

东亚、非洲和太平洋地区语言出现的古人类学证据

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摘 要

复杂语言进化的研究主要是根据欧洲古人类学的记录。世界其他地区的资料常常作为由欧洲衍生的而被忽视或遗忘。虽然东亚、撒哈拉以南的非洲和澳大利亚的证据与欧洲更广泛的记录显示了某些明显的相似，也有显著的差别。最明显的是，在欧洲和地中海东部地区之外，埋葬似乎是一种晚得多的现象，但是岩石艺术在撒哈拉以南的非洲和澳大利亚的出现却早于欧洲。这些差异很可能是由于环境的和发掘所得的因素，而并不表明在旧石器时代的世界人群中，复杂语言的能力有什么根本的不同。

关键词 语言进化，埋葬，岩石艺术，东亚，撒哈拉以南非洲，澳大利亚

引 言

语言常常被视为现代人最特殊、最独特的特征。今天关于语言的争论主要集中在，以符号为基础并具有当代语言结构的复杂的现代语言是如何变成人类技能的一部分的。

复杂语言的进化可以从古人类学的各种资料中得到证明（表1）。

表1 有关复杂语言进化的古人类学资料的种类 (根据 Schepartz, 1993 改编)

脑量和形态
化石的声道组成部分
动物群组合成分
遗址内的特征的多样化(例如埋葬和炉床)
石制品组合和原料的多样性
埋葬
装饰品
艺术

古人类学关于复杂语言的进化研究过去主要根据欧洲、北亚旧石器时代晚期的艺术、装饰品和石器的地区性多样化的证据。这里我将简要地讨论亚洲、非洲和澳大利亚的埋葬和岩石艺术的证据并与其他地区进行对比。

埋葬的证据

对人体与其他考古物品的不同的任何处理提供了符号思维和行为的证据。埋葬代表了一种意识和觉察到自己本身或者觉察到他所属的这个物种是与自然界相区别的,而这尸体起到与这个物种认同的象征的作用。埋葬第一次在欧洲和地中海东部地区旧石器时代中期的远古智人群中得到证明(参见 Lindly and Clark, 1990; Belfer-Cohen and Hovers, 1992)。最早的埋葬可以追溯到末次间冰期,大约距今 10 万年 (Klein, 1989)。与欧洲和地中海东部地区不同,其他地区没有发现远古智人的埋葬,而最早的解剖学上的现代人的埋葬似乎是一种罕见得多的现象。非洲早于更新世末期的埋葬证据还有争论。只有一个例子,就是南非边界洞的幼儿埋葬,它被描述为可能是最早的解剖学上的现代人的代表,但是可能是侵入到中石器时代层位中的 (Klein, 1989)。

亚洲和太平洋地区经过断代的年代最早的埋葬是大约 3 万年前的,这包括中国和澳大利亚的遗址。报道的中国最早的埋葬是周口店山顶洞的个体(早于距今 18 000 年且可能早到距今 29 000 年) (Chen *et al.*, 1989; Chen and Zhang, 1991; 讨论见 Brown, 1992; Wu Xinzhi, 个人通信 1994), 它们与一根骨针、装饰品和赤铁矿一起发现 (Pei, 1939; Wu and Zhang, 1985; Jia and Huang, 1990)。较早的发现例如金牛山(辽宁省)和柳江(广西)发现共生的颅骨和颅后骨骼,它们极佳的保存状况暗示,在中国,埋葬处理可能是一种比较古老的行为。目前没有证据证实这一点,但这显然是未来进行埋藏学研究的一个领域。

在澳大利亚,埋葬处理的记录是从距今 28 000—32 000 年前蒙戈(Mungo)湖 3 号遗址发现的广泛的红色赤铁矿的埋葬 (Bowler and Thorne, 1976) 和稍稍较晚的、年代测定为大约距今 25 000 年的蒙戈湖 1 号遗址的埋葬 (Bowler *et al.*, 1970) 开始的。蒙戈湖遗址代表了澳大利亚发现的有年代测定的最早的人类化石以及最早的埋葬处理的证据。因此很可能最早的澳大利亚人从东南亚地区把埋葬行为带到了这个大陆。

岩石艺术

世界上最早的岩石艺术出现在澳大利亚,那里几个地区发现的雕刻早于距今 3—4 万年前 (Layton, 1992)。测定覆盖刻在岩石上的物像上的沙漠漆的年代和分析绘画作品中的人血红蛋白的技术的发展已弄清了澳大利亚艺术的古老性。对沙漠漆的阳离子比率的年代测定表明,南澳大利亚奥拉利(Olary)地区卡罗尔塔(Karolita)遗址的雕刻的图像早于 3 万年 (Dorn *et al.*, 1988)。对北部地方 (Northern Territory) 拉利河(Laurie Creek)岩层绘画的红色颜料中的人血红蛋白用加速器放射性碳测定年代为大约距今 20 300 年前 (Loy *et al.*, 1990)。阿纳姆地(Arnhem Land)发现的手印估计为距今 35 000 年前 (Chaloupka, 1984), 而塔斯马尼亚发现的手的模板也被认为是更新世晚期的 (Brown, 1991)。

东非和南非似乎具有差不多一样长的岩石艺术传统。基塞斯(Kisese)Ⅱ岩厦(坦桑尼亚)的发掘由年代测定先于距今 29 000 年前的考古层位中发现了赤铁矿笔和染有赤铁矿

的石板 (R.Inskeep, 个人通信, 1986)。纳米比亚的阿波罗 11 号洞中发现的画在石板上的动物像年代测定为距今 19 000 和 27 500 年之间 (Wendt, 1976)。

亚洲几个地区的岩石艺术的古老性仍在讨论之中。迄今在中国发现的许多岩石艺术作品中没有一个能肯定地断代为早于新石器时代的 (Tang, 1993)。有人认为亚洲几个别的岩石艺术遗址是旧石器时代的, 但是它们仍然是未经年代测定的 (讨论见 Bednarik and You, 1991 和 Bednarik *et al.*, 1991)。

结论和未来研究方向

本文对埋葬处理和岩石艺术在亚洲、非洲和澳大利亚起源的讨论说明, 复杂语言不是在世界的一个地区发展并扩展到其他地区的一个简单的统一体。根据目前的知识, 复杂语言的某些表现形式例如岩石艺术在非洲和澳大利亚有最早的体现, 而其他方面像埋葬在欧洲和地中海东部地区的出现要早得多。与其追索复杂语言的“这个”起源并试图把它与现代人进化这样的现象联系起来, 我们倒不如应该集中了解古人类学记录上复杂语言表现的变异, 并把符号和认识表现上的这些差异与史前人类所遇到的环境和资源联系起来 (参见 Reynolds, 1991; Keates, 1994; Pope and Keates, 1994)。

(林圣龙 节译)

PALEOANTHROPOLOGICAL EVIDENCE OF LANGUAGE FROM EAST ASIA, AFRICA AND THE PACIFIC

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Abstract

The study of complex language evolution is primarily based upon the European paleoanthropological record. Data from other world regions are often ignored or dismissed as European-derived. While the East Asian, sub-Saharan African and Australian evidence shows some marked similarities with the more extensive record from Europe, there are also striking contrasts. Most notably, burial appears to be a much later phenomenon outside Europe and the Levant, but rock art from sub-Saharan Africa and Australia predates European examples. These differences are most likely due to environmental and recovery factors, and do not provide evidence

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for any fundamental disparities in complex language capacities among world populations during the Palaeolithic.

Key words Language evolution, Burial, Rock art, East Asia, sub-Saharan Africa, Australia

Introduction

Language is often viewed as the most distinctive and unique feature of modern humans. It is an adaptation for conceiving and describing the emotional and physical realms of human experience. Defined in this way, human language is an overall hominid system that has both internal and external components. The internal aspects involve complex mapping and simulation of the world, consciousness, and cognition. External aspects of language involve the expression of the system shared between individuals in the form of gesture, vocalizations, and articulate speech (Schepartz, 1993).

The study of language evolution has always been contentious. There is now some agreement about the origin of hominid language. It is generally unquestioned that the earliest members of the genus *Homo*, given the size and morphology of their brains, had some basic linguistic abilities (c.f. Tobias, 1987; Deacon, 1990). Today the language debate is primarily focused on how complex modern language, with its symbolic basis and present-day linguistic structures, became part of the hominid repertoire.

Complex language evolution can be documented in a variety of paleoanthropological data (Table 1). Hominid fossils may provide evidence for symbolic thought and speech capabilities if brain endocasts and portions of the vocal tract are preserved. Archaeological sites may provide evidence for symbolism if they yield burials, ornaments, or art. The preservation of site features such as hearths and specialized activity areas and the distributional characteristics of faunal and lithic assemblages may provide information on cognitive aspects of language.

Table 1 Categories of paleoanthropological data pertinent to complex language evolution

(adapted from Schepartz, 1993)

Brain volume and morphology

Fossilized vocal tract elements

Faunal assemblage composition

Intrasite diversification of features (ex. burials & hearths)

Lithic assemblage and raw material diversity

Burial

Ornaments

Art

The paleoanthropological study of complex language evolution has been dominated by the

European and North Asian evidence for the fluorescence of art, ornamentation and regional lithic diversification in the Upper Palaeolithic. When the data from other regions are compared to this yardstick, non-European populations appear to be fundamentally different in both the antiquity and extent of the current evidence. Rather than attempting to evaluate all of the Asia, African and Australian data here, I will provide a brief discussion of the patterns of evidence for burial and rock art in those areas and contrast them with other regions.

Evidence for burial

Any treatment of the human body that distinguishes it from other materials in an archaeological context provides evidence for symbolic thought and behavior. Burial represents a consciousness and awareness of self or one's species as distinct from the natural world, and the body functions as a symbol of identity with the species. Burial is first documented for the archaic *sapiens* populations of the Middle Palaeolithic in Europe and the Levant (c.f. Lindly and Clark, 1990; Belfer-Cohen and Hovers, 1992). The earliest burials may date to the Last Interglacial, app. 100,000 B.P. (Klein, 1989). In contrast to Europe and the Levant, there are no archaic *sapiens* burials in other regions, and burial of the earliest anatomically modern humans appears to be a much rarer phenomenon. The African evidence for burial prior to the terminal Pleistocene is debatable. It consists solely of the infant burial from Border Cave in South Africa, which has been described as a possible representative of the earliest anatomically modern humans, but may be intrusive into the Middle Stone Age levels (Klein, 1989).

The oldest dated burials from Asia and the Pacific are app. 30,000 years old. These include sites in China and Australia. The oldest reported Chinese burials are the Zhoukoudian Upper Cave individuals (older than 18,000 and possibly as old as 29,000 B.P.) (Chen *et al.*, 1989; Chen and Zhang, 1991; discussion in Brown, 1992; Wu Xinzhi, personal communication-1994) which were discovered with a bone needle, ornaments and haematite (Pei, 1939; Wu and Zhang, 1985; Jia and Huang, 1990). The excellent preservation of associated cranial and post-cranial elements from earlier discoveries such as Jinnuishan (Liaoning Province) and Liujiang (Guangxi Zhuang Autonomous Region) implies that burial treatment may be an older behavior in China. At present there is no evidence to confirm this, but it is clearly an area for future taphonomic research.

In Australia the record for burial treatment begins with the extended, red ochred interment of Lake Mungo 3 at 28–32,000 B.P. (Bowler and Thorne, 1976) and the slightly more recent cremation Lake Mungo 1 dating to app. 25,000 B.P. (Bowler *et al.*, 1970). The Lake Mungo remains represent the earliest dated hominid finds from Australia as well as the earliest evidence for burial treatment. It is therefore probable that the first Australians brought burial behaviors to the continent from southeast Asia.

Rock Art

The earliest appearance of rock art world-wide is from Australia, where engravings in several regions predate 30,000–40,000 B.P. (Layton, 1992). The development of techniques for calibrating the age of desert varnish overlying petroglyphs and for analyzing human blood proteins in the paints have clarified the antiquity of the Australian artwork. Cation ratio dating of desert varnish has yielded ages older than 30,000 for engraved images from the Karolita site in the Olary region of South Australia (Dorn *et al.*, 1988). Accelerator radiocarbon dating of human blood proteins in red pigments from the Laurie Creek rockshelter paintings in the Northern Territory provide an age of app. 20,300 B.P. (Loy *et al.*, 1990). Hand prints from Arnhem Land are estimated to date to 35,000 B.P. (Chaloupka, 1984), and late Pleistocene ages have also been suggested for hand stencils in Tasmania (Brown, 1991).

Eastern and southern Africa appear to have similarly long traditions of rock art. Excavations in the Kisese II rockshelter (Tanzania) yielded ochre crayons and ochre-stained stone palettes from archaeological layers dating prior to 29,000 B.P. (R. Inskip, personal communication 1986). Animal figures painted on rock slabs in the Apollo 11 cave of Namibia date to between 19 and 27,500 B.P. (Wendt, 1976).

The antiquity of rock art in several regions of Asia is still under discussion. Thus far, none of the numerous rock art examples in China have been unequivocally dated to earlier than the Neolithic (Tang, 1993). A few other Asian rock art sites have been proposed as being Palaeolithic in age, but they remain undated (see discussion in Bednarik and You, 1991 and Bednarik *et al.*, 1991).

Conclusions and Future Research Directions

This discussion of the origins of burial treatment and rock art in Asia, Africa and Australia illustrates that complex language is not a simple entity that developed in one world region and expanded into other areas. Based upon our current knowledge, certain manifestations of complex language such as rock art have their earliest expression in Africa and Australia, while other aspects like burial appeared much earlier in Europe and the Levant. Rather than searching for 'the' origins of complex language and trying to link this with phenomena such as the evolution of modern humans, we should instead focus on understanding the variation in the expression of complex language in the palaeoanthropological record, and relating these differences in symbolic and cognitive expression to the environments and resources that prehistoric peoples encountered (c.f. Reynolds, 1991; Keates, 1994; Pope and Keates, 1994).

Future paleoanthropological research in China has great promise for elucidating some of the issues raised in this paper, as work is resumed at the Zhoukoudian localities and additional sites are excavated. At Dadong, a new Palaeolithic locality in Guizhou Province, stratified levels containing artifacts, hominid-modified fauna, charcoal and ash have been identified. Horizon-

tal excavation strategies are planned so that hypotheses about within-site spatial patterning, behavioral complexity and resource exploitation can be investigated (Huang Weiwen *et al.*, in prep).

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