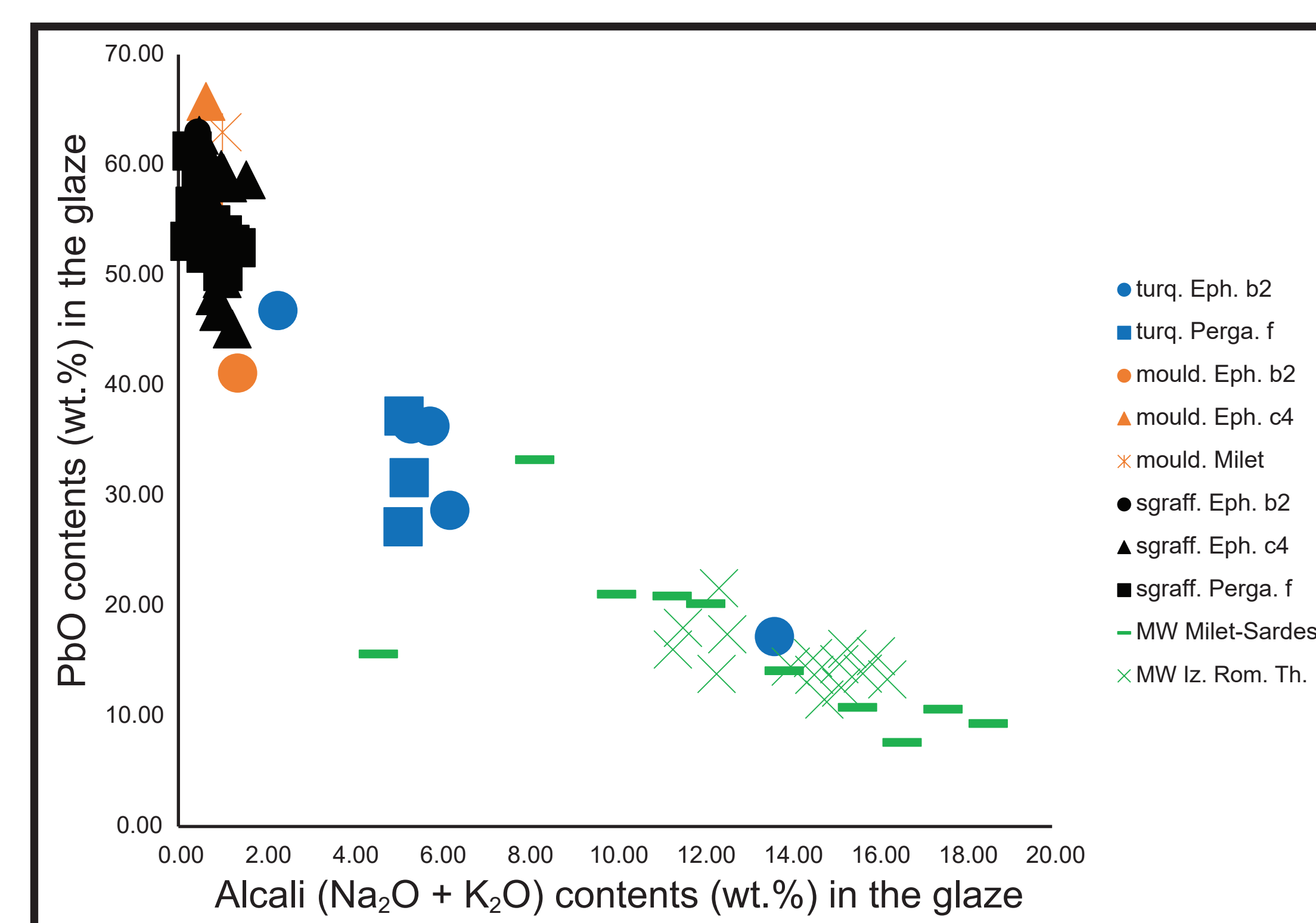
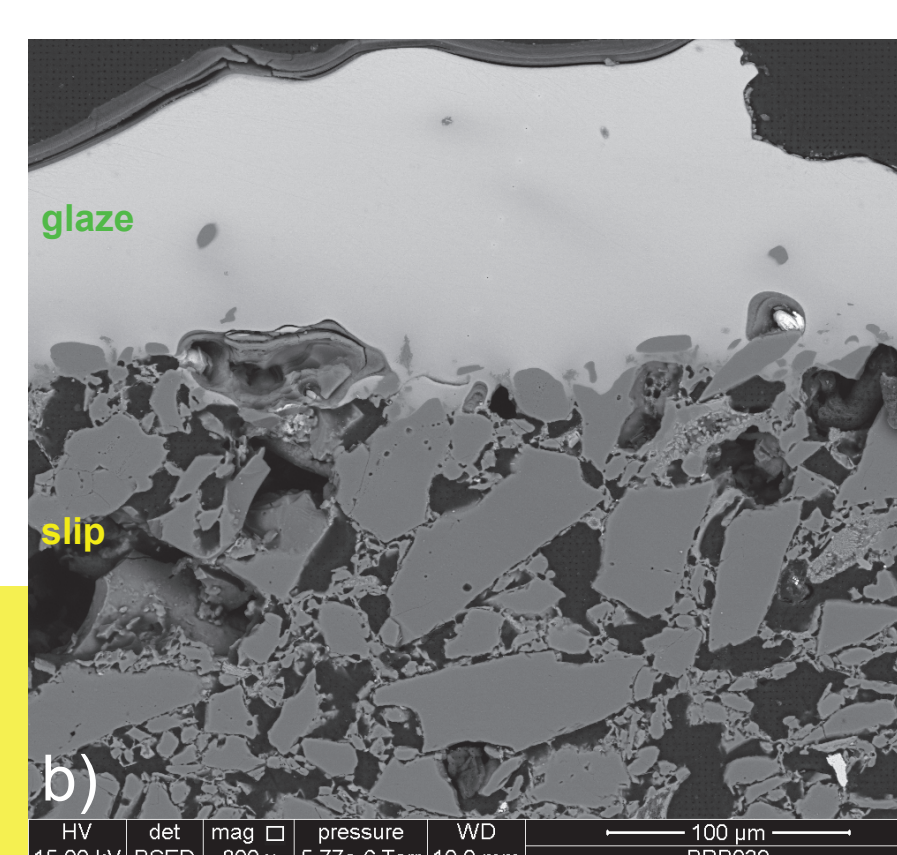
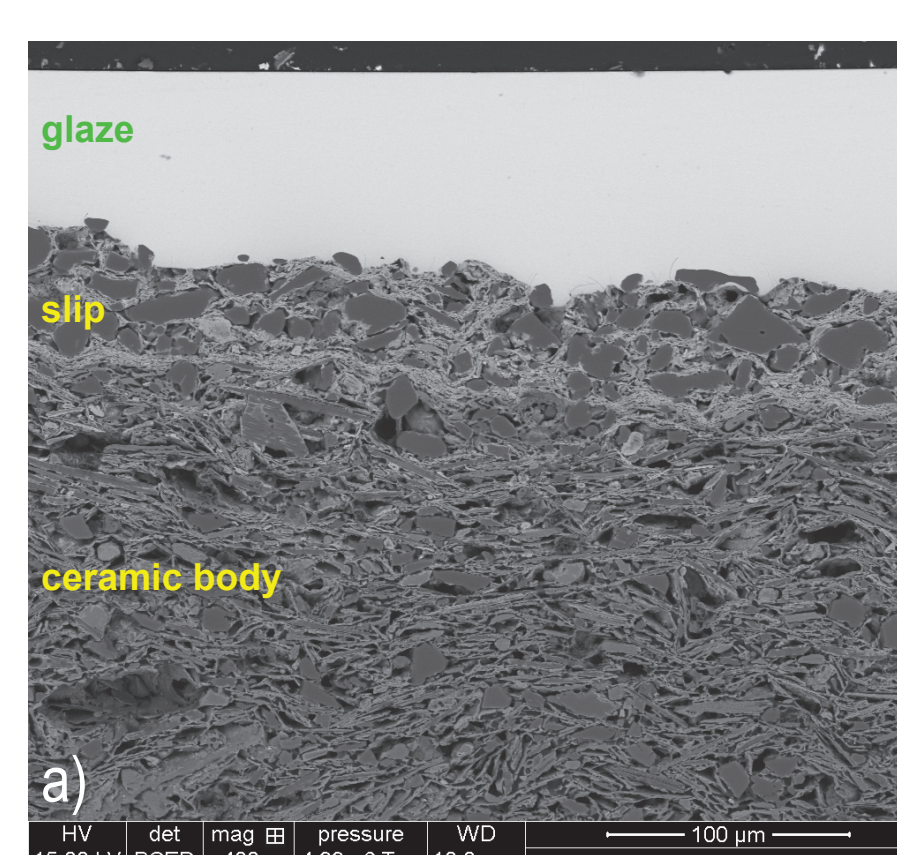
Opaque lead-alkali glaze
Clayey slip



New tradition



Transparent lead-alkali glaze
“Synthetic” slip



Binary diagram showing PbO contents vs. alkali contents ($\text{Na}_2\text{O}+\text{K}_2\text{O}$) in the glazes.

Credits

Map, BSE images, diagram: J. Burlot
Samples pictures: Y. Waksman

SEM images using “backscattered electron” mode:

- a) Cross section showing a glazed ceramic with a clayey slip.
b) Cross section showing a “Miletus Ware” with a “synthetic” slip.

CONCLUSION

The association of archaeological and archaeometric data have allowed defining some of the first Turkish pottery productions in western Anatolia. For instance, we could define three productions of “Miletus Wares”, one of which was manufactured in Iznik and exported to Crimea until the end of the 16th century. Two of them have very similar stylistical and technical features.

As for decoration, the glazes and slips of the polychrome sgraffito and the moulded wares follow the Byzantine tradition with high lead glazes and clayey slips. This is not the case for the turquoise wares, whose glaze is coloured by the association of copper and sodium oxides, the later being introduced as a new fluxing element. The “Miletus Wares” are also of lead-alkali glazed type, and present a “synthetic” slip, prefiguring the stone-pastes of Iznik productions.

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