



Roots of Europe summer school

University of Copenhagen
24 July – 6 August 2017

Schedule and readings



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Schedule and readings

Practical information

Dear prospective student,

This document contains the schedule and list of preparatory literature for the summer school. Not all lecturers have uploaded their abstracts and literature yet, and the document will be updated as they do, and uploaded to the dropbox where you found this schedule, and where you will also find pdfs of articles for most lectures.

Note that all lectures will take place at:

ROOM 22.0.11 (BUILDING 22, GROUND FLOOR, LECTURE HALL 11)

Department of Nordic Studies and Linguistics
University of Copenhagen
Njalsgade 120
2300 Copenhagen S
Denmark

The nearest metro station is Islands Brygge.

We are looking forward to meeting you!

Best wishes,

Dr Benedicte Nielsen Whitehead (academic matters)
Phone (+45) 35 32 86 55

Casper Lindblad Andresen (admissions)
Phone (+45) 35 33 60 11

Overview

MONDAY, 24 JULY

- 10:15 – 11:00 Opening session; introduction
Prof. Birgit Anette Olsen (University of Copenhagen)
- 11:15 – 13:00 The ideological impact of the Indo-European hypothesis
Dr Benedicte Nielsen Whitehead (University of Copenhagen)
- 13:00 – 14:15 Lunch break
- 14:15 – 17:00 Fundamentals of linguistic reconstruction
Introduction to palaeolinguistics
Dr Thomas Olander (University of Copenhagen)
Prof. Birgit Anette Olsen (University of Copenhagen)
- 18:00 – 20:00 Welcome reception

TUESDAY, 25 JULY

- 10:15 – 13:00 Basic concepts in genetics; introduction to ancient DNA
Richard Hagan (Max Planck Institut, Jena)
- 13:00 – 14:15 Lunch break
- 14:15 – 17:00 The Indo-European languages
Dr Oliver Simkin (University of Cambridge)

WEDNESDAY, 26 JULY

- 10:15 – 13:00 Basic concepts in archaeology
Dr James A. Johnson (University of Copenhagen)
- 13:00 – 14:00 Lunch break
- 14:00 – 15:45 Pre-Indo-European languages of Europe
Dr Oliver Simkin (University of Cambridge)
- 16:00 – 16:30 Patterns of derivation and semantic change in terms of social relations
Veronika Milanova (University of Vienna)
- 16:30–17:00 The Khotanese and Tumshuqese languages and peoples in the West Tarim Basin and Central Asia
Federico Dragoni (Leiden University)

THURSDAY, 27 JULY

- 10:15 – 12:00 Bridging fields: origins and routes of dispersal of Indo-European languages
Peter de Barros Damgaard (Centre for GeoGenetics, University of Copenhagen)
- 12:15 – 13:00 Kin, clan and community in Proto-Indo-European society
Prof. Birgit Anette Olsen (University of Copenhagen)
- 13:00 – 14:15 Lunch break
- 14:15 – 17:00 Anatolian and Indo-European – language relations in time and space
Dr Matilde Serangeli (University of Copenhagen)

FRIDAY, 28 JULY

- 10:15 – 13:00 Material traditions and practices in Chalcolithic and Bronze Age Eurasian steppe cultural groups
Dr James A. Johnson (University of Copenhagen)
- 13:00 – 14:15 Lunch break
- 14:15 – 16:00 Uralic languages and cultures; linguistic contacts in northern Europe
Dr Adam Hyllested (University of Copenhagen)
- 16:15 – 16:45 Eastern Mediterranean households in the Early Bronze Age
Sabina Cvecek (University of Vienna)

SATURDAY, 29 JULY

- Excursion to Sagnlandet Lejre
- 09:17 Departure Copenhagen Central St. (København H), platform 7
- 10:45 – 12:45 Indo-European textiles – technology and terminology
Prof. Birgit Anette Olsen (University of Copenhagen)
Mikkel Johansen Nørtoft (University of Copenhagen)
- 16:00 – 20:00 “Stone-age gourmet” food workshop
Martin (Sagnlandet Lejre)
- 21:37 Arrival at Copenhagen Central St.

MONDAY, 31 JULY

- 10:15 – 13:00 Computer-simulated models and statistical methods in language reconstruction
Jurgen van den Heuvel
- 13:00 – 14:15 Lunch break
- 14:15 – 17:00 Indo-European religion and poetry
Laura Massetti

TUESDAY, 1 AUGUST

- 10:15 – 13:00 The archaeology and linguistics of Indo-European origins and spread
Prof. David W. Anthony (Hartwick College)
- 13:00 – 14:15 Lunch break
- 14:15 – 17:00 The Indo-Europeanization of Europe
Prof. Kristian Kristiansen (University of Gothenburg)

WEDNESDAY, 2 AUGUST

- 10:15 – 13:00 Ancient DNA and IE expansions from Ireland to India
Prof. David W. Anthony (Hartwick College)
- 13:00 – 14:15 Lunch break
- 14:15 – 17:00 Midwinter dog sacrifices and warrior initiations
Dr Dorcas R. Brown (Hartwick College)

THURSDAY, 3 AUGUST

- 10:15 – 13:00 Cultures and migrations of prehistoric Europe
Prof. Kristian Kristiansen (University of Gothenburg)
- 13:00 – 14:15 Lunch break
- 14:15 – 17:00 Basic homeland hunting: Language shift and archaeological evidence
Prof. James P. Mallory (Queen's University Belfast)

FRIDAY, 4 AUGUST

- 10:15 – 13:00 Homeland theories and controversies
Prof. James P. Mallory (Queen's University Belfast)
- 13:00 – 14:15 Lunch break
- 14:15 – 17:00 Q&A and celebration

SATURDAY–SUNDAY, 5–6 AUGUST

Saturday, 5 August

- 12:00 Announcement of exam question

Sunday, 6 August

- 12:00 Submission of exam essay

Monday, 24 July

Opening session; introduction

Prof. Birgit Anette Olsen (University of Copenhagen)

The ideological impact of the Indo-European hypothesis

Dr Benedicte Nielsen Whitehead (University of Copenhagen)

The realization that most of the European languages were related to a number of exotic, Asiatic languages had a profound impact on the way the learned society thought of language, race and nation. This subject was widely debated throughout Enlightenment and Romanticism, only to become taboo after the second World War.

The class gives an overview of different ideological responses to the discovery of the Indo-European family of languages.

 F. M. Müller. 1854. The last results of the researches respecting the non-Iranian and non-Semitic languages of Asia or Europe, or the Turanian family of language. In *Christianity and Mankind, their beginnings and prospects*, 473–487. C. C. J. von Bunsen. London: Longman, Brown, Green and Longmans. Available at Hathitrust.

• **Note:** Friedrich Max Müller (1823–1900) was a German-born Oxford professor of Modern Languages and Comparative Philology. He was known, and genuinely famous, as the greatest Oriental scholar of his day; he worked extensively on the history of religion.

Müller divided the world's languages into three major groups:

- The Semitic languages, traditionally named after Noah's first-born son Shem.
- The Turanic ones, named after Tur, who, according to Persian folklore, was the father of the Turkic peoples. Tur was, at the time, identified as Ham, Noah's second son. Müller's Turanic language family contained a number of languages now considered unrelated.

- The Aryan or Indo-European ones, sometimes labelled Japhetic after Noah's youngest son, Japheth.



H. S. Chamberlain. 1910. *Foundations of the XIXth Century*. Vol. 2. London: Ballantine & co. Pp. 187–200. Available at the Hathitrust.

- **Note:** Houston Stewart Chamberlain (1855–1927) was a British-born political philosopher. Raised mainly in France and Italy, he became a German citizen in 1916; he had married Eva von Bülow-Wagner, daughter of the composer Richard Wagner, in 1909.

Chamberlain believed the Germanic, Celtic and Slavic peoples were related in a “Teutonic race”. His *Foundations of the 19th century* is an extollment of the virtues of that alleged race; it became hugely influential on Adolf Hitler and Nazi ideology.

Fundamentals of linguistic reconstruction

Introduction to palaeolinguistics

Dr Thomas Olander (University of Copenhagen)

Prof. Birgit Anette Olsen (University of Copenhagen)

By comparing related languages it is possible to reconstruct parts of the proto-language from which they descend, even if the proto-language is not attested in writing. This is due to the curious fact that sound change is regular: if, say, a *p* changes to an *f* in one word in a certain language, then any *p* in the same environment in that language will change to *f*. The regularity of sound change lets us wind back the development of the sounds of related languages and to reconstruct the sounds of their proto-language; and since sounds are the building stones of spoken languages, this also allows us to reconstruct the grammatical system and the vocabulary of the proto-language.

If a given word or phrase can be reconstructed on the basis of several, preferably geographically distant, branches of the Indo-European family with regular sound change and identical meaning, the corresponding concept must be assumed to belong to the common, inherited culture. Evidently, part of the vocabulary pertains to semantic fields common to practically all cultures, such as the words for basic verbs like ‘eat’, ‘sleep’, ‘die’ or natural phenomena like ‘fire’, ‘water’ or ‘sky’, but in other cases the lexical correspon-

dences are a valuable key to a precise understanding of the inherited culture, as when, e.g., the terminology of wagonry, wool and dairy products point to a time span postdating the “secondary products revolution”. In this session we will try to determine a number of characteristic features of Indo-European society as testified by the vocabulary.

 Michael Weiss. 2015. The comparative method. In Claire Bowerman & Bethwyn Evans (eds.), *The Routledge handbook of historical linguistics*, 127–145. Oxon & New York: Routledge.

 Hans Henrich Hock & Brian D. Joseph. 1996. Historical linguistics, history, and prehistory: Linguistic paleontology and other applications of our methods. In Hans Henrich Hock & Brian D. Joseph (eds.), *Language history, language change, and language relationship: An introduction to historical and comparative linguistics* (Trends in Linguistics. Studies and Monographs 93), 477–509. Berlin: Mouton. (Second revised edition, 2009.)

Welcome reception

At the home of Birgit Anette Olsen (Rasmussen), Njalsgade 45, 3rd floor, left (close to the university)

Tuesday, 25 July

Basic concepts in genetics; introduction to ancient DNA

Richard Hagan (Max Planck Institut, Jena)

Recent advances in the fields of genetics, genomics, and ancient DNA (aDNA) have profoundly impacted our understanding of human history, particularly when and where past human migrations have taken place. The addition of biological data to linguistic and archaeological findings creates new avenues by which we may assess and refine models of human dispersals and the language and material culture that accompanied them.

This lecture provides a condensed framework of the biological knowledge and methods employed by archaeogeneticists, and is intended to provide linguists and archaeologists with a knowledge base that enhances their ability to interpret and interact with biological data pertinent to their research.

-  Jobling et al. 2014. Organization and inheritance of the human genome. *Human evolutionary genetics*, 2nd ed., 17–41.
-  Johannes Krause & Svante Pääbo. 2016. Genetic time travel. *Genetics* 203(1). 9–12.
-  John Novembre et al. 2008. Genes mirror geography within Europe. *Nature* 456(7218). 98–101.

The Indo-European languages

Dr Oliver Simkin (University of Cambridge)

With almost 450 living languages and many others that are now extinct, Indo-European is one of the world's larger language families, and in terms of total number of speakers it is by far the largest. It is also the best-studied language family in the world: the entire science of historical linguistics was born from the study of Indo-European languages. However, there is still intense debate and disagreement about the relationships between the individual languages and sub-branches – in other words, the structure of the Indo-European “fam-

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Tuesday, 25 July

ily tree". This session gives an overview of the various subgroups which make up the Indo-European family, and presents the latest thinking on their history and development.

 James Clackson. 2007. *Indo-European linguistics*. Cambridge: CUP. Chapter 1 (pp. 1–26).

 Robert S. P. Beekes. 1995. *Comparative Indo-European linguistics. An introduction*. Amsterdam & Philadelphia, PA: Benjamins. Chapters 1 and 2 (pp. 3–33)

Wednesday, 26 July

Basic concepts in archaeology

Dr James A. Johnson (University of Copenhagen)

This lecture provides the necessary basic tools needed for non-archaeologists and beginning archaeologists alike to better understand how archaeological research fits into the broader domain of Indo-European studies, including the “search” for the Proto-Indo-European language speakers. This lecture begins with the most basic of archaeological understandings – the excavation and analysis of material culture as the foundation for the construction of archaeological conceptualizations of culture. From there, we will explore how this has been used to construct typologies of different sorts using the principles of seriation and uniformitarianism, including the three-age system, social complexity, and social change. We then discuss the use of increasingly more complex scientific methods in archaeology, often referred to as archaeological science or archaeometry, including isotopic analysis and remote sensing, and their use in Indo-European studies.

-  Philip L. Kohl. 2007. *The making of Bronze Age Eurasia*. Cambridge: CUP. Chapter 1 (pp. 1–22).
-  Colin Renfrew & Paul G. Bahn. 2004. *Archaeology: Theories, methods, and practice*. New York: Thames & Hudson. Chapter 2 (pp. 53–74).
-  Exercise: “Cemetery of Bilj”.

Pre-Indo-European languages of Europe

Dr Oliver Simkin (University of Cambridge)

What languages did Europeans speak before the Indo-European family spread across the region? The only surviving Pre-Indo-European language of Western Europe is Basque, but there are also thousands of ancient inscriptions in various other non-Indo-European languages. With the help of these documents from the Minoan palaces of Bronze Age Crete, the Etruscan towns of

Iron Age Italy and the Iberian trading ports of the Catalan coast, we can learn more about the languages of these lost civilisations of early Europe.

 J. Clackson. 2015. *Language and society in the Greek and Roman worlds*. Cambridge: CUP. Chapter 1: “The linguistic ecology of the Mediterranean” (pp. 1–32).

Patterns of derivation and semantic change in terms of social relations

Veronika Milanova (University of Vienna)

The analysis of kinship terms seems to be quite simple when the researcher deals with the terms within one language and within a certain epoch but it becomes rather complicated when more than one language in more than one period of time are under study: For the historical linguists who study kinship terms and try to find their etymology, the absence of a common and reliable semantic theory of how terms of relation are formed and how they change is a serious problem. It is obvious that, like any other items of vocabulary, kinship terms will change their meaning over time, but it is not quite clear how it happens and which meaning should be considered to be primary and which one secondary. This gap is usually filled with personal experience and general knowledge. For anthropologists, whose main research question is how the human race and social institutions emerge(d) and evolve(d), and for whom kinship terms are interesting not simply as lexical items, but first of all as designators of an underlying reality, an absence of such a theory has been an even more acute problem. That is why first attempts to create it were made by them.

In my talk I would like to present the theoretical assumptions concerning reoccurring patterns of derivation and semantic change in terms of social relation based on discussions of social anthropologists and linguistic typologists and how historical linguists can use these ideas in their work.

The Khotanese and Tumshuqese languages and peoples in the West Tarim Basin and Central Asia

Federico Dragoni (Leiden University)

Expeditions to Chinese Turkestan (modern Xinjiang) at the beginning of the 20th century have brought to light many previously forgotten languages and cultures, enhancing greatly our understanding of the area in Pre-Islamic times. Among them are two Iranian languages, written in Brāhmī characters and strongly influenced by Buddhism, one formerly spoken in the area of Khotan on the Southern Silk Road, and therefore called Khotanese, and one in the North, in the vicinity of Tumshuq, commonly referred to as Tumshuqese. Unlike the other Indo-Iranian languages of the area (Sogdian, Parthian, Middle Persian, Gandhārī Prakrit and Buddhist Sanskrit), which we know were imported to the Tarim basin in historical times as religious or trade languages, we have enough evidence to reasonably infer that the two idioms (or their common ancestor) were spoken locally for a considerable period of time, possibly since the beginning of the 1st millennium BCE or even earlier. Related languages are to be found till nowadays in the Eastern Pamirs, where, in the Wakhan corridor, modern Wakhi is still spoken.

An early date of occupation of the region has also been proposed for another major, *ancient* Indo-European language group of the Tarim basin, Tocharian. Whereas its geographical and linguistic position poses a series of highly debated problems which are still awaiting a comprehensive solution, only very little attention has been devoted to its linguistic prehistory in relation to Khotanese and Tumshuqese. This is partly due to the fact that little has been done to investigate the proto-history of these two Eastern Iranian languages. Their interpretation is indeed hampered by a series of still unsolved difficulties. Whereas some important texts often lack a reliable edition, there are virtually no modern comprehensive lexicographical or grammatical tools at disposal. Moreover, the extremely rapid linguistic change which Khotanese underwent in more than 600 years of linguistic attestation (loss of vowel quantity, radical phonological and morphological simplification) are not yet fully understood. My PhD research, which started in May 2017 as part of the NWO funded project “Tracking the Tocharians from Europe to China”, aims at throwing some light on these intricate issues by reconstructing the proto-

language at the origin of Khotanese and Tumshuqese. The linguistic results thus obtained can then be combined with the known archeological data from the region, in order to gain a more precise picture of the prehistory of the Tarim basin and a better understanding of the historical dynamics of change in the region.

Thursday, 27 July

Bridging fields: origins and routes of dispersal of Indo-European languages

Peter de Barros Damgaard (Centre for GeoGenetics, University of Copenhagen)

Recent ancient DNA evidence has provided archaeological and linguistic research with a massive amount of data for investigating past human dispersal. Having expanded from analyses of short sequences of uniparental markers – mitochondrial DNA and Y-chromosomal DNA – to hundreds of thousands of genetic markers, leading to an unprecedented scale of analysis, we are now able to confidently retrace past population histories.

Several studies have provided compelling evidence of the early Bronze Age western steppe populations as a source of Indo-European languages in Europe. However, this scenario does not from a strictly genetic viewpoint exclude a non-steppe origin of PIE, because pre-Bronze Age steppe ancestry related to mesolithic hunter-gatherers only makes up half the ancestry of the Yamnaya/Afanasievo gene pool, while the remainder has its origins in the northern Caucasus.

Furthermore, genetic evidence has indicated a problem with the steppe hypothesis: the absence of steppe ancestry in the early Bronze Age Balkans, thought to be the route of dispersal of the population ancestral to the Hittites in Anatolia. However, complicating the matter, language dispersal and even human migrations may or may not be visible in the genetic record due to elite dominance, or due to population structure.

Here I will start by revisiting the basic methodology behind ancient DNA analyses in order to clarify the possibilities and pitfalls of ancient DNA research. Next I will review state-of-art knowledge on human mobility in the Bronze and Iron Age related to the dispersal of Indo-European languages. I will then discuss what we would expect the past genetic landscape to look like in the light of the main existing models on the origins and routes of dispersal of various branches of Indo-European languages, including Armenian, Anatolian, Indic and Indo-Iranian. Finally, I will discuss how, and if, ancient DNA will be able to finally point to the Proto-Indo-European homeland.

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Thursday, 27 July

- 📖 Clio Ter Sarkissian et al. 2015. Ancient genomics. *Philosophical Transactions of the Royal Society B*. 370(20130387).
- 📖 Rasmus Nielsen et al. 2017. Tracing the peopling of the world through genomics. *Nature* 541(7637). 302–310.
- 📖 Morten E. Allentoft et al. 2015. Population genomics of Bronze Age Eurasia. *Nature* 522(7555). 167–172.
- 📖 Wolfgang Haak et al. 2015. Massive migration from the steppe was a source for Indo-European languages in Europe. *Nature* 522(7555). 207–211.
- 📖 Iosif Lazaridis et al. 2016. Genomic insights into the origin of farming in the ancient Near East. *Nature* 536(7617). 419–424.
- 📖 Iain Mathieson et al. 2017. The genomic history of southeastern Europe. *bioRxiv* 135616.

Kin, clan and community in PIE society

Prof. Birgit Anette Olsen (University of Copenhagen)

The identification of the Indo-European homeland in time and space is intimately connected with investigations into the social structure of the Indo-Europeans as a determining factor of their mobility and interaction with foreign population groups. In this perspective, the reconstructed vocabulary for kinship and the extended family may be a clue to a closer insight into the conventions of marriage, gender roles, age sets and fosterage in early Indo-European society. In particular, we will see that the traditional conception of a strictly patrilineal, patrilocal society is to some degree counterbalanced by the importance of alliances with the wife's family.

- 📖 Heinrich Hettrich. 1985. Indo-European kinship terminology in linguistics and anthropology. *Anthropological Linguistics* 27(4). 453–480.
- 📖 Martin Huld & James P. Mallory. 1997. Kinship. In Douglas Q. Adams & James P. Mallory (eds.), *Encyclopedia of Indo-European culture*, 332–335. London & Chicago: Fitzroy Dearborn.

Since the decipherment of Hittite as an Indo-European language (1917) the Anatolian branch has presented many obscure points for IE studies. Despite its antiquity, it lacks several of the features that are considered representative for the language family and are common to other well-known ancient IE languages as for example Sanskrit and Greek, belonging to the so-called Core IE, i.e. the non-Anatolian branches of IE.

The interpretation of the peculiarities of this branch with its lack of some classical IE features combined with the presence of new elements is still an open question: is it evidence for a more primitive or more advanced stage of evolution of the Anatolian branch compared to the other representative IE languages? Until now, three hypotheses have been proposed: (1) Anatolian could have lost a number of ‘classical Proto-Indo-European (PIE)’ features after it split off from PIE as the first branch; (2) the ‘classical PIE’ features missing in Anatolian are common innovations of Core IE, and Anatolian is, therefore, a ‘sister language’ rather than a ‘daughter language’ of PIE; (3) Anatolian is simply one descendant of PIE, which consequently has to be radically revised on the basis of Anatolian features.

This module will offer an overview of the Anatolian languages as seen in relation to Core IE. We will discuss distinguished morphological and phonetic features relevant to determine the position of Anatolian and sketch its consequence for the reconstruction of the Proto-Indo-European stage, i.e. before the daughter languages split off from the IE family. The analysis of these aspects is also significant for the reconstruction of the PIE homeland since one of the hypotheses put forward until now sees Anatolia as possible homeland.

 J. Clackson. 2007. *Indo-European linguistics: An introduction*. Cambridge: CUP. Chapter 1 (1–26); Chapter 7 (pp. 187–215).

Material traditions and practices in Chalcolithic and Bronze Age Eurasian steppe cultural groups

Dr James A. Johnson (University of Copenhagen)

This talk offers an introduction to the prehistory of the Eurasian steppe, focusing primarily on the Ukrainian and Russian steppe regions during the Chalcolithic and Bronze Ages, ca. 5000–1000 BCE. It is these ‘cultural’ groups that are often seen as primary practitioners and movers of different languages, including the Proto-Indo-European language speakers. The lecture closely examines settlement patterning, landscape use, material culture, and subsistence and production economies of these groups and how they relate to the breakdown and spread of languages. The aim is to give students the basic foundation from which to more critically assess the multi-disciplinary efforts to identify cultures, language groups, and population movements in prehistory.

 Philip L. Kohl. 2007. *The making of Bronze Age Eurasia*. Cambridge: CUP. Chapter 2 (pp. 23–46); Chapter 4 (126–180).

Uralic languages and cultures; linguistic contacts in northern Europe

Dr Adam Hyllested (University of Copenhagen)

During the last ice age, most of Northern Europe was uninhabitable, but hunter-gatherer cultures were roaming on the tundras along the edge of the ice sheet. When the climate became warmer, human settlers followed the wild reindeer up North. The enormous amounts of meltwater turned large territories into seabed, and coastlines continued to change dramatically as sea levels rose even during the Mesolithic. Until around 6500 BC, the British Isles were still a part of the continent, and Northwestern Europe was dominated by land rather than sea. Cultures in the West such as Starr Carr must have been connected with the Maglemosian culture of Scandinavia, and ar-

eas of the present-day North Sea were covered with vegetation and inhabited by aurochs, deer, boar, birds, and humans.

We do not know the languages of the prehistoric Northern Europeans; just like the Indo-European languages in Europe, Uralic languages are comparatively late intruders into Europe from the East. However, recent studies have shown traces of at least one previously unknown language in Scandinavia which must have survived at least into the Middle Iron Age. From around 300 AD, radical cultural changes took place in Lapland as ancestors of the Saami were exposed to linguistic influence from Uralic expansions from the East. Hundreds of everyday words, however, were not replaced by Uralic ones, but live on in the Saami languages today. This lecture will present the Uralic language family, including current research on Uralic homeland and migration theories, with special focus on its arrival in Scandinavia.

-  Pekka Sammallahti. 2011. From Africa to the Arctic – expansions, bottlenecks, and contacts in the linguistic prehistory of the Saami. In Cornelius Hasselblatt, Peter Houtzagers & Remco van Pareren (eds.), *Language contact in times of globalization, 197–216*. Amsterdam & New York: Rodopi.
-  Janne Saarikivi & Mika Lavento. 2012. Linguistics and archaeology: A critical view of an interdisciplinary approach with reference to the prehistory of northern Scandinavia. In Charlotte Damm & Janne Saarikivi (eds.), *Networks, interaction and emerging identities in Fennoscandia and beyond* (Mémoires de la Société Finno-Ougrienne 265), 177–216. Helsinki: Suomalais-Ugrilainen Seura.
-  Petri Kallio. 2015. The language contact situation in prehistoric Northern Europe. In Robert Mailhammer, Theo Vennemann gen. Nierfeld & Birgit Anette Olsen (eds.), *The linguistic roots of Europe, 77–102*. Copenhagen: Museum Tusulanum Press..

Eastern Mediterranean households in the Early Bronze Age

Sabina Cvecek (University of Vienna)

The planned research focuses on studying households as a primary source for discussing the emergence of social structures in the Early Bronze Age

(EBA, beginning of 3rd Millennium BC), with emphasis on the importance of bottom-up studies for classifying and studying prehistoric societies. The project deals with households and household activities, social structure and settlement organization within the Aegean and Western Anatolia. These sets of topics are being addressed cooperatively by two archaeologists (working at two different sites), an archaeozoologist and an anthropologist, thus linking knowledge of both humanities and natural science.

Within this geographical frame, the project's main goal is to shed more light into the social organization of this period through the transdisciplinary approach of combining archaeological data and methods with anthropological methodology and concepts. The spatial analyses of two archaeological excavations, Çukuriçi Höyük in Western Anatolia and Platia Magula Zarkou in Thessaly/Greece, provide data for detailed analysis on intra- as well as inter-site spatial analyses through the exclusively domestic context. One of the main questions to be resolved in this PhD project is how EBA settlements themselves were organized, and what forms of social structure and social hierarchies may become evident and comprehensible within the material. A related, important issue is the reconstruction of provable trading networks within the Eastern Mediterranean in EBA₁.

This talk will consist of three parts. The first part will include an introduction to the overall DOC.team project and its objectives briefly described above. The second part will draw on anthropological models of social organization, namely segmentary societies and chiefdoms. In segmentary societies no standing organization or leadership exists above the level of the autonomous minimal segment usually based on household economies such as domestic mode of production. Contrary, in chiefdoms (simple or complex) the economic and political processes are organized along kinship lines, which also determine person's social status and political position. In this case chief is the one who holds the authority and special access to economic, military, and ideological power.

The aim to compare these two social organization models with the archaeological sources for the sites under investigation poses several challenges, which will be discussed in the third part of this talk. One of these challenges represents the fact that there have been no burials unearthed within the two sites. That implies that the well-known archaeological interpretation

of value of grave goods as a social marker cannot be implemented within our case study. Therefore, a detailed study of household activities plays a crucial role in defining (de)centralized system of social organization within this research project. At the same time, however, maintaining an open research process entail that these models may only partially or not fit at all to sufficiently address the empirical challenges in question.

Saturday, 29 July

Excursion to Sagnlandet Lejre

Itinerary to Sagnlandet Lejre

- 09:17 Dep. Copenhagen Central St. (København H), platform 7
Train: IC 51837 towards Esbjerg St.
Meet up in last carriage
- 09:44 Arr. Roskilde St., platform 3
- 09:54 Dep. Roskilde St., platform 1
Train: Re 2537 towards Holbæk St.
- 10:01 Arr. Lejre St.
- 10:05 Dep. Lejre St.
Bus 233 towards Herthadalen
- 10:13 Arr. Sagnlandet Lejre (Slangealleen) Arrival
- 10:15 Coffee & tea at the welcome center; introduction to the open-air museum
"Stone-Age gourmet" host Martin
- 10:45–12:45 Indo-European textiles – technology and terminology
Prof. Birgit Anette Olsen (University of Copenhagen)
Mikkel Johansen Nørtoft (University of Copenhagen)
- 13:00–14:00 Lunch – bring your own or buy at the café
- 14:00–14:15 Midway evaluation
- 14:15 Visit to dress workshop, demonstration of ancient spinning and weaving techniques
- 15:00–19:30 Meet up at welcome center
Our host Martin brings us to the stone-age settlement where he will introduce us to life in the stone age, and teach us to prepare a meal over the fire, using stone-age tools.
- Itinerary to Copenhagen*
- either* 20:00 Dep. by foot to Ledreborg castle; bus will pick us up at castle at 20:45 and take us to Lejre St.

or 20:30	Dep. by bus from Sagnlandet Lejre to Lejre St.
20:58	Dep. Lejre St. platform 2 Train Re 2564 towards Høje Taastrup St.
21:05	Arr. Roskilde St., platform 5
21:14	Dep. Roskilde St., platform 4 Train: IC 51864 towards Østerbro St.
21:37	Arr. København H, platform 2

Indo-European textiles – technology and terminology

Prof. Birgit Anette Olsen (University of Copenhagen)

Mikkel Nørtoft (University of Copenhagen)

The utilization of sheep's wool may be used for spinning and weaving in a cultural achievement that is important for the chronological determination of Indo-European culture, since the mutation of woolly sheep is a chronologically later phenomenon than the occurrence of the earliest farmers.

First Birgit Olsen will provide a survey of the Indo-European vocabulary of sheep, wool and textile technology, including the inherited words for spinning and weaving, and the linguistic evidence for specific garments.

In the following section, Mikkel Nørtoft will give us a broad archaeological overview of what we know about Indo-European textiles and plant dyes from the Pontic–Caspian steppes, as well as in the Tarim Basin and Europe after the migrations from the homeland, with an added focus on nettle textiles.

 E. J. W. Barber. 1991. *Prehistoric textiles: The development of cloth in the Neolithic and Bronze Ages with special reference to the Aegean*. Chapter 1 (pp. 9–38).

 Birgit Anette Olsen. Forthcoming. *The Indo-European vocabulary of sheep, wool and textile production*.

“Stone-age gourmet” food workshop

Martin (Sagnlandet Lejre)

Computer-simulated models and statistical methods in language reconstruction

Jurgen van den Heuvel

Linguistic phylogenetics is the discipline of establishing language trees. This can be done using traditional methods of historical linguistics, but in more recent years quantitative approaches have also gained in popularity. The latter use statistical data analysis tools that have been used successfully in evolutionary biology.

This class will discuss the principal mathematical-statistical models for linguistic phylogenetics. Topics will include: benefits and drawbacks of using a model-based approach, model concepts, the type of linguistic data used, how the data is processed, and how the results can be interpreted. No prior knowledge of mathematical models or statistics is needed.

 M. Dunn. 2015. Chapter 7. Language phylogenies. In Claire Bowerman & Bethwyn Evans (eds.), *The Routledge handbook of historical linguistics*. *Routledge handbooks in linguistics*, 190–211. New York: Routledge.

Indo-European religion and poetry

Dr Laura Massetti (CHS, Harvard University, Washington, DC)

The scope of this introduction to the comparative study of Indo-European (IE) religion and poetics is to familiarize students with the study of ancient comparative literature and, in particular, with the methodology of the so-called *cultural reconstruction*. The lecture will be divided in three main parts.

The first part will deal with some basic methodological issues, specifically, how the comparative method can be applied to the possible reconstruction of the IE poetic language. I will provide the main references for the history of the studies in the field as well as an overview of the different literary genres and most documented themes of IE poetry.

The second part will concern the possible reconstruction of the IE pantheon. Object of examination will be problems pertaining the structural characteristics and the functions of the IE divine figures. Both recommended principally relate to these two parts of the lecture.

In the third part, I will focus on a single case study, namely, the reconstruction of some fundamental traits of the “Daughter of the Sky, i.e. the Dawn-Goddess” on the basis of the textual evidence. All texts referred to will be given in their originals and translations.



Calvert Watkins. 1995. *How to kill a dragon. Aspects of Indo-European poetry*. New York & Oxford: Oxford University Press, pp. 1–6; pp. 50–67.



Benjamin W. Fortson, IV. 2010. *Indo-European language and culture. An introduction*. Malden, MA: Wiley-Blackwell. 2nd ed. Pp. 22–35.

Tuesday, 1 August

The archaeology and linguistics of Indo-European origins and spread

Prof. David W. Anthony (Hartwick College)

This lecture will describe aspects of the archaeology of the steppes (Russia, Ukraine, and Kazakhstan) relevant to the Indo-European question, including the advantages of a steppe homeland, the domestication of the horse, and the archaeological evidence for migrations out of the steppes.

-  David W. Anthony & Don Ringe. 2015. The Indo-European homeland from linguistic and archaeological perspectives. *Annual Review of Linguistics* 1. 199–219.
-  David W. Anthony. 2013. Two IE phylogenies, three PIE migrations, and four kinds of steppe pastoralism. *Journal of Language Relationship* 9. 1–22.

The Indo-Europeanization of Europe

Prof. Kristian Kristiansen (University of Gothenburg)

Abstract and readings t.b.a.

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Tuesday, 1 August

Wednesday, 2 August

Ancient DNA and IE expansions from Ireland to India

Prof. David W. Anthony (Hartwick College)

This lecture will describe recent evidence from ancient DNA that indicates that massive, long-distance migrations out of the steppes did occur, and flowed into those places where IE languages were later spoken. These Bronze Age migrations established the genetic foundation of modern populations, and I will discuss why it is reasonable to connect the IE languages with these migrations.

-  Wolfgang Haak et al. 2015. Massive migration from the steppe was a source for Indo-European languages in Europe. *Nature* 522 (7555). 207–211.
-  David W. Anthony & Dorcas R. Brown. 2017. Molecular archaeology and Indo-European linguistics: Impressions from new data. In Bjarne S. S. Hansen et al. (eds.), *Usque ad Radices: Indo-European studies in honour of Birgit Anette Olsen* (Copenhagen Studies in Indo-European 8), 25–54. Copenhagen: Museum Tusulanum Press.

Midwinter dog sacrifices and warrior initiations

Dr Dorcas R. Brown (Hartwick College)

This class discusses Indo-European war bands from the perspective of an archaeological excavation that revealed the remains of a winter-season sacrifice of at least 57 dogs and 7 wolves that occurred between 1900–1700 calBC at Krasnosamarskoe, a Late Bronze Age (LBA) settlement of the Srubnaya culture located in the middle Volga steppes near Samara, Russia. We use linguistic and mythological resources from comparative Indo-European scholarship to understand the culture, institutions, and worldview that surrounded the canid sacrifice. References to the institution of initiatory warrior bands associated with dogs and wolves can be found in mythological and epic traditions

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Wednesday, 2 August

known in Germanic (*Männerbünde*), Celtic (*fian*), Italic (*luperci* or *sodales*), Greek (**koryos, ephebes*), and in Indo-Iranian, particularly in Vedic sources (*vrātyas*). Using behavioral studies of modern and ancient warfare we analyze the institutions of IE warrior bands to better understand their efficacy in training young men to fight together to kill other humans while avoiding psychological trauma.

 Dorcas R. Brown & David W. Anthony. Late Bronze Age midwinter dog sacrifices and warrior initiations at Krasnosamarskoe, Russia. Unpublished manuscript, submitted 2017.

 B. P. C. Molloy & D. Grossman. 2007. Why can't Johnny kill?: The psychology and physiology of interpersonal combat. In B. P. C. Molloy (ed.), *The cutting edge: Studies in ancient and medieval combat*, 188–202. Stroud: Tempus.

Thursday, 3 August

Cultures and migrations of prehistoric Europe

Prof. Kristian Kristiansen (University of Gothenburg)

Abstract and readings t.b.a.

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Basic homeland hunting: Language shift and archaeological evidence

Prof. James P. Mallory (Queen's University Belfast)

This lecture will outline some of the basic criteria for assessing the plausibility of any homeland theory and will then focus on one of the major problems of any model that requires the Indo-Europeans to expand over a vast area and incorporate speakers of non-Indo-European languages into the Indo-European family.

-  James P. Mallory. 1997. The homelands of the Indo-Europeans. In R. Blench & M. Spriggs (eds.), *Archaeology and language*, 93–121. London: Routledge.
-  James P. Mallory. 2016. Chapter 13: Archaeology and language shift in Atlantic Europe. In B. Cunliffe & J. T. Koch (eds), *Celtic from the West*. Vol. 3. *Atlantic Europe in the Metal Ages – questions of shared language*. Oxford: Oxbow.

Thursday, 3 August

Friday, 4 August

Homeland theories and controversies

Prof. James P. Mallory (Queen's University Belfast)

This lecture will introduce 5 current models of Indo-European origins:

- the Palaeolithic continuity theory (Alinei, Otte);
- Anatolian Neolithic theory (Renfrew);
- the Armenian theory (Gamkrelize, Ivanov, Grigoryev);
- Steppe theory (Gimbutas, Anthony);
- Chariot warfare theory (Drews).

The theories will be compared and the major issues will be discussed.



James P. Mallory. 2013. Chapter 1: The Indo-Europeanization of Atlantic Europe. In J. T. Koch & B. Cunliffe (eds.), *Celtic from the West*. Vol. 2. *Rethinking the Bronze Age and the arrival of Indo-European in Atlantic Europe*. Oxford: Oxbow.



James P. Mallory. 2013. Twenty-first century clouds over Indo-European homelands. *Journal of Language Relationship* 9. 145–154.

Q&A and celebration

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Friday, 4 August

Saturday–Sunday, 5–6 August

Saturday, 5 August

12:00: Announcement of exam question.

Sunday, 6 August

12:00: Submission of exam essay.

