WEBINAR

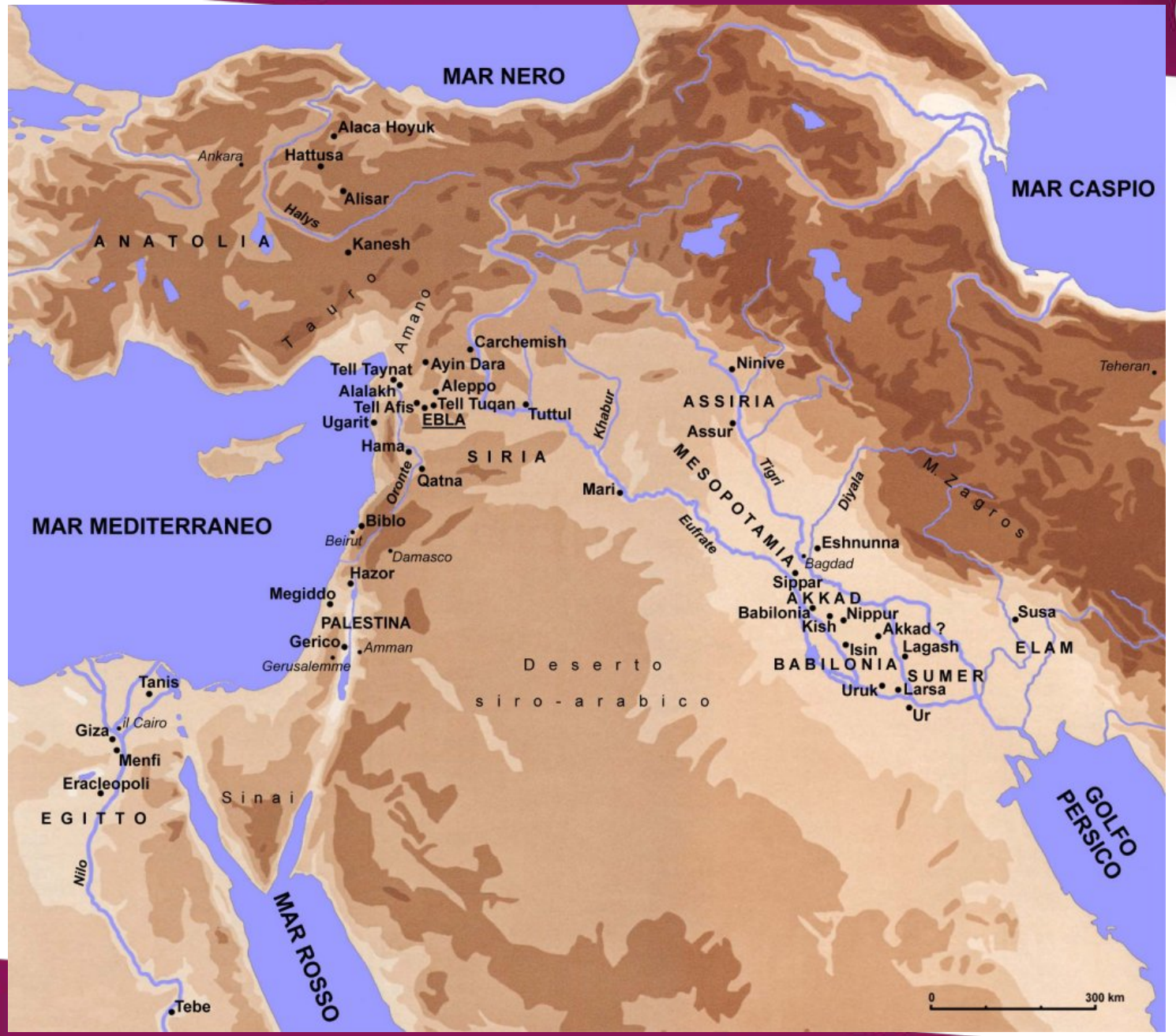
STARTING YOUR CAREER IN HERITAGE SCIENCE AT ISPC-CNR:
MARIE SKŁODOVSKA-CURIE ACTIONS POST-DOCTORAL FELLOWSHIPS

MONDAY 30TH MAY 2022

National Research Council of Italy | ISPC INSTITUTE OF HERITAGE SCIENCE

Ancient Near Eastern Studies and the digital turn: pioneering times are back

Marco Bonechi



the Ancient Near East

What is Assyriology?

The old-fashioned term “Assyriology” covers all scholarly fields related to the study of the ancient Near East in the time of the **cuneiform cultures**, from the fourth millennium BCE to the first century CE in the historical regions of Mesopotamia, Syria, and the Levant, Iran, and Anatolia, including periods and regions of influence and contact.

[…]

“Assyriology” covers philological disciplines dealing with texts written in Akkadian, i. e. Babylonian and Assyrian, Sumerian, Hittite, Elamite, Hurrian, and other languages, linguistics of these languages, the history of the ancient Near East, and the archaeology and art history of the respective regions and periods.

(https://iaassyriology.com/)

Who we are

65ème Rencontre Assyriologique Internationale
Paris, July 8-12, 2019

Assyriologists are part
of the larger scientific community devoted to
Ancient Near Eastern Studies

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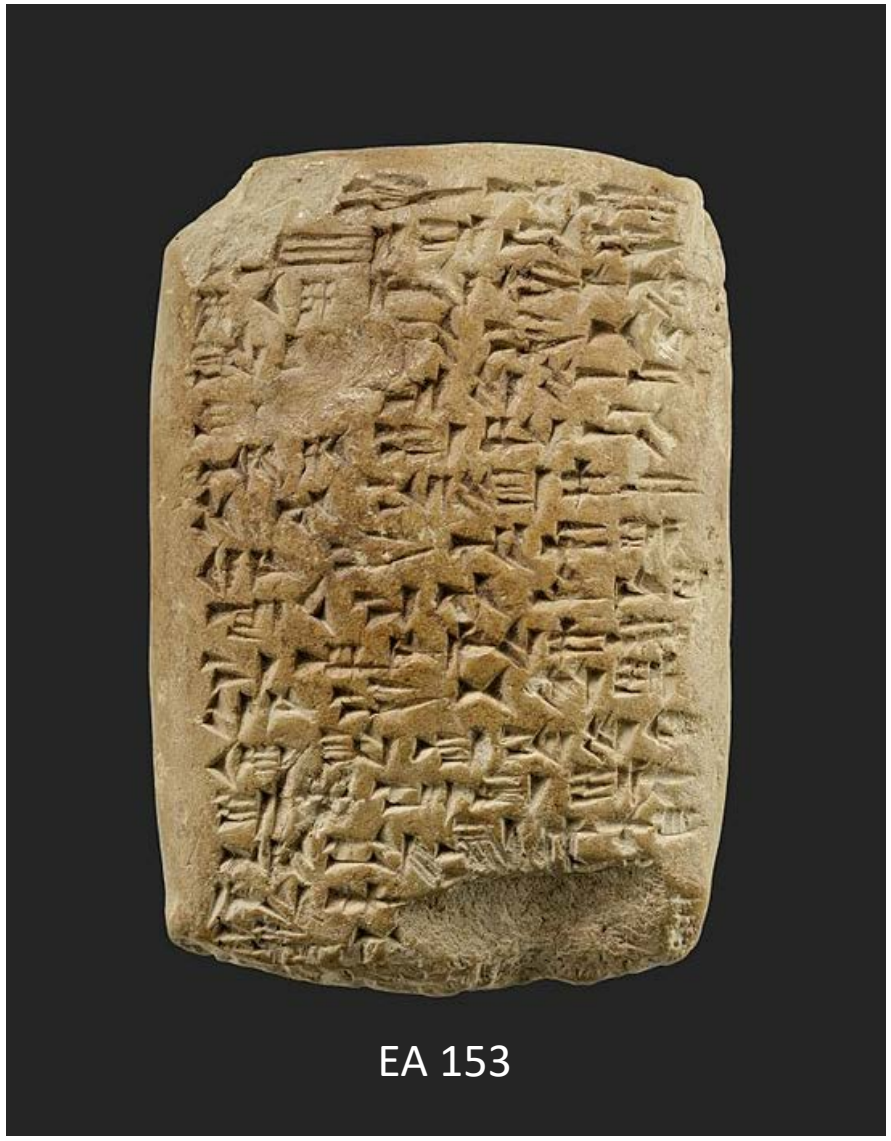
https://www.ispc.cnr.it/en/2021/02/02/voa/

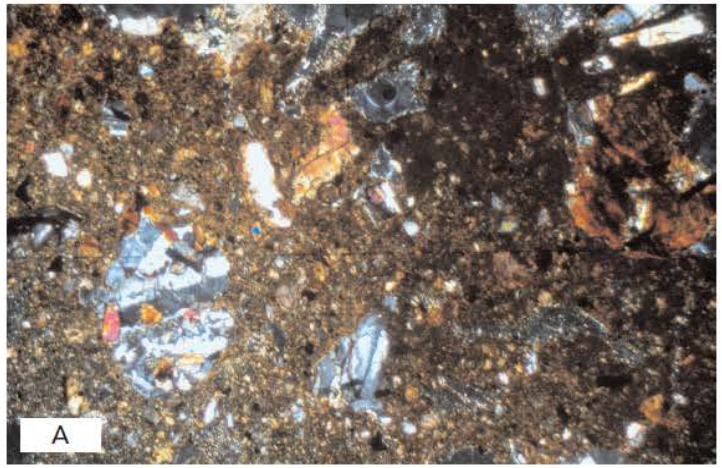
The wide range of skills of the **VOA** Group's members enable fruitful collaborations with colleagues from other institutions in Italy and abroad. Their research lines and projects encompass broad geographical and chronological horizons.
In the northernmost area, the researches focus on **cuneiform texts and the material culture of pre-classical Anatolia**, while in the southernmost region, **pre-Islamic inscriptions from the Arabian Peninsula** are investigated. In the central areas of the Near East, archaeological and art-historical studies are devoted to the **cultures of Mesopotamia**. Further west, the **Levant** is the subject of Assyriological and archaeological research, from Syria to Cyprus to the Egyptian Delta.
From a chronological point of view, the time span concerned is very wide, from **the 3rd millennium BC to the mid-1st millennium AD**. In fact, the research not only continues to cover the periods traditionally investigated by the CNR, i.e. the Late Bronze and Iron Ages, but it has further extended to include both the Ancient and Middle Bronze Ages and Late Antiquity.
Two aspects of the ISPC's VOA group, both characterised by an **interdisciplinary approach**, should be highlighted. The first concerns the increasing attention to the use of **innovative technologies** and their integration in **archaeological and philological investigations**. The second is the strong interest in the **history of Near Eastern studies**, which includes research based on archival materials and the study of archaeological collections.

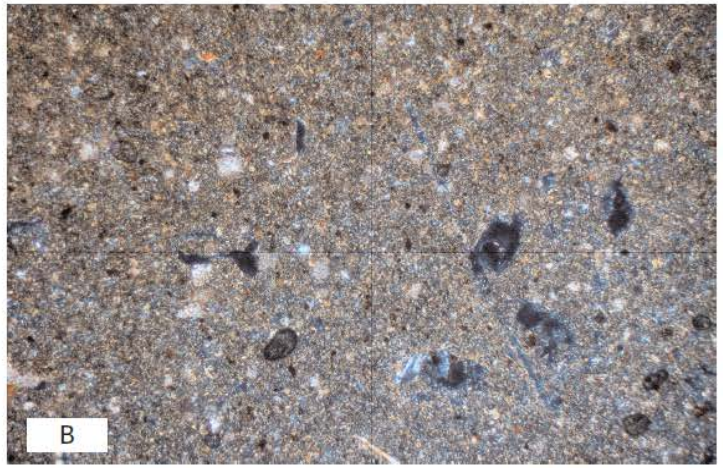
https://www.ispc.cnr.it/en/2021/02/02/voa/

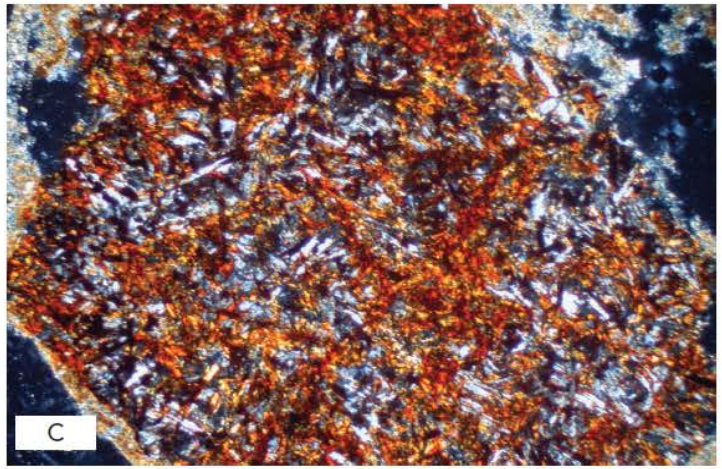
sport, art
team, équipe, group, ensemble, orchestra, band, …

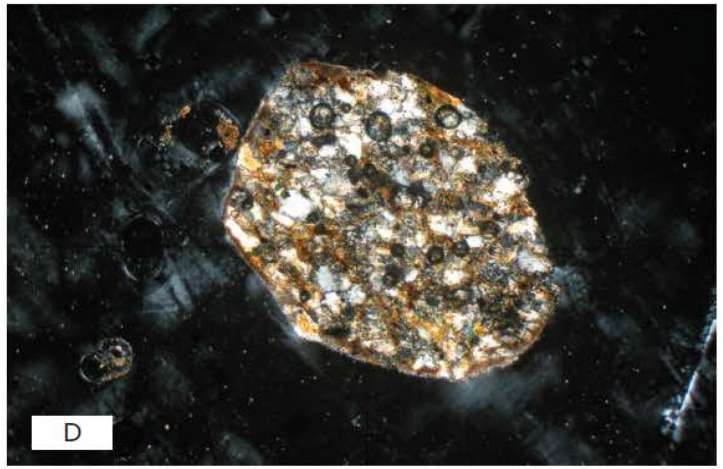


EA 153



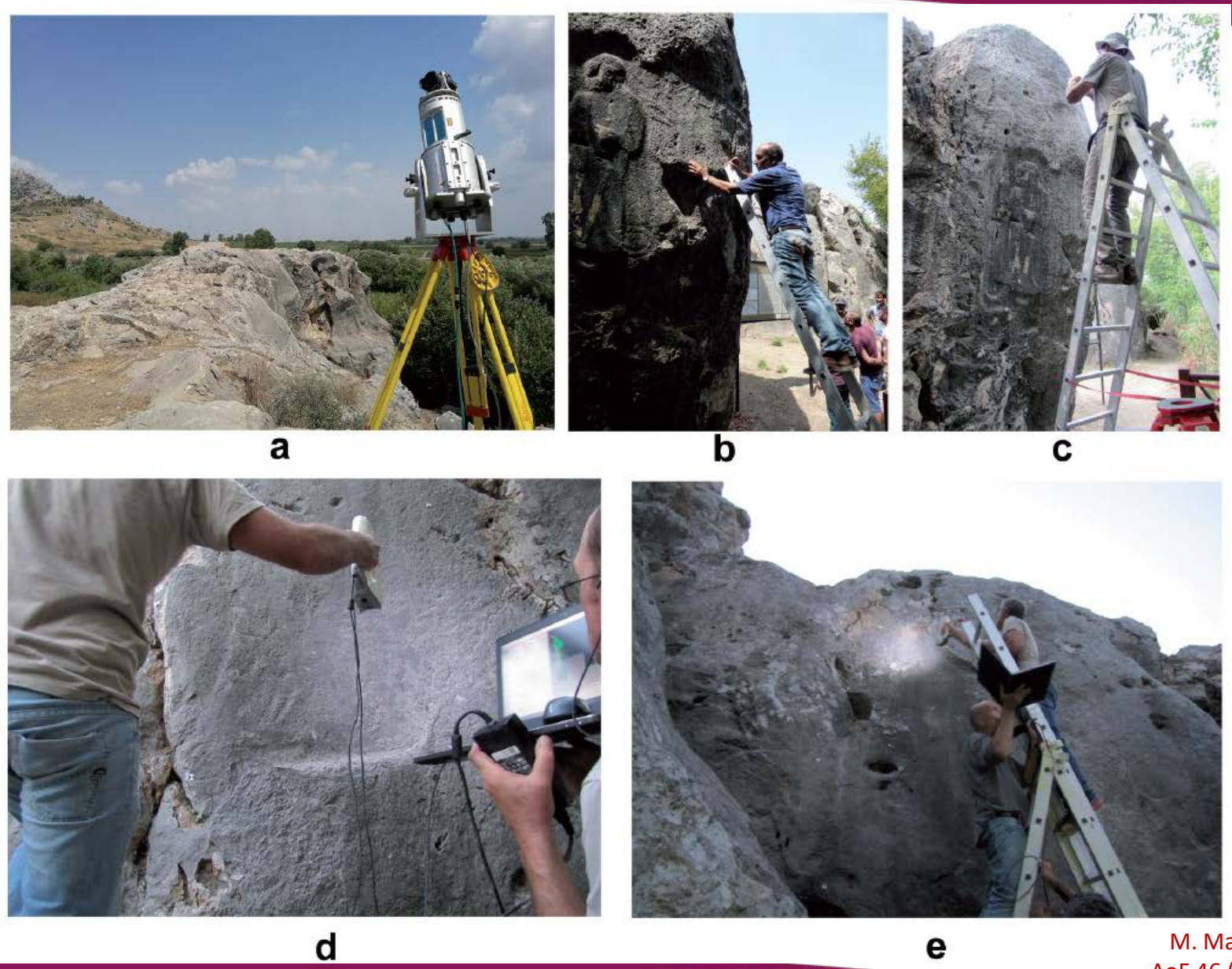




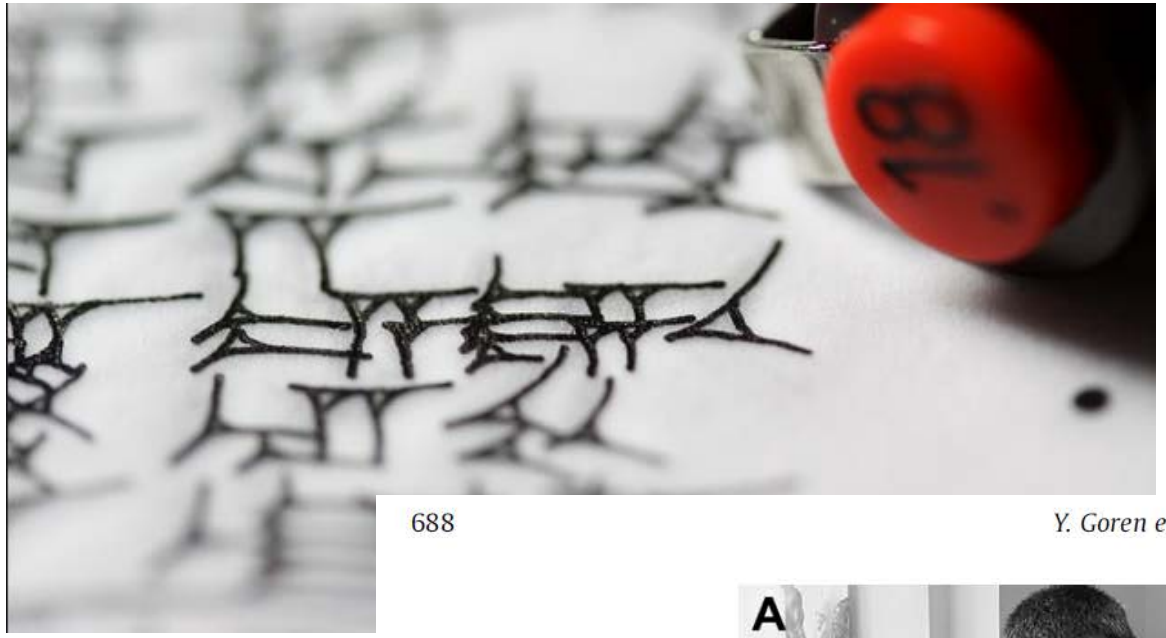


Thin sections of Alashiya letters, all under crossed polarizers, green bar size: 0.2 mm. A) Two dolerite inclusions, RSL.1. B) Marl with dolerite inclusion (left, center) in EA 33. C) Highly weathered spilite in EA 37. D) Low-grade metamorphic greywacke in EA 37.

Innovative digital technologies open up new perspectives of research in ancient cultures. In particular, the 3D digitization of artefacts, built structures and landscapes provides unique opportunities for the documentation, interpretation, preservation and presentation of our **cultural heritage**



M. Marazzi et alii,
AoF 46 (2019), p. 218



tradition and innovation

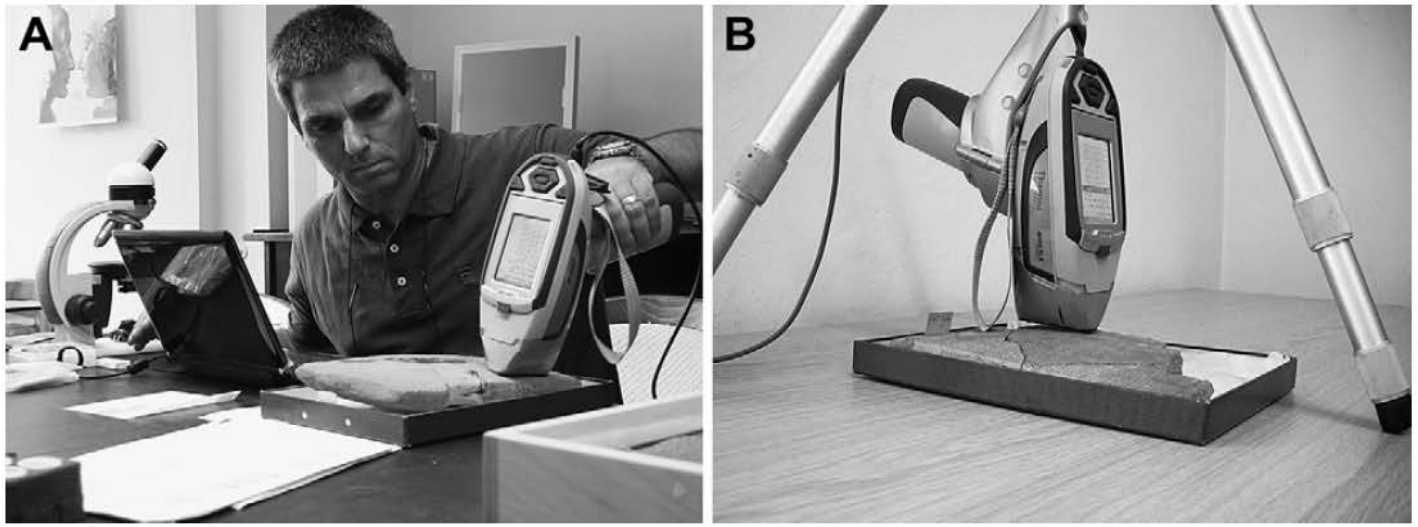
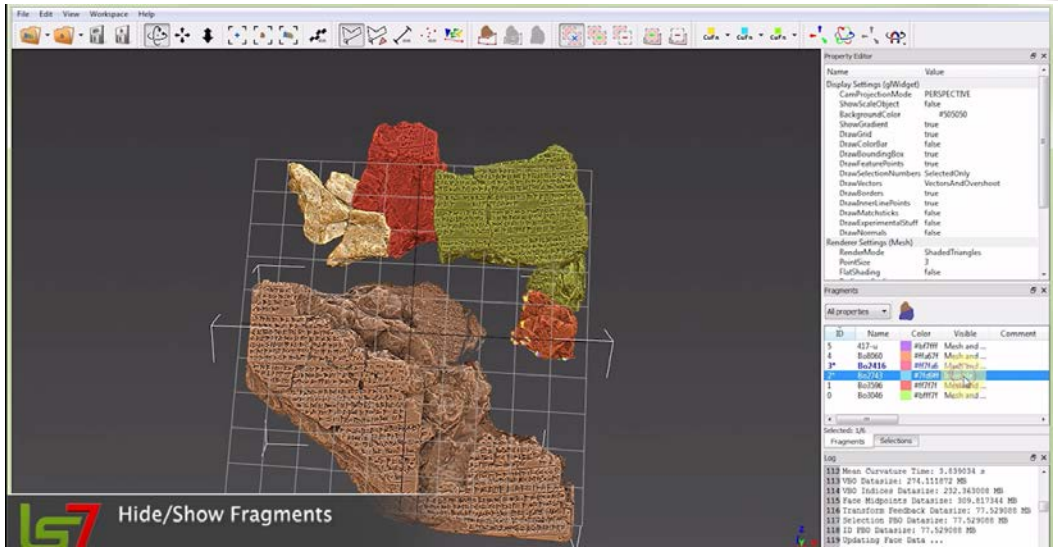
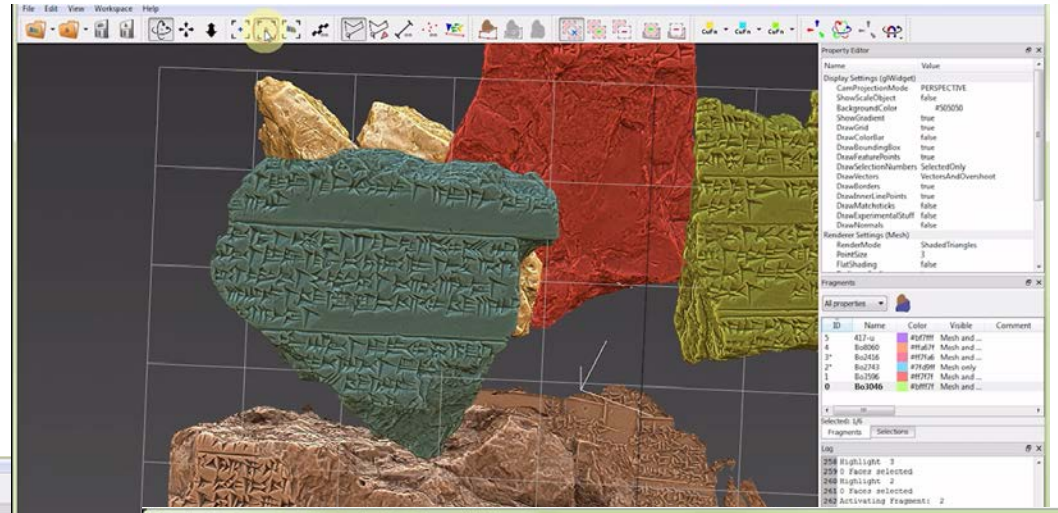
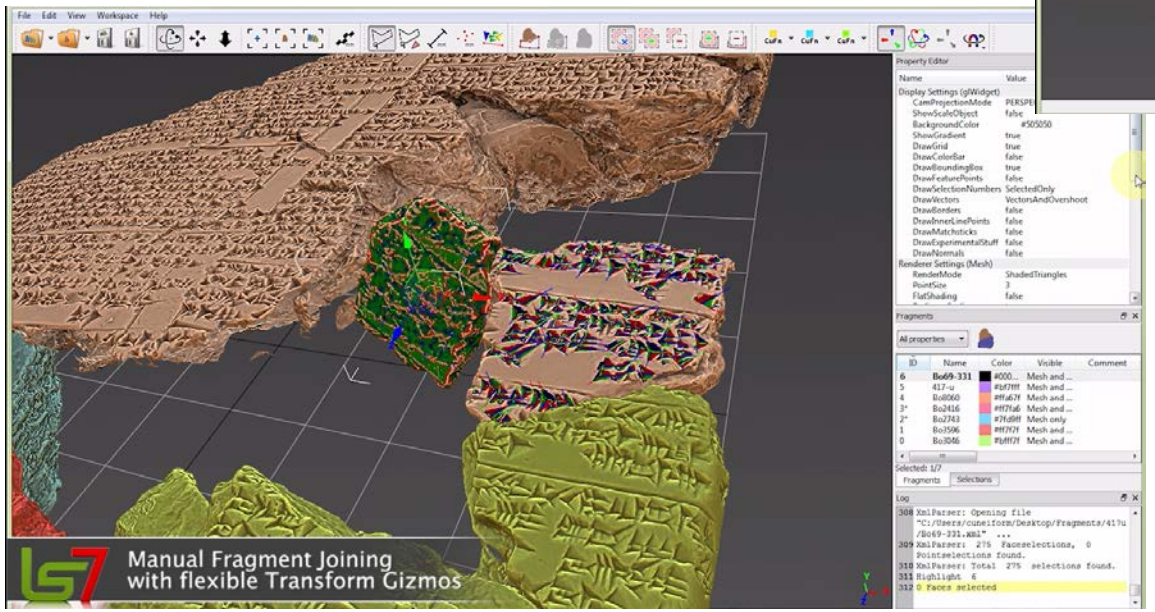
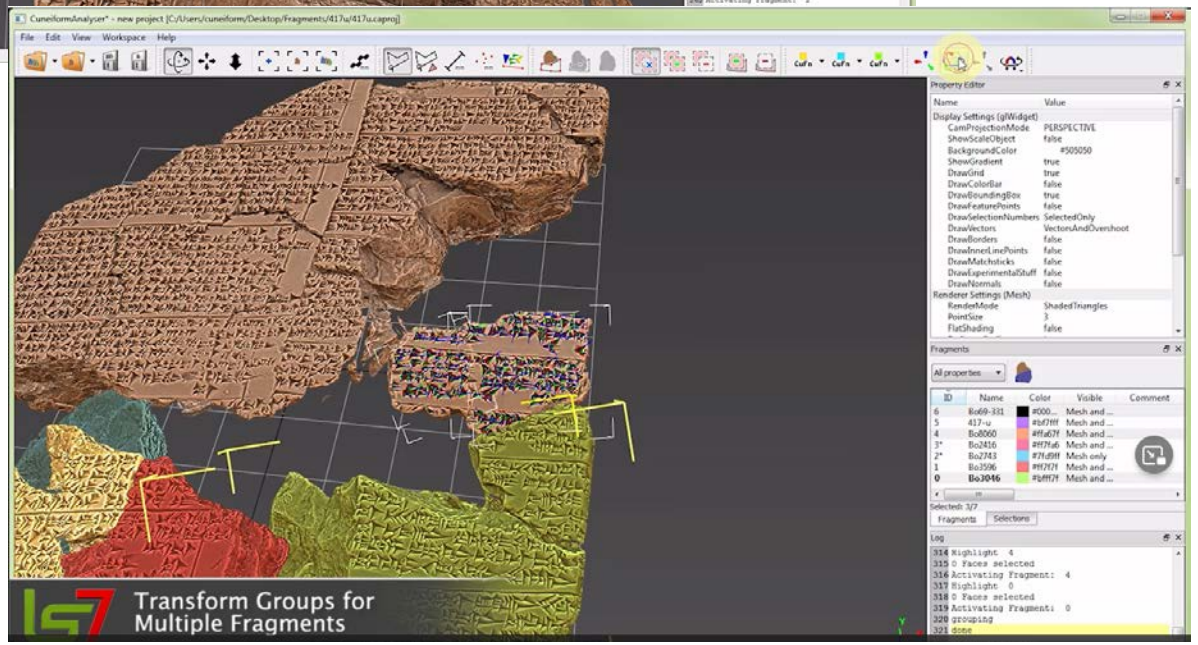


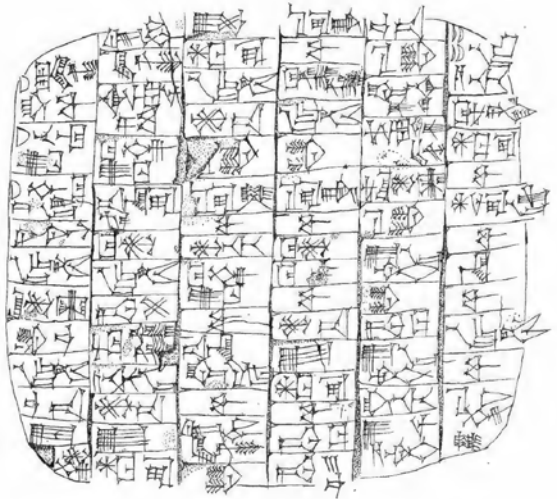
Fig. 2. Analysis of tablets in the VAM with the pXRF: A. Direct analysis of a tablet from Hattuša by holding the pXRF. B. The pXRF installed on an improvised accessory built from a photographic tripod and the unit holder of the optional Extend-a-Pole facility provided by Niton, showing the examination of a flat surface of a cuneiform tablet.


Hide/Show Fragments




Manual Fragment Joining
with flexible Transform Gizmos


Transform Groups for
Multiple Fragments



Early Bronze Ebla

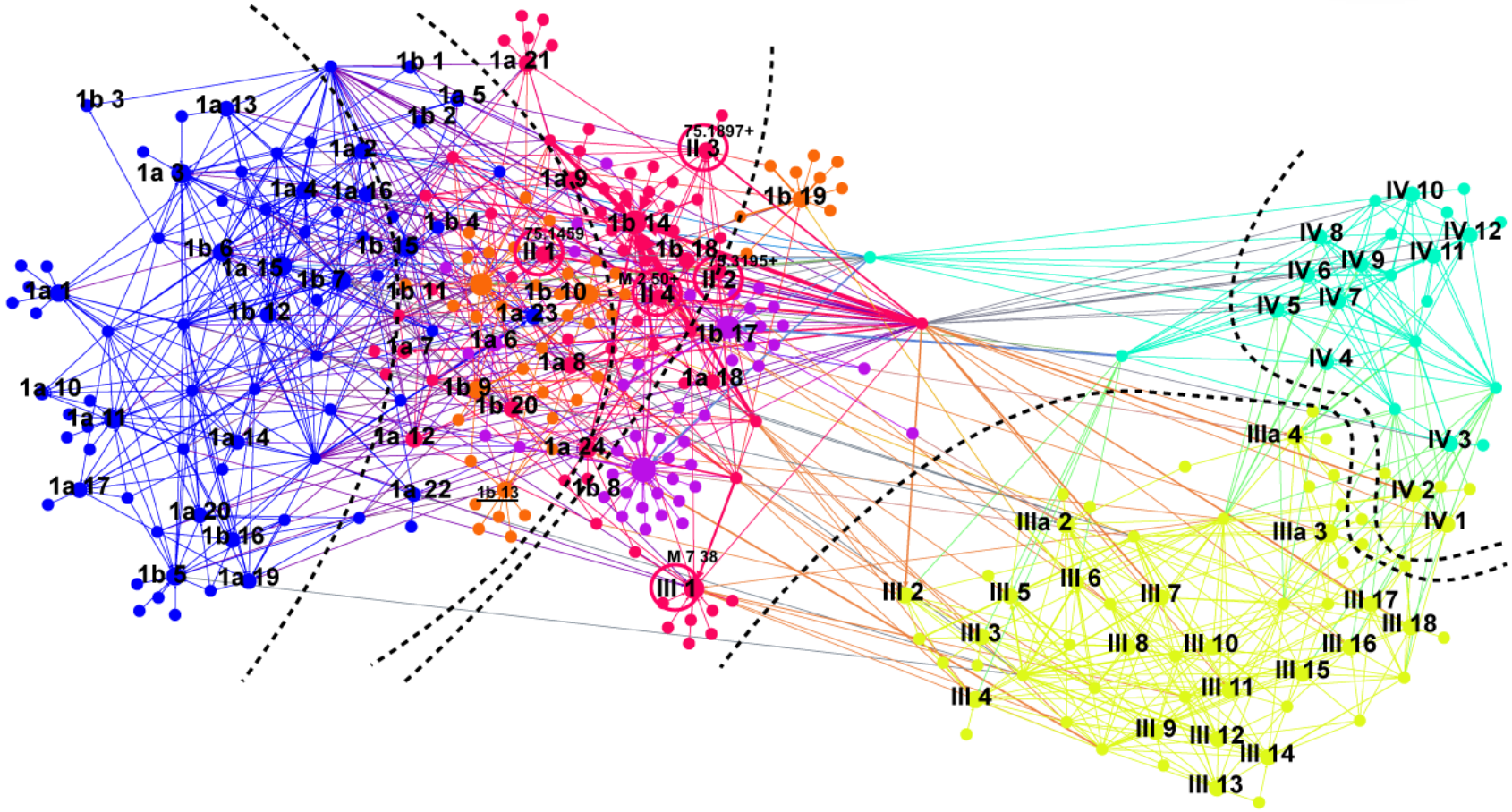
the archive with the cuneiform tablets

amounts	adm. text	record
1,061,460	**[26]**	1 *ma-ḫu-at* 6 *rí-bab* 1 *li<-im>* 4 *mi-at* 60 *GÚ-BAR* še
1,000,000	**[27]**	1 *ma-ḫu-at GÚ-BAR* še
855,530	**[4]** (**[5]**?)	10 lá*-2* *ma-i-at* 5 *rí-bab* 5 *li<-im>* 5 *mi<-at>* 30 *GÚ-BAR* še
548,500	**[6]**	5 *ma-i-at* 4 *rí-bab* 8 *li-im* 5 *mi-at GÚ-BAR* še
501,866	**[7]**	5 *ma-i-at* 1 *li<-im>* 8 *mi<-at>* 66 *GÚ-BAR* še
464,000	**[8]**	4 *m*[*a*]-*i-a*[*t*] // 6 *rí-bab* 4 *li<-im> GÚ-BAR* še
422,000	**[9]**	4 *ma-i-at* 2 *rí-bab* ˹2?˺ *li<-im>* gána-ki
360,400	**[10]**	3 *ma-i-at* 6 *rí-bab* 4 *mi-at GÚ-BAR* še
242,080	**[11]**	2 *ma-i-at* 4 *rí-bab* 2 *li-im* 80 *GÚ-BAR* še
234,400	**[12]**	2 *ma-i-at* 3 *rí-bab* 4 *li-im* 4 *mi-at zi-mi-da-tum*
221,520	**[13]**	2 *ma-i-at* 2 *rí-bab* 1 *li<-im>* 5 *mi<-at>* 20 *GÚ<-BAR>* še
204,400	**[14]**	2 *ma-i-at* 4 *li<-im>* 4 *mi<-at> GÚ-BAR* še
199,640	**[15]**	1 *ma-i-at* 9 *rí-bab* 9 *li-im* / 6 *mi-at* 40 gána-kešda ki
193,300	**[16]**	1 *ma-i-at* 9 *rí-bab* 3 *li-im* 3 *mi-at GÚ*-[*BAR*] še
190,980	**[17]**	1 *ma-i*-[*at*] 9 *rí*-[*bab*] 9 *m*[*i-at*] 80 ˹x˺ / [...]
182,600	**[18]**	1 *ma-i-at* 8 *rí-bab* 2 *li-im* 6 *mi-at GÚ-BAR* še
157,000	**[19]**	1 *ma-i-at* 5 *rí-bab* 7 *li-im* gána-kešda ˹ki˺
138,620	**[20]**	1 *ma-i-at* 3 *rí-bab* 8 *li<-im>* 6 *mi<-at>* 20 udu
137,710	**[21]**	1 *ma-*˹*i*˺*-at* 3 *rí-bab* 7 *li-im* 7 *mi-at* 10 *GÚ-BAR* še
100,400+	**[22]**	1* *ma-i-at* 4 *mi*-[*at* ... gána-kešda-ki]

One can note that my suggestion that *ma-ḫu-at* means "1,000,000" does not create monster figures. In fact, in my interpretation **[25]** (1,061,460 units, with *ma-ḫu-at*) exceeds **[4]** (855,530 units, with *ma-i-at*) only by 205,930 units, which is compatible with the whole series of figures displayed above.

M. Bonechi, *On Large Lexical Numbers at Ebla, or: Was the Last Palace G King a Millionaire?*, *Studia Eblaitica* 7 (2021)

PRIN 2017 project "Big Data and Early Archives (Big-DEA). Measuring Settlement Dynamics and Environmental Exploitation in the Ebla Region during the 3rd Millennium BC: Archaeological Record, Cuneiform Texts, and Remote Sensing"



E. Scarpa, *Social History through Textual Patterns. Study on the Social Organization at Ebla during the Age of the Archives (Syria, 24th century BCE)*, PhD Diss, Università Ca' Foscari, Venezia, 2020, p. 118

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THANK YOU