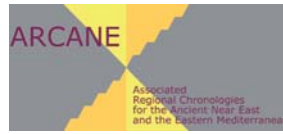




EUROPEAN
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Associated Regional Chronologies for the Ancient Near East and the Eastern Mediterranean (ARCANE)

An ESF Standing Committee for the Humanities (SCH)
Research Networking Programme



Chronology underpins all archaeological and historical studies. To establish the proper sequence of events is a prerequisite for writing history. The synchronization of chronologies, and therefore of the histories, of the various areas of the Eastern Mediterranean and the Near East is an essential task without which the development of civilizations, their reciprocal influences, their convergence and divergence, cannot be described and understood.

The broad chronological framework of these civilizations had been outlined by scholars by the 1960s. Since then, however, the multiplication of excavations and the widespread use of radiocarbon dates have revolutionized our knowledge. More discoveries have been made in the last forty years than in the preceding century. New schemes of periodization have been formulated; new chronologies worked out, and new synchronisms proposed, based on a large variety of sometimes conflicting data originating from expanded geographical horizons.

As a result, disagreements between specialists are numerous and profound, controversies frequent and uncertainties widespread. In particular, the same term may be used by different scholars to designate periods which have rather different archaeological definitions and time spans. In such extreme cases, scholarly communication is hindered.

To remedy an analogous situation, specialists in the archaeology and chronology of the second millennium BC in the Eastern Mediterranean, from Anatolia to Egypt, have coordinated international research during the last decade within the framework of SCIEM 2000 (The Synchronization of Civilisations in the Eastern Mediterranean in the Second Millennium BC) in order to resolve major problems related to terminology, synchronization and absolute chronology.

However, nothing has yet been done to create a solid foundation for the chronology of the third millennium BC in the Eastern Mediterranean and the Near East, and thus to propose an overall synchronization of its diverse cultures.

In order to fill this gap, in 2002 a group of scholars representing several academic and research institutions met at the University of Pisa for a two-day workshop. The outcome of this meeting was the creation of an international research project entitled "Associated Regional Chronologies for the Ancient Near East and the Eastern Mediterranean", summarized by the acronym ARCANE.

The research networking programme runs from 1 January 2006 until 31 December 2010.

Cover:

Cuneiform tablet from Tell Beydar, Jezirah (c. 2415 BC)

Aims and objectives

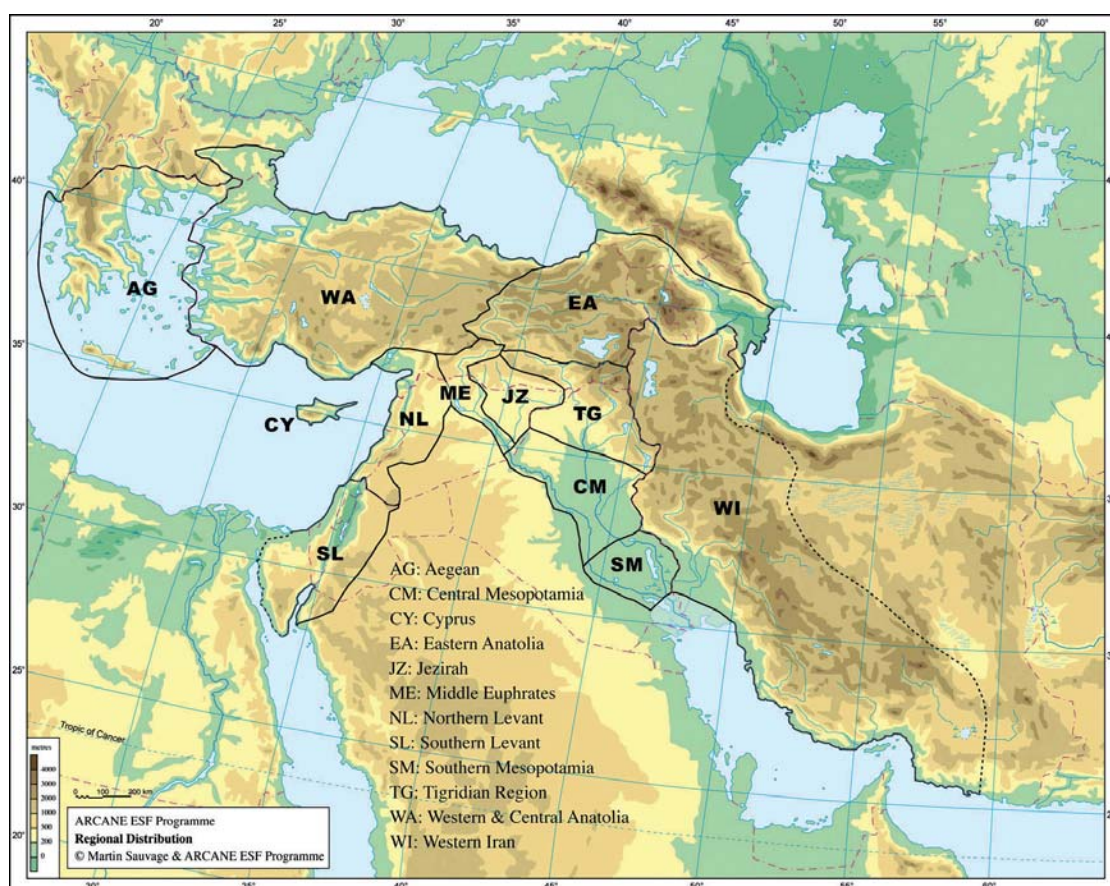
The ultimate goal of the ARCANE project is to produce a reliable, relative and absolute chronology of the Near East and the Eastern Mediterranean, based on the synchronization of regional chronologies for the third millennium BC.

“Third millennium” is a conventional designation corresponding, in fact, to the period called by many archaeologists the “Early Bronze Age”. In current terminology, the Early Bronze Age begins during the course of or at the end of the fourth millennium and its end may occur at the beginning of the second millennium, depending on the area. Hence, the core chronological focus of the project is the third millennium BC, but the time span considered may include portions of the preceding and following millennia.

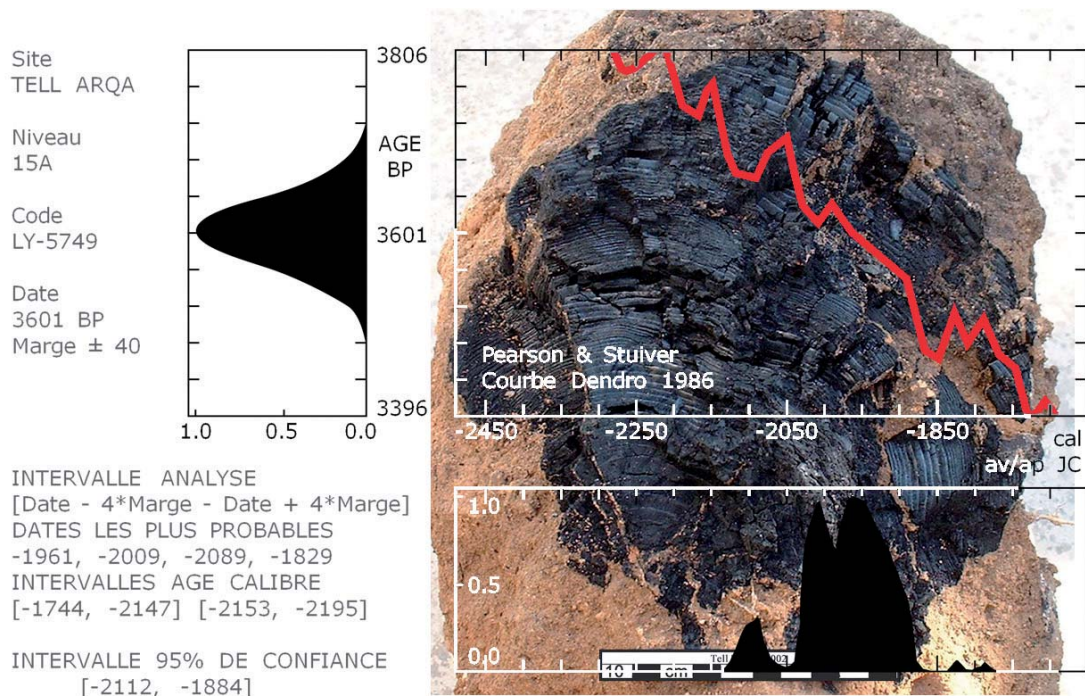
Within this long time span, the project intends to review all aspects of the material culture, together with the artistic manifestations, the historical and epigraphic records and the various methods of dating (mainly radiocarbon, but also thermo-luminescence, dendrochronology, etc.).

Its geographical scope covers the entire Eastern Mediterranean and Near Eastern area, from Greece and Bulgaria to Iran.

Within this large territory, the study approach is *regional*: the aim of the project is first and foremost to achieve the establishment of regional archaeological sequences which will be ultimately synchronized in order to obtain a synthetic view of the Eastern Mediterranean and Near Eastern chronology. Hence the title of the project.



The geographical scope of ARCANE



Beam section and dendrochronological graph

For working purposes, twelve regions have been isolated on the basis of a preliminary archaeological analysis undertaken during preliminary workshops held in Pisa and Paris. These regions are: Southern Levant (SL), Northern Levant (NL), Cyprus (CY), Aegean (AG), Western & Central Anatolia (WA), Eastern Anatolia (EA), Middle Euphrates (ME), Jezirah (JZ), Tigridian Region (TG), Central Mesopotamia (CM), Southern Mesopotamia (SM), and Western Iran (WI). These regions constitute the operational framework of the *Regional Groups*.

However, since several aspects of the archaeological data must be treated at a supra-regional level, the project has also a *transregional*, or *transversal*, dimension: the critical examination of radiocarbon dates, art historical studies, as well as epigraphic and historical evidence needs to be undertaken within a broader framework. These constitute, therefore, the focus of additional research groups, called the *Transversal Groups*.

The ESF research programme

A Gradual Approach

First Phase: Regional Periodization

Each Regional Group will produce a synthesis of its results, in the form of a volume presenting a regional periodization, a tabulated synchronization of the stratigraphic sequences of the major sites, and a series of contributions illustrating the categories of objects which characterize the material culture for each period (type fossils).



Norsuntepe, Eastern Anatolia

Second Phase: Cross-Regional Synchronization

During the second phase of the project, the same methodology will be applied for synchronizing the different regional periodizations. Interregional workshops will be organised for comparing the assemblages of artefacts, e.g., for Southern and Northern Levant, for Iran, Central and Lower Mesopotamia, etc. The role of the three Transversal Groups will be especially important at this stage of the project.

Third and Last Phase: General Synthesis

The last and final phase of the project will consist of a general synthesis elaborated in the course of a final conference. It will result in a final volume with chronological tables, contributions about the periodization and chronology of the different regions, illustrations of the regional assemblages, and distribution maps for some widespread types of artefacts.

Workshops and Conference

The project involves the organisation of several international meetings at the three phases of its development:

- Each Regional Group will organise two workshops bringing together the members of the group and several field archaeologists and specialists of related disciplines and natural sciences;

- Several workshops will review interregional data;
- A general conference will be organized at the end of the Programme to mark the conclusion of the project and the formulation of a global synthesis.

Specific Objectives

The ARCANE Programme represents a radically new scholarly endeavour in the field of Near Eastern studies. It is unique in aspects of its scientific approach, methodology and organisation.

A New Common Methodology

The project explicitly seeks to set new scientific standards through the use of a common methodology applied by all Regional and Transversal Groups. In particular:

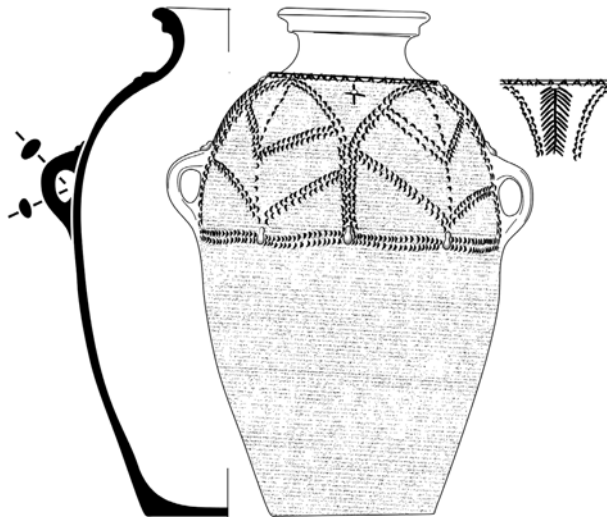
- A relational *Database* will be implemented, allowing participants to harmonise, and thus improve the comparability, of information from various sites at regional and interregional levels;
- All Regional Groups will follow the *same operational procedures* aimed at reviewing the evidence as objectively as possible, in order to avoid the complications arising from five or six decades of scholarship. For example, to avert the situation in which a single term may be applied by different scholars to entities with different archaeologi-

The screenshot shows the ARCANE database software interface. At the top, there is a menu bar with options: File, Edit, View, Insert, Format, Records, Scripts, Tools, Window, Help. Below the menu bar, the title bar reads "ARCANE" and "you are in POTTERY". The main window is divided into several sections. On the left, there is a "Registration" tab. The "Header" section contains fields for "Probable origin/manufacture" (Local), "Shape Class" (R), "Jar (Restricted Neck)", "Shape complete" (yes/no), "Segmentation/preserved parts" (Rim, Handle, Body L(ower), Neck, Body U(pper), Base), "Sherds from different vessels" (yes/no), "Functional category" (Storage), "Rim Typology" (00), "Ware Quality" (Medium), "Base Typology" (00), "Ware Hardness" (Hard), "Size" (L, W, H, D), "Capacity", "Miniature Vessel" (yes/no), "Mark(s) type", and "position". Below the "Header" section, there are tabs for "Fabric", "Surface treatment", and "Decoration". The "Fabric" tab is active, showing "Inclusions" (Mineral, Basalt, Limestone), "Building technique" (Coiled, Turned (slow wheel)), "Determination of Ware by laboratory analysis" (yes/no), and "Firing technique" (Oxidized with reduced surface). On the right side of the interface, there are buttons for "Go to menu", "Exit", "New record", "Simplified printable format", "Delete record", and "Go to 'help'". At the bottom right, there are buttons for "go to pottery chart" and "go to Volume.exe".

A file of the Data base (s.v. Pottery)



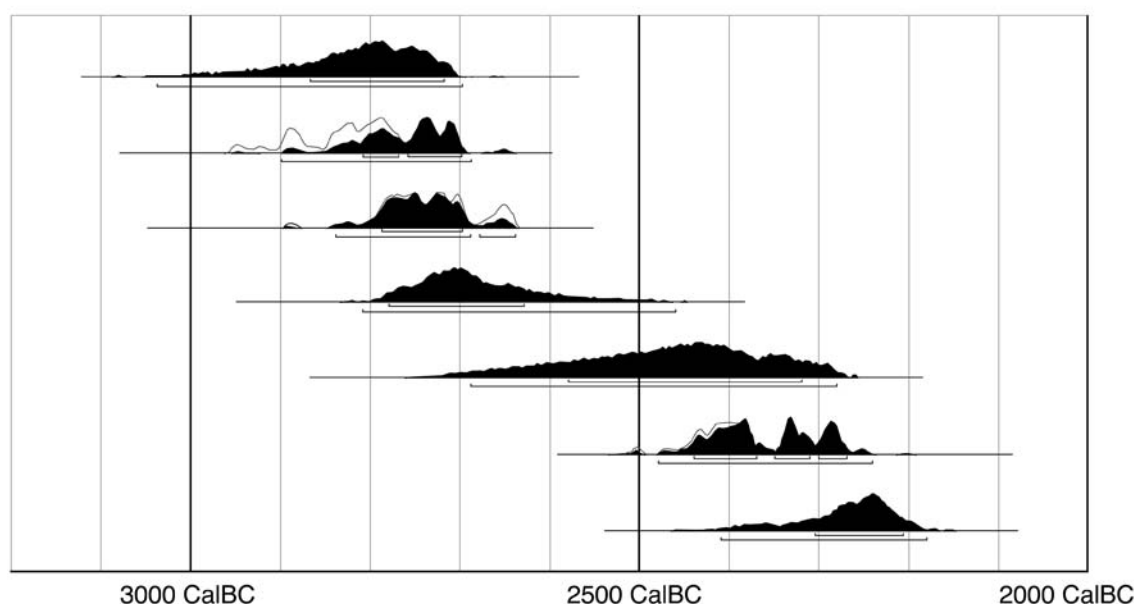
Tell Yarmouth, Southern Levant



3rd Millennium ceramic from Tell Arqa, Northern Levant

cal definitions or chronological time spans, each Regional Group will use, initially, as a provisional working terminology, “neutral” designations of period by combining the acronym of the region with an Arabic number indicating the phase (e.g., “ESL 2” for “Early Southern Levant Phase 2”, “EJZ 2” for “Early Jezirah Phase 2”, etc.);

- Participants will try to develop, in the course of the project, a *common terminology* to define periods and types of material;
- In selecting the data for chronological purposes, they will aim at selectivity rather than quantity; i.e., they will consider only stratigraphically secure material and concentrate on complete assemblages discovered on sites the archaeological sequences of which are beyond dispute;
- In addition, a large amount of *recently excavated and currently unpublished material* will be included, in order to guarantee that the project represents the most up-to-date treatment of the subject.



Radiocarbon graphs

An Emphasis on Multidisciplinarity

The project is resolutely multidisciplinary: in addition to archaeologists, it includes historians, art historians, epigraphers and specialists in a range of dating methods.

The Mobilization of an International and Comprehensive Team of Scholars

These specialists belong to 28 different countries and represent the major European, American and Australian academic and research institutions, active in this field. It should be emphasized that the project will combine the efforts of *all those countries and the majority of the scholars and institutions* currently involved in the study of the Early Bronze Age of the Eastern Mediterranean and Near East. At this present time, it represents a major and unique scientific endeavour.

The Association of Graduate Students and Young Scholars

Finally, it should be emphasized that the project will bring together three generations of scholars. Special attention will be devoted to the training of doctoral and young post-doctoral researchers from the participating institutions. In particular, a number of masters and doctoral dissertation topics will be offered to students within the framework of the project.

Funding

ESF research networking programmes are principally financed by the Foundation's Member Organisations on an *à la carte* basis.

ARCANE is supported by:

Fonds National de la Recherche Scientifique, Belgium; Research Promotion Foundation, Cyprus; Forskningsrådet for Kultur og Kommunikation, Denmark; Suomen Akatemia/Finlands Akademi, Finland; Centre national de la recherche scientifique, France; Deutsche Forschungsgemeinschaft, Germany; Nederlandse Organisatie voor Wetenschappelijk Onderzoek, the Netherlands; Fundação para a Ciência e a Tecnologia, Portugal; Vetenskapsrådet, Sweden; Schweizerischer Nationalfonds zur Förderung der Wissenschaftlichen Forschung/Fonds national suisse de la recherche scientifique, Switzerland; Scientific and Technical Research Council of Turkey, Turkey; The Arts and Humanities Research Council, United Kingdom.



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