effectiveness of Western political and social forms and the consequent laudable desire by Manus to emulate these. However, it is more likely that the realities of the acculturative setting, with the presence of enforced planned changes (or at least planned prohibitions of traditional ways) by the dominant culture, present subordinate peoples with few choices other than attempts at assimilation. Other strategies to acculturation, such as biculturalism or marginality, active revitalization, and nativism may not be successful. Contrary to a view of subordinate societies as passive victims, anthropologists have usually sought to show that members of subordinate societies have been creative opportunists, actively taking charge of their own response to acculturation, including the adoption of the dominant culture. However, a distinction may be made between internal and external assimilation. Internal is an ideological transformation involving the adoption of the values, beliefs, and worldview of the dominant culture, while external involves the manifestations of the dominant culture: clothing, dwellings, work schedules, farming practices, and so on. It is difficult to consider that these could be mutually distinct and unrelated processes. The dominant culture typically enforces only external assimilation. Moreover, people's responses in change often are focused on items of material culture that either show promise of material advantage or are viewed as observable markers of prestige. Still, it is the purposeful interest in acquiring ideology, values, and beliefs that drives continuing assimilation, and consequently most studies explaining people's interest in assimilation have looked at such ideological arenas as religious conversion and education.

What is the result? The end product of assimilation would be members of the former subordinate society merging with and becoming indistinguishable from members of the dominant society. However, there is the issue of acceptance by the dominant society, especially when physiological attributes are used to reject former members of the subordinate society regardless of their capability at assimilation. This rejection has become a source of much concern in Western social science, for example, in the study of racism. Many American social scientists have looked at assimilation much more favorably than anthropology has. They view the immigrant experience in America as one in which successful assimilation was desirable, and therefore it was important to determine those social factors that enable it. Anthropology, on the other hand, views it as destructive (especially in regard to Native Americans) and therefore sought to determine those social factors that held it in check and would enable non-Western groups to maintain their own distinctive cultures and languages.

- John Rhoades

See also Migrations; Social Change

## **Further Readings**

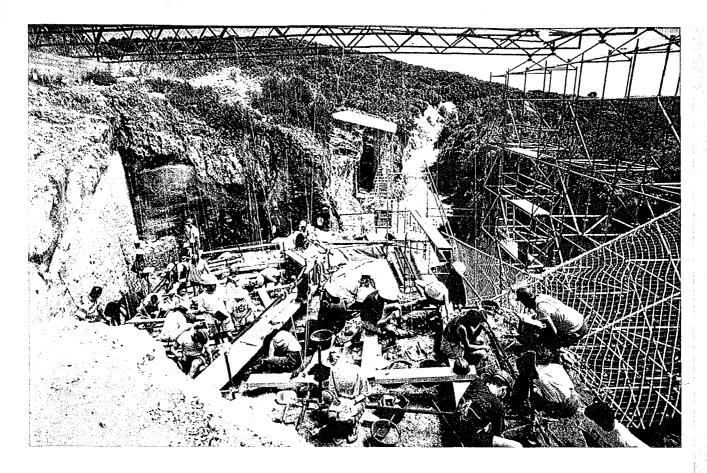
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## ATAPUERCA

Atapuerça is a World Heritage Site located in Burgos province, Spain. The construction of a railroad at the end of the 19th century, cutting through the foothills of the Sierra de Atapuerca, led to the discovery of several hominid sites. In 1910, the archaeologist Jesús Carballo discovered the Bronze Age site and paintings in the Cueva Mayor, known as the Portalón. In 1964 and 1966, Francisco Jordá carried out excavations, which led to the first estimation of the antiquity of the sites in the Trinchera. Based on the faunal analysis done by Juan F. Villalta, an age of 500,000 years ago was estimated. In 1976, Trinidad Torres undertook an excavation and entered in the Sima de los Huesos in search of bear remains. Among the bones removed were human fossils: mandible, teeth, and cranial fragments. Torres took the human fossils to his doctoral advisor, the paleontologist Emiliano Aguirre, and based on the bears' remains placed the site within the Middle Pleistocene.

Due to the importance of the human remains, Aguirre organized a multidisciplinary group to excavate the main sites, and after he retired, the studies were codirected by Juan L. Arsuaga, José M. Bermúdez de Castro, and Eudald Carbonell. Since 1978, very relevant human remains have been found by this multidisciplinary group in the main sites: Trinchera Dolina, Trinchera Galería, Sima de los



Huesos, Portalón de Cueva Mayor, Trinchera Elefante, and Mirador.

Trinchera Dolina excavations in 1990 yielded a lot of vertebrate bones and in 1993 intensive excavations began of an area of 6 sq m. In 1994, several human fossils were discovered: a handful of upper and lower teeth, a large cranial fragment, and a mandible with a molar wisdom tooth in the process of erupting. Furthermore, 36 human fragments were recovered of at least six individuals. Based on micromammals and magnetostratigraphy, the level was dated of 780,000 years ago. In 1997, a new human species was defined: *Homo antecessor*, the species that discovered Europe.

Sima de los Huesos is the other most important site of Atapuerca. It is a small cavity at the end of a ramp, which is accessed by a 13-meter vertical shaft, after traversing half a kilometer of difficult passages from the current entrance to Cueva Mayor. The Sima de los Huesos is one of the most productive paleanthropological sites in the world. Since 1987, at least 28 different individuals had been identified as *Homo heidelbergensis*. Several very well preserved and almost complete craniums, mandibles, pelvises, femurs, hands, and feet have a mixture of ancient and modern characteristics.

Some are similar to their Neandertal descendants and others to their ancestors the first Europeans.

— Eustoquio Molina

See also Arsuaga, J. L.; Bermúdez de Castro, J. M.; Homo Antecessor; Orce; Paleoanthropology

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