

# CMMA Monthly Seminar

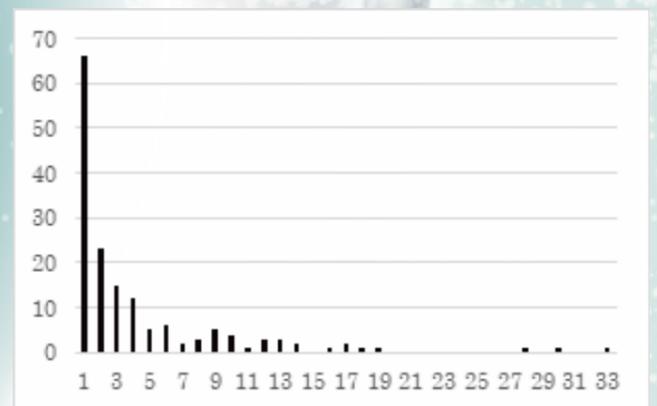
## 第30回 CMMA 月例セミナー

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A cultural trait can be defined as an innovation (invented/discovered by an individual) that has spread by social learning (learning from others). Examples in archaeology/ethnography are different types of tools, pottery, ornaments, etc. The material culture of a unit of study (e.g., ethno-linguistic unit, island, society, village, archaeological site) can be described quantitatively by a 0,1-vector indicating the presence (= 1) or absence (= 0) of each of these individual (i.e., different) cultural traits. This representation then can form the basis for the interpretation of the phylogenetic relationships of, interactions among, and environmental adaptations of these units of study—in other words of cultural evolution. The “spectrum” of a class of cultural traits is the distribution of the popularities of the individual cultural traits across the units of study. The figure below gives the spectrum for 157 bead types at 98 archaeological sites in Aurignacian Europe (roughly 42 ~ 29 kilo years ago) (original data from Vanhaeren & d’Errico 2006). There are, for example, 66 bead types each of which is found at only one site, and just one bead type common to 33 sites. In today’s talk, I will argue that such spectra may provide useful information on the processes underlying the evolution of material cultures.



The 0,1-vector representation of prehistoric/  
ethnographic material culture

日時：2019年2月20日(水) 16:30-17:30

場所：明治大学 中野キャンパス高層棟6階 研究セミナー室3

主催：

文部科学省 共同利用・共同研究拠点  
明治大学先端数理科学インスティテュート  
現象数理学研究拠点 (CMMA)



■連絡先

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