

**Exploratory Workshop Scheme** 

Standing Committee for the Humanities (SCH)

# **ESF Exploratory Workshop on**

# Wool Economy in the Ancient Near East and the Aegean: From the Beginnings of Sheep Husbandry to Institutional Textile Industry

Nanterre (France), 7-10 November 2012

Convened by:

**Cécile MICHEL and Catherine BRENIQUET** 

# **SCIENTIFIC REPORT**

#### **EXECUTIVE SUMMARY**

Mesopotamia in the third millennium BCE has been called the birthplace of wool. This is because of local socio-economic developments there that led to its increased production, as well as local improvements in techniques for the manufacture of woolen threads and fabrics. In this region, large-scale factories first began to produce fabrics and clothing in unprecedented quantities. The exploratory workshop analyzed the impact of this transformation, which radically altered the natural environment, the political landscape, and international trade networks, across the Near East to the Aegean. Its main focus was economic aspects of wool production, using an interdisciplinary approach.

The first textiles were made from vegetable fibers, the most important of them flax, cultivated from the beginnings of agriculture (around 9,000 BCE). The exploitation of wool began as a consequence of the domestication and selective breeding of livestock. In southern Mesopotamia, with the onset of urbanism in the late fifth and fourth millennia BCE, archaeozoological remains show that husbandry of pigs and cattle began to lose ground to nomadic goat and sheep-herding. This development should be understood within the context of the economy of Ubaidian chiefdoms, in which sheep became the animal of prestige. Wool fibers implied new techniques: spinning with the spindle, whorl, and distaff; weaving using the vertical weighted loom; felting. Use of animal fibers brought with it new forms of management, such as quotas of yield and production: the challenge is to describe and document this process.

By the late third millennium BCE, wool had become the main woven material and was distributed to male and female workers as a subsistence ration. According to cuneiform documentation, large-scale textile production began at that time. Domestic production continued, of course, but only women wove at home; spindles and spindle whorls became a female gender marker among grave goods. This "wool revolution" had less impact in the Bronze Age Aegean, where linen kept its importance along with wool, but there too wool was produced in large quantities, as evidenced by Linear A and B tablets. In Mesopotamian institutions and in Aegean palaces, scribes recorded standardized production goals for both palatial wool production and for thread and textile production in factories. Thousands of specialized textile workers, primarily women and children, were supervised and sustained by the central authorities.

Early in the second millennium BCE, international trade in textiles expanded, its profitability dependent on the quality of the fleece from which the textiles were produced. Isotopic analizes allow following the growth of some herds, depending on their location; diversification of wool-bearing sheep breeds can also be detected. In southern Mesopotamia, palaces employed merchants to market the wool produced by their herds; private entrepreneurs engaged in such commerce as well.

During the first millennium, wool and dye products were important elements in exchange networks and wool was used to finance international trade.

The "wool revolution" and its impact on societies can be observed from the Near East to the Aegean in a multitude of sources and involving many different specialists: historians of texts and images, philologists, archaeologists, craftspeople testing techniques and textile tools, archaeozoologists. This workshop linked together these experts in order to reconstruct the processes that led to the first form of industry in Antiquity. The data provided by archaeology, archaeozoology, and epigraphy were brought together into a united historical perspective. Participants presented systematic studies of the multiple aspects of wool in the economies of the various Near Eastern and Aegean states from the beginnings of writing till the end of the first millennium BCE. Wool was originally used for weaving and probably controlled by institutions, but, as a novel material, it also became a form of payment, given to workers as such, and exchanged within the framework of a primitive market economy. Wool became a kind of currency in a pre-monetary economy.

#### Organisers

Cécile Michel, Senior Researcher (Directrice de Recherche), CNRS, Archéologies et Sciences de l'Antiquité (ArScAn, UMR 7041), Maison de l'Archéologie et de l'Ethnologie René-Ginouvès &

Catherine Breniquet, Professor, Université Blaise Pascal, Equipe d'Accueil 1001, Centre d'Histoire Espace et Culture (CHEC), Clermont-Ferrand.

#### The exploratory workshop

The exploratory workshop took place in Nanterre (F - 92000), 7-10 November 2012. The host was the Université Paris Ouest Nanterre La Défense and for the lunches, the human sciences research house Maison René-Ginouvès, Archéologie et Ethnologie (CNRS, Université Paris 1 Panthéon – Sorbonne, Université Paris Ouest Nanterre La Défense), very close to the University building, on the same campus..

All participants were staying in four hotels (Hotel Bresil Opera, Hotel Hauteville Opera, Hotel Le Havane, Hotel Mattle), choosen for their location, situated near the RER A and metro station Opéra/Auber which is on the direct line to Université Paris Ouest Nanterre La Défense (15 mn). The participants arrived on November 7<sup>th</sup> and thus the meeting could start in the morning of November 8<sup>th</sup>. Participation numbered 24 people from different European countries: France, Denmark, Italy, Spain, England, Belgium, Germany, Czech Republic, Switzerland, and Poland. One scholar came from outside of Europe (USA, extra money provided by co-sponsoring). Two Italian colleagues did not attend the conference. Mr. R. Besana, PhD student, cancelled his participation just before the workshop for personal reasons. Dr. R. Laurito was not able to come to Paris but sent her power point presentation and paper which was read by Dr. L. Peyronnel.

Each day was divided into two main sessions, morning and afternoon, with two different chair persons. The morning session started at 9.30 AM, and the afternoon's session at 2 pm. Each session contained five lectures dealing with the same topic or period. Coffe-breaks provided time for informal discussions, while true scientific discussions closed each day. Practical help for general organization and lunches was provided by two young PhD students. One of them is writing a PhD on ancient textiles in the lst millennium Babylonia; unfortunately, due to the ESF rules (limited number of French scholars), she could not participate to the workshop.

The convenors and all the participants appreciated very much the presence of Prof. Bernhard Palme, representative of the ESF organization, for his advices and participation during the meeting.

The general atmosphere was excellent and friendly. Discussions went on during lunches pauses, and the closing dinner was a great moment, much appreciated by all. Most of the

participants, as they returned to their home country, sent very positive appreciations of the workshop.

# **SCIENTIFIC CONTENT OF THE EVENT**

The workshop was built on an interdisciplinary dynamic. All the sessions were moderated by colleagues who have a wide knowledge of each specific field: P. Charvat and M.-L. Nosch for the first day, N. Postgate and M.-G. Biga for the second day, and B. Foster for the Saturday morning. They all kindly accepted to introduce the lectures and start the first discussions.

It started with methodological lectures, highlighting the vast knowledge which is necessary for textiles studies (generally speaking), and the difficulties held by the confrontation of philological and archaeological data in early Mesopotamia.

The first day of the workshop was devoted to the first evidences of wool and its first uses.

The first lecture was given by **A. Rast-Eicher** who provided a detailed overview of the very well preserved Hallstatt woollen textiles. Despite the chronological and geographical differences, this presentation was highly usefull, showing a new methodological approach of ancient textiles which is now more accurate than the previous model held by M. Ryder on ancient fleeces.

The lecture of **E. Vila** emphasized the role of the archaeozoology in archaeology for reconstructing the development of the wool production. Iconography was integrated to the scientific approach as a mean of confirmation.

The invaluable role of experimentation and ethnoarchaeology was presented by **E. Andersson** from the CTR who did methodological efforts to make invisible/perishable artefacts (wool and textiles) through archaeological contexts visible to the scientific community. A similar approach was also developed by **R. Laurito** with the material from Arslantepe, a newly excavated site in Turkey which provided tools and textiles from Chalcolithic period, cross-examined by herself and a skilled craftsman.

**C. Breniquet** gave an overview of the archaeology of wool, between human choices and environmental constraints. She shown how difficult was this interdisciplinary approach in the archaeology of the ancient Near East. Ancient excavations and sometimes wrong readings of archaeological records, especially in iconography, complicated the approach. She also developed the role of the *chaîne opératoire* for reconstructing ancient techniques.

Wool is one of the commodities appearing most frequently in Mesopotamian protocuneiform texts from the end of the IVth millennium B.C. **P. Charvat** highlighted the role of wool already as a mean of payment in these first written documents and the collect of textiles as taxes; he identified some procedures involving wool treatment, as well as transport of wool and wool products in storage jars.

The well-known Syrian site of Ebla gave opportunity to **L. Peyronel** to study weighing techniques and weaving tools toward archaeology and epigraphy during the second half of the III<sup>rd</sup> millennium B.C. Ebla textual evidences, analyzed by **M. G. Biga**, deal with the ration system in which wool was delivered to workmen.

Two other lectures also concerned to III<sup>rd</sup> millennium sources and delt with two specific problems, often debated : the role played by the nomads at the end of the third millennium BCE and the economic changes which followed the advent of the Akkadian state. **W. Sallaberger** analyzed sheep flocks through the Sumerian documentation of Tell Beydar-Nabada (xxI<sup>vth</sup> century) and of the Third Dynasty of Ur (xxI<sup>th</sup> century). He showed that the

sheep flocks providing wool used in the textile industry was controlled by the urban centers and not by nomads. **B. Foster**'s lecture dealing with the Akkadian period (XXIV-XXIII<sup>th</sup> centuries) pointed out the role of wool as a raw ingredient for increasing industrialization of commodity production.

The discussions concerning the III<sup>rd</sup> millennium cuneiform sources focused on the following topics: problems of translation of technical terms involved in wool craft, frequency of wool deliveries, monthly or annually, craft specialization, wool as currency or measure, wool converted into silver, in other words, wool as a source of wealth in early Mesopotamia.

The second day of the workshop was devoted to wool trade and wool rations in II<sup>nd</sup> millennium archaeological and textual sources from Mesopotamia, Anatolia and the Aegean.

**L. Colonna d'Istria** analyzed the very new Mari textual evidences from the Shakkanakku period (XIX<sup>th</sup> century) which concern flocks of sheep and the production and distribution of textiles. Mari documents from the next period (XVIII<sup>th</sup> century) as well as other corpuses from upper Mesopotamia and Central Anatolia give important data about wool trade and circulation both in the institutional and private spheres.

According to **C. Michel who collected data from several sites**, palaces had important needs of wool to cloth the royal family, the palace population, to distribute as allocations to its workers or to offer to foreign kings. Their production was almost exclusively for internal consumption and for diplomatic gifts. While the surplus of the private contemporaneous Assyrian production of textiles was sold abroad in Anatolia. A. Wisti Lassen analyzed the involvement of Assyrian merchants in the Anatolian local wool trade, showing that most of the wool ended up in the Anatolian palaces or other major households where it was used for textile production.

Old Babylonian documentation from Southern Mesopotamia was presented by **K. de Graef** who proposed a re-evaluation of the wool production and trade in Sippar explained thirty years ago by D. Charpin. The wool surplus of the palace flocks was given to entrepreneurs who entrusted it to merchants by credit sale contract. They had to pay back in silver. These transactions concerned very small quantities implying that the palace's surplus was not important.

For the late Bronze Age, two areas have been studied. **P. Abrahami** focused on the palatial archives of Nuzi, East of the Tigris, which detail the dyeing processing of raw wool and the organization of textile workers. **V. Matoïan** and **J. P. Vita** presented a crossed analysis of archaeological and textual evidences from Ugarit on the Levant coast, where textile and clothing industry played a significant role in the economy of the kingdom.

Three papers dealt with the Aegean and Greece during the II<sup>nd</sup> and I<sup>st</sup> millennia. Analyzing simultaneously Minoan Crete iconography and Linear A tablets, **P. Militello** dated the introduction of wool in Crete during the end of the IV<sup>th</sup> millennium. It started to be used for clothes during the second half of the IIIrd millennium and the first purple dyed wool can be dated to 2000 B.C. It does not seem to have been exploited at that time by the institutions. This is not anymore the case during the Mycenean period; according to **F. Rougemont**, Linear B tablets (XV-XIII<sup>th</sup> centuries), produced by the administration of the palaces, attest the importance of wool production and use in the palatial economies. In textual material of the late Bronze Age, there is curiously very little additional information on wool which seems to have gained a rather standardised value as it was explained by **M.-L. Nosch**. Equally, very little is known about the economy of wool in the classical Greek world. However, in I<sup>st</sup>

millennium BC Greek sources, wool has still a strong position as a commodity and investment of the ancient economy, especially in relation with sanctuaries.

The third and last day of the workshop was devoted to wool in Institutionalized economies. **N. Postgate** dealt with written evidence for the production of wool and textiles in the Middle Assyrian sources, predominantly dating to the XIII<sup>th</sup> century B.C. He reviewed the technical terminology of wool and goat hair, the production processes and workers, evidence for state and privately organized wool production, and the range of attested wool products, including felt and carpets. Curiously enough, the Assyrian documentation of the I<sup>st</sup> millennium, less numerous, document about the same aspects. **S. Zawadzki** based his lecture on the Neo-Babylonian documentation from Sippar, showing that sheep husbandry had a very high income: a herd of 36 sheep was enough for a whole large family. The last paper by **F. Joannès** dealt with fabrics and clothes in wool and other raw materials during the Achaemenid and Seleucid periods. At that time, clothing was still a sign of cultural identity: clothes in religious context occurring in the temples documentation differed from the garments attested by the dotal inventories related to marriages contracts.

The final discussion lasted for an hour and a half. Several plans for follow-up research activities and joint collaborative actions have been discussed in a very constructive way by most of the participants.

During the workshop, an unsual experimental session was presented by two colleagues on our request. They brought different sheep fleeces and different spindles, showed the way of using it and most of the participants could experiment it. This experimental session demonstrated without any doubt better than by explaining with words the technical knowledge involved in spinning and how time consuming was the activity in a traditional context of production. It made also visible the difference between wool and goat hair qualities. This session strenghtened the scholars within the frame of the same activity in a very friendly and relaxed atmosphere.

# ASSESSMENT OF THE RESULTS CONTRIBUTION TO THE FUTURE DIRECTION OF THE FIELD OUTCOME

C. Breniquet, C. Michel and Fr. Rougemont proposed syntheses by millennia and areas. These showed that some period or area were not covered as for example the Hittite documentation or the Neo-Assyrian documentation. N. Postgate announced that he had already made some research in the Neo-Assyrian corpus as he was preparing his contribution and kindly accepted to include it in his manuscript. Other researchers will be solicited to contribute to the volume. The organizers and the participants agreed to publish the proceedings of this ESF exploratory workshop as a book, as soon as possible in 2013. Participants have been asked to send back their manuscripts for February 15, 2013. C. Breniquet and C. Michel will edit the papers, M.-L. Nosch accepted the publication in the Ancient Textiles Series of the Centre for Textile Research, published at Oxbow Books, Oxford.

Before making plans for the future, the organizers presented the existent projects in order to show the main steps that led to the present workshop, and to highlight the important role of the ESF. Wool economy and textile research is one of the themes developed by the team HAROC (Histoire et Archéologie de l'Orient cunéiforme) since 2005, and C. Michel participated to the project of the Centre for Textile Research at its creation. After a first ESF Exploratory Workshop organized in collaboration with the two centers of research and dedicated to Textile Terminologies in the Ancient Near East and the Aegean from the III<sup>rd</sup> and IInd millennia BC (Copenhagen, 2009; published in the series Ancient Textiles in 2010), C. Michel and M.-L. Nosch became in January 2012 the coordinators of a CNRS – DNRF Programme of International Scientific Cooperation (in French: Programme International de Coopération Scientifique, PICS), entitled *Textiles from the Orient to the Mediterranean*, financed for three years. The PICS TexOrMed intends to unite historians of texts and images, archaeologists, craftspeople testing techniques and textile tools, palaeobotanists, and palaeozoologists in order to reconstitute the processes which led to the first form of industry of the Antiquity. Participants to this PICS are members of the CTR in Danemark and in France, researchers and university professors from several CNRS and University teams in Nanterre, Lyon, and Clermont-Ferrand.

The main actions of the PICS in 2012 were this ESF Exploratory workshop on Wool Economy and the collaborative publication of a special issue of the Journal Paleorient, vol. 38, devoted to the Prehistory of Textiles in the ancient Near East, both assembling scholars from broader horizons.

Among the many planned projects within the PICS, French and Danish researchers are working on book dealing on interdisciplinary researches on textiles including a great majority of papers by young colleagues. They are participating to Master and PhD seminars in Copenhagen and Nanterre on textiles and they plan the organisation of a second workshop on Textile Terminologies from Ist millennium BC to Ist millennium AD which will take place in the CTR in Copenhagen in June 2014. All the participants of the present workshop were asked to contribute to this second workshop.

Thus, the ESF organization gave to the French-Danish team twice the opportunity to work together. In the future, this cooperation should lead to joint collaborative actions involving many more European countries, creating a network of researchers working on any topic linked to ancient textiles. Indeed, the project must be carried forward on a broader basis, hoping to consolidate the approaches of archaeology and philology.

Several systematic approaches to the ancient textile crafts need to be planned and have been discussed between the participants of the workshop during the final session.

C. Breniquet asked for the opportunity to create a database of the ancient textile remains from the Near East. All the data should be gathered in order to develop researches on the textile fibers and techniques. As we know, textile remains are scarce in Near Eastern archaeological contexts, due to taphonomic conditions. Most of them are not preserved at all for no preservative action was taken on the field. They are also widely dispatched in archaeological reports and usually badly described. With such a situation, it is clear that no one – specialist or not - can have a correct overview of textile archaeology of the ancient Near East. Each new discovery might change the conclusions drawn from their analysis. It seems urgent to collect all the data from the published excavations reports and to suggest to our colleagues to publish them in the best conditions. If planned, this project would give the opportunity to associate young colleagues and to start further direct researches on textiles.

C. Michel proposed in parallel to make, for each ancient language concerned (First pictograms, Sumerian, Akkadian, Hittite) a database of words connected to textiles, fibers, textiles tools and techniques. Juan Pablo Vita proposed that this work could take the form of an encyclopedia with a glossary at the end. W. Sallaberger, V. Biga, E. Andersson, P. Charvat and N. Postgate agreed to participate to such a large project.

E. Andersson also proposed to develop experimental approaches linked to observations on archaeological materials, especially textile, rope and basketry imprints. The project to study systematically textile imprints on clay has been discussed in detail. N. Postgate and B. Foster proposed to create collections of photos of textile imprints on clay, especially on sealings and tablets. P. Militello thought about making silicone imprints of textile imprint on the collection of bullae from Aegean sites. C. Michel and E. Andersson proposed to start by making a pilot study with the collection of objects from Kültepe (Anatolia), because material from Syria is not avalaible for the moment (large collection at Ebla, for example).

It has also been proposed to develop projects to yield a comprehensive picture of the economic and cultural impact of textiles and textile manufacturing on society, especially by identifying the production structures and composition of herds. E. Vila emphasized the importance to study the age of death of the animals, and to try to understand from where come the sheep with wool.

# FINAL PROGRAMME

#### Wednesday 7 November 2012

Late afternoon <i>Mattle</i>	Arrival at Hotel Bresil Opera, Hotel Hauteville Opera, Hotel Le Havane, Hote	
	Thursday 8 November 2012	
09.00-9.30 09.30-10.00	Registration Welcome by Convenors Cécile Michel and Catherine Breniquet (CNRS, Nanterre, France and Université Blaise-Pascal/EA 1001 CHEC, Clermont- Ferrand, France) Presentation of the European Science Foundation (ESF) Bernhard Palme (ESF Standing Committee for the Humanities (SCH)) Introduction Cécile Michel and Catherine Breniquet	
10.00-10.30	FIRST EVIDENCES, FIRST USES OF WOOL Bronze and Iron Age Wools from Europe Antoinette Rast-Eicher (Archeotex, Ennenda, Switzerland)	
10.30-11.00	Expansion of Sheep-Herding and Development of Wool Production in the Ancient Near East: An Archaeozoological and Iconographical Approach Emmanuelle Vila (CNRS, Lyon, France)	

11.00-11.30 *Coffee / Tea Break* 

11.30-12.00	Sheep, Wool and Textile Production, an Interdisciplinary Approach on the Complexity of Wool Working
	Eva Andersson Strand (CTR, Copenhagen, Denmark)
12.00-12.30	Archaeology of Wool in Archaic Mesopotamia
	Catherine Breniquet (Université Blaise-Pascal/EA 1001 CHEC,
	Clermont-Ferrand, France)

- 12.30-14.00 *Lunch*
- 14.00-14.30Lambs of the Gods. The Beginnings of the Wool Economy in<br/>Proto-Cuneiform Texts
- 14.30-15.00 **Petr Charvat** (University of Plzen, Plzen, Czech Republic) **The Sources of Wool in Early Mesopotamia Walter Sallaberger** (Ludwig-Maximilians-Universität München, München, Germany)
- 15.00-15.30 Wool in the Economy of the Akkadian Period Benjamin Foster (Yale University, New Haven, USA)
- 15.30-16.00 *Coffee / Tea break*
- 16.00-16.30 From Weighing Wool to Weaving Tools. Textile Manufacture at Ebla (Syria) on the Light of Archeaological and Epigraphic data Luca Peyronel (Università IULM, Milano, Italy)

16.30-17.00 Rations of Wool at Ebla (Syria, xxiv<sup>th</sup> cent. BCE) Maria-Giovanna Biga (Università di Roma "La Sapienza",

Roma, Italy)17.00-17.30Making Textiles at Arslantepe in the 4th and 3rd MillenniaBCE. Archaeological Data and Experimental Archaeology

Romina Laurito (Università di Roma "La Sapienza", Roma, Italy) in collaboration with Cristina Lemorini and Assunta Perilli

17.30-18.00 **Discussion** 

#### Friday 9 November 2012

#### TRADE AND RATIONS SYSTEM

- 09.30-10.00 Wool Economy in the Royal Archive of Mari during the Šakkanakku Period Laurent Colonna d'Istria (Université de Liège, Liège, Belgium)
- 10.00-10.30 All Wool and a Yard Wide. Wool Production and Trade in the Old Babylonian Sippar
- Katrien de Graef (Rijkuniversiteit Gent, Gent, Belgium)10.30-11.00Wool Trade in Upper Mesopotamia and Syria According to<br/>Old Babylonian and Old Assyrian Texts<br/>Cécile Michel (CNRS, Nanterre, France)
- 11.00-11.30 Coffee / Tea Break
- 11.30-12.00Wool Trade in Anatolia during the Old Assyrian Period
- Agnete Wisti Lassen (CTR, Copenhagen, Denmark)12.00-12.30Wool Economy in Minoan Crete before Linear B. A<br/>Minimalist Position<br/>Pietro Militello (Università di Catania, Catania, Italy)
- 12.30-14.00 **Lunch**

14.00-14.30 14.30-16.00	Wool in the Nuzi Texts (Iraq, XIV <sup>th</sup> cent. BCE) Philippe Abrahami (Université de Lyon 2, Lyon, France) Experimental session presented by Eva Andersson Strand & Antoinette Rast-Eicher
16.00-16.30	Coffee / Tea break
16.30-17.00	Wool Production and Economy at Ugarit Juan-Pablo Vita and Valérie Matoïan (Consejo Superior de Investigaciones Científicas-CCHS, Madrid, Spain and CNRS, Lyon, France)
17.00-17.30	Sheep Breeding and Wool Exploitation in the Mycenaean Written Documents

- Françoise Rougemont (CNRS, Nanterre, France) Wool Economy in Greece, end of II<sup>nd</sup> millennium and 17.30-18.00 I<sup>st</sup> millennium B.C.E.
  - Marie-Louise Nosch (CTR, Copenhagen, Denmark) Discussion
- 18.00-18.30 19.30

# **Closing Dinner**

## Saturday 10 November 2012

# WOOL IN INSTITUTIONALIZED ECONOMIES

09.30-10.00	Wool and Textile Production in the Middle-Assyrian State Nicholas Postgate (University of Cambridge, Cambridge, UK)
10.00-10.30	Fabrics and Clothes from Mesopotamia during the Achaemenid and Seleucid Periods: the Textual Evidence
10.30-11.00	Francis Joannès (Université Paris 1, Paris, France) Wool in the Economy of the Neo-Babylonian Sippar Stefan Zawadzki (Adam Mickiewicz University, Poznan, Poland)
11.00-11.30 11.30-13.00	<b>Coffee / Tea Break</b> <b>Final discussion,</b> plans for follow-up research activities and other joint collaborative actions of the group of researcher
13.00-15.00	lunch

Free museum visits and departure either on Saturday 10 or Sunday 11 November

# FINAL LIST OF PARTICIPANTS

#### Convenor:

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#### 24. Agnete WISTI LASSEN

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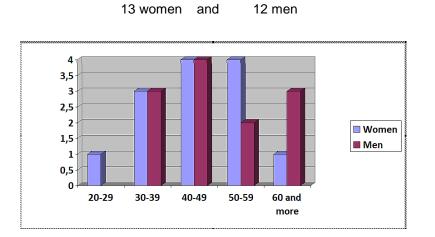
#### 25. Stefan ZAWADSKI

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# **STATISTICAL INFORMATION ON PARTICIPANTS**

Europe		
France	7*	
Italy	4	
Denmark	4	
Belgium	21	
Austria	1 (ESF representative)	
Czech Republic	1	
Germany	1	
Great Britain	1	
Poland	1	
Spain	1	
Switzerland	1	
Non-European countries		
USA	1	
Poland Spain Switzerland <i>Non-European countries</i>	1 1 1	

\* V. Matoïan was not in our first list of attendees of the workshop, but J.-P. Vita (Spain) asked us to prepare a joint contribution with her because of her position at the head of Ugarit excavations; it was very difficult to refuse. This explains why there is one more French participant.



# Age and Gender of Participants

## Repartition by scientific specialty\*

	Archaeology	Philology/History	Experimental archaeology	Archaeozoology
Ancient Near East	6 (III <sup>rd</sup> and II <sup>nd</sup> millennia BC)	11 (from III <sup>rd</sup> to I <sup>st</sup> millennium BC)	1	1
Aegean	2	3 (II <sup>nd</sup> mill. BC)	1	
Ancient Europe	1		2	

\* Some participants are specialized in more than one field