# Cultural Transfers between the Caucasus area, the Ancient Near East and the Eurasian Steppes, from the Neolithic to the Early Bronze Age (6<sup>th</sup>-3<sup>rd</sup> mill. BC)

## **Bertille Lyonnet**

French National Centre for Scientific Research, Paris, France

#### Introduction

From the very remote past we have evidence of the movement of populations and of exchanges of material, goods or ideas. It is, apparently, one of the specific features of humankind and a major contribution to its extraordinary diversity and complexity. Though mountains, and especially the Great Caucasus, have often been considered as barriers and/or shelters for local groups with their own languages, numerous passes have also been used to cross them over.

In this article we will present several evidences of cultural contacts between the Caucasus area, the ancient Near East and the northern steppes starting from the Neolithic period, in the 6<sup>th</sup> millennium, until the Early Bronze Age, around the middle of the 3<sup>rd</sup> millennium. As we will see, these intercomnections may have been due, in some cases, to migrations, either of small groups of merchants or of larger population movements, but, until more research on a DNA is done, this cannot be confirmed.

Our evidences rely mainly on material culture, mostly on pottery, one of the most ubiquitous materials found in the course of archaeological excavations. Pottery, or what it contained, can easily been exchanged and its decoration can be copied, but it is usually considered as a cultural marker. However, as we all know, pots rarely equal people. Similarly, languages cannot be reduced to an ethnos or to genes. Furthermore, even in the case of large migrations or dramatic climatic changes, the local population/culture never totally disappears as shown by the numerous evidences of its remains in the succeeding period(s), resulting in some kind of hybridization. Interpretations on the meaning of these cultural "transfers" are, therefore, difficult and very sensitive to handle: they can only be presented as hypothetical. This is particularly important to underline and to remembering the case of the Caucasus, an area that is considered by some as the homeland of the IndoEuropeans (Gamkrelidze et Ivanov 1984) and of the Hurrians known through Mesopotamian texts.

#### The Neolithic Period

Compared with Northern Mesopotamia and Eastern Anatolia, the first evidences of Neolithic communities in southern Caucasus date to a rather late period, not before the beginning of the 6<sup>th</sup> millennium, and present already a full-blown culture with a mudbrick, circular architecture, pottery, and already domesticated cereals and fauna. This is the "Shomu-Shulaveri culture", named after the two first type-sites that have been excavated, ShomuTepe in western Azerbaijan and Shulaveris-Gora in Eastern Georgia.Two sites of this culture recently excavated, Aknashen in the Araxes valley (Armenia) (Badalyan et Harutyunyan 2014) and Hacı Elamxanlı Tepe in the Middle Kura valley (Azerbaijan) (Nishiaki et al. 2013) give,for the earliest levels, radiocarbon dates around 6000 BC and painted pottery shards that are made of not local clay and painted in a similar style as those of northern Mesopotamia ("Samarra" style). Research on the communities who lived previously in this area has led, up to now, to the discovery of several caves or shelters with hunters-gatherers who do not present direct relations with what follows (Amirkhanov 1987, Petrosyan et al. 2014).

Several indications tend to show that the 8.2ka year climatic event (i.e. around 6200 BC) led to severe transformations in the Near Eastand that this might be at the origins, a few centuries later, of the foundation of this Shomu-Shulaveri culture that extends between the Araxes and the Middle Kura valley (Lyonnet et al. 2016). The wealth of the local flora and fauna, or of the different raw materials present in the Lesser Caucasus, has also often been advanced to explain the relations between these different areas. Active research is being done on these different themes to prove or refute these proposals. We are also working on the ancient DNA<sup>1</sup> from skeletons coming from a collective grave dating to ca. 5700 BC discovered at Mentesh Tepe in the Kura Valley (Azerbaijan) in order to track the origins of this population.

Besides the circular mudbrick architecture, also known in the Halaf culture of northern Mesopotamia (though, it is, there, usually associated with a rectangular one), other evidences point at relations with this Mesopotamian area in the course of the Shomu-Shulaveri culture development, like the presence of similar grooved stones (Arimura 2010), of applied decoration frequent in early Neolithic cultures, or of Halaf pottery shards along the Araxes river at Aratashen in Armenia(Palumbi

<sup>&</sup>lt;sup>1</sup> Research made by C. Bon, Museum National d'Histoire Naturelle / CNRS, Paris.

2007)and at Kül'Tepe in Nakhchivan (Abibullaev 1982).Clearly, relations were maintained for several centuries between all these areas.

Nevertheless, despite these intrusions and/or the continuity of exchanges, the Shomu-Shulaveri culture developed its own character, with a specific rich bone and lithic industry. Italso established links with other cultures farther east towards the Iranian borderlands (Lyonnet 2017b).

For yet unknown reasons, traces of sedentary life disappear after ca. 5300 BC and were probably replaced by a semi-mobile life.

### The Chalcolithic Period

The rare evidences of human life we have for the next thousand years consist mainly in pits and post-holes with a light architecture and little material. Only one site, at Sioni in eastern Georgia, in the piedmont of the Lesser Caucasus, presents a round stone architecture. This data let suppose a possible semi-mobile way of life. However, many of these discoveries come from a period when the practice of radiocarbon dates was not used, and we lack firm data on which to rely. The few known recent dates place them from 4800 to ca. 4000 BC. The pottery shows some continuity with that of the Shomu-Shulaveri culture, together with the introduction of new shapes (Lyonnet 2017a, in press). This material culture has been named "Sioni", on the basis of the first site that was excavated. No sign of exterior relationship is visible at that time, except, probably at the end of the period, relations with the northern side of the Great Caucasus, with similar pottery found at Zamok (Korenevskij 1998).

Recent discoveries, however, have shown that, during the last third of the 5<sup>th</sup> millennium (from about 4350 BC to 4100 BC), at the time when some of these Sioni sites are attested, a few settlements, like Mentesh Tepe, present a totally different layout, with a very well built rectangular mudbrick architecture previously unknown in this area but recalling that of tripartite buildings in Mesopotamia (Lyonnet et al. 2012). The abundant pottery production found at this site also presents features, both in shape and decoration, known in northern Mesopotamia, though it is not totally identical. The "Sioni" pottery is present there but represents only the cooking ware (Lyonnet 2012). The site testifies of important local metallurgical activities based on copper sources that lie not far from it, in the Lesser Caucasus (Courcier et al. 2016), but we have not been able yet to identify precisely why and by who such a settlement was established.

A few centuries later, during the first half of the 4<sup>th</sup> millennium, other settlements attest of an even more visible northern Mesopotamian influence, like Leilatepe in Azerbaijan (Narimanov 1987) or Berikldeebi in Georgia (see fig. 1). This is again evident in the architecture and in the pottery, which is, now, totally identical to that known at sites in northern Syria or Iraq (Akhundov 2007, Makharadze 2007). There too, metallurgy seems to have played an important role. But a few contemporary sites, like Boyuk Kesik, show a more local/traditional architecture with oval shapes (Museibli 2007), perhaps pointing at the cohabitation of different populations over the same territory.

At the same time, in the same southern Caucasus area, kurgans (tombs under a stone tumulus) make their first apparition. Such funerary customs had started to appear a little earlier in the steppes north of the Caucasus and are usually linked with mobile groups (Rassamakin 1999). At Soyuq Bulaq, close to Boyuk Kesik in western Azerbaijan, in a rather rich tomb of this kind, beads of gold, silver-copper alloy, lapis-lazuli, carnelian and paste have been discovered together with a copper dagger and a stone scepter with an equid head (Lyonnet et al. 2008). The pottery found in these kurgans also clearly relates to that from the Leilatepe culture. From the several kurgans that have been excavated, it seems that no full skeletons have been retrieved and that a possible ritual of exposure was already in use at that time (Lyonnet 2009). Similar kurgans are known at SéGirdan, south of Lake Urmia in Iran (Muscarella 2003), and in Georgia, not far from Berikldeebi (Makharadze 2007).

It is also at that time that the Maikop culture, essentially known through its kurgans, develops north of the Great Caucasus. Very few settlements are known of this culture, and for long, it has been wrongly dated to a much later time (Andreeva 1977, Lyonnet 2000).Nevertheless, relations with the Leilatepe culture and northern Mesopotamia are obvious and it is now dated also to the first half of the 4<sup>th</sup> millennium, both on the basis of radiocarbon dates and of comparisons in the material culture (Trifonov 1996; Lyonnet 2000, 2007).Maikop kurgans are also famous for their incredible wealth in gold, silver and exotic beads.

To sum up, for about 800 centuries during the Late Chalcolithic period, starting around 4300 and until 3500 BC, intense relations involved northern Mesopotamia with the Caucasus area and spread even over its northern side. Though some claim that this was due to migrations (Akhundov 2007), it might have only concerned small groups of merchants dealing with the local population who was, at least for a part of it, mobile, and could have access to materials from far away, as attested by the presence of lapis-lazuli coming from NE Afghanistan. The raw or finished materials that were looked for by these foreign southerners are unknown, even if metal

probably played a major role. But wool or wood might also have been already searched for at that time.

#### The Early Bronze Age

A long break in the external relations of southern Caucasus follows this period. It corresponds to the time of the "Uruk expansion" from southern Mesopotamia, during the second half of the 4<sup>th</sup> millennium. This economically-based expansion mainly followed the road of the Euphrates up to Arslantepe in Eastern Turkey and resulted in the foundation of several colonies or of a strong influence on other sites (Algaze 1993). In southern Caucasus, for one or two centuries after the break with the previous external relations, no change is visible in the material culture at the few sites that have been excavated and date to this period. This is the case at Godedzor, in Armenia, up to around 3350 BC (Palumbiand Chataigner 2014).

However, from about 3300 BC, a new culture appears in the hills and mountains of the southern Caucasus area, mainly characterized by a new brownish and/or black polished pottery and, later, by specific andirons and hearths. This culture is named Kura-Araxes since it is mainly distributed between the two rivers. Up until now, its origins remain obscure (Sagona 2014). It is, however, clear that the Uruk phenomenon is responsible for its venue, even though no direct contacts between them is visible.

Since the previous population did not disappear, it is quite right that some features of the local cultures are still present, but most of the others are new. The population lived, at first, in rather light wattle and daub and round structures following the local traditions, while various types of burials are attested, either collective under kurgans, or individual in pit graves of different shapes. Later, the houses became rectangular with round corners, but most had the same plan over a large territory. This population settled at different altitudes and practiced both cattle-breeding and agriculture. The economical emphasis was on the household or on small scale production without evidence of exchange with the exterior and of hierarchy among the people. Metallurgy seems to have continued to play an important role, as shown by the recent excavations made at the gold mine of Sakdrisi and Dzedzvebi (Gambashidze and Stöllner 2016). Slowly, starting with the beginning of the 3<sup>rd</sup> millennium, regionalization appears in the decoration of the pottery, the architecture or the burials.

During the first half of the 3<sup>rd</sup> millennium, from around 2900 BC onwards, part of this population moved in two directions, towards the Zagros (Rothman 2011) and

the Levant (Greenberg et al. 2014), where it has been identified at several sites. This movement is even traceable up to Turkmenia in the Kopet Dagh (period Namazga IV). The reasons behind this migration – here clearly involving groups of people – are again puzzling and different hypotheses have been advanced (pastoralism, metallurgy, trade, search for new land, etc.) but no proof supports any of them up to now.

Around the middle of the 3<sup>rd</sup> millennium, a new small group of people appears in the southern Caucasus, mainly along the Kura Valley in Georgia and Azerbaijan. They clearly lived together with the local population and borrowed from them at least their pottery. Their first remains are those of rich and large kurgans with wooden chambers, most of which contain four wheels wooden wagons (Makharadzeet al. 2016, Pecqueur et al. 2017). Only very few settlements are known that can be related to them, and they date to a later phase. Though most of these kurgans have been grabbed in antiquity, they almost all contain exotic and luxury items coming from a very wide area (from amber beads of the Baltic sea, *conus* shells of warmer seas, to indented beads well known in central Asia) and can be attributed to groups of northern (steppe) traders rather than to those of warriors as previously thought. Many features relate them to the fabulous graves of the 'Royal Cemetery of Ur' (Lyonnet 2016). These people and the changes they bring will slowly put an end to the Kura-Araxes culture.

#### Conclusion

The Caucasus area has long been considered as an isolated area and it has also long been forgotten by many scholars due to the political situation of previous USSR. The short presentation given here shows, on the contrary, that it was a crossroad of many different intercultural relations during a long period in the protohistoric times.

Its wealth in raw materials and its opening on the wide Eurasian steppe to the north has certainly created the basis for most of these relations. Exchange and trade in different materials can be proposed for many of the visible connections, but this also led to cultural "transfers" both inwards and outwards and contributed to an intense development.

There are still many obscure points in the proto-history of the Caucasus area. A major problem is the total absence of writing, and our ignorance of the languages that were spoken at that time. A lot of research is now being investigated for these early periods in the environment, the paleo-fauna and flora, metallurgy, a DNA, etc. and we hope

that the results will help understanding better both the local and the exterior components of the successive cultures that developed there.

#### **References and notes:**

Abibullaev O.A. (1982) Eneoliti Bronzana territory i Nakhichevanskoj ASSR, Elm, Baku.

- Akhundov T. (2007) Sites de migrants venus du Proche-Orient en Transcaucasie. In : B. Lyonneted. Les Cultures du Caucase (VI<sup>e</sup>-III<sup>e</sup> millénaires avant notre ère). Leurs relations avec le Proche-Orient. CNRS éditions-ERC, Paris, 95-121.
- Algaze G. (1993) The Uruk World System. The Dynamics of Expansion of Early Mesopotamian Civilization. The University of Chicago Press. Chicago and London.
- Amirkhanov Kh. A. (1987) Chokhskoeposelenie: cheloveki ego kul'tura v Mezolite i Neolitegornogo Dagestana, Nauka, Moscou. Andreeva M.V. 1977. K voprosu o juzhnykhsvjazakh Majkopskoj Kul'tury, Sovetskaja Arkheologija, 1, 39-56.
- Arimura M., R. Badalyan, et al. (2010). Current Neolithic research in Armenia, *Neo-Lithics* 1/10, 77-85.
- Arimura M., B. Gasparyan, C. Chataigner. (2012) Prehistoric sites in Northwest Armenia: Kmlo 2 and Tsaghkahovit. in: R. Matthews and R. Curtis (eds.), *Proceedings of the* 7<sup>th</sup> ICAANE, London 2010. Harrassowitz, Wiesbaden, 135-150.
- Badalyanet Harutyunyan. (2014). Aknashen The Late Neolithic settlement of the Ararat Valley: main results and prospects of the research. In: B. Gasparyan and M. Arimura (eds.) Stone Age of Armenia, Center for Cultural Resource Studies, Kanazawa University, 161-176.
- Courcier A., B. Jelilov, I. et al. (2016). The ancient metallurgy in Azerbaijan from the end of the Neolithic to the Early Bronze Age (6<sup>th</sup>-3<sup>rd</sup> mill. BCE): an overview in the light of new discoveries and recent archaeometallurgical research. *From Bright Ores to Shiny Metals, Festchrift Andreas Hauptmann, Der Anschnitt*, 29, 25-36.
- Gambashidze, I. and Stöllnereds, T. (2016) *The Gold of Sakdrisi. Man's first gold mining enterprise.* Verlag Marie Leidorf GmbH, Rahden (Westf.)
- Gamkrelidze, T.V., Ivanov, V.V. (1984) Indoevropejskij jazyki Indoevropejtsy. Rekonstruktsija i istoriko-tipologicheskij analiz prajazyka i protokul'tury. University of Tbilissi.Tbilissi.
- Greenberg R., Shimelmitz, R. and Iserlis, M. (2014) New evidence for the Anatolian origins of 'Khirbet Kerak Ware People' at Tel Bet Yerah (Israel), ca 2800 BC. *Paléorient* 40.2, 183-201.
- Korenevskij, S.N. (1998). Poselenie 'Zamok' u gorodaKislovodska (nizhnijsloj). In: A.B. Belinskij (éd.) Materialy po izucheniju istoriko-kul'turnogo nasledija severnogo Kavkaza, I, Arkheologija, Stavropol', 96-147.
- Lyonnet, B. (2000). La Mésopotamie et le Caucase du Nord au cours du 4<sup>ème</sup> millénaire av. n. è.: leurs rapports et les problèmes chronologiques de la culture de Maikop. Etat de la question et nouvelles propositions. In: C. Marro et H. Hauptmann (éds.) *Chronologies des pays de l'Euphrate et du Caucase aux IV<sup>e</sup>–III<sup>e</sup>mill., Varia Anatolica* XI, De Boccard, Paris, 299-320.

- Lyonnet, B. (2007). La culture de Maikop, la Transcaucasie, l'Anatolie orientale et le Proche-Orient: relations et chronologie. In: B. Lyonnet (dir.) Les cultures du Caucase (VIe-IIIe millénaires av. n. è.). Leurs relations avec le Proche-Orient. CNRS-éditions, ERC, Paris, 132-161.
- Lyonnet, B. (2009) « Périphérie de la Mésopotamie à la période d'Uruk (4<sup>e</sup> millénaire): le cas des régions du Caucase ». In: J.-M. Durand et A. Jacquet (éds.) *Centre et Périphérie: approches nouvelles des Orientalistes*, CIPOA vol. I, Maisonneuve, Paris, 1-28.
- Lyonnet, B. (2012) Mentesh Tepe Pottery. In: B. Lyonnet et al. Ancient Kura 2010-2011: The First Two Seasons of joint field work in the Southern Caucasus, Archäologische Mitteilungenaus Iran und Turan 44, 97-108.
- Lyonnet, B. (2016) A Grave with a Wooden Wagon in Transcaucasia (Azerbaijan). Its Relations with Central Asia. In: N.A. Dubova, P.M. Kozhin, M.F. Kosarev, M.A. Mamedov, R.G. Muradov, R.M. Sataev, A.A. Tishkin eds. V. Sarianidi Memorial Volume, Transaction of Margiana arcaheological expedition, Vol. 6. Moscow, Staryj Sad, 191-198 and color plate.
- Lyonnet, B. (2017) a (in press) « Rethinking the 'Sioni Cultural Complex' in the South Caucasus (Chalcolithic Period): New data from MenteshTepe (Azerbaijan). In: A. Sagona's Festschrift.
- Lyonnet, B. (2017) b. Mentesh Tepe, Concluding Remarks. In: B. Helwing, T. Aliyev, B. Lyonnet, F. Guliyev, S. Hansen and G. Mirtskhulavaeds. The Kura Projects, Archäologie in Iran und Turan, 16, Dietrich Reimer Verlag, Berlin, 193-194.
- Lyonnet, B., T. Akhundov, et al. (2008) Late Chalcolithic Kurgans in Transcaucasia. The cemetery of Soyuq Bulaq (Azerbaijan). *Archäoligische Mitteilungenaus Iran und Turan*, 40, 27-44.
- Lyonnet, B. & Guliyev, F. in collaboration with L. Bouquet, G. Bruley-Chabot, M. Fontugne, P. Raymond and A. Samzun. 2012.Mentesh Tepe. In: B. Lyonnet et al. Ancient Kura 2010-2011: The First Two Seasons of joint field work in the Southern Caucasus, *Archäologische Mitteilungenaus Iran und Turan*44, 86-97.
- Lyonnet B., F. Guliyev, L. Bouquet, et al. (2016.) Mentesh Tepe, an early settlement of the Shomu-Shulaveri Culture in Azerbaijan, *Quaternary International* 395, 170-183.
- Makharadze, Z. (2007). Nouvelles données sur le Chalcolithique en Géorgie orientale. In: B. Lyonnet ed. Les Cultures du Caucase (VI<sup>e</sup>-III<sup>e</sup> millénaires avant notre ère). Leurs relations avec le Proche-Orient. CNRS éditions-ERC, Paris, 123-131.
- Makharadze, Z. Kalandadze, N. and Murvanidze, B. (2016). *Ananauri Big Kurgan 3*. Georgian National Museum and Shota Rustaveli Foundation. Tbilisi
- Muscarella, O.W. (2003). The Chronology and Culture of Sé Girdan: Phase III. Ancient Civilizations from Scythia to Siberia, 9, 1-2, 117-131.
- Museibli, N. (2007). Böyük Kesike neolit dövrü yaşayiş məskəni. The Chalcolithic Settlement of Beyuk Kesik. Baku: Institute of Archaeology and Ethnology.
- Narimanov, I. (1987). Kul'tura drevnejshego zemledel'chesko skotovodcheskogo naselenija Azerbaidzhana (epokha Eneolita VI-IV tys. do n. e.), Elm, Baku.

- Nishiaki, Y, Guliyev, F, Kadowaki, et al. (2013). Hacı Elamxanlı Tepe: Excavations of the earliest Pottery Neolithic occupations on the Middle Kura, Azerbaijan, 2012, *Archäoligische Mitteilungenaus Iran und Turan* 45, 1-25
- Palumbi. (2007). A preliminary analysis on the Prehistoric pottery from Aratashen, Armenia.In: B. Lyonnet (éd.). Les cultures du Caucase (VI<sup>e</sup>-III<sup>e</sup> millénaires avant notre ère). Leurs relations avec le Proche-Orient. CNRS-Editions, ERC, Paris, 63-76.
- Palumbi, G. and Chataigner, C. (2014). The Kura-Araxes Culture from the Caucasus to Iran, Anatolia and the Levant: Between unity and diversity. A synthesis. *Paléorient* 40.2, 247-260.
- Pecqueur, L, Decaix, A, and Lyonnet, B. (2017). Un kourgane de la phase Martkopi à MenteshTepe (Période des Premiers Kourganes, Bronze ancien). In: B. Helwing et al. *The Kura Projects. New Research on the Later Prehistory of the Southern Caucasus. Archäologieaus Iran und Turan*, 16, Dietrich Reimer Verlag, Berlin, 179-192.
- Petrosyan A., M. Arimura, B. Gasparyan, et al. (2014) Early Holocene Sites of the Republic of Armenia: Questions of Cultural Distribution and Chronology. In: B. Gasparyan and M. Arimura (eds.), *Stone Age of Armenia*, Center for Cultural Resource Studies, Kanazawa University, 135-159.
- Rassamakin. (1999). The Eneolithic of the Black Sea Steppe: Dynamics of Cultural and Economic Development 4500-2300 BC. In: M. Levine, Y. Rassamakin, A. Kislenko and N. Tatarintseva (eds.), *Late Prehistoric Exploitation of the Eurasian Steppe*, Mc Donald Institute Monographs, Cambridge, 59-182.
- Rothman, M.S. (2011). Migration and Resettlement: Godin Period IV. In: H. Gopnik and M.S. Rothman, with contributions by R.C. Henrickson and V.R. Badler(eds.), On the High Road. The History of Godin Tepe, Iran. Royal Ontario Museum Press and Mazda Publishers, Toronto, 139-206.
- Sagona, A. (2014) Rethinking the Kura-Araxes Genesis, Paléorient 40.2, 23-46.
- Trifonov, V.A. (1996) Popravki k absoljutnoj khronologii kul'tur epokhi eneolita-bronzy severnogo Kavkaza. *Mezhdu Aziej I Evropoj, Kavkaz v IV-I tys.don. e. (K 100-letiju co dnja rozhdenija A.A. Iessena)*, St Petersburg, 43-49.