Humanity and Nature
in the Japanese Archipelago

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Niles | Abe | Editors

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The Japanese Archipelago is a region of long-term climatic stability yet dramatic short-term environmental variability. Perched at the edge of the Eurasian continents, its human and environmental history is dominated by two planetary-scale natural forces: volcanism resulting from an immense confrontation of the Pacific and Eurasian Plates, and the rivers of water vapor carried by the annual Asian monsoon. From earth and atmosphere, these two phenomena infuse great energy, both creative and destructive, into the archipelago.

Typhoons, floods, landslides, heavy snow, earthquakes, tsunami, and volcanic eruptions regularly rework Japan's land- and sea-scapes. Yet ecological productivity—linked to plentiful water, nutrient rich soils and coastal zones, and strong seasonal change—has remained extremely high. Humans have made use of this natural productivity for over thirty thousand years, changing it and augmenting it in ways that reflected their preferences and sensibilities. In such dynamic environments, individual settlements and the human population in general experienced periods of both success and failure, but over time inhabitants maintained sophisticated patterns of subsistence centered on intensive use of forest and ocean fringes and eventually the cultivation of rice.

In the last hundred years Japan has been transformed from an almost entirely rural country to an overwhelmingly urbanized one. The cultural-ecological complexes established over millennia are certainly less significant to the everyday lives of modern Japanese people today, yet many traditional forms and practices still exist and still describe some essential qualities of Japan—and perhaps offer some clues to its future.

The Jomon
Early Peoples of the Archipelago

For over ten thousand years (12,000–300 BP), the Jomon peoples depended on intensive gathering of a wide range of plant foods and materials, management of forest fringes, selective gardening, seasonal collection of shellfish and fish, and hunting on both land and sea. Their principal subsistence strategies, and the wider cultural practices to which they were linked, established a cultural-ecological complex of rare continuity in human history.

Why did it take so long for agrarian society to be established in East Asia? One prominent theory in Japan describes Jomon peoples as prosperous, settled 'affluent foragers' subsisting on the archipelago's native ecological productivity. In this view, Japan's relatively warm and stable climate, plentiful water, and rich forests provided many opportunities to secure food without the need for regular agriculture. Forests provided an abundance of nuts, acorns, and other fruit and were home to many animals such as wild boar, deer, and birds, while a great variety of shellfish, and salmon, trout and other fish were available along the coastlines and many rivers. Large shell middens have been found along the coasts, some measuring five meters thick and as many as fifty meters in diameter, demonstrating that shellfish were an important food source, especially in spring and early summer, when few other foods are so readily available. Wooden dugout canoes suitable for open ocean travel have been found preserved in wetlands. These vessels were suitable for hunting larger sea mammals, especially as found in the northeast, or larger species of fish, such as tuna (*Thunnus orientalis*), the consumption of which has been documented through analysis of isotopes in human bones and teeth (see pages 40–43). Jomon peoples developed a number of other associated technologies, such as earthenware pottery (also discussed below) used for cooking, processing plant foods, and seasonal storage of foodstuff.

Tochinoki | Horse Chestnut
Aesculus turbinata

About this Volume

Humanity and Nature in the Japanese Archipelago is based on research conducted between 2000–2011 at the Research Institute of Humanity and Nature (RIHN). Located in Kyoto, Japan, RIHN is a national research institute, one of six that comprise the National Institutes for the Humanities.

RIHN was established to conduct multidimensional research on key areas of interaction between humanity and nature, and in doing so, to bring humanistic traditions of study into dialogue with those of the natural and social sciences. In this latter goal in particular, the institute is unique in Japan. Its research structure is also uncommon, as it is based around fixed-term research projects, of which twenty-six have been concluded as of 2015.

In 2010, on the occasion of its tenth anniversary, RIHN published *The Encyclopedia of Global Environmental Studies* (in Japanese). Composed of 250 entries on a wide variety of subjects addressed by RIHN research projects to that date, the volume was designed to provide a thorough introduction to a general Japanese readership of the biophysical, social, institutional, cultural, and conceptual issues that arise in the study of the contemporary environmental change.

In 2014 The National Institutes for the Humanities provided funds to translate a number of the original entries into English, and those considered to be of greatest interest to an international readership were loosely arranged into a single narrative. Unsurprisingly, most of those entries dealt directly or indirectly with Japan, including a core of material on the Jomon period, a fascinating segment of human history about which there is precious little written in English for a non-specialist audience.

The final text of this volume is therefore fundamentally based on the original Japanese entries listed on pages 54–55. In order to bring these entries into a coherent narrative, however, much of the original (translated) prose has been repeatedly revised, rewritten, and ultimately composed anew by the editors. This substantial work would have been impossible without the assistance and encouragement of several of the original authors as well as many others whose interest in and attention to this project is acknowledged on page 57. It has been a pleasure to speak and work with them, each of whose efforts have certainly enriched the final work.

At an early stage of the project it became clear that readers unfamiliar with Japan's particular environmental and cultural history would much more easily understand our story if it were accompanied by quality illustrations. The enthusiasm and careful attention of several artists and scientific illustrators made all the difference. The result of their efforts is evident.

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