## **Keynote Lecture: "Re-theorizing Migration. Towards a New Prehistory"**

### Kristian Kristiansen, University of Gothenburg

I propose that we are now in the middle of a third scientific revolution in archaeology: the recent breakthrough in ancient DNA is fast producing new genomic evidence on human origins and migrations. Various forms of strontium isotope analyses have dramatically altered our perception of human mobility in prehistory. This new evidence has undermined previous autonomous interpretations of European prehistory. It opens up a new prehistory, one that we are only beginning to understand. It will in turn demand new theoretical and explanatory models, not least in the relationship between material culture and mobility. This I shall exemplify by a number of case studies.

## "Migration and Ancient DNA in the Eurasian Steppes: a Review of Population Movements during the Bronze Age."

## David W Anthony & Dorcas Brown, Hartwick College

Rapidly advancing methods for analyzing ancient human DNA are causing a revolution in archaeology, introducing a new "molecular archaeology". aDNA permits us to place ancient people within their mating networks, to see ancestry evolve across generations as populations expanded or died out, to track migrants and their genes across geographic space, and to say whether and with what frequency migrants and the indigenous population mated at the destination. This is an unprecedented tool for the study of ancient migrations, kinship, and biological adaptation. aDNA from hundreds of individuals from Bronze Age and older contexts across the Eurasian steppes recently revealed massive migrations of steppe Yamnaya-culture pastoralists westward into central Europe and eastward to the Altai Mountains dated about 3000-2500 BC, raising migration to a new significance in the archaeological interpretation of Old World prehistory and bringing a new level of fine granularity to studies of population migration.

## "Movement as Trigger for Consciousness"

## Han Barnard, UCLA

Our ability to control our movements seems intricately connected with our sentience, which creates a sense of unity and continuity, both in time and in space, as well as a sense of urgency to keep the individual functional, whole, and safe. These phenomena are often approached as exclusive functions of the brain, a problematic hypothesis as a brain is as ineffective without a body and its senses as a body is without its brain. The relevant output of the brain, irrespective of what may or may not go on inside it, is control over our movements. The body of living animals, including humans, maintains a

central platform identified as sentience, which integrates the often complex input and decides on a course of action. Movements connect individuals in the creation of signs and symbols, but also at a physiological level as illustrated by contagious laughter and yawning, mirror neurons and the related motor theory of speech perception. At a larger scale this may translate into a group of social animals developing a common sense of cohesion by moving across the landscape, most clearly when dancing, marching or on a pilgrimage.

## "Familiar Grounds: An Anthro-Archaeological Approach to Forced Migration Landscapes and Memory in Armenian Cilicia"

### Aurora E. Camaño, Simon Fraser University

Social anthropology vaunts a long legacy of scholarship on the topic of refugee and forced migration studies, with recent global events drawing new attention to the contemporary study of displacement and mass resettlement. Despite the recent surge in interest, the study of forced movement within the field of archaeology has been severely limited. Past discussions on forced migration within an archaeological context, moreover, have largely taken site identification as their focus, furthering a void in understanding social responses to forced migration and resettlement experience in our ancient past.

Within social anthropology, where this line of enquiry has had extensive development, methodologies have almost exclusively centered around ethnological comparative analysis and ethnographic participant-based observation. In archaeological contexts, however, where there are no longer living informants, the reproduction of these research methods is not possible. Therefore, in the absence of ethnographic recordings, my research looks toward "reading" the natural and built landscapes to revive past migrant narratives, and employs comparative analysis between landscape of origin and landscape of resettlement to gain insight into how concepts of identity, legitimacy, legacy, and place-attachment are reworked and monumentalized.

Drawing on the forced resettlement of Armenians into Rough Cilicia, this paper will explore the intersections of cultural anthropology, landscape archaeology, and social memory, to present how the medieval Armenians expressed the retention of cultural identity through rebuilding a sense of familiarity within their new home.

"Captives: The Invisible Migrant"

## Catherine M. Cameron, University of Colorado, Boulder

Involuntary migration is a topic not often addressed by archaeologists studying human movement in the past. I argue that for most societies, especially those engaged in frequent raiding or warfare, involuntary migration was common. Involuntary migrants, more commonly called "captives," were most frequently young women and children and they could comprise a significant portion of the groups they unwillingly joined. Captives

can be detected in the archaeological record through the application of such analytical methods as stable isotope analysis and DNA analysis, as well as from bioarchaeological studies of human remains that show evidence of non-local individuals subjected to violence and abuse. We can begin to reconstruct captives' social lives and their contributions to their captors' society through the study of captives in the ethnohistoric and ethnographic record. These records suggest that captives were often moved considerable distances, including across social and ethnic boundaries. Archaeologists should consider how such movements may have affected the boundaries of the ancient archaeological cultures we create and recognize that these boundaries were likely more fluid than we often imagine. We should also recognize captives as important agents of culture change, in spite of the low status positions they often occupied.

## "New Data and Old Narratives: Migrants and Cultural Transfers in the pre-Roman Western Mediterranean"

## Franco De Angelis, University of British Columbia

The study of the ancient Mediterranean and Near East has witnessed an explosion of new data and approaches over the past generation. In some cases, old historical narratives have also changed to account for these new data and approaches, but in most cases old, outdated narratives continue. A case in point concerns the question of cultural transfers in the pre-Roman Western Mediterranean. Two competing narratives currently exist. The dominant older view is that this region was backward before superior immigrants, most notably Greeks and Phoenicians, started arriving in the late ninth century BC. From these supposedly more advanced immigrants, other pre-existing cultures, like the Etruscans and Romans, would have been able to take the best of the immigrants' technology, innovation, and ideas and build on them without having to reinvent the wheel, so to speak. The other competing narrative is more recent and argues for greater sophistication and cultural autonomy in the western Mediterranean prior to the arrival of any immigrants. This paper critically evaluates these narratives and tests to what degree, if at all, they stand up to the latest evidence and theoretical thinking. In doing so, it charts a new course between them, with the intention of providing a less polarized and more nuanced working narrative for understanding cultural transfers in the crucial centuries before the rise of the Roman Empire.

## "The Multiple Histories of Western Asia: Perspectives from Ancient and Modern Genomes"

#### Omer Gokcumen, SUNY-Buffalo

Western Asia lies at the heart of the Old World, in the midst of Africa, Asia, and Europe. As such, this region has been populated and repopulated by myriad peoples, starting with the first migrants from Africa. All evidence points to Western Asia for the

beginnings of sedentary life, and indeed, first the villages and later the cities of this land remain as archaeological wonders, revealing complex histories of multiple peoples and their interactions. With the wondrous breakthroughs in genomic studies, we now have the power to look at these histories with a truly quantitative lens. Here, we review the recent anthropological genomics literature pertaining to this region, with an outlook for the future challenges and exciting possibilities for the field.

# "Wandering Ports in the Southeast Aegean: A View of Maritime Mobility and Network Dynamics from Burgaz, Turkey"

# Elizabeth S. Greene, Brock University Justin Leidwanger, Stanford University

Excavations at Burgaz in southwest Turkey have brought to light a seaside settlement that flourished with maritime activity from the Archaic period through Late Antiquity. The site saw significant transformation in the fourth century BC, when workshops and industrial zones replaced domestic quarters and public spaces. This shift was concurrent with the expansion of the port city of Knidos at the tip of the Datça peninsula as a regional and international center of religious and cultural life. These developments and the broader reorganization of socioeconomic activity on the peninsula intersect with the increasingly international networks of the late Classical and early Hellenistic era. Better situated for such maritime traffic, Knidos was more desirable as the preeminent cultural and probably also the business hub, even as the best agricultural lands allowed Burgaz to continue flourishing as the peninsula's economic engine.

Through its evolving fortunes and dynamic maritime landscape Burgaz offers a long-term perspective on maritime networks and raises crucial questions about the socioeconomic rationale for the location of port development and shipping routes in antiquity. What social, political, environmental or other motivations are behind the relocation of network hubs, and how do such events unfold? What drove residents in the fertile center of the Datça peninsula to expand their maritime horizon by capitalizing on rich lands, raw materials, and ceramic production once deprived of their earlier civic, religious, and military centrality? How do new economic opportunities and broadening maritime horizons evoke a shift in technology, design, and utilization of facilities? This paper uses Burgaz as a lens through which to explore Mediterranean connectivity and shifting centers of maritime activity concurrent with regional sociopolitical, economic and technological development, maritime network internationalism, as well as catastrophic and gradual local environmental pressure.

## "The Settlement Record and Evidence for Migrations in Eneolithic Ukraine"

## Thomas K. Harper, The Pennsylvania State University

Archaeological materials have long supported the notion that Neo-Eneolithic settlement systems throughout Europe were highly mobile from one generation to the next, engaging in serial relocation of sites and gradually colonizing new regions. The typochronology of the Cucuteni-Tripolye cultural complex (ca. 4800–3000 BC) suggests that especially large-scale, spatially targeted migrations occurred in the forest-steppe region of Moldova and Ukraine, peaking during the first half of the fourth millennium with the construction of the Tripolye giant-settlements of Central Ukraine. Bearing in mind the common anthropological refrain that "pots aren't people," the most compelling supporting evidence for these events is found in the settlement record. Examination of diachronic trends in settlement number, location, and size allows for the reconstruction of demographic histories and regionally differentiated assessments of population growth potential at various time references. By examining available paleodemographic data with reference to modern and historical ethnographic analogies, a baseline for growth may be established (the biotic potential). This allows us to highlight those situations in which archaeologically observed population growth exceeds the endogenous biotic potential. In this case, results are highly complementary to inferences drawn from material culture, particularly supporting the idea that unusual and ephemeral episodes of population agglomeration (such as the giant-settlements) are manifestations of migratory behavior. These population movements were likely influenced by concurrent climatic fluctuations (the 5.9 ka event; Bond Event 4), which leave a discernible signal in Eastern European pollen core data. While the social dynamics of these population movements remain obscure, a few inferences may be made on the basis of climatically induced subsistence constraints and the comparative ecological potential of source and destination regions.

#### "The in/visiblity of Migration"

#### Elena Isayev, University of Exeter

Terms such as Refugee, Migrant, Asylum Seeker, Displacement, and Forced Migration are often used in discussions of ancient evidence in relation to migration. Yet they do not have stable meanings and at times their contemporary – often technical – definitions do not fit with what the evidence portrays. To what extent can such concepts, and the processes that underpin them, be found within the ancient sources, and in the material evidence in particular? What other concepts may be better suited to reveal and make visible the ancient patterns of movement and asylum?

## "Methods of Understanding Migration in Imperial Italy: A Synthesis and Prospects for Future Work"

### Kristina Killgrove, University of West Florida

The Roman Empire was, at its height, about five million square kilometers. With few barriers to movement, both voluntary and forced migration occurred at a variety of scales. Although the idea of migration has had currency among demographers for decades, only comparatively recently have archaeologists and anthropologists devised ways to identify migrants that go beyond epigraphic and historical research. This contribution will focus largely on a synthesis of contemporary approaches in bioarchaeology that aim to identify immigrants, including: metric and nonmetric cranial and dental analysis; strontium, oxygen, and lead isotope analysis; and ancient DNA analysis. The results of these anthropological techniques will be situated within the historical and archaeological context of Imperial Italy, revealing patterns and pointing out lacunae where future interdisciplinary work is needed.

## "Human Mobility over the Very Long-term: Structure, Dynamics, and Biogeographic Constraint"

#### Tom Leppard, University of Cambridge

Human mobility can be measured over several scales, from the individual and quotidian to the global distribution of hominin species. In this paper I adopt a very large-scale and long-term perspective in order to assess how biogeographic constraint has shaped the distribution of hominins across the planet, focusing in particular on the most enduringly obstructive habitat-types for other large-bodied mammals: oceans and seas. Older models emphasize how open-ocean crossings imposed absolute barriers to hominin movement, yet newer data from the Pleistocene of the Mediterranean and Island Southeast Asia complicate this. Neanderthal island colonization in the Mediterranean looks increasingly likely; an emerging trans-Wallace's Line Lower-Middle Palaeolithic chipped stone industry is coming into sharper focus; and a now precociously early arrival in Australia (at 65 kbp in <sup>14</sup>C and OSL terms) significantly constrains the window between African dispersal of moderns and their colonization of Sundaland.

I suggest that we can most readily comprehend these new data by recognizing various different modes of hominin dispersal in maritime contexts. I review previous work on passive versus active dispersal, but build on this by considering how glacial/interstadial eustatic change was likely exaggerated by specific coastal geomorphologies, driving novel passive dispersal effects in ISEA and the Mediterranean. By contrast, the very rapid nature of coastal colonization from mainland Asia suggests targeted and strategic dispersal in modern humans; this capacity for rapid coastal movement is relevant when considering the increasing evidence for (a) coastwise dispersal into and along the Americas and (b) the very early dates for Monte Verde. In concluding, I explore the implications of a Late Pleistocene universal

emergence of long-distance targeted colonizing behaviours, particularly as regards explanations for colonization 'pauses' (i.e., at the Near/Remote Oceania boundary) based on lack of ability versus lack of motivation.

## "Theorization and Mobility in the Ancient Near East"

#### Anne Porter, University of Toronto

Mobility of one kind or another is continually transformative in the ancient Near East, but there is little theorization as to what the concept of mobility encompasses, and equally little theorization as to what any kind of mobility looks like archaeologically. This is the case even within the limited framework of mobile pastoralism. Since the rejection of migration as a global explanation of political and cultural change, it is only when there is textual evidence, itself not unambiguous, that Near Eastern scholars recognize mobility as a dynamic in the past. To this day, archaeological signatures of movement are primarily seen in the distribution of specific aspects of material culture and interpretation is reliant on the lens of period-specific issues in ethnographic analogy. In the 70s it was sedentarization; in the 80s divisions in kinds of pastoralism; and in the 90s, ecological and environmental concerns. So where are we now?

# "Surfing with the Alien: Simulations, Archaeological Science and the Spread of Early Farming Across Europe"

## Marc Vander Linden, University of Cambridge

The spread of animal and plant domesticates across Europe offers a good laboratory of the many fortunes of migration and mobility in archaeology. From all mighty *deus ex machina* during the culture-historical days, to conceptual obscenity throughout the late twentieth century AD, human mobility has experienced a recent revival under the impetus of new scientific techniques, especially stable isotopes (Sr, O), and ancient DNA. In this sense, if the – partial – link between the new domesticates and migrants is warranted in several instances, the scale and cultural impact (i.e., how much does this help us to understand the period) of early Neolithic human mobility remains extensively debated.

This paper will review the existing aDNA evidence in light of the <sup>14</sup>C record, considered as an alternative population proxy, in order to assess the regional variability of the Early Neolithic migratory pattern. The putative cultural impact of these migrations will then be evaluated by testing predictions derived from an agent-based model against several categories of evidence (e.g. archaeobotany, zooarchaeology), with a particular focus on the western Balkans.

## "Using Paleogenomics To Illuminate The European Migration Period"

#### Krishna Veeramah, Stony Brook University

Between the fifth and seventh centuries Western Europe experienced the disappearance of the Roman Empire and along with it a fundamental economic, social, and cultural transformation. Since the eighteenth century, scholars have debated the extent to which migrations of Germanic people such as Gepids, Goths and Anglo-Saxons into the Empire contributed to this transformation. Archaeological evidence from burials from this period has long been interpreted under the assumption that patterns of material culture reflected distinct ethnic traditions of such groups. Historical sources then provided the names, dates, and locations to which shared material culture attributes could be fitted to describe the movements and settlements of specific ethnically homogenous barbarian "peoples". However, the available written sources are almost without exception literary and rhetorical and written almost exclusively by Romans often decades if not centuries after the events, while geographical distributions of material cultures that appear in multiple regions do not necessarily mean that people migrated.

Therefore, we have sequenced the genomes of more than 100 sixth-century individuals from Europe in order to better understand two "Barbarian" groups mentioned in historical texts from this period; the Bajuwarians associated with the Bavarian region of southern Germany, and the Lombards who it is said invaded northern Italy from the historical Roman province of Pannonia. We find clear evidence for long distance migration involving individuals buried in cemeteries associated with both of these groups. Intriguingly, while grave goods appear to be strongly associated with genomic ancestry in Lombard-associated cemeteries in both Italy and Hungary, such evidence is lacking in Bavaria, suggesting very different social dynamics in these two regions.

## "Tool Kits and Adaptive Strategies of Mobility and Migration in the Eastern Mediterranean"

#### Assaf Yasur-Landau, University of Haifa

The question of the archaeological identification of forced migration is a thorny one, and tightly connected to the identification of other modes of Mediterranean mobility. With the Mediterranean Sea being a relatively convenient medium for connectivity in antiquity as it is today, various ranges of interaction co-occur in the same regions, sometimes at the same location as migration, trade, maritime colonization, piracy, and indeed the movement of refugees. Indeed, contemporary phenomena of refugees and forced migration are often being studied within the wider theoretical framework of migration and mobility. This paper argues therefore that the multiplicity of concurrent interactions involving mobility in the Mediterranean does not allow us to discuss each form of

mobility by its own, not even the very wide range of forced migration, but requires a unified model of interaction that will allow the identification of each event of mobility within the much wider interaction continuum (Yasur-Landau 2010: 10-12). Only when forced migration is viewed as part of the wider spectrum of mobility is it possible to fully appreciate the difficulties in identifying archaeologically refugees. An example of such difficulty is the realization, based on historical as well as contemporary case studies, that the material culture of the forced migrants changes along their travels, from the initial escape, to finding temporary solutions along their way, to finding long term solutions: thus the same people can leave different archaeological traces in different points in time. This is because the strategies which the forced migrants implement to survive and adapt change according to circumstances, and dictate the use of specific toolkits, a set of material culture items aimed at providing means for personal, economic and cultural survival.

Yasur-Landau, A. 2010. *The Philistines and Aegean Migration in the Late Bronze Age.* Cambridge and New York. Cambridge University Press.

### "Migratory Behavior for Disasters"

# Ezra B.W. Zubrow, SUNY-Buffalo, Oleksandr Diachenko, National Academy of Sciences of Ukraine; and Jay Leavitt, Premata Funds LLC

This paper discusses migratory behavior prior to, during, and after disasters. The disasters include climate, warfare, and volcanic eruptions to name only a few. A series of traditional theories and models are critically discussed as well as new models that contrast determinant and non-determinant modes. Examples are provided from modern refugee situations, historical cases, and archaeological sites. Instances include Norwegian, Finnish, and Siberian research as well as more temperate areas in Europe and North America. Finally, the study relates the more specific disaster migratory theories and models to a new general model being created by Leavitt, Diachenko and Zubrow.

# Perspective Piece: "Anecdotal without Apology, or How a Journalist Uncovered the Secret of New York's Renaissance: Delivery Boys from Mexico"

## **Joel Millman, International Organization for Migration**

"Anecdotal without Apology" refers to how I framed a keynote lecture I gave at a symposium on immigration in El Paso, TX, organized by the Federal Reserve Bank, after being challenged by several leading academics about my own observations as a journalist on the myriad ways immigration was revitalizing American society. After my talk, a number of academics told me never to be ashamed about where my insights

came from – and, moreover, that much of the inspiration for their own work came from the work of journalists like myself. Indeed, while my work was never academic, I learned how to observe changes in neighborhoods, even single city blocks, in cities all over the world: what data to seek, how to find it quickly, and how data paints a picture of what has changed in a town or a community. The lessons I learned from these experiences are reflected in my 1997 book, *The Other Americans: How Immigrants Renew Our Country, Our Economy, and Our Values*, and will form the subject of my talk.