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INTRODUCTION

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Oh, East is East, and West is West, and never the twain shall meet,
Till Earth and Sky stand presently at God's great Judgment Seat;
But there is neither East nor West, Border, nor Breed, nor Birth,
When two strong men stand face to face,
tho' they come from the ends of the earth!

—Rudyard Kipling "The Ballad of East and West"

The idea to assemble this special section came to my mind in May 2000, when I was at the NSF-Arizona AMS Facility at the University of Arizona in Tucson, Arizona, USA, and organizing the complete set of *Radiocarbon* collected by Prof Douglas J Donahue in the laboratory. At the time, I was a "freshman" on the journal's editorial board. Before that, I was involved in several projects, dealing with the peopling of North America, under IREX and Fulbright fellowships. Having seen several special issues, "Calibration*"* 1986, 1993, and 1998 issues; "Paleoastrophysics and Paleogeophysics"; "^{14}C Cycling and the Oceans"; "Varves/Comparison", etc., I thought: "Why has an important subject, like the ^{14}C evidence of the peopling of the New World, never had the opportunity to be the focus of a *Radiocarbon* special issue?" Fortunately, this raw idea was immediately supported by the journal's editor, A J T Jull, and was finally approved by the editorial board at a business meeting, held at the Ma'ale Hachamicha Hotel in the Judean Hills near Jerusalem on 20 June 2000.

After a search for possible contributors (some of were invited, some contacted *Radiocarbon* after seeing the announcement on the journal's webpage), work started on this subject. Two and a half years later, we have a collection of papers that constitute the special section, *"Old and New World Connections"*. Since the Old World is essentially in the East, and the New World in the West, they did not get along well in post-WWII times, an echo of the Cold War. Nowadays, there is no more "stand face to face" as is mentioned in the epigraph; we instead cooperate in the study of the complex and intriguing process of the peopling of the New World, and this is a good example of such joint efforts. It is also reflected in the special section's logo (see the front cover of this issue), where two well-known artifact types, the wedge-shaped microcore of the Dyuktai culture of Yakutia and the lanceolate projectile point from the Mesa site of Alaska, represent two sides of the same story—human migration from West to East, from the Old World to the New one.

In this special section, the Old World means Asia (Japan, Korea, and the Asiatic part of Russia), and the New World consists of the Americas and Australia. All papers generally follow the "Out of Asia" scenario, assuming that Asia was the source of the initial peopling for both the Americas and Australia. The main focus here is the ^{14}C chronology of the prehistoric occupation, with emphasis on the earliest evidences of human presence in Asia, North and South America, and Australia, within the limit of ^{14}C dating, about the last 45,000–50,000 ^{14}C years.

S J Fiedel presents a comprehensive critical review of the peopling of the Americas, with extensive use of the ^{14}C data corpus from Paleoindian complexes and from other early sites. He assumes that the ^{14}C age of the best-known possible pre-Clovis sites, such as Bluefish Cave 1, Meadowcroft Rockshelter, Cactus Hill, and Monte Verde, still remains uncertain. Thus, Clovis is the earliest

firmly documented prehistoric complex in the Americas south of the former continental ice sheets, and may be dated to approximately 11,600–10,700 ^{14}C years ago (BP). The ^{14}C age of the earliest Alaskan sites, such as Swan Point, Mead, and Broken Mammoth, is approximately 11,800–11,700 BP. Calibration of ^{14}C dates allows us to estimate the real, astronomical age of the Clovis complex, corresponding to approximately 13,200 calendar years ago (cal BP); and for the earliest Alaskan complexes it is approximately 13,800–13,400 cal BP. Considering that the route for the earliest inhabitants of North America was from Alaska southward, Fiedel assumes that the "ice-free" corridor between the shrinking Laurentide and Cordilleran glaciers was open from approximately 12,500 BP, and this allowed people to move southward. As for the Paleoindian ancestral cultural complexes in Asia, Fiedel provisionally proposes southern Siberia (and possibly northern China) based on both genetic evidences and ^{14}C-dated archaeological assemblages.

T G Arnold performs a thorough analysis of the ^{14}C data from the very important part of northern North America, in terms of the initial peopling, the so-called Ice Free Corridor. He presents 255 carefully selected ^{14}C dates from 164 localities, and they are used to examine when this Corridor became accessible for human migration from Alaska southward at the end of the Pleistocene. A List of chosen ^{14}C dates is also provided, and makes this paper a good source of original data. As for timing when the Ice Free Corridor became open for human migration, Arnold proposes approximately 11,000 BP, unlike Fiedel at approximately 12,500 BP (this issue). This means that it was "too late" for Clovis ancestors to take this migration route southward, because Clovis is dated no later than approximately 11,600 BP.

R Gillespie provides a critical overview of the existing chronometric evidences for the peopling of Greater Australia, which is another important issue in world prehistory. After careful evaluation of chronometric dates from key sites, produced by ^{14}C, TL, OSL, ESR, AAR, and U/Th methods, the tentative conclusion is that the earliest human sites in Australia may be dated to approximately 50,000 cal BP, i.e. approximately 48,000 BP. The extinction of several Australian megafaunal species corresponds to this time.

K Bae reports on the available ^{14}C dates for Paleolithic sites in Korea. This is the first systematic presentation of chronological evidences about the initial settling of this part of East Asia, which is crucial for understanding the peopling of the Japanese Islands. The earliest ^{14}C dates, approximately 54,720–50,300 BP, are right on the edge of the radiocarbon method limit, and should be treated with great caution only as minimal age estimates. The Middle to Upper Paleolithic transition in Korea could be provisionally placed at around 36,000–30,000 BP. A very important event in northeast Asian prehistory, the introduction of microblade technology in the form of wedge-shaped microcores and microblades, can now be established in Korea as early as approximately 24,000 BP. These data create the background for future studies of the Paleolithic geoarchaeology and chronology of the Korean Peninsula.

A Ono, H Sato, T Tsutsumi, and Y Kudo assemble the most complete list of Paleolithic ^{14}C dates from the Japanese Islands ever published, which consists of 416 values (plus 13 Incipient Jomon dates). The previous selection of Japanese Paleolithic ^{14}C dates published in English includes 207 values (Ono et al. 1998:51–7). The list published in this volume thereby doubles the number of dates! Furthermore, Ono and co-authors provide a careful interpretation of the existing ^{14}C chronology of the Japanese Paleolithic. The Middle to Upper Paleolithic transition in Japan can now be dated to approximately 34,000 BP. Microblade technology, corresponding to the Final Paleolithic, appeared first in Hokkaido, northernmost Japan, at approximately 20,500 BP, and in central and southern Japan at approximately 15,500 BP. The Final Paleolithic-Jomon transition, characterized

by the emergence of pottery vessel manufacture, occurred within the latest phase of the Pleistocene, at approximately 13,000 BP.

H Takamiya and H Obata discuss the issue of the peopling of the southernmost part of the Japanese Islands, particularly the Ryukyu Archipelago, along with the Kyushu and Shikoku Islands. This is one of the most important places in East Asia in terms of the chronology and anthropology of modern humans. Several well-preserved *Homo sapiens sapiens* skeletal remains were found on Okinawa Island, and associated material was dated to approximately 32,000–16,600 BP. If these age determinations are correct, this might also mean that by at least 32,000 BP ancient people were able to use watercraft to cross the sea straits between Okinawa and either mainland East Asia or Kyushu. Even though the lowermost ocean water level was about 120–130 m below the present one at the Last Glacial Maximum (ca. 20,000–18,000 BP), Okinawa was not connected to other large islands and the mainland because of straits up to 1000 m deep (Gorshkov 1976:281).

S A Vasil'ev, Y V Kuzmin, L A Orlova, and V N Dementiev produce a brief review of the Siberian Paleolithic ^{14}C chronology. They also compile a list of Paleolithic ^{14}C dates for the territory of the Asiatic part of Russia, Siberia, and the Russian Far East, consisting of 446 values. This is the most complete database of the Siberian Paleolithic ^{14}C chronology published so far. The issue of the Pleistocene bone collagen dating is discussed, based on experience obtained in Russian ^{14}C laboratories during the last 30 years. The phenomenon of wide variations in the Paleolithic ^{14}C date series is also discussed, in particular with respect to the dating of mammoth bones and ivory. Early Upper Paleolithic sites are known from Southern Siberia as early as approximately 40,000 BP. In central eastern Siberia, or Yakutia, closely related to the issue of the peopling of the New World, the earliest Dyuktai cultural sites may date to approximately 25,000 BP, and definitely to approximately 18,000 BP. Modern humans at approximately 13,000 BP occupied extreme Northeastern Siberia—the Arctic Ocean coast, the Kolyma River headwaters, and the Kamchatka Peninsula (using data published as of mid-2002).

The articles in this special section summarize the existing knowledge of the chronology of human occupation of significant parts of both the Old and New Worlds, and show directions for future research. Several ^{14}C date lists comprise a comprehensive supplement to other lists published recently (Bonnichsen and Turnmire 1999; Dillehay 2000; Holliday 2000). Hopefully, in the following or next decade, most of the issues raised in the papers presented here, will be solved.

Finally, I would like to express my deep gratitude to colleagues and friends who helped in the realization of the idea to produce this *Radiocarbon* special section. I am especially grateful to A J Timothy Jull for constant support; to Kimberley T Elliott for assembling papers and conceiving the title, "Old and New World Connections"; to P Jeffrey Brantingham for editorial work in the early stage of production; and to all reviewers for useful comments and suggestions. In the long run, we "come from the ends of earth!"

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