"From Relative to Absolute Chronology: Steps for Integrating the Southern Caucasus into Near Eastern Archaeology"

Timing Cultural Changes in the Southern Caucasus: where do we stand with absolute chronology from the Late Chalcolithic to the Iron Age?

International Workshop

Thursday and Friday, 20-21 January 2022

Aula Baratto
Ca' Foscari University
Dorsoduro, 3246, 30123 Venezia VE

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TIMING CULTURAL CHANGES IN THE SOUTHERN CAUCASUS: WHERE DO WE STAND WITH ABSOLUTE CHRONOLOGY FROM THE LATE CHALCOLITHIC TO THE IRON AGE?

THURSDAY JANUARY 20TH, 2022

CHAIR Elisabetta BOARETTO
(Scientific Archaeology Unit, Weizmann Institute of Science)

9:30 - 09:50 Maria DEL VALLE OJEDA CALVO (Proretritte alla Ricerca Ca' Foscari University of Venice)
Giovanni VIAN (Direttore del Dipartimento Studi Umanistici Ca’ Foscari University of Venice)
Welcome greetings

09:50 - 10:10 Elena ROVA - The SPIN-2 FRAC-SISCANEA project: an introduction

10:10 - 10:30 Flavia AMATO - FRAC-SISCANEA project: the general framework and a synthesis about the Early Bronze Age in Shida Kartli

10:30 - 10:50 Andrea MILANESE - Results of the FRAC-SISCANEA project: The Middle Bronze and the transition to the Late Bronze Age

10:50 - 11:10 Francesco BIANCHI - Results of the FRAC-SISCANEA project: The Late Bronze – Iron Age

11:10 - 11:40 COFFEE BREAK

11:40 - 12:00 Questions and Answers

12:00 - 12:30 Elisabetta BOARETTO - Radiocarbon chronology with a large data set: how to reduce the outliers (paper + questions and answers)

12:30 - 14:30 LUNCH

14:30-15:00 Veli BAKHSHALIYEV (ONLINE) - Results of archaeological excavations in Nakhchivan Tepe (paper + questions and answers)

15:00 - 15:30 Bertille LYONNET, Michel FONTUGNE (ONLINE) - Mentesh Tepe and Soyuq Bulaq (Western Azerbaijan) radiocarbon dates, from the Late Chalcolithic to the Early Bronze Age (paper + questions and answers)

16:00 - 16:30 Giulio PALUMBI, Andrea RICCI (ONLINE) - Radiocarbon dates from the settlements of Kiçik Tepe and Qaraçinar. Old and new data for the definition of the cultural developments of Western Azerbaijan between the fifth and third millennium BCE (paper + questions and answers)

16:30 - 16:40 BREAK (free)

16:40 - 17:10 Sarit PAZ, Mindia JALABADZE, Elisabetta BOARETTO (ONLINE) - New radiocarbon dates from the Kura-Araxes village of Kvatskhelebi, Shida Kartli, Georgia (paper + questions and answers)

17:10 - 17:40 Irina GAMBASHIDZE (ONLINE) - Pre-Kura-Araxes Culture Settlement of Orchosani and the Chalcolithic / Early Bronze Age chronology of Samtskhe (South-West Georgia) (paper + questions and answers)

17:40 - 18:40 Discussion

19:30 DINNER

ZOOM LINK to participate to the meeting: https://unive.zoom.us/j/83551271137
FRIDAY JANUARY 21ST, 2022

CHAIR Elena ROVA

(Ca’ Foscari University of Venice, Italy, GISKAP-GILAP projects)

9:00-9:30 Annapaola PASSERINI, Adam SMITH - The EBA/MBA transition: integrating geographic variability into chronology building (paper + questions and answers)

9:30-10:30 Giorgi BIDIANASHVILI, Andrew JAMIESON, Claudia SAGONA (ONLINE)
1) Early Kurgan evidence from the settlement of Rabati, Southwest Georgia: Issues of stratigraphy, absolute dating and terminology
2) Early Kurgan-Bedeni material culture from Rabati: Cultural remains and their wider implications (papers + questions and answers)

10:30 - 11:00 Pavel AVETISYAN, Ruben BADALYAN (ONLINE) - Corpus of radiocarbon dates of the Chalcolithic, Bronze and Early Iron Ages of Armenia: an attempt at systematisation and interpretation (paper + questions and answers)

11:00-11:30 Lauren RISTVET, Hilary GOPNIK, Veli BAHSALIYEV - The Absolute Chronology of the Early Bronze Age to the Iron Age in Northern Naxcivan (paper + questions and answers)

11:30 - 12:00 COFFEE BREAK

12:00 - 12:30 Martin GRUBER (ONLINE) - Radiocarbon-dated burials of the Late Bronze/Early Iron Age in Azerbaijan – a view from Karacamirli Tepe 5 (paper + questions and answers)

12:30 - 13:00 Walter KUNTNER, Sandra HEINSCH, Vakhtang LICHEL (ONLINE) - Considerations on the chronology of the pottery of the Samtavro Culture based on the radiocarbon-dated stratigraphy of Khovle Gora (paper + questions and answers)

13:00 - 14:30 LUNCH

14:30-15:00 Mehmet IŞIKLI (ONLINE) - A general evaluation on radiocarbon dates from Erzurum – Pasinler plains (paper + questions and answers)

15:00 – 16:00 Gian Maria Di NOCERA - New considerations on the Upper Euphrates chronology between the 5th and 1st millennium BC (paper + questions and answers)

16:00 - 16:30 COFFEE BREAK

16:30 - 18 Final discussion

ZOOM LINK to participate to the meeting: https://unive.zoom.us/j/83551271137

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Venue

Ca' Foscari University, Aula Baratto, Dorsoduro 3246 - 30123 (VE)
INTERNATIONAL WORKSHOP

Timing Cultural Changes in the Southern Caucasus: where do we stand with absolute chronology from the Late Chalcolithic to the Iron Age?

THURSDAY AND FRIDAY, 20-21 JANUARY 2022

AULA BARATTO
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To participate in person it is necessary to fill out this online form by 19/01/2021
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Flavia AMATO

(Ca’ Foscari University of Venice, Italy, GISKAP-GILAP projects)

FRAC-SISCANEA project: the general framework and a synthesis about the Early Bronze Age in Shida Kartli

After shortly illustrating the state of the art and briefly introducing the methods followed by the FRAC-SISCANEA team, the paper will focus on the Early Bronze Age in Shida Kartli. It will integrate the previously published KA $^{14}$C sequence from Aradetis Orgora with new dates from Doghlauri cemetery and Natsargora, by Bayesian modelling of $^{14}$C results coupled with a careful analysis of the archaeological contexts. On this occasion it will also tackle the lately largely discussed questions of the end of the Kura-Araxes culture in the Southern Caucasus and of the continuity or discontinuity with the subsequent cultures of the Middle Bronze Age.

Pavel AVETISYAN, Ruben BADALYAN

(Institute of Archaeology and Ethnography, National Academy of Sciences, Armenia)

Corpus of radiocarbon dates of the Chalcolithic, Bronze and Early Iron Ages of Armenia: an attempt at systematisation and interpretation

This paper contains the preliminary results of the systematisation of almost 400 radiocarbon dates of the Chalcolithic-Early Iron Age sites in Armenia. In the work, first of all, the degree of informativeness of dates is assessed according to a number of criteria; their statistics are given by epoch and geographical areas; refined lists of $^{14}$C dates for each culture and their (sub)stages are presented. The dates are correlated with typologically identified “reference” complexes in their stratigraphic relationship, forming a sequence of archaeological cultures in Armenia in the range of the 5th—the turn of 2nd-1st millennium BC, and compared with the corresponding data from neighboring regions. The results of constructing an absolute chronological scale of the
Chalcolithic—Early Iron Age of Armenia based on a representative series of radiocarbon dates allow us to solve a number of problems associated with the synchronisation and/or sequence of a number of sub-complexes of the Early and Middle Bronze Ages. Accordingly, throughout the range under consideration, the paper reveals both the “break points” between archaeological cultures and their phases, and also the overlapping of chronological spectra during a number of “transitional” periods.

Veli BAKHSHALIYEV

(Nakhchivan Branch of Azerbaijani National Academy of Sciences, Azerbaijan Republic, Nakhchivan)

Results of archaeological excavations in Nakhchivan Tepe

The settlement of Nakhchivan Tepe is located on the right bank of the Nakhchivan River, on the eastern outskirts of the city of Nakhchivan. Since the beginning of 2017, archaeological excavations have been carried out in the settlement by an expedition of the Nakhchivan branch of the National Academy of Sciences of Azerbaijan. During the study, four occupation periods were identified. At the same time, three of these horizons belong to the culture of Dalma Tepe, and the fourth to the Neolithic period. Monuments of the Mill Steppe, in which ceramic products with impression ornaments are revealed date from 5600-5200 BC. There is a chronological gap between the sites of the Mil Steppe and the culture of Dalma Tepe. However, as has already been said, some of the ceramics from the sites of the Mil Steppe and Karabakh, and especially the ceramics of Ilanlı Tepe, are very similar to the ceramics of Dalma Tepe. One of analysis of charcoal taken from the center of the first room yielded a date of 5209-4930 BC and second 5038-4799 BC. We can say that the process of formation of the Dalma Tepe culture spanned the end of the VI and the beginning of the V millennium BC. This is also confirmed by excavation of Nakhchivan Tepe settlement. Charcoal analyses of Nakhchivan Tepe taken from various horizons of the settlement show that this culture existed here in 5200-4400 BC.
Currently, the oldest sites characterized by impression ornaments are located on the territory of the Mil Steppe and Karabakh. At the same time, it can be said that the cultures of the Mil Steppe and Karabakh, to a certain extent, influenced the formation of the culture of Dalma Tepe, and especially the formation of ceramics with impressed ornamentation. In my opinion, the Neolithic layer of the Nakhchivan Tepe settlement is a link with the sites of the Mil Steppe and those of Urmia Basin, and Nakhchivan Tepe was part of the Dalma Tepe cultural formation area. Studies show that the rich natural resources of the South Caucasus contributed to the development of ties between the cultures of the South Caucasus and North-West Iran. At the same time, the cultures of North-West Iran influenced the South Caucasus. The cultures of the South Caucasus also influenced North-West Iran. Based on studies, it can be said that the cultures of the Mil steppe and Karabakh, which are characterised by impression ornaments, contributed to the formation of the culture of Dalma Tepe. It can be assumed that the range of the formation of the culture of Dalma Tepe included the territories of Nakhchivan and the basin of Lake Urmia. Thus, it can be deduced that the culture of Dalma Tepe, which appeared at the junction of the borders of the Middle East and the South Caucasus, reflects the traditions of the cultures of these two regions. This culture from the main center spread south of Lake Urmia, to Iran, Iraq, and East Anatolia.

Giorgi BIDIANASHVILI (Georgian National Museum, Georgia),
Andrew JAMIESON, Claudia SAGONA (University of Melbourne, School of Historical and Philosophical Studies, Australia)

1) Early Kurgan evidence from the settlement of Rabati, Southwest Georgia: Issues of stratigraphy, absolute dating and terminology

Rabati in Meskhet-Javakheti, southwest Georgia, has seen three excavation seasons (2016, 2018 and 2019) conducted by the Georgian National Museum and the University of Melbourne. Significant Early Kurgan - Bedeni remains cap most of the summit of the site and these overlie substantial, non-domestic architecture from the Kura-Araxes period. In many respects, we have only
begun to uncover what is proving to be a sizeable Bedeni settlement with a paucity of architecture, but typical plastered habitation floors and pits. We will present the current extent of the stratigraphy of the site and a detailed account of the contexts as well as implications of the suite of 19 radiocarbon dates so far obtained for this and the Kura-Araxes periods. When it is possible to resume fieldwork, we aim to continue generating radiocarbon dates for every significant context and every cultural phase detected in the site. Another aspect we would like to discuss is the issue of terminology. In our recent publications we prefer the term ‘Early Kurgan’ to avoid the ambiguities of the Early and Middle Bronze Age overlay, which does not reflect adequately the complexity of the third to second millennium BC in the region.

2) Early Kurgan-Bedeni material culture from Rabati: Cultural remains and their wider implications

Against the backdrop of the Rabati’s Bedeni cultural sequence and the supporting radiocarbon dates, the detailed analysis of the material culture so far excavated is revealing a significant array of common wares among which is a smaller number of classic, black burnished finer Bedeni vessels. Even more telling are persistent domestic forms that suggest continuity of at least a core population with long-held traditions, but within a landscape of cultural change. Signs of continuity are generally overlooked or played down in the literature, which often aims to present the broad-brush strokes of Bedeni culture, but persistent cultural traits should be factored into how we interpret the archaeological record. Most notable aspects are lingering Kura-Araxes traditions, the true nature of the enigmatic Martkopi interlude and the Bedeni cultural traits. There are very few settlement sites that have been investigated from this period, they are often fraught with complex, often disturbed depositions. The Rabati Bedeni levels are significant because they are so close to the surface and have so far escaped extensive disturbances by subsequent populations. Already unprecedented finds at the site have transformed our understanding of the Bedeni economy in the areas of their textile industry and possible dye production which, in turn, deepens our understanding of increasing social complexity at this time.
Francesco BIANCHI

(Ludwig-Maximilians-Universität München, Germany, GISKAP/GILAP Projects)

Results of the FRAC-SISCANEA project: The Late Bronze – Iron Age

Levels belonging to the LBA-IA were discovered in both areas (Fields A and B) excavated at Aradetis Orgora between 2013 and 2016. The paper will present the parallel stratigraphic sequences of the two areas with reference to both the newly available 14C dates and the associated pottery, will attempt their synchronisation and highlight possible hiatuses and problematic points. It will then evaluate the obtained results in the light of the well known problems concerning the periodisation and absolute chronology of the Late Bronze-Early Iron Age in the central regions of the Southern Caucasus, where the work of different scholars led to the creation of different, sometimes conflicting, hypotheses, and of the recent increase in available 14C dates sequences throughout the region.

Elisabetta BOARETTO

(Scientific Archaeology Unit, Weizmann Institute of Science, Rehovot, Israel)

Radiocarbon chronology with a large data set: how to reduce the outliers

Time in archaeology is determined by cultural changes, stratigraphy and absolute dating. The integration of these different time systems is a complicated task as each of these methods relies on assumptions and on data which represent only a part of the archaeological record. Of the three systems, only absolute dating has a quantified uncertainty, the standard deviation. This is mainly derived from the analytical part. The uncertainty related to the stratigraphy and the cultural remains cannot be quantified, and when the radiocarbon dates do not agree with the stratigraphy and the cultural remains, the radiocarbon dates are considered as outliers.
Considering the contribution of three different independent systems, one expects the number of outliers/disagreement to be much larger than 10 percent. This number is certainly much larger if the chronology is based on different sites or very large geographical regions. The integration into the study of the chronology of microarchaeology to characterise the contexts of the materials for dating and their correlation with the cultural remains, reduces the number of outliers. The example of Aradetis Orgora and the Early Bronze age chronology show how the study of the archaeological record in relation to the material for dating is essential.

Gian Maria DI NOCERA

(University of Tuscia, Viterbo, Italy)

New considerations on the Upper Euphrates chronology between the 5th and 1st millennium BC

More than twenty years have passed since the publication of an article summarising the radiometric datings of Arslantepe, Norşuntepe and other mounds of the Upper Euphrates. All those dates were compared with various Caucasian sites. Since then, new $^{14}$C datings and new research on stratigraphic sequences from the Late Chalcolithic to the Iron Age have been conducted and published in Arslantepe. This contribution aims to integrate and reconsider, in a synthetic form, the chronology of this large time span in the light of the new dates.

Irina GAMBASHIDZE

(Georgian National Museum, Georgia)

Pre-Kura-Araxes Culture Settlement of Orchosani and the Chalcolithic/Early Bronze Age chronology of Samtskhe (South-West Georgia)
Chronological studies of archaeological material from the Caucasus and the Near East have recently been greatly enriched thanks to investigations conducted in Georgia with the aid of radiocarbon dating techniques that have produced important results that shed light on the correlation of Late Chalcolithic and Early Bronze Age chronology. Studies of the Orchosani settlement had the aim of determining its date and of comparing it with contemporary sites. The dating of Samtskhe archaeological sites relied mainly on relative chronology on account of the lack of the radiocarbon dating. The reconciliation of absolute dates established at the archaeological complexes of the Orchosani settlement presented the possibility of determining the transitional stage of the Late Chalcolithic period (Late Uruk period) to the Kura-Araxes Culture in the Early Bronze Age in this region with its characteristic features. The radiocarbon dating was carried out on 14 samples of closed complexes at Orchosani. This study presents a detailed analysis of the material found in these complexes and of their absolute dates. The latter fall between the 37th and 34th centuries BC.

Martin GRUBER

(Julius-Maximilians-Universität of Würzburg (JMU), Germany)

Radiocarbon-dated burials of the Late Bronze/Early Iron Age in Azerbaijan – a view from Karacamirli Tepe 5

In 2017 and 2018, excavations were carried out on Karacamirli Tepe 5, a small hill near the southern bank of the river Kura in Shamkir District, Azerbaijan. The site was first occupied in the 5th millennium BC, from which only few pits could be studied. After the mid-2nd mill. BC, Tepe 5 saw repeated use as a place of burial. Altogether 46 graves, starting with the Late Bronze/Early Iron Age, continuing with interments from Late Antiquity and concluding with the 14th cent. AD, were documented. This presentation focuses on a series of seven radiocarbon dates from a total of 20 Late Bronze/Early Iron Age burials and puts them in context with other known radiocarbon-dated assemblages in the region. It aims to discuss their implications for the chronology of the material culture – subsumed under the term Khojaly-Gadabay-Culture – and to address
some issues and limitations for current archaeological research on the Late Bronze/Early Iron Age in Azerbaijan.

Walter KUNTNER, Sandra HEINSCH (Universität Innsbruck, Austria)
Vakhtang LICHELI (Ivane Javakhishvili Tbilisi State University, Georgia)

Considerations on the chronology of the pottery of the Samtavro Culture based on the radiocarbon-dated stratigraphy of Khovle Gora

The eight-layered settlement sequence of Khovle Gora has long been considered a key site for a Late Bronze/Early Iron Age dating of the Samtavro culture, as it was once proposed by Rostom Abramishvili. However, recent archaeological research at Khovle Gora based on the radiocarbon-dated re-evaluation of the stratigraphy indicated that the settlement development did not begin before the late 12th century BCE. The main settlement period, which was characterised by the ram-headed clay models, even falls into the 9th-7th century BCE. The new dates not only confirm the more recent dating of Pitskhelauri for the beginning of the Samtavro Culture, but also assign its characteristic ceramic culture to the Early Iron Age. The paper begins with the presentation of the results of the archaeological reconstruction and of the radiocarbon-dated reassessment of the settlement sequence with which Muskheilishvili described the typological development of the pottery assemblage on the Khovle Gora. The discussion then focuses on the recent results of the excavations in the settlement areas east and north of the main hill and compares their radiocarbon-dated pottery assemblages with the typological classification of Muskheilishvili.

Mehmet IŞIKLI

(Archaeology Department, Atatürk University in Erzurum, Turkey)

A general evaluation on radiocarbon dates from Erzurum – Pasinler plains
Northeast Anatolia (Erzurum-Kars Plateau), which is an extension and part of the South Caucasus, attracts attention with its unique geographical, ecological and cultural features. Archaeologically, the region shares many similarities with the Southern Caucasus (Transcaucasia) of which it is a part. However, the region is much less fortunate in terms of archaeological research and radiocarbon data compared to other subcultural regions of Transcaucasia. Archaeological research on this wide plateau are concentrated in two plains; Erzurum and Pasinler plains. Within the archaeological research that began in the 1940s, the number of sites which have been systematically excavated and presented reliable stratigraphic sequences supported by radio-carbon dates is extremely low. The situation presents a more negative picture, especially in terms of radiocarbon dating, which is the subject of the workshop. Despite this situation, there are some series of radiocarbon dating that can be analysed. The most important of them is the data obtained from the excavations at Sos Höyük in Pasinler Plain, which is the most important project of the region. This project has provided a very good radiocarbon dating sequence for the region. In addition to that, Alaybeyi Höyük which is located on the Erzurum Plain, which has been excavated in recent years, has also presented a very important radiocarbon dating sequence. Apart from these two key projects, there are also a few radiocarbons analysis results in the plain. This study will aim to re-evaluate all these data.

Bertille LYONNET (CNRS, UMR 7192 Paris)

Michel FONTUGNE (CNRS/CEA, UMR 7269 Aix-Marseille)

Mentesh Tepe and Soyuq Bulaq (Western Azerbaijan) radiocarbon dates, from the Late Chalcolithic to the Early Bronze Age

Mentesh Tepe in the Middle Kura Valley is one of the rare sites from Southern Caucasus with a long sequence of occupation from the Neolithic to the end of the Early Bronze Age. Excavated between 2008 and 2015, it gave the occasion to practice a long series of radiocarbon dates that have all been published in 2017. Earlier (2006) excavations that had been made on several kurgans of the
Soyuq Bulaq cemetery, on the left bank of the Kura River near the border with Georgia, complete the sequence.

For the Chalcolithic period, Mentesh Tepe provided a small group of five dates concerning the first half of the 5th millennium when a Middle Chalcolithic occupation seems to be temporary, and a much larger group of 25 dates concerning the second half of the 5th millennium all related with a mudbrick rectangular architecture associated with the LC1 cultural phase.

Two radiocarbon dates (human bone) from two different kurgans at Soyuq Bulaq place them in the first half of the 4th millennium while their content relate them with the LC2-3 and Leilatepe cultural phases.

The Early Bronze Age at Mentesh Tepe is mainly characterized by its burials with two large kurgans and several other individual burials as well as pits dug into the earlier levels of the site. A total of 13 radiocarbon dates come from them. The earliest kurgan (K. 4) is dated by four charcoals to the first half of the 4th millennium for its construction and to ca. 3000 BC for its use, and is related to the Early Kura-Araxes cultural phase. Its burning at the end of use unfortunately destroyed the collagen of the bones and did not allow other dates. The latest kurgan (K. 54) is dated to ca. 2500-2400 BC by one charcoal and two human bones and is related to the Martkopi cultural phase by its content. Other individual burials and pits excavated on the site are dated to the period in between and may point at temporary occupation or rituals. Finally, two individual burials have been buried later into the latest kurgan K. 54: a child whose bones are dated to the end of the 3rd millennium, and an adult dated much later, to the end of the Bronze Age/beginning of the Iron Age.

The radiocarbon dates and the associated archaeological data from Mentesh Tepe and Soyuq Bulaq have clarified the dating of the so-called Tsopi/Sioni phase of Georgia, and confirmed that of the Leilatepe culture of Azerbaijan. Questions are still opened about the Middle Chalcolithic period due to the paucity of the remains, and about the Early Kura-Araxes period due to the long interval given for its construction and that of its use.
Considerable work has been carried out in the South Caucasus since the Istanbul conference in 1998, where more than twenty scholars, working on the Caucasus, Eastern Anatolia and Mesopotamia, endeavoured to set up a common chronological framework by tying together Caucasian and Near-Eastern archaeological data. This task proved quite difficult, partly because of the lack of radiocarbon datings from the Caucasus at large. Remarkably enough, twenty years later, the situation has changed completely. This paper will focus on the new data produced by the Mission Archéologique du Bassin de l’Araxe, a Franco-Azerbaijani team that has been working in Nakhchivan over the last 15 years. A continuous chronological sequence has been established from the data retrieved from seven different Late Prehistoric sites; this sequence encompasses the 6200 - 2400 BCE time span. This paper, however, will focus on the 5000-2400 BCE period: after describing the main chronological markers that characterise the Nakhchivani chrono-cultural framework, we will discuss one of its most salient specificities, namely multi-culturalism, a behavioural pattern that is perceptible through most of the chronological sequence. We will argue that multi-culturalism is a key-notion for apprehending settlement patterns and cultural dynamics, not only in Nakhchivan, but also in the South Caucasus and beyond.

Andrea MILANES

(Ca’ Foscari University of Venice, Italy, GISKAP-GILAP projects)

Results of the FRAC-SISCANE A project: The Middle Bronze and the transition to the Late Bronze Age
The paper will present the parallel stratigraphic sequences of the two areas (Field A and B) of the Aradetis Orgora site from the final Early Bronze (Bedeni Culture), Middle Bronze (Trialeti Culture) and the Middle Bronze/Late Bronze Age transition in connection with new $^{14}$C readings and the results of pottery analysis. Despite the lack of dates for any internal MBA phasing, ceramics attest some occupation/frequentation of the site during the MBA, a period known elsewhere above all from funerary contexts. The analysis of ceramic features provided new elements of discussion for the MBA-LBA transition debate: in spite of the strong continuity in material culture, it allowed to better define some aspects of progressive change.

Giulio PALUMBI (CNRS – Laboratory CEPAM, Nice, France, Università degli Studi di Bari “Aldo Moro”, Italy)

Andrea RICCI (Cluster of Excellence ROOTS, Kiel University)

Radiocarbon dates from the settlements of Kiçik Tepe and Qaraçınar. Old and new data for the definition of the cultural developments of Western Azerbaijan between the fifth and third millennium BCE.

The paper will present the radiocarbon dates from the settlements of Kiçik Tepe and Qaraçınar excavated since 2017 by the Mission “Boyuk Kesik”. Kiçik Tepe is located in the valley of the Kura River (district of Tovuz) and witnesses a sequence of occupation dating to the sixth and fifth millennium. Qaraçınar is located on the eastern piedmont of the Lesser Caucasus mountains (district of Goranboy) and witnesses a sequence of occupation dating to the third millennium. The stratigraphic sequence and the ceramic assemblages associated to radiocarbon data from both settlements will be presented in order to discuss the cultural developments of Western Azerbaijan in the Chalcolithic and Bronze Age periods.
Annapaola PASSERINI, Adam T. SMITH

(Cornell University, Ithaca, USA)

The EBA/MBA transition: integrating geographic variability into chronology building

The EBA/MBA transition in the South Caucasus was marked by extraordinary socio-cultural changes attendant to the dissolution of the KA horizon and the emergence of the so-called Early Kurgan communities. And yet despite the extent of social transformation, the resolution of our chronology for the transition is remarkably poor, defined by a five-century span roughly 2500 and 2000 BCE. While $^{14}$C has contributed to clarifying the order of early MB material sequences, the uncertain genealogy of KA and EK communities and limitations of the extant $^{14}$C corpus continue to frustrate chronology building. Current data on the final phase of the KA suggests that part of the issue is a failure of existing models to allow for a considerable degree of temporal and geographic variability in the regional dynamics of cultural transition. This paper reassesses the EBA/MBA transition through a radiocarbon perspective that allows for geographic variation. Bayesian modelling will be applied to existing $^{14}$C data in order to highlight regional disparities in patterns of material culture change.

Sarit PAZ (Tel Aviv University, Israel)

Mindia JALABADZE (Georgian National Museum, Georgia)

Elisabetta BOARETTO (Weizmann Institute of Science, Rehovot, Israel)

New radiocarbon dates from the Kura-Araxes village of Kvatskhelebi, Shida Kartli, Georgia

The Early Bronze Age village of Kvatskhelebi in the Shida Kartli region of Georgia is one of the best-preserved Kura-Araxes settlements in the South Caucasus. The wide exposure, good preservation, and ample finds in situ, offer
valuable information on Kura-Araxes village life in the early 3rd millennium BC. The recent renewed archaeological research on the 1950s–60s excavations at the site leads to a better understanding of its stratigraphic sequence and provides various finds and data that enable us to present a new set of radiocarbon dates. $^{14}$C samples of good quality were chosen from reliable contexts, and the lab results were modelled using Bayesian analysis incorporating stratigraphic information. Based on the material culture and radiocarbon dates, all four main occupation phases at the site correspond to the KA II phase (following the twofold periodisation scheme, with KA I–II transition at ca. 2900 BC). Placed in the wider context of the region, the Kvatskhelebi dates offer an important contribution to the ongoing efforts to establish a firmer and more nuanced chronological scheme for the Kura-Araxes.

Lauren RISTVET (*University of Pennsylvania, USA*)

Hilary GOPNIK (*Monash University, Australia*),

Veli BAHSHALIYEV (*Nakhchivan Brunch of Azerbaijani National Academy of Sciences, Nakhchivan*)

**The Absolute Chronology of the Early Bronze Age to the Iron Age in Northern Naxcivan**

Excavations since 2006 by the Naxcivan Archaeological Project in Northern Naxcivan have produced a sequence of radiocarbon dates spanning the Early Bronze Age through the Iron Age, which suggest the need to revise the chronological parameters that have traditionally been assigned to the Middle Bronze Age and Late Bronze Age particularly. The Middle Bronze Age dates have been retrieved from both burials and a stratified settlement, where deep excavation has revealed a settlement at Qizqala that was continuously occupied from the very beginning of the MBA into the EIA. The associated ceramic chronologies make a good case for adjusting our understanding or periodisation in the most southern part of the South Caucasus.
Elena ROVA

*(Ca’ Foscari University of Venice, Italy, GISKAP-GILAP projects)*

**The SPIN-2 FRAC-SISCANEA project: an introduction**

The FRAC-SISCANEA project was carried out at Ca’ Foscari University of Venice between 2019 and 2021 in collaboration with Elisabetta Boaretto of the Weizmann Institute of Science. Its main aim was to build a reliable sequence of $^{14}$C determinations and associated finds from the sites investigated by the “Georgian-Italian Shida Kartli Archaeological Project” of Ca’ Foscari in the Georgian province of Shida Kartli (Natsargora, Okherakhevi, Aradetis Orgora/Doghlauri). As an introduction to the project’s results, the paper will shortly present the sites, and examine problems (settlement continuity/discontinuity of occupation at multi-period sites, contamination caused by residual material and later disturbances, representativeness of local sequences for regional purposes, confusing terminology, ambiguous identification of material cultural assemblages, etc.) which emerged in the evaluation of their stratigraphic sequences. Finally, it will summarize the project’s main results.

ZOOM LINK to participate to the meeting: [https://unive.zoom.us/j/83551271137](https://unive.zoom.us/j/83551271137)