

THE ANCIENT CHRONOLOGY FORUM

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OLD WORLD CHRONOLOGY

Is It Time for a Reassessment?

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terpretation of history from an archaeological perspective can only date events in relative time and cannot be set accurately. Consequently, it is not possible to accept or reject any one theory. However, given the significant need for an accurate dating system, it is important to evaluate the various theories and their merits. In this issue, we will explore some of the most prominent theories and their implications for our understanding of ancient history.

OLD WORLD CHRONOLOGY

Is It Time for a Reassessment?

"Chronology is the backbone of history" - a familiar enough truism, but also something of an understatement. It would be fair to say that without a sound chronological framework for the history of the ancient world, nothing of its technological, cultural, social and religious history can be interpreted correctly.

The radiocarbon revolution

The importance of dating is vividly illustrated by the long-standing question of diffusion versus independent invention. All efforts to draw a broad picture of cultural developments across the ancient world have faced this conundrum. From the 1960s onwards this was increasingly highlighted by the application of new methods to the dating of prehistoric European cultures. C14 results and dendrochronology appeared to raise the dates of their Neolithic and Early Bronze Age to an unexpectedly high antiquity. Various developments traditionally thought to have been borrowed from the "older" civilizations of the Eastern Mediterranean were now found to have begun earlier in Europe. The result was the abandonment of the traditional diffusionist picture and the drawing of a chronological and cultural "fault-line" - as defined by Colin Renfrew - between prehistoric Europe and the ancient Near East during the 3rd and early 2nd millennia BC.

However, attempts to apply the new scientific techniques to chronological problems in the E Mediterranean have generally produced confusing results. Examples are the controversy over C14 dating against Egyptian Sothic chronology - brought to a head in the pages of Antiquity by James Mellaart in 1979 - and the inconclusive attempts to correlate the ceramic date for the eruption of Thera with the tree-ring, ice-core, radiocarbon and palaeomagnetic data, recently pursued in Nature and New Scientist. We are clearly still very far from reconciling the results of the new scientific methods with already established systems such as the historical chronology for Egypt and the ancient Near East.

The Mediterranean: A new chronological fault-line?

While the new methods, particularly C14 dating supported by local dendrochronological sequences, have been of real value in determining a new chronology for prehistoric Europe, their impact on the E Mediterranean and Near Eastern areas has so far been negligible. In many instances they have merely aggravated the situation, resulting in another fault-line, later than that discussed by Renfrew. This second chronological fault-line is not sharply defined and so far has received

little attention. It also covers a fairly long time-span and falls, surprisingly, in a period when the history of the literate cultures of the E Mediterranean and Near East is well documented. At their greatest extent the problems range between about 1200 (the end of the LBA in Near Eastern terms) and the 6th to 5th centuries BC, when we enter the firmly dated era of Greek and Persian history.

On one side of this new fault-line lie the LBA and early Iron Age cultures of northern and western Europe. During the late 2nd millennium and early 1st millennium BC (on the basis of C14 dates), these present a relatively consistent pattern of abundant settlements, burials and artefacts. Areas to the southeast, on the other side of the fault-line, tend to be dated by their connections with Mycenaean civilization. Here a very different picture emerges, one plagued by curious chronological gaps and anomalies. For example, the Yugoslavian LBA is very sparsely represented by comparison with its EBA and with the LBA cultures to the northwest. To the south an almost complete blank appears in the history of BA Illyria between about 1200 and 700. At the same time Albanian tumuli, dated to the 12th century or later, contain "surprising" finds of early Mycenaean rapiers and daggers which, if the datings are correct, must be "archaic anachronisms". Thus, contrary to expectations, the nearer one approaches the Mediterranean and firm connections with accepted Mycenaean chronology, the more acute the problems become.

Archaeological problems of this kind are endemic throughout the central Mediterranean. Developing a chronology for BA Sardinia presents a formidable task, due to apparently conflicting data. Aegean synchronisms and C14 have helped set the dates for the flourishing of the Nuragic culture between 1500 and 1000; after then, however, there appear to be few material remains apart from menhirs and bronzes until Carthaginian times, c.600. Dating such bronzes, by comparison with E Mediterranean examples, involves acute difficulties: for example the Santa Maria hoard can be dated with equal facility anywhere between the 12th and 8th centuries.

In Sicily thriving coastal sites such as Thapsos with imported Mycenaean pottery (LHIIIB) were apparently abandoned c.1200 and remained uninhabited until the period of Greek colonisation in the 8th century. The inhabitants, it is usually argued, took refuge during the intervening centuries at inland sites such as Morgantina. The stratigraphical evidence for the survival of population inland for some 400 years is, however, patchy. At Morgantina itself, after a 12th century phase of Ausonian pottery from the Italian mainland there is a complete hiatus in occupation until the Sant' Angello Muxaro phase of the 7th century.

A similar recession is supposed to have taken place in Malta, which offers few remains to fill the gap between its Sicilian influenced MBA, ending c.1200 and Carthaginian colonisation in the 8th century.

On mainland Italy similar problems are further aggravated by the long-standing controversy over the date of the Etruscan advent, arguably in either the 12th or 9th centuries. The Apennine phase of the Italian LBA, with clear Aegean influences, is dated before 1200, while the Villanovan IA began around 900. The intervening 300 years

are filled by a "Proto-Villanovan" phase, only sporadically documented and with little evidence of cultural change. As if to compound the problem, the site of Scoglio del Tonno near Taranto presents a striking stratigraphical anomaly, with Mycenaean ware lying above the late Apennine level.

Comparable problems exist in southern France, where the period between 1250 and 750 has been described in the Cambridge Ancient History as "the darkest in the prehistory of southern France".

The "Dark Age" of Greece

Interestingly enough, the chronology of Greece itself, always a factor in the dating problems of the central Mediterranean, presents an equally problematic picture for exactly the same time-span. The "Dark Age" of Greece between 1200 and 800 is notorious for bitter controversies (going back to the 1880s) in which artefacts and even whole buildings and strata have been dated and redated across a period of some 400-500 years.

According to the generally accepted scheme, Mycenaean civilization collapsed c.1200 BC when Greece was plunged into a long "Dark Age". Literacy and the skills of metalworking, jewellery manufacture, ivory working, painting, relief carving and building largely disappeared until the renaissance of Greek civilization around 800 BC. The population sharply declined and practically the only craft of which there is any evidence from 1200 to 800 is pottery.

This scenario is rendered even more mysterious by the fact that Mycenaean forms and traditions often reappear after the hiatus. The styles and motifs used in 8th century ivory carving, jewellery, pottery, architecture and metallurgy frequently display a striking similarity to the LBA forms. To explain this curious situation, it has been suggested that Mycenaean traditions such as ivory carving were preserved in the Levant during the "Dark Age" and then re-exported to Greece in the 8th century. Yet the Levant itself has an equally baffling hiatus in its ivory-working tradition between 1200 and 850. To explain the disappearance and reappearance of the same motifs across this time gap, Mallowan suggested that the Phoenicians had transferred their skills from ivory to perishable materials such as textiles and wood during the interval. Similarly, numerous explanations have been offered for the apparent illiteracy of the Greeks after the disappearance of Linear B c.1150 until the earliest alphabetic writings of the late 8th century. The most similar forms to the 8th century letters are found, anomalously, in 11th century Phoenician texts, giving rise to theories that Greek inscriptions from 1100 onwards have so far escaped discovery, or that the Greeks somehow preserved the memory of an early experimentation with the alphabet for some 400 years before implementing it.

Ad hoc hypotheses such as this seem strained at best. They also fail to explain numerous other problems, such as the repeated occurrence of Geometric buildings immediately above Mycenaean structures with no intervening strata, continuities in architecture, the

absence of building remains from the Protogeometric period and stratigraphical anomalies where Mycenaean and Geometric materials occur together. All of this has to be seen against the background of the seemingly interminable difficulties involved in dating early "Dark Age" pottery. It is often with some reluctance that ceramic specialists have accepted the chronological necessity of spinning out the extremely scanty remains of the "Submycenaean" and Protogeometric phases to cover the period between 1075 and 825. Reviewing the most favoured ceramic dates between the fall of Mycenae and the 8th century Cook cautiously remarked that: "to assign dates to those styles is convenient, to rely on them foolhardy."

No one can fail to be struck by the similarities between the Greek "Dark Age" and those of the central Mediterranean and northern Balkans between 1200 and 700. Are they due to a genuine recession, caused, as is often supposed, by disruptive shifts in population c.1200? Undoubtedly the end of the Aegean LBA and equivalent periods throughout the Mediterranean were accompanied by widespread site destructions and, possibly, a climatic change. Even so, massive depopulation alone certainly cannot explain all the stratigraphic and chronological problems.

It is conceivable that many of the areas on the Aegean side of the "fault-line", if left to themselves - i.e. without Mycenaean and Geometric synchronisms - could have developed consistent and hiatus-free internal chronologies linked to the rest of Europe. Periods now dated after the "gaps" might be raised to fill them, or alternatively the earlier periods might be given a much lower dating.

Curiously, the second possibility was once put into effect by the earliest Mycenaean archaeologists - for Greece itself. In the late 19th century most scholars accepted dates for Mycenae dramatically lower than those accepted today. Mycenaean civilization was allowed to extend into the 9th, even 8th, century, so that it could blend into the Geometric. These early schemes were abandoned, however, when indisputable synchronisms were discovered between the Aegean LBA and New Kingdom Egypt (18th to 20th dynasties). Mycenaean civilization was consigned to the 2nd millennium and the redating produced a secondary effect on the chronologies of those European areas which were in contact with the Mycenaeans.

The question remains whether the hiatus after 1200 is a genuine one. Is it possible that a false turn was taken at the beginning of this century, leaving us with a faulty chronology for the Mediterranean BA? At first glance this would seem a total impossibility, given the established pattern of synchronisms between the LB Aegean, Anatolia, the Levant and the history of Egypt. However, a review of these areas seems to confirm, rather than dispel doubts.

Anatolia: Trojan and Hittite Chronology

The problems of "Dark Age" chronology are further highlighted by the excavations of Troy. The site is completely lacking in strata between the time of Troy VIIIB (associated with LHIIIC ware) dated to the early

12th century, and Troy VIII of the 8th century. The inhabitants are supposed to have abandoned Troy for a nearby refuge, where they preserved a Grey Minyan pottery tradition for 4 centuries before returning. The stratigraphy of the site has also produced a number of disturbing anomalies, such as Protogeometric and Geometric sherds found in the deeper strata of Troy VIIB.

The chronology of LBA Anatolia, like the Aegean, ultimately depends on Egypt. Originally Hittite antiquities were dated to the 1st millennium, until the discovery of the archives at Boghazköy revealed the existence of a Hittite Empire contemporary with the Egyptian New Kingdom. Even so, the establishment of a high chronology based on Egypt gave rise to serious problems. Central Anatolia, after the fall of the Hittite Empire c.1200 appears to be almost devoid of settlements until the time of the 8th century Phrygians. Hittite civilization supposedly vanished from central Anatolia but continued to maintain an extended "afterglow" in the 1st millennium "Neo-Hittite" states of SE Anatolia and N Syria. Stratigraphic and chronological difficulties exist at most Hittite sites, including Boghazköy, where the excavator noted the remarkable absence of sedimentation between the Imperial Hittite levels and the Phrygian occupation. Carchemish showed no evidence of the Hittite Imperial presence (known from literary texts) in 2nd millennium contexts; instead, Imperial artefacts and Mycenaean pottery occur exclusively in the early 1st millennium layers.

Cyprus and the Levant: Ceramic controversies

Cyprus, whose LBA can be synchronised with those of the Aegean, Syro-Palestine and Egypt, plays a pivotal role in E Mediterranean chronology. Unlike Greece, where Mycenaean elements reappear after several hundred years, the Cypriots are thought to have retained many "archaic" Mycenaean traditions into the 1st millennium. Further, the chronology of Cypriot IA pottery between about 1050 and 600 presents complex problems which seem to defy a completely satisfactory solution. The conflict between the schools of Van Beek, who favoured a high dating of Cypriot pottery, and Gjerstad, who argued for a much lower one, still continues. The high chronology, based largely on the finds of Black-on-Red ware in Palestinian contexts, inevitably results in a gap of some 200 years in the Cypriot sequence. The low chronology, while internally consistent and in agreement with the dates provided by Late Geometric Greek pottery, can only be accepted by dismissing the Palestinian evidence.

The one relatively constant factor in the Black-on-Red debate is the dating of the Palestinian strata, assumed to be safely fixed by innumerable synchronisms with Egyptian chronology. However, Palestinian IA strata still present a number of puzzling anomalies. The presently accepted dates are not only wildly at variance with the low Cypriot chronology but also conflict in many instances with the historical record and the ceramic chronology of Assyria. The reign of Solomon is described as an era of great palace and temple building,

monumental art and the lavish use of ivory; yet the IA levels ascribed to the early monarchy fall in an artistic "Dark Age" devoid of precisely these features. "8th-century" Palestinian levels often contain the so-called "Assyrian Palace-ware"; but this has recently been shown to be post-Assyrian, of late 7th to early 6th century date. At Timna, the focus of a major controversy, the Early IA Midianite ware was dated by Albright and Glueck to the 7th-6th centuries (based on Assyrian evidence) and by the Aharoni and Rothenberg to the 12th-11th (based on Egyptian evidence). Thus Assyrian and Egyptian chronologies, though usually assumed to be mutually supportive throughout the LBA and IA, are often antagonistic when they meet at Palestinian sites.

Egypt: The central problem

The trail of "Dark Age" questions eventually leads to Egypt, whose history provides the yardstick for most ancient chronologies. Apparently fixed by a number of astronomical observations, the Egyptian dating system may appear to be reasonably sound - when considered in isolation. Yet, as we have seen, it is encircled by countries in which Egyptian synchronisms have raised immense difficulties. The archaeology of Nubia, on the very doorstep of Egypt, presents a disturbingly familiar pattern. There is abundant evidence of occupation and activity until the late 20th Dynasty (c.1100), followed by a complete blank in the record until the conquest of Nubia by the founders of the Ethiopian 25th Dynasty during the 8th century.

The puzzle of an apparent Nubian "Dark Age" contemporary with those of the Mediterranean prompts the restatement of a question first asked by Cecil Torr at the end of the last century - is the Sothic chronology of Egypt really as firm as it is claimed to be? Recent studies have cast doubt on many of the assumptions behind the astronomical dating of Egyptian history and the time would seem to be ripe for a reassessment. Could a substantial shortening of Egyptian chronology provide a reconciliation of practically all the furious dating arguments that have bedevilled Mediterranean archaeology for the last hundred years?

Alternatively, would it be feasible to raise the dates of periods which fall after the "Dark Age" gap? This possibility is becoming increasingly unlikely as new research is effecting a piecemeal reduction of Greek Late Geometric and Archaic chronology, together with the dates for some Near Eastern strata. Of particular importance is the continuing work of Francis and Vickers, who have used a range of evidence, including the new dendrochronological sequences from Europe, to make substantial reductions in Archaic chronology.

In many respects we seem to be on the brink of a revolution in ancient chronology, the only stumbling block being the date currently set for the end of the Near Eastern LBA, c.1200 BC. However, if we set aside Sothic reckoning the absolute date of the Egyptian New Kingdom (and hence the LBA) would then be dependent on the length

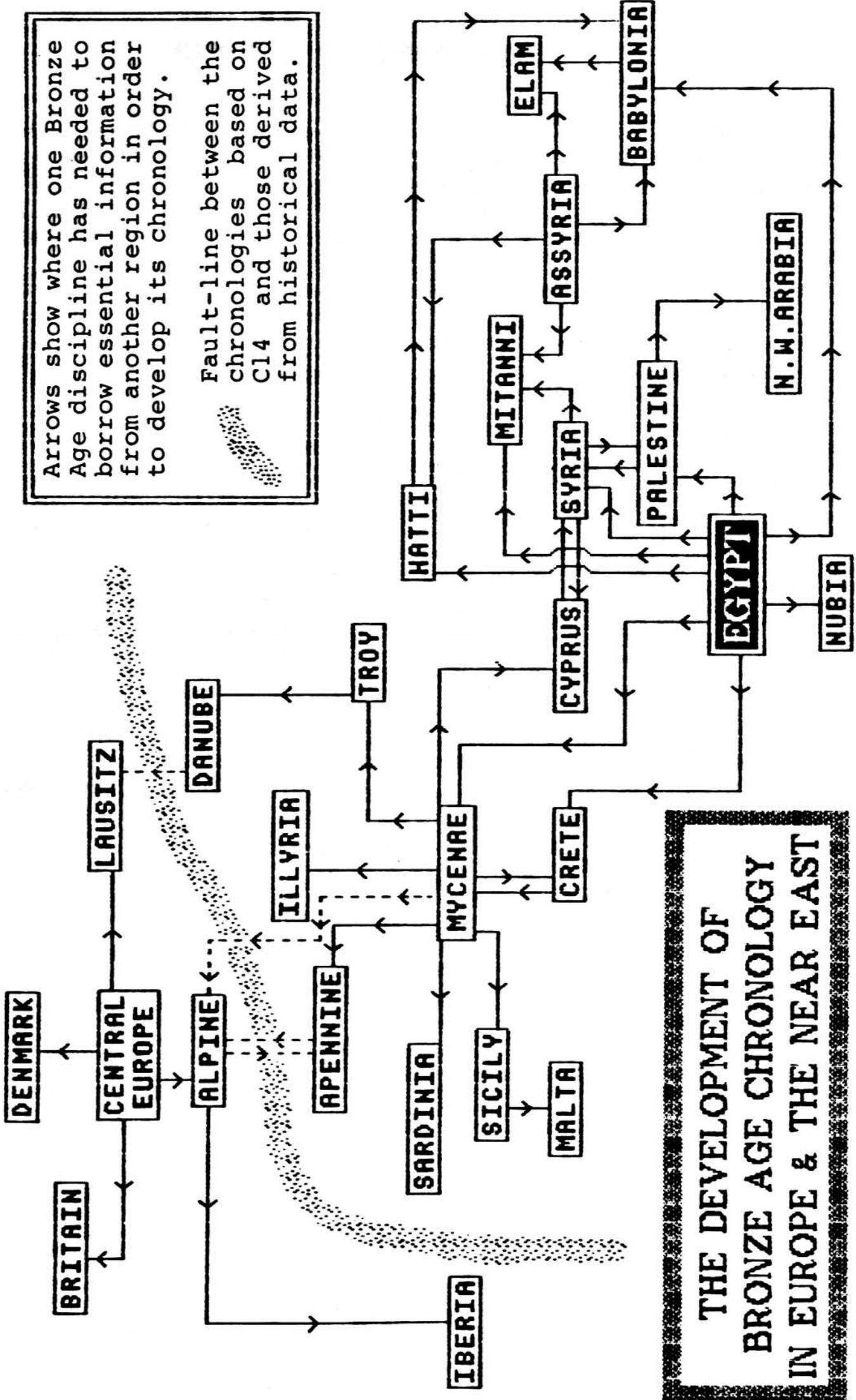
allowed to the Third Intermediate Period (TIP). At present this is considered to fill the time between 1100 and 660, lying curiously parallel with the "Dark Ages". Detailed studies have been undertaken by Kitchen and Bierbrier in recent years but their picture of the TIP was, of course, developed within the framework a high chronology. Despite these efforts, there remain suspicious gaps in the sequence of Apis burials, lists of high priests and officials; some kings are merely ciphers to whom no monuments can be attributed, while frequent repetitions of names and titles suggest that many TIP individuals may be reduplications. Preliminary work on the anomalies of the period suggests that its chronology could be telescoped by allowing greater overlaps among the 20th to 26th dynasties, ruling in different parts of the country. One major test of this possibility will be a re-examination of the chronology of Mesopotamia.

'Mesopotamia - An independent control?

While Kassite Babylonian chronology for the 14th-13th centuries is largely dependent on Egyptian and Hittite synchronisms, the Assyrian King Lists have enabled the development of a independent chronology for the period of the Late Bronze and Iron Ages. This has not, however, produced a continuous and consistent picture for Mesopotamian archaeology. Assyria itself is supposed to have entered a curious cultural recession c.1200, while the archaeological record of Post-Kassite Babylonia is an almost complete blank. Solidly dated Assyrian history only really begins with the uninterrupted lists of annual eponyms from 911 onwards. The King Lists provide the names of "14th and 13th century" rulers which can be synchronised with the conventional chronology of Egypt and the Hittites; but it should be remembered that many of the reign lengths and genealogical links are derived from documents no earlier than the 10th century. Errors and/or deliberate manipulation of the Assyrian King List tradition may have seriously distorted the picture.

The Work Ahead

The very scope of the evidence considered above should make it of prime importance to most ancient historians and archaeologists. As archaeology becomes increasingly specialised, it is only too easy to attempt localised solutions. Nevertheless, wider problems persist, and only a broad perspective, involving the close co-operation between specialists in different areas can provide an ultimately satisfactory solution. The classic areas of chronological dispute in a vast range of fields (from European prehistory to biblical archaeology) may be due to a common cause. The first step towards a resolution would seem to be a reassessment of the reliability of Egyptian chronology and its effects on the dating of the Late Bronze and Iron Ages. In the longer term the establishment of independent dendrochronologies will provide a vital check on the historical chronologies of the Near East.



ISIS - THE ANCIENT CHRONOLOGY FORUM

This pamphlet is summarised from a discussion paper to be published in the first ISIS Bulletin. ISIS - The Ancient Chronology Forum was founded in 1985 by a number of interested students and scholars who feel that a major re-examination of ancient chronology is urgently needed. ISIS is a non-profit making body with an international membership and is registered as an educational charity (no.292881).

The present state of chronology in Old World archaeology might be described as confused, at best. There also seems to be little general understanding of the way in which chronologies are constructed and chronology as a subject in its own right is sadly absent from most university curricula. Theories such as Sothic dating are occasionally taught to Egyptology students but hardly at all to students of Aegean and European prehistory; and furthermore the nature and limitations of techniques such as C14 dating still seem to be poorly understood by most archaeologists.

The Ancient Chronology Forum aims to increase awareness of the importance of chronology and, while organising a thorough re-examination of presently held views and available alternatives, to develop new and consistent methodologies for assessing the value of the evidence at our disposal. Our present concern is the dating of the Old World cultures of Europe, North Africa and the Near East during the 3rd to 1st millennia BC, a focal point being provided by the presumed "Dark Ages" of these areas.

Whether you would like to support, become involved in the research programmes, or simply be kept in touch with the progress and activities of ISIS, you are invited to become a member. Membership involves no commitment to a particular viewpoint: the stated aim of The Ancient Chronology Forum is simply "The advancement of research into the chronology of the Ancient World."

Future Plans include:

1. An annual Bulletin (as part of the membership entitlement).
2. The republication of Cecil Torr's seminal work on chronology, Memphis and Mycenae - An Examination of Egyptian Chronology and its Application to the Early History of Greece, originally published by Cambridge University Press in 1896. This inaugural volume, ISIS Occasional Publication, No. 1, will be complimentary to members joining in 1986.
3. A Conference on Stratigraphy and Chronology.
4. Informal seminars and other meetings.
5. A project to catalogue all published radiocarbon dates from Ireland

to Iran falling between 2000 and 1 b.c., together with extensive analysis. This invaluable study will be published as ISIS Occasional Publication, No. 2.

6. An examination of Black-on-Red Ware from Cyprus and the Levant, reassessing its relative and absolute chronology. This will involve, among other methods, neutron activation and palaeomagnetic intensity determinations.
7. A re-examination of the astronomical and textual bases of Sothic chronology.
8. A computerised concordance of Eastern Mediterranean stratigraphy.
9. A comprehensive investigation of strategies for remodelling Egyptian Third Intermediate Period chronology.
10. The sponsorship of field work relevant to the above.

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