Theoretical Models of Cultural Evolution during Modern Human Dispersals

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Speakers: Mark Collard (Simon Fraser University, Canada)
Maxime Derex (Arizona State University, USA)
Marcus W. Feldman (Stanford University, USA)
Joaquim Fort (University of Girona, Spain)
Jeff Wall (University of California, San Francisco, USA)
Yoshihiro Nishiaki (University of Tokyo, Japan)
Seiji Kadowaki (Nagoya University, Japan)
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Kenichi Aoki (Meiji University, Japan)
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Date: November 27th–29th, 2017
Venue: Meiji University Nakano Campus, 6F seminar room #603
Abstract submission:
A4, 1 page, PDF
Due date: November 13th, 2017
All 12 abstracts are compiled and the printed version will be given at the venue.
Please send your abstract to: Mitsuhiro Nakamura m.nacamura@gmail.com

Workshop objective:
The goal of Mathematical modelling group (B02) of PaleoAsia project is to facilitate our
understandings of cultural evolution during range-expansion of modern humans from Africa to the
whole Eurasia continent. The ultimate goal is to clarify the cause of the replacement (or assimilation) of
archaic humans by modern humans, with special focus on cultural changes. Close cooperation is
important between theoretical researches and empirical studies on archaeology (from Middle
Paleolithic to Upper Paleolithic), cultural anthropology (cultural changes caused by the contact of
several populations), behavioral science (innovation and transmission of culture and technology),
environmental sciences (environmental changes), and population genetics (genome biology of
ancient and modern humans). The aim of the workshop is to invite several researchers in these fields
and to discuss how mathematical modelling (including theoretical methods in population genetics) can
contribute to the ultimate goal of the PaleoAsia project.
See project webpages for more details;
http://paleoasia.jp/en/research_overview/
http://paleoasia.jp/en/research_projects/b02/

Program
* Please check our website for the updates

Day 1 (Monday, November 27th)
10:00–10:20 Opening Remark
10:20–10:40 Yoshihiro Nishiaki
PaleoAsia project overview
10:40–11:30 Seiji Kadowaki
Space-time distributions and behavioral changes of Neanderthals and modern humans in west
Asia: archaeological records on the Middle-to-Upper Palaeolithic transition
11:30–12:20  Mark Collard
   What can patterns in historical hunter-gatherer technology tell us about likely cultural changes
during the period of modern human dispersal?

12:20–14:00  Lunch break (100 min.)

14:00–14:50  Kenichi Aoki
   On the absence of a correlation between population size and "toolkit size" in ethnographic
hunter-gatherers

14:50–15:40  Maxime Derex
   The effects of population structure on cultural complexity

15:40–16:30  Open discussion

**Day 2 (Tuesday, November 28th)**

09:00–09:50  Joaquim Fort
   Demic-cultural models, archaeology and genetics of Neolithic spread

09:50–10:40  Mitsuhiro Nakamura, Atsushi Nobayashi
   Detecting correlations between cultural factors in Paleoasian populations

10:40–11:30  Hiroki Oota
   Is it sex-biased migration/admixture or social selection for contribution to population genetic
structure in East Asians?

11:30–12:00  Document work for overseas speakers (30 min.)

12:00–18:00  Free afternoon

18:00–20:00  Conference Dinner (near Nakano Station)

**Day 3 (Wednesday, November 29th)**

10:00–10:50  Marcus Feldman
   Genetic model for the evolution of culture

10:50–11:40  Naoyuki Takahata
   Soft selective sweep in PaleoAsia
11:40–12:30  Jeff Wall
          Inference of human demographic history from the GenomeAsia 100K project
12:30–14:10  Lunch break (100 min.)
14:10–15:00  Yutaka Kobayashi
          Genealogies, ages, and frequencies of cultural traits
15:00–15:50  Joe Yuichiro Wakano
          Ecocultural range-expansion models for the replacement or assimilation of Neanderthals by modern humans
15:50–16:00  Closing remark