

A Japanese View of Nature [*]

A Japanese View of Nature—The World of Living Things by Kinji Imanishi

Translated by Pamela J. Asquith, Heita Kawakatsu, Shusuke Yagi and Hiroyuki Takasaki

Although *Seibutsu no Sekai* (*The World of Living Things*), the seminal 1941 work of Kinji Imanishi, had an enormous impact in Japan, both on scholars and on the general public, very little is known about it in the English-speaking world.

This book makes the complete text available in English for the first time and provides an extensive introduction and notes to set the work in context. Imanishi's work, based on a wide knowledge of science and the natural world, puts forward a distinctive view of nature and how it should be studied. Ecologist, anthropologist, and founder of primatology in Japan, Imanishi's first book is a philosophical biology that informs many of his later ideas on species society, species recognition, culture in the animal world, cooperation and habitat segregation in nature, the "life" of nonliving things and the relationships between organisms and their environments.

Imanishi's work is of particular interest for contemporary discussions of units and levels of selection in evolutionary biology and philosophy, and as a background to the development of some contributions to ecology, primatology and human social evolution theory in Japan. Imanishi's views are extremely interesting because he formulated an approach to viewing nature that challenged the usual international ideas of the time, and that foreshadows approaches to study of the biosphere that have currency today.

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To the memory of Kinji Imanishi (1902-1992), and of Jun'ichiro Itani (1926-2001)

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Note on the translators

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Foreword: As if climbing a favorite mountain

This small book is worth reading many times. I read it in a paperback edition for the first time when I was 17 years old. The pages of my first copy became too loose for easy holding after reading it eight times in five years. Since then I have bought two additional copies, and have ceased to count the number of times that I have read it. A copy accompanied me on many fieldwork trips, and still does. Whenever I read it, in particular high above the earth's surface on intercontinental flights, the opening passages impress me anew. It is unbelievable that this book was written before we witnessed our blue planet from space.

Among the works left by Imanishi, this book constitutes just a small portion. It occupies only about one-third of the first volume of his Collected Works, which amount to 14 volumes. Ten volumes were published in 1974 while Imanishi was still an active writer, and four supplementary volumes appeared in 1993 following his death in 1992. In other words, this book comprises less than three per cent of all his printed works. However short it may appear, it bears the essence of all of his work; so he placed it first in his Collected Works. The opening three paragraphs in his own preface well explain the reason for the enigma of the iridescence of this work. He wrote this as his "self-portrait" to leave behind in case he died, which he thought was fairly likely in the war. Though written by a biologist, this book does not read at all like a book of biology. It is, rather, a book of philosophy written by a naturalist who was a thinker faithful to his own beliefs.

Imanishi was definitely not an unquestioning follower of established doctrines. He started his career in biology as an entomologist. Dissatisfied in entomology, however, he turned to ecology – the economics and sociology of living things.

He wrote this book at this stage in his life. After some more work in ecology, he turned to anthropology, a converging point for comparative animal sociology. It was a natural consequence that he became the founding father of primatology in Japan. His view of the world of living things, which is perceived to have an infinitely nested structure, greatly influenced the discovery of social structures in nonhuman primates by Japanese primatologists. Their discovery of cultural behaviors is also traceable to his world view, which encourages anthropomorphism when judged appropriate. Most important of all, to me, the path indicated by this book eventually pulled me into anthropology and primatology. After retirement he returned to evolution. He was an "Imanishian" evolutionist from the very beginning, as is evident in this book. Throughout his life he was an alpinist, and left a legacy of climbs in the glacier-covered Himalayas in Asia and Ruwenzoris in Africa, as well as 1552 peaks in Japan. In short, he was always a pioneer, seeking challenges, and brought extraordinary gifts to his endeavors.

On the Satsuma Peninsula in Kyushu, southernmost of the four main islands of Japan, there is a dormant volcanic peak named Kaimondake. It is sometimes called "Satsuma-Fuji" because of its resemblance to Mount Fuji. Although not so significant in height at 922 meters, it demands a few hours of hard climbing to reach the summit because the path, which spirals steeply upward, starts near sea level. The climb is demanding, but the view from the mountaintop is magnificent. Sometimes the summit may be covered with cloud, and the view may seem fathomless in the woolly whiteness. To describe the difficulty of the climb and the splendor of the view, the local people say, "If he who has once climbed Kaimondake climbs it once again, he is a fool. But if he who has twice climbed Kaimondake does not climb it once more, he is a fool doublefold." They mean that Kaimondake is such a mountain that one who loves it should climb it again and again.

Although this book is small, the reader will find it difficult to read in some places, but after all he may find it worth reading. It is not a book to read to criticize, however, as it was written as a "self-portrait." If the reader dislikes it, he should simply throw it away. It is a matter of taste. If he likes it, he should just forget what is written in the ornamental extras – the introduction and the translators' forewords – and read the text again and again as if climbing a favorite mountain.

Hiroyuki Takasaki Okayama, Japan

Foreword

The meaning of the translation of Imanishi's *The World of Living Things*

For a non-Western person, the period from the late 1960s to the end of the 1980s was an exciting time, which gave a glimmer of hope finally to go beyond the Cartesian dichotomy, positivism, Eurocentrism, illusory objectivity and universalism. Postmodernism, feminism, postcolonialism and multiculturalism challenged conventional objectivistic and realist approaches to knowledge, or

so it seemed. Several writers^[1] gave me the impression that this could herald a new era. Yes, they were still Eurocentric, but nonetheless they were a good beginning, I thought.

When I was first involved in this translation of Imanishi's *The World of Living Things*, I was hopeful for the trends mentioned above, especially for the emergence of a new trend in anthropology. During the late 1980s, Western ethnographers belatedly realized that what they wrote were narrative texts susceptible to the biases of representation, authority and inequality between the observer and the observed. To rectify the situation by presenting both the Self and Other in ongoing dialog,^[2] various experimental writings were advocated^[3] but seldom practised. In addition, these writings lacked true epistemological reflexivity^[4] and any realization of the cultural embeddedness of the endeavor itself^[5] Even one of the very best recent attempts does not escape this characterization.^[6] Worse still, already there are some advocating a return to universalism.^[7] Although Finkelkraut^[8] maintains that the anti-colonial and

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- 1 To name but a few, Homi Bhabha (ed.), 1990, *Nation and Narration*. London: Routledge; Michel de Certeau, 1984, *The Practice of Everyday Life*. Berkeley: University of California Press; Michel Foucault, 1980, *Power/Knowledge: Selected Interviews and Other Writings, 1972-1977*, Colin Gordon ed. New York: Pantheon; Stephen Greenblatt, 1990, *Learning to Curse: Essays in Early Modern Culture*. New York: Routledge; Meaghan Morris, 1988, *The Pirate's Fiancée: Feminism, Reading, Postmodernism*. London: Verso; Richard Rorty, 1979, *Philosophy and the Mirror of Nature*. Princeton: Princeton University Press; Edward Said, 1978, *Orientalism*. London: Routledge and Kegan Paul; Gayatri Chakravorty Spivak, 1988, *In Other Worlds*. London: Routledge.
 - 2 Barbara Tedlock, 1991, From participant observation to the observation of participation: The emergence of narrative ethnography. *J. of Anthropological Research* 47: 69-94. James Clifford and George Marcus, 1986, *Writing Culture*. Berkeley: University of California Press; George Marcus and Michael Fisher, 1986, *Anthropology as Cultural Critique*. Chicago: University of Chicago Press; Renato Rosaldo, 1989, *Culture and Truth: The Remaking of Social Analysis*. Boston: Beacon Press.
 - 4 Pierre Bourdieu and Loic J. D. Wacquant, 1992, *An Invitation to Reflexive Sociology*. Chicago: University of Chicago Press; Jean-Paul Dumont, 1986, *Prologue to ethnography or prolegomena to anthropology*. *Ethos* 14: 344-367; Andrew Strathern, 1993, *Landmarks: Reflections on Anthropology*. Kent: Kent State University Press.
 - 5 Shusuke Yagi, 1991, Japanese ethnography: Searching for the shadow of the other. Paper presented at the 50th Anniversary Meeting of the Association for Asian Studies, New Orleans, unpubl. ms.
 - 6 Anna Lowenhaupt Tsing, 1993, *In the Realm of the Diamond Queen: Marginality in an Out-of-the-Way Place*. Princeton: Princeton University Press.
 - 7 Adam Kuper, 1994, Culture, identity and the project of a cosmopolitan anthropology. *Man* (N.S.) 29: 537-554; SP Reyna, 1994, Literary anthropology and the case against science. *Man* (N.S.) 29: 555-581.

anti-Western sentiments of Third World theorists are derived from very reactionary sources such as German Romanticism, he does not know how difficult it is for them to make Western intellectuals understand non-Western thought.

A similar trend can be detected in the natural sciences, in which scientific endeavor is seen as a historical and cultural product.^[9] Many practitioners however, remain quite ignorant of developments in the humanities and their importance. There has also been the inevitable backlash against these incipient openings of the Western mind,^[10] perhaps more within the science community than among the general public.^[11]

How can one make others recognize the legitimacy of non-Western discourses in an intellectually hostile atmosphere? In my view, there have been two major ways to do so. One way is to demonstrate how academic discursive practices in Western academic cultures have been no more than a deceptive and futile practice to "render the strange familiar"^[12] by reducing heterogeneity and otherness, thus paving the way for the oppression, conquest and control of other cultures.^[13] Another way is the so-called indigenization of science, creating a new concept or model that is molded from indigenous experiences situated in a non-Western episteme, and applying it with a new meaning in Western scientific discourse.^[14] Hsu^[15] and Maruyama^[16] are two examples of this

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- 8 Alain Finkielkraut, 1995, *The Defeat of the Mind*. New York: Columbia University Press.
- 9 For example, Bryan Appleyard, 1992, *Understanding the Present: Science and the Soul of Modern Man*. New York: Doubleday;
Morris Berman, 1989, *Coming to Our Senses: Body and Spirit in the Hidden History of the West*. New York: Bantam;
Donna Haraway, 1989, *Primate Visions: Gender, Race, and Nature in the World of Modern Science*. New York: Routledge, Chapman & Hall;
Mary Midgley, 1992, *Science as Salvation: A Modern Myth and Its Meaning*. London: Routledge;
Laura Nader (ed.), 1996, *Naked Science: Anthropological Inquiry Into Boundaries, Power and Knowledge*. New York: Routledge.
- 10 For example, Paul Gross and Norman Levitt, 1994, *Higher Superstition: The Academic Left and its Quarrels with Science*. Baltimore: Johns Hopkins University Press.
- 11 For example, Melvin Konner, 1993, *Medicine at the Crossroads: The Crisis in Health Care*. New York: Pantheon;
Bill Moyers, 1993, *Healing and the Mind*. New York: Mainstreet Books/Doubleday.
- 12 Hayden White, 1978, *Tropics of Discourse: Essays in Cultural Criticism*. Baltimore: Johns Hopkins University Press [orig. 1928].
- 13 Nobumi Iyanaga, 1987, *Gensō no Tōyō – Orientalizumu no Keifu* [The Illusory Orient: A Genealogy of Orientalism]. Tokyo: Seidosha;
VY Mudimbe, 1988, *The Invention of Africa: Gnosis, Philosophy, and the Order of Knowledge*. Bloomington: Indiana University Press;
Edward Said, 1978, *Orientalism*. London: Routledge and Kegan Paul.
- 14 Peter Park, 1988, Toward an emancipatory sociology: Abandoning universalism for true indigenization, *International Sociology* 3: 161-170.
- 15 Francis L. K. Hsu, 1971, Psychological homeostasis and *jen*: Conceptual tools for advancing psychological anthropology, *American Anthropologist* 73: 23-44.
- 16 Magoroh Maruyama, 1963, The second cybernetics; Deviation-amplifying mutual causal processes, *American Scientist* 51: 164-179; 250-256.

indigenization, yet Hsu's *jen* and dyadic relationship model in psychological anthropology, and Maruyama's second cybernetics have been either neglected or misunderstood for many years by their Western colleagues. Others, such as Okonogi's^[17] Ajase-complex, which emphasizes the mother-child relationship as an alternative to the Oedipal complex, along with Stanley Kurtzig's^[18] study of the Durga-complex of Hindu India, should be discussed seriously. Finally, more than half a century after Heisaku Kosawa submitted a paper on the Ajase-complex to Freud in 1932,^[19] several works have started to appear in English.^[20] Shigeo Mike's^[21] unique contribution to anatomy, which shows a striking isomorphism with various aspects of nature, has yet to be introduced to the West. Although difficult, this path nevertheless appears potentially more promising than the first.

This translation of Kinji Imanishi's *The World of Living Things*, as an example of the second way, I hope will stir some interest in the cultural embeddedness of scientific endeavor. Here, at least, cross-fertilization is still possible.

Shusuke Yagi Greenville, South Carolina

Preface to the JAWS Routledge-Curzon series

Members of the Japan Anthropology Workshop continually carry out deep and insightful research in Japan, and they meet regularly to present papers about their research and to exchange views on the subjects of their study. The fruits of most of these gatherings have eventually appeared in print in a variety of different forms and formats, and we are proud of our collection. However, it sometimes takes several years for our deliberations to be made widely available, and in a country where change flourishes, this is regrettable. The inauguration of a series devoted specifically to the research of the Japan Anthropology Workshop is a step in the direction of speeding up this process,

¹⁷ Keigo Okonogi, 1991, *Edipusu to Ajase* [Oedipus and Ajase], Tokyo: Seidosha.

¹⁸ Stanley N. Kurtz, 1992, *All the Mothers are One: Hindu India and the Cultural Reshaping of Psychoanalysis*. New York: Columbia University Press.

¹⁹ Keigo Okonogi, 1978, The Ajase Complex of the Japanese (1). *Japan Echo*, vol. 5, no. 4: 88-105; Keigo Okonogi, 1979, The Ajase Complex of the Japanese (2). *Japan Echo*, vol. 6, no. 1: 104-118.

²⁰ Alan Roland, 1988, *In Search of Self in India and Japan: Toward a Cross-Cultural Psychology*. Princeton: Princeton University Press;

David H. Spain, 1992, Oedipus Rex or Edifice Wrecked? Some Comments on the Universality of Oedipality and on the Cultural Limitations of Freud's Thought. In David H. Spain (ed.) *Psychoanalytic Anthropology after Freud: Essays Marking the Fiftieth Anniversary of Freud's Death*. New York: Psyche Press, 198-224;

David H. Spain, 1993, Entertaining (Im)possibilities: Chance and Necessity in the Making of a Psychological Anthropologist. In: Marcelo M. Suarez-Orozco and George and Louise Spindler (eds), *The Making of Psychological Anthropology II*. Fort Worth: Harcourt Brace College Publishers, 103-131

²¹ Shigeo Miki, 1989, *Seimei-Keitai no Shizenshi* [A Natural History of the Morphology of Life], Vol. 1. *Kaibōgakuronshū* [Anatomical Papers]. Tokyo: Ubusuna Shoin.

and we look forward to bringing recent research to the readership as soon as we can after it is presented.

Another aim of the series is to present studies that offer a long-term understanding of aspects of Japanese society and culture to offset the impression of constant change that so tempts the mass media around the world. Living in Japan brings anyone into contact with the fervent mood of change, and former residents from many other countries enjoy reading about their temporary home; but some also seek to penetrate less obvious elements of their temporary life. Anthropologists specialize in digging beneath the surface, in peeling off and examining layers of cultural wrapping, and in gaining an understanding of language and communication that goes beyond formal presentation and informal frolicking. I hope that the series will help to open the eyes of readers from many backgrounds to the work of these diligent "moles" in the social life of Japan.

Of course, no one knows Japan quite as well as a Japanese person does, and I am proud to introduce, as a first book in the series, the translation by a Western anthropologist and her Japanese team of the work of a seminal Japanese anthropologist. Imanishi's work is not well known in the English language, but he had some profound ideas about the place of human beings in the living world that do not always confirm theories to date almost unquestioned in the West. Many Japanese are also unaware of the strength of conviction that ordinary people in other countries have about the way the world came about. If this book makes readers of any background rethink even one or two of their long held assumptions about the way the world has developed, it will have achieved the purpose I envisage for the series.

Joy Hendry

Editor's preface

I first heard of Kinji Imanishi while doing doctoral research at Oxford University during the 1970s. At that time, Kinji Imanishi was of interest to me as founder and a key historical figure in Japanese primatology. By a lucky coincidence, I met fellow doctoral student Heita Kawakatsu at this time. He was very interested in and knowledgeable about the ideas of Imanishi, yet he was an economic historian – a field with which Professor Imanishi has never, as far as I am aware, had anything to do. Kawakatsu told me of the importance of Imanishi's first book in Japanese, *Seibutsu no Sekai (The World of Living Things)* which, he said, contained the kernel of many of the ideas upon which Imanishi elaborated throughout his life. He obviously had a high regard for Imanishi,^[22] but I had at that time no thought of pursuing a broader study of Imanishi's ideas, nor of going to Japan.

²² Kawakatsu later dedicated his widely read book, *Nihon bunmei to kindai Seiyō: "Sakoku" saiko [Japanese Civilization and the Modern West: Second Thoughts on the "Closed Country"]*. Tokyo: Nihon Hoso Shuppan Kyokai, 1991, to Imanishi. In the book, he devotes an

By 1981 some of that had changed. Doctorate in hand, a grant from Monbusho, and the cooperation of primatologists in Japan provided me with the opportunity to do an anthropological study of their science. In the autumn of 1981, I still did not consider pursuing Kinji Imanishi's career to any greater extent than any other primatologist's career I had come to study. Yet, soon after an initial meeting with professors from Kyoto University, a plan was made for me to visit the famous Professor. I was thrilled at the prospect of actually meeting this living legend.

Thus, soon after the New Year in 1982, on Imanishi's 80th birthday, I was taken to his home in Shimogamo, Kyoto. New Year is an especially celebratory time in Japan, signifying renewal, a cementing of ongoing friendships, apprenticeships, family ties, and a time to ask formally for favors to continue in the coming year. It is a time when students pay courtesy calls to their teachers, and under that aegis Jun'ichiro Itani, his student Hiroyuki Takasaki and I went to Imanishi's home. Shunzō Kawamura, another pioneer of primatology of Itani's generation, joined us there. The lovely, wood-constructed two-storey home was set in a large treed garden behind a wall. Immediately off the entrance hall was Imanishi's sitting room. This was furnished in Western style with chairs rather than tatami mats. There was a forest of books, lining three walls, and overflowing into small stacks all over the floor. We wound a path through the books to face Professor Imanishi, dressed in Japanese kimono and sitting in a high-backed reading chair. He said it was difficult for him to read now as his eyesight was getting weaker – an unkind twist of fate for such an avid reader.

Even at the age of 80 and for a few years afterwards, long past the time when most would relax and enjoy a well-deserved retirement, Imanishi continued to give thoughtful lectures and to publish, constantly reworking and refining his ideas. I did not hear him give the same talk twice in those initial three years I spent in Japan.

Later, when my Japanese colleagues and I undertook an English translation of *The World of Living Things*, my respect for Imanishi deepened. Although the book could be characterized as a natural philosophy, it is surprisingly widely read by laypersons as well as specialists in Japan. This book provides insights into the basis for the ideas that he later developed on evolution, and much else besides (for which see the Introduction). It is, above all, the work of someone with a wide knowledge of the natural world, and is filled with originality, and, as we can now see, some remarkable foresight into later developments in ecology, biosociology, primatology, and anthropology.^[23] The book is thus widely

entire chapter, Imanishi [*shizengaku*] a no chūmoku [Focus on Imanishi's *shizengaku*], pp. 152-182, to Imanishi's thought. His afterword describes his intellectual relation to Imanishi.

23 See Kiyohito Ikeda and Atuhiro Sibatani, 1995, Kinji Imanishi's biological thought. In David Lambert and Hamish Spencer (eds), *Speciation and the Recognition Concept: Theory and Application*. The Johns Hopkins University Press, 71-89; Yoshiaki Itō, 1991, Development of ecology in Japan, with special reference to the role of Kinji Imanishi. *Ecological Research* 6, 139-155, and Yoshimi Kawade, 1998, Imanishi Kinji's biosociology as a forerunner of the semiosphere concept, *Semiotica* 120-3/4, 273-297, and 1999, Subject Umwelt-Society: The triad of living beings, *Semiotica* 134-1/4, 815-828.

regarded as his most important work for understanding his later writings and as a source of inspiration on many different intellectual fronts.

Imanishi's theory of evolution and his anti-Darwinian views have been copiously published and commented upon in Japan. These were briefly introduced into English in the mid-1980s.^[24] However, and as was evident from the flurry of correspondence that followed on Halstead's article, most Japanese and Western scientists remain entirely unconvinced by them.^[25] Thus, although much publicity has been given to Imanishi's anti-Darwinism within and outside of Japan, and although Imanishi himself may have come to consider his anti-selectionism as a fundamental outcome of his view of nature, I think that to focus on it is to miss the point of the man and his real influence.^[26]

Imanishi's goal was to understand nature, how things got to be the way they are, and how they fit together in the web of life. The simplest questions about nature are the most difficult to answer and Imanishi tackled them with sincerity and courage as a young man. His great contribution seems to me to be that his ideas and studies of nature inspired people to apply them in original ways in different disciplines, even while disagreeing with one part or another of his views. His life and ideas have also evidently inspired people outside of academia in Japan,^[27] and that is a great accolade to a scholar.

The World of Living Things (hereafter referred to as *World*) does not read as a series of finite ideas, but develops in ever-widening circles to make in the end a coherent and subtly changed (for the reader) view of the apparently simplest and commonly held perceptions of the natural world. *World* offers new insights on rereading, and probably the most insights for those with the most experience behind them.

Much has been written about the difficulties and pitfalls of translation. Japanese presents perhaps more than many languages. *World*, besides, is rather obtuse, so much so that Jun'ichirō Itani once remarked to me that an English translation of

²⁴ Beverly Halstead, 1985, Anti-darwinian Theory in Japan. The popularity of Kinji Imanishi's writings in Japan gives an interesting insight into Japanese society, *Nature* 317, 587-589. Halstead became aware of Imanishi's work through an article by A. Sibatani, 1983, The anti-selectionism of Kinji Imanishi and social anti-darwinism in: *Japan, J. Social and Biological Structures* 6, 335-343. Also in 1983 Sibatani published a paper Kinji Imanishi and species identity, *Rivista di Biologia* 76, 25-42.

²⁵ A. Sibatani, 1986, *Nature* 317, 587-589; M. Sinclair, 1986, *Nature* 320, 492; CD Millar, NR Phillips & DM Lambert, 1986, *Nature* 321, 475; J. Nakahara, T. Sagawa & T. Fuke, 1986, *Nature* 321, 475; A. Rossiter, 1986, *Nature* 322, 315-316; TD lies, 1986, *Nature* 323, 576; O. Sakura, T. Sawaguchi, H. I. Kudo & S. Yoshikubo, 1986, *Nature* 323, 586; P. J. Asquith, 1986, *Nature* 323, 675. Halstead responded to this correspondence in B. Halstead, 1987, *Nature* 326, 21.

²⁶ See also Noboru Hokkyo, 1987, Comments on anti-Darwinian theory in Japan: human concerns beyond natural science, *J. Social Biol. Struct.* 10, 377-379.

²⁷ These should not be confused with the use made by conservative elements in Japan of Imanishi's ideas as evidence of a "unique Japanese approach" to science, or with the *nihonjinron* [studies of "Japaneseness"] genre of writers, which are merely political, and not scholarly (cf. Peter Dale, 1986, *The Myth of Japanese Uniqueness*. New York: St. Martin's Press).

the book may be easier for Japanese to understand than the original! This is because a translation removes some ambiguities simply because English forces us to do so. This in turn means that our interpretation will be the views to which readers are introduced. In the final editing, I have done my utmost not to interpret Imanishi's statements unduly. While some of the real poetry of the original was beyond my capacities to render into English, some of the prolixities have been shortened and the translation, I believe and hope, retains the original route of Imanishi's intellectual journey with, as he says, its zigzagging path through the complexities of the natural world.

A word on our translation method would be appropriate. In 1987, Kawakatsu and I spent two weeks in Oxford roughing out chapters one through three. He first read passages aloud in Japanese (thus providing the choice of "reading" for the *kanji* or Chinese characters in which the book is written), and then rendered a very free translation in English on tape, while we both looked at the original. The next year the work continued with Yagi, who was a postdoctoral scholar at the University of Alberta. Yagi and I worked for four weeks in the same manner to complete chapters four and five. This initial roughing in of English was quickly accomplished due to their good abilities in English.

The text, which I then transcribed, however, made very little sense in English. Those with knowledge of literal translations will appreciate that they amount to more or less a third language. The roughed-in text, however, provided me with the structure of the sometimes very long sentences, and saved enormous time in providing the character readings for later checking in dictionaries. A further challenge was that some of the Chinese characters used by Imanishi in 1940 have since been dropped from written Japanese and are not found in modern dictionaries. The following summer, in 1989, Takasaki went over the transcription with me in Japan to clarify complete mysteries and point out omissions. I then went back to the original text and embarked on the translation with these considerable aids. At this point, the translation process was greatly slowed down. I found that subtleties of meaning and interpretation were the greatest challenge, and the reader will see that some of the ideas in the text are not very easy to understand in the first place. I was indeed a snail at this work, and my part took five years to complete. Finally, Takasaki kindly reread the final version. I have not agreed with my co-translators on all points, and faults with interpretation should be laid at my door.

Several Japanese warned how very difficult a translation of this particular book would be. Imanishi himself once commented that if any of his work was translated, he would prefer all of it to be translated at once so that his thinking would be better understood. As his collected works run to 13 volumes,^[28] this is unlikely to be done. My understanding of the text increased steadily with the reading and rereading, yet I continue to see different things when I read parts of it again. Toward the end of his life, Imanishi did not object to just the one book being translated.

²⁸ The fourteenth volume is a list of his publications, mountaineering and other activities (Kinji Imanishi, 1974-1975, 1993, *Imanishi Kinji Zenshū* [The Collected Works of Imanishi Kinji] vol. I-XIV, Tokyo: Kodansha).

With his intellectual and personal powers so vigorous in his twilight years when I first met him, I can only imagine what an extraordinary star Imanishi must have been in his prime. It was evident that he was a natural leader, an individual who inspired deep devotion and loyalty. Because of his strong character and effectiveness he doubtless also inspired strong disagreement, which in itself can be fertile ground for new ideas. I think that he and his students must have had a very interesting time. It is our hope that the translation will provide Western readers with the opportunity to follow the early intellectual path of a Japanese scientist. Besides their historical interest, such translations are of a special relevance in the growing circles of philosophical, historical and anthropological interest in alternative epistemologies and science.

Pamela J. Asquith Edmonton, Canada June 2000

Acknowledgments

Work on the actual text that has culminated in this translation began about fifteen years ago, but the groundwork for it was set a few years before then. During that time the project has been assisted, directly and indirectly, through the generosity and interest of many kind people.

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It goes without saying that the book owes its existence to the efforts of my co-translators, Heita Kawakatsu, Shusuke Yagi and Hiroyuki Takasaki. Kawakatsu first introduced me to some of the Japanese writings of Imanishi in the 1970s before we ever thought about this project. Throughout the years he and his wife Kimi extended wonderful hospitality and stimulating conversations about many things. Shusuke Yagi helped to keep the project on track by giving up some of his postdoctoral research time when at the University of Alberta, and spending a month on the final two chapters with me. His help and interest were indispensable and greatly appreciated.

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I thank Bunataro Imanishi and his wife Kazuko who graciously allowed me to see the rooms where his father read and worked on his book. I am further indebted to them for their help and cooperation in enabling publication of this translation. Imanishi's second son, Hidejirō Uji (who passed away in 1999), and his family kindly introduced me to many sights in Osaka when I first arrived in Japan. And I thank Kinji Imanishi for including me in several meetings where he spoke, as well as for his active participation in the shizengaku seminars held during 1982-1983 at Kyoto University.

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The drawings of mayfly larvae that appear in Figures 6 and 7 have been reprinted in several sources, including the collected works of Imanishi, and on flyleaves of books about Imanishi. I am grateful to Kazumi Tanida and Hiroyuki Takasaki for tracking down the original Japanese source in a paper published by Imanishi in 1940. The illustrator was the late Yonekichi Makino. Photos of Kinji Imanishi that appear in Figures 8-11 were kindly provided by Jun'ichirō Itani. Permission to reprint the splendid portrait of Imanishi at 80 years of age that appears in Figure 12 was provided courtesy of Keita Endo, owner of *Ryutsu Keizaa Shinbunsha*, and taken by Setsuo Kono. To all these people I make grateful acknowledgment.

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I am very glad to have had the opportunity to know a little the person whose thought has occupied mine for several years. I am grateful to all those who made that possible and who have helped in so many ways to make the translation a reality.

Note on Japanese names

Japanese names appear in Western name order, first name followed by family name. This is a departure from the style that many Japanologists have adopted in their publications in English, in which they have followed Japanese name order when referring to Japanese authors. I was emboldened to make this departure because it was Imanishi's own usage in English, and he is better known to English language readers this way. Additionally, Western name order for Japanese active after the Meiji Restoration (post1868) has been formally adopted by the Japanese editors of *The Japan Foundation Newsletter*, which reports on research on Japan, and is distributed throughout the world in English.

They note that many Japanese prefer seeing their names in Western order when in a Western context (Vol. 25/ No. 1, June 1997).

Romanization of the names of modern Japanese writers is not always consistent in the published literature. In each case, the most frequently used, or the most recent form is written here (e.g. Atuhiro Sibatani, not Atsuhiro Shibatani). Similarly, romanization of Japanese book and journal titles in this work is in the form in which they appear in current publications.

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Introduction

Imanishi's Background

Imanishi was born in Kyoto on January 6, 1902, first son, though not firstborn, of a silk textile manufacturer in the area of the city known as *Nishijin*. He thus had the benefit and freedom that a certain wealth and privilege provide. For 500 years, the name *Nishijin* has been synonymous with the production of fine silk textiles. This northwest corner of Kyoto was once the locus of *oribe*, weaving communities attached to the Heian court of noblemen and women of 1000 years ago. Later, textile-producing guilds connected to great families made this area their home.^[29] Even today some 20000 weavers' looms continue to produce silk for the silken kimono, but it past its peak of operations in the late seven-teenth-early eighteenth centuries.

Although Imanishi was the eldest son, he did not continue in the family tradi-tion of employment, but in 1932 he moved to a home in the pretty Shimogamo area of northern Kyoto which was close to the Kamo River (Figures 1 and 2). Dyers of kimono material used to dip their cloth further downstream in the fast-flowing waters of this shallow river. Imanishi instead followed his early interest in studies of nature and many of his later scientific studies were carried out close to home in the torrents of the Kamo River (Figures 3-5). Like many children, Imanishi was fond of collecting insects in primary school, but he displayed an early interest in what were to become two lifelong passions - natu-ral history and mountain climbing. For Imanishi, mountains equalled nature as they were one of the few places in Japan free from intensive cultivation or urbanization. When he entered Kyoto University, he chose the College of Agri-culture rather than the College of Science because he wanted his summers free for mountain climbing. When he married, he named his first and second sons, Bunataro and Hidejir⁶, after mountain peaks around Kyoto and Mino, near Osaka. His first daughter, Minako, was named after the highest peak in Kyoto Prefecture, and his second daughter, Madoko, after the mountaineering term for a pass.^[30]

In 1928, Imanishi received his Bachelor's degree from the College of Agricul-ture, Kyoto University, specializing in entomology. His first papers written between 1930 and 1940^[31] were based on his studies of the ecology and taxon-omy of mayfly larvae (*kagerō yōchū*) of various genera (*Ecdyonurus*, *Epeorus*, *Ameletus*, *Ephemera*, *Cinygma*, *Baetis*, *Paraleptophlebia*, *Ephemerella*, *Baetiella*, *Siphonurus*, *Potamanthodes*, *Bleptus* and *Heptagenia* spp.) in

²⁹ Gary P. Leupp, 1992, Overview of a *Nishijin* Ward in the Late Tokugawa Period, *The Japan Foundation Newsletter*, vol. XX, no. 2: 14-17 [see pg. 14].

³⁰ J. Itani, personal communication. *Mado* is a colloquial term for a passable path and *ko* is a suffix designating "child".

³¹ These include a series of ten papers, titled "Mayflies from Japanese Torrents I [through] X". No. I was published in the *Taiwan Hakubutsugaku Kaihō* [Taiwan (Formosa) Natural History Bulletin]; nos. II-IX in the *Annotations Zool. Japon* and no. X in the *Memoirs of the College of Science, Kyoto Imperial University, Series B*.

Japanese rivers (Figures 6 and 7). In 1940, he received his Doctor of Science degree from the College of Science, Kyoto University, based on these papers.

During the next decade Imanishi remained around Kyoto University, and was self-supporting, without a permanent position on staff. He is nevertheless remembered for his wonderful seminars, going as often as possible on mountain climbing expeditions which doubled as scientific expeditions. In 1931, Imanishi had founded the Academic Alpine Club of Kyoto (AACK). In many ways his interests in ecology and mountaineering formed the basis for everything else. In the mountains, Imanishi came to regard the study of living nature, as opposed to laboratory study of confined or dead specimens, as of paramount importance.^[32] Concerned that he would be drafted to fight in the war and might not survive, he wrote his main ideas in *The World of Living Things*, completing it in November, 1940 (Figure 8). He wrote spontaneously and quickly, relating the views that had supported his biological work thus far, and out of which he developed most of his future ideas and projects.^[33]

During the war, Imanishi was sent to Mongolia, which was comparatively safe. With his pre-war experience of four trips to inner Mongolia and one to north-east China for research and exploration, this was a natural choice. However, his scientific collaborator, Tōkichi Kani (1908-1944) was sent to the Pacific and died within the year.^[34] Among Imanishi's various trips, he went in 1942 with students Jiro Kawakita, Tadao Umesao, Sasuke Nakao and Tatsuo Kira to the northern part of Da Xinggan Ling in China. In 1944 Imanishi became Director of the Japanese *Seihoku Kenkyūsho* (Northwest Research Institute) in Chōkako in China.^[35] He left Mongolia in 1946 when the Institute was closed in the aftermath of the war. Shortly after his return to Japan, he initiated various naturalistic animal behavior studies, which soon became focused on Japanese macaques. Japanese primatology was founded through Imanishi and his students' efforts. In 1950, at age 48, he became a lecturer in the Institute for Humanistic Studies at Kyoto University, though he is best remembered by his former students sitting on tatami in a ground floor room in what used to be a

32 Years later he related that the sight of a grasshopper on a leaf suddenly made him realize that the real life of animals is their life in their natural surroundings, not as a specimen in a laboratory or collector's box. He resolved then and there to abandon his collecting and to study the life or "living" of animals (K. Imanishi, 1957), *Reichōruī kenkyū group no tachiba* [*The standpoint of the Primates Research Group*], *Shizen* [Nature], vol. 12, no. 2: 1-9.

33 Syunpei Ueyama, former professor of philosophy at Kyoto University, wrote in his epilog to the 1972 reprint of *World* that he judged Imanishi to be one of the few original thinkers in Japan since the Meiji Restoration (1868). He said that although Imanishi's book is about natural history, it is really a philosophical work and that no previous book had attempted to discuss the basis of biology in Japan.

34 See T. Kani, 1981. Stream classification in "ecology of torrent-inhabiting insects" [1944]: An abridged translation, *Physiol. Ecol. Japan* 18, 113-118.

35 Eiichi Kasuya provides names of people with whom Imanishi worked, many of whom were academic colleagues and students: E. Kasuya, 1993, *Senchūki no Chūgoku ni okeru nihonjin chishikijintachi no kurosurōdo: Chūgoku de no Imanishi Kinji o megutte* [Japanese intellectuals' crossroads in wartime China: Kinji Imanishi in China]. *Gendai Shisō* [Contemporary Thought] 21, 226-231.

parasitology laboratory annex to the Department of Zoology. Sadly for the nostalgic among us, the building has been demolished.

During the 1950s Imanishi made further mountaineering expeditions to the Himalayas. On a six-month trip through Africa, Europe and America in 1958, he and Jun'ichiro Itani looked for possible African field sites for future primate studies, and visited several pioneers of the developing primate study centers in the West (Figures 9-11). Soon after this, Imanishi directed his students to begin preliminary surveys of the elusive great ape species (including gorillas and chimpanzees) in the Congo, Uganda and Cameroon, as well as, in 1962, to study hunter-gatherers and nomadic pastoralists in Tanzania. In 1959, he became Professor of Social Anthropology at Kyoto University. Astonishingly, from a modern perspective, Imanishi also developed the Laboratory of Physical Anthropology and in 1962 was appointed Professor there too. After his retirement from Kyoto University in 1965, he held the position of Professor of Cultural Anthropology, College of General Education, Okayama University, and in 1967 he became president of Gifu University.

Imanishi's extraordinarily broad and pioneering scholarly career was matched only by his mountaineering career and exploration (on which he also wrote prolifically). The latter was very much the basis for his inspirational example and popularity among the general public in Japan. His personal qualities and contributions were recognized twice by the Japanese government: in 1962 he received the award "Person of Cultural Merit" and in 1979 he was named to "The Second Order of the Sacred Treasure." Imanishi remained active and prolific in publishing and contributing to academic meetings well into his eighties (Figure 12) and only since about 1986, when his sight began to deteriorate seriously, did he curtail his public and scientific engagements. He went blind in 1988 and passed away on June 15, 1992. Fifteen hundred people attended his funeral, including an envoy from the Emperor.

Imanishi's Intellectual Context and Contribution

Imanishi's life spanned four eras in modern Japanese history. Born in the last decade of the Meiji era (1868-1912) his education had a mixture of traditional and modern or international influences. The Meiji era had heralded an extraordinary change of course for Japan from a nonindustrial feudalistic country to a significant international power. By 1905, at the end of the Russo-Japanese War, Japan had become the first Asian nation to defeat a European nation at war, ironically speeding Japan's acceptance into the Western sphere of influence.

Not many years before, until 1854, Japan had been to all intents and purposes a country closed to foreigners. During the preceding Tokugawa era (1615-1867) only a small amount of exchange occurred between Japan and a colony of Dutch, who were allowed to remain on a man-made island off the port of Nagasaki in western Kyushu, as well as with China and Korea. In 1720 the blanket censorship on all foreign books was relaxed and certain scientific works made their way into the country via the Dutch colony. By the early eighteenth century, Western science was seen largely as a means of providing military strength in the form of guns and battleships. Much later, as the Opium War of 1840 in China proved with alarming conclusiveness, Japanese military techno-

logy would be no match against Western weapons. The opening of the country in 1854 was accomplished largely on a protectionist argument. Japan needed Western knowledge to defend itself against such incursions in future.

What became most important in the debates about whether or not to adopt the foreign technology was a problem of ethics and values. The most common charge leveled against the Western spirit and scheme of values was preoccupation with profit to the neglect of duty. Putting one's own pleasure and advantage above dutiful consideration of one's place in family and society flew in the face of the ideals of an ordered Confucian (Tokugawa) society.

Yet others realized that to produce her own science Japan needed to understand the ideas that had led to the appearance of this technology in the West. However, the thinking that had made possible the rise of science the particular view of the external world and man's^[36] relation to it – was not at all compatible with the views on these subjects that had been accepted since the beginning of the seventeenth century in Japan. Thus, Japan needed to rethink some of her most fundamental and sacrosanct assumptions about the way the universe worked. As an example, in Confucian ideology, nature appeared as a vast moral organism, ordered on principles which at the same time ordered the ideal workings of the mind of man and the manner in which one should live in society. The passage of the seasons and the movements of the stars, the way a hawk flies and a fish leaps, were manifestations of the same ultimate principles as those which prescribed that men should be filial to their parents and loyal to their lords.

Soon after the Meiji Restoration of 1868, a group of scholars attempted to solve this profound dilemma in what has become known as the Japanese Enlightenment.^[37] They tried to create a new basic discipline in what should be considered valid and useful knowledge, a new scheme of values, a new practical morality in everyday life, a new view of the past and a new theory of political obligation.

The nucleus was a group of scholars who formed the *Meirokeisha* society, named for its formation in the sixth year of the Meiji era (1873). Yukichi Fukuzawa (born 1835) was the most expressive exponent of the enlightenment doctrines and wrote copiously for the general public as well as for the government. The idea of importing Western technology while retaining Eastern ethics was, he argued, futile. He pointed out that "civilization" was not a matter of "things" but of the way people thought. The "spirit" of the West, he felt, was characterized chiefly by "independence." Because the Western nations had cultivated a spirit of independence, initiative and responsibility, he averred, they had been able to develop their sciences and become strong and prosperous. Lack of such a spirit had made the Japanese fall behind – and this deficiency

³⁶ The term "man" is retained here in keeping with the nomenclature of the time.

³⁷ Carmen Blacker, 1964, *The Japanese Enlightenment: A Study of the Writings of Fukuzawa Yukichi*. Cambridge, Eng.: Cambridge University Press (see especially chapter three, "The Enlightenment").

was to be blamed on Chinese learning and the feudal system of which it was the philosophical justification.

Enlightenment thinkers had, therefore, to prove that the differentiating quality of civilized peoples – the national spirit of independence which produced science and a wealthy nation – would also promote the moral destiny of man. The theory of progress told them that the essence of civilization was the free exercise of independent reason, inborn in all men, not something attained by a genius peculiar to the Western peoples. However, already by 1881 the government was sending visiting Western scholars home and returning to the canons of the Confucian ethic – a policy which culminated in the Imperial Rescript on Education of 1890 that effectively perpetuated the old Confucian virtues for several more decades. The most outspoken of the enlightenment scholars, Fukuzawa, died in 1901, a year before Imanishi was born.

A second point historically relevant to Imanishi's intellectual development is his relationship to the Kyoto School of philosophy and particularly the work of the philosopher Kitarō Nishida (1870-1945). From the middle of the nineteenth century, Japanese thinkers had been interested in Western philosophy. Because they believed that this form of thought had no parallel in their tradition they developed a new word to translate the idea of Western philosophy, *tetsugaku*. This created some distance between traditional forms of Japanese thought such as Buddhist and Confucian doctrines and Western modes of analysis, speculation and argumentation.

The Kyoto school of philosophy^[38] had its roots at Kyoto University among specialists in the philosophy of religion. It is considered to have its foundation in Nishida, whose writings mainly span the period from 1910-1945. Imanishi used to visit Nishida's household in the late 1920s and 1930s. One of Imanishi's closest student protégés, the primatologist Jun'ichiro Itani (b. 1926), relates that one of his earliest memories was falling into a garden pond at Nishida's home when Itani was four years old. Itani's father, an artist, was also a regular visitor to the Nishida household. The ties among them go back a long way.

The motivation behind Nishida's writings,^[39] as with his Meiji predecessors, was the problem of how Western science and Eastern morality could coexist within a consistent philosophical system. Nishida hoped to reveal the universal source of both empiricism and religious/ethical/aesthetic intuitionism. I do not know how profound was Imanishi's understanding of Nishida's or any other philosophy. However, a modern philosopher, Syunpei Ueyama, has pointed out that whole passages from Nishida's first book *Zen no Kenkyū* (*An Inquiry into the Good*) can be found in Imanishi's *The World of Living Things*.^[40] Indeed, several of Nishida's statements in *An Inquiry into the Good* (especially Chapters

³⁸ See Frederick Franck (ed.), 1982, *The Buddha Eye: An Anthology of the Kyoto School*. New York: Crossroad; Thomas P. Kasulis, 1982, *The Kyoto School and the West: Review and Evaluation*, *The Eastern Buddhist*, 15(2), 125-144.

³⁹ See Kitarō Nishida, 1921, *An Inquiry into the Good*, transl. by Masao Abe and Christopher Ives, 1990, Yale University Press. Also see Keiji Nishitani, 1985, *Nishida Kitarō*, transl. by Seisaku Yamamoto and James W. Heisig, 1991, University of California Press.

⁴⁰ Stated at the *shizengaku* seminars, 1983, Kyoto University.

10-12, "The Sole Reality," "The Development of Reality through Differentiation" and "Nature") reveal many resemblances to Imanishi's arguments as set out in his own Chapter 1 ("Similarity and Difference") in *World*. Nishida argued that reality is a unified whole, but as such it must include opposition. He wrote: "In such mutual opposition, the two entities are not totally independent realities, for they must be unified; they must be part of the development of one reality through differentiation."^[41] As will be seen, the perspective that everything developed and differentiated from one thing is absolutely fundamental to Imanishi's views on the relatedness of all things, living and nonliving, in the world.

Consistent with his Buddhist background, Nishida was suspicious of the substantialization of the self. Even the Kantian or Husserlian transcendental ego seemed to Nishida an abstraction not directly derived from concrete experience. Rather, he argued, the self of self-consciousness is not an entity at all, but an act. It is an acting-intuiting. This concept is left obscure, but the main point seems to be that judgment is possible only as an interactive flow from the person into the world (as the attitude, the action, the intentionality) simultaneous with the flow of the world into the person (as the givenness, the sensation, the presence). Thus, at the basis of every judgment is the interaction of the person with the world and the world with the person. The two cannot ultimately be separated. Subjectivity and objectivity are two profiles of the same event. For Imanishi, the subject (living thing) and the environment were part of each other, flowed into each other, and created a particular world over which each living thing had some control.

Nishida also expressed antipathy toward the trend to mechanistic explanations of nature with which same antipathy Imanishi concluded his career as a scientist. In his chapter on "Nature" Nishida noted:

The present tendency of science is to strive to become as objective as possible. As a result, psychological phenomena are explained physiologically, physiological phenomena chemically, chemical phenomena physically, and physical phenomena mechanically.^[42]

Nishida further expressed the view:

The various forms, variations, and motions a plant or animal expresses are not mere unions or mechanical movements of insignificant matter; because each has an inseparable relationship to the whole, each should be regarded as a developmental expression of one unifying self. For example, the paws, legs, nose, mouth, and other parts of an animal all have a close relation to the goal of survival, and we cannot understand their significance if we consider them apart from this fact. In explaining the phenomena of plants and animals, we must posit the unifying power of nature. Biologists explain all the phenomena of living things in terms of life instincts. This unifying activity is found not only in living things, but is present to some extent even in inorganic crystals, and all minerals have a particular crystalline form. The self of nature, that is, its unifying activity, becomes

⁴¹ Pg. 64, Abe and Ives, 1990, *ibid*.

⁴² Pg. 69, Abe and Ives translation, *ibid*.

clearer as we move from inorganic crystals to organisms like plants and animals (with the true self first appearing in spirit).^[43]

A further point of comparison is Imanishi's species-society concept for which he coined the term "specia." A species-society is not the equivalent of a biological species but is a sociological concept that implies a system consisting of all members, however dispersed, which support a species through their interactions. The concept of specia is absolutely central to his views of the interconnectedness of things in nature. It is not just a conceptual construct, Imanishi noted; it is an existent entity with an autonomous nature, whose various individuals are continually contributing to the maintenance and perpetuation of the specia to which they belong. It is this expression that is most obviously compared with the thought of Nishida. Nishida argued that an individual could not exist outside the context of society and that a society was the only meaningful, everlasting entity, while individuals were ephemeral. We may note too, that Imanishi did not think that the term individualism (so important in the minds of the Meiji Enlightenment thinkers) in the Western sense should be applied to himself: his view was that the individual can be poetically unified with nature without any self-assertion, though he concedes his scientific career and endeavors would be classed as individualistic by Western thinkers.

Towards the end of his career, Imanishi's writings became explicitly anti-Darwinian,^[44] culminating in an expression of "anti-science." He wrote prolifically about this,^[45] but only in Japanese, until 1984 when he published a paper in English on the conclusion to his study of *shizengaku* (nature-study).^[46] In reflecting on the meaning of his life's work in the article, he repeatedly and almost exclusively returned to ideas he wrote in *World*. In reflecting on his long career, he noted that:

When I was young, I was engaged in entomology. I have also dabbled somewhat in ecology. At nearly fifty years of age, I switched to the humanities, had contact with the nomads of Mongolia, and in Africa observed gorillas and chimpanzees. After seventy I took up the theory of

⁴³ Pg. 70, Abe and Ives translation, *ibid.*

⁴⁴ Imanishi, however, noted that he was a faithful follower of Darwin in terms of the idea that "somewhere, long ago, the first organism came into being, subsequently dividing and developing, until we arrived at the flourishing nature of the present day" (1984: 362 [see note 46 for ref]). What he opposed was the assumption that organisms had to compete with each other for survival. He explained this in much the same terms as he had used in *World* 40 years before, that as all things had come from the differentiation and development of a single thing, and not as immigrants from other planets, it made no sense to think they would be fighting for space, rather than live as part of a harmonized whole (*ibid.*, p. 365)

⁴⁵ In books such as *Watashi no shinkaron* [*My Theory of Evolution*], 1972, Shisakusa; *Dāwinron – Dāochaku shisō kara no rezisutansu* [*Darwinian theory – Resistance from Native Thought*], 1977, Chūōkōronsha; *Dāwin o koete-Imanishi shinkaron kogi* [*Beyond Darwin – Lecture on Imanishi's Evolutionary Theory*], 1978 (with Takaaki Yoshimoto), Asahi shuppansha; *Shizen to Shinka* [*Nature and Evolution*], 1978, Chikumashōbo; *Shinkaron mo shinka suru* [*Evolutionary Theory also Evolves*], 1984 (with Atuhiro Sibatani and Shōhei Yonemoto), Librōpoto, and in numerous papers and interviews.

⁴⁶ K. Imanishi, 1984, A proposal for shizengaku: The conclusion to my study of evolutionary theory, *J. of Social and Biological Structures* 7, 357-368.

evolution, and now I am trying to wrap it up I have done quite a few things, but it seems to me that I have been consistent in working on the problem of 'What is nature?' And I feel that it is not the constituent nature as represented by such-and-such-ology, but total nature, that I have been in constant quest of. What I have been seeking all this time is shizengaku.

He continued,

... shizengaku does not fit within the general scheme of academic disciplines the term 'nature' is being bandied about these days more than ever I wonder just how deep an understanding of nature the people who use these words really have. It seems that, though the word nature is used more than ever before, there has never been a time in history when people have had such a small realization of what nature really is We must teach (students) that nature is not matter, it is (a) living thing; it is the colossal maternal body, the giant, the behemoth within which we, along with all the other myriad creatures, have always been nourished.^[47]

Imanishi concluded that in introducing his ideas to the world, it is not the ecologist Kinji Imanishi, or the anthropologist Kinji Imanishi: it is Kinji Imanishi, the scholar of shizengaku. When he stated that he was no longer a scientist, he meant that he did not agree with current science, which is not addressing the larger picture. Imanishi felt that the ultimate concern and responsibility of a scientist should be to free contemporary people from their cultural fragmentation by making them more conscious of the way art, morality, religion and science have become specialized, censorial, and constrictive to the wholeness of our cultural experience. In *World*, Imanishi has, essentially, written an ethic of how to relate to and understand nature.

The inter-weavings of modern and traditional nineteenth and early twentieth century thinking continue to provide inspiration to writers today in Japan, as shown cogently in Morris-Suzuki's recent book.^[48] In her chapter on "Civilization," the intellectual influences of Tokugawa Japan and of Kitarō Nishida are evident in the writing of three modern scholars whose work she discusses – that of philosopher Syunpei Ueyama, economic historian Heita Kawakatsu and philosopher of science Shuntarō Itō. These writers address the history of civilization and examine Japan's place and role in modern civilization.^[49] Here again we may find it useful to weave another thread into the fascinating tapestry of Japanese social intellectual history and contemporary thought through English translation of Imanishi's original work.

⁴⁷ K. Imanishi, 1984, *ibid*: 366-367.

⁴⁸ Tessa Morris-Suzuki, 1998, *Re-inventing Japan. Time, Space, Nation*, M. E. Sharpe.

⁴⁹ The titles of these popular works are: S. Ueyama (ed.) 1990, *Nihon bunmeishi no koso* [A Plan of the History of Japanese Civilization] 7 vols. Tokyo: Kadokawa Shoten; H. Kawakatsu, 1991, *Nihon bunmei to kindai Seiyō: "Sakoku" saikō* [Japanese Civilization and the Modern West: Second Thoughts on the "Closed Country"]. Tokyo: Nihon Hōsō Shuppan Kyōkai; S. Itō, 1990, *Hikaku bunmei to Nihon* [Comparative Civilization and Japan]. Tokyo: Chūō Kōronsha [cited in Morris-Suzuki, 1998].

Reading the Text

It is the editor's intention as far as possible to allow the reader to derive his own insights and to make her own intellectual links with Imanishi's text. If his work is to be read as a philosophy of biology, this is essential. However, a few guideposts will be helpful to aid readers in the initial stages of his argument. These remarks will be confined to the ideas developed in this book, rather than follow their later trajectories. The surprisingly modern ring of some of his ideas as compared with current commentary in biological science, as well as in studies of the interface between animal behavior and human social evolution studies are evident, but beyond the scope of the introduction. With that in mind, the following comments are intended as signposts rather than a detailed map of his ideas in *The World of Living Things*.

The book contains five chapters, of which the first three are intended as an introduction to the discussion in Chapter 4 ("On Society") and Chapter 5 ("On History"). To Imanishi, Chapter 4 was the heart of the book, and Chapter 5 followed as an extension of his discussion on society.

In the **first chapter**, "Similarity and Difference," Imanishi refers to "change" of the earth from a single thing to the multiplicity of related forms we now see. He states that change is not mere change, but is a kind of growth or development. What Imanishi meant was that things have a place and a function in the structure of the whole world. This place is not predestined, but the fact of a thing's existence means it is there for a reason – it fits having developed along with the unfolding of the whole world. "Unfolding" again does not imply preformation, but rather simply that things must fit because they developed from within the fold.

Similarity and difference in the chapter title refer to our recognition of things as they are in their relation to each other. Things of this world have different degrees of resemblance and difference. Our recognition of their relatedness or affinity is the simultaneous perception of similarity and difference among things. We are able to do this because all things developed from one thing, and all things are related both in terms of blood and soil or living space. Herein lies the basis for our intuitive understanding of similarity and difference. The closer the relation, the more empathetically we can understand them. That is because the distance and closeness between things in terms of affinity reflects the distance and closeness of the particular environments or worlds in which they live. It follows, therefore, that though we humans have the world of humans, monkeys have the world of monkeys, amoebae have the world of amoebae, and plants have the world of plants, because of the relatedness, we can say that the world of monkeys is closer to ours than the worlds of amoebae and plants, and that the world of living things is closer to ours than the world of inanimate things. Each species is thus similar and also different to the other, and we have an intuitive, naturally determined, subjective response to degrees of affinity.

The themes in this chapter presage the development of Imanishi's interests in anthropology and primatology. Of particular relevance is his statement of the "objective of biology." Biology is not related to the resources for human life, he says, but provides the path by which we can understand our biological affinity

with the living world, and that the roots of our behavior are in the world of living things.

The **second chapter** is "On Structure." Our world is not a random chaos but is an ordered one with a certain structure. Living things are distinguished from nonliving things by their shape or morphology, but also by their complete structure, including their internal morphology. All living things are composed of cells as the structural unit, and develop from a single cell. But nonliving things also have a form. Although we classify living things by their forms in taxonomy, external morphology alone makes no distinction between living and nonliving things. These are distinguished instead by the fact that only living things are composed of cells. More importantly, they are distinct from dead things because they are "alive." Living animals fly or swim because they are alive. That is what "living" means. When we consider living animals in terms of body or structure, flying or swimming are phenomena that cannot be described well by the concept of structure alone. These should be called functions rather than structure. Only a structure that allows various kinds of functions such as flying or swimming can be the structure of living things.

Thus, in Imanishi's idea, structure of a living thing is nothing but for function and vice versa. As the body of a living thing developed from one cell, and if the inseparability of structure and function is a fundamental principle of the existence of living things, then what has developed from one thing is not only the structure of living things, but also the function. The structure of living things is integrated with their function.

Imanishi further notes that the only world we know is one in which everything exists and perpetually changes. This is a world, then, with space and time, as well as structure and function, as one inseparable set. Inanimate things, as constituents of this world, also have integrated structure and function, and in that sense they may be said to have their "inanimate life."

Chapter 3 "On Environment" builds on the idea that the "life" of a nonliving thing is the action expressed by it directed by the integrating process of the life of living things. Thus, the atom of oxygen itself does not change, but its action is under the control of the living body. Living things cannot exist without environment; their way of being can be comprehended only in a system comprising their environment also, and the environment is a part of the world that has coevolved with them. Recognition of the environment by a living thing is the recognition of what is necessary for its living. As it makes a living in an environment, it makes the environment an extension of itself. In the world that the living thing recognizes and utilizes, it is master, in control not only of its own body, but of its environment also. The integrating nature of a living being which consists in controlling and governing itself and its surrounding world seems to be interpretable as their autonomous subjective character (*shutaisei*). *Shutaisei* is a recurring concept in this work. Any living being must be an autonomous subjective being in this world, as it makes a living in it. The subjectivity is a character endowed on living things from their very beginning on this earth; in it lay the root of what eventually developed into human mind. The life of a living thing consists in assimilating the environment and controlling the world, and that is after all the development of *shutaisei* endowed on it.

These initial discussions set the stage for **Chapter 4**, "On Society," which Imanishi considered to be the core of the book. Right off, Imanishi tackled a question of interest in science then and now: why do organisms live in proximity other than for reproductive purposes?

He asks, "What is a species?" He notes that an individual sees a conspecific as an extension of its own body. This is a basis for his thinking that nature abhors conflict. Imanishi does recognize competition for the same resources, especially food, and says that various life forms emerged due to this. But this was a division of resource-use and the forms that could utilize them, rather than war over resources. Even interspecifically, competition is futile, as may be seen in the mutualism between parasite and host.

Members of a species gather, not for reproductive purposes, but because they have the same needs. In their common habits they find the most stable, and thus the most secure life. That world is the world of the species, and the life there is the life of the species. This shared life does not imply a conscious and active cooperation; rather, as the result of the interactive influences among individuals of the same species, a kind of continuous equilibrium results. The species society is a real entity in this world, or in other words, the world of species is a social phenomenon.

Imanishi later gave the name "specia" to the species society. As the basis of the formation of species societies, every organism is postulated to have an intrinsic faculty of perceiving the identity of fellow members of the same species. *Shutaisei* is the vital attribute of every living individual and species society. Every living thing is considered to be a subjective autonomous entity that acts on and interacts with other living things and its environment. These living things form a species society, which in turn, in a similar manner, acts on and interacts with other species societies to form the whole living world. All of these together were called the holospecia in later publications.^[50]

In the **fifth chapter** "On history," organic evolution is discussed with emphasis on the sociality of living things. Imanishi denies random mutation and natural selection as the prime movers in speciation. He asks, "Can we think of organisms ... passively depending on chance?" He thinks that natural selection does occur, but not as the major driving force of speciation. Thus, he contends by way of illustration, that if Australia rejoined with mammalian communities, the marsupials would probably become extinct. This would be due in part to natural selection – but, from the point of view of the whole society of mammals – it would be the resettling of the whole community into a structural equilibrium.

For the title, and throughout the book, the term "living thing(s)" rather than the more usual term "organism(s)" is usually used to translate *seibutsu*. This usage adheres to Imanishi's reflection in Chapter 2 "On Structure," in which he refers to the literal meaning of the Chinese characters *sei-butsu* as "living things." Imanishi notes that living things are first of all conceived to exist as things, and thus they tend to be regarded as merely a physical existence, with "life" left out. He considers that a natural feature of our way of understanding the world is to

⁵⁰ K. Imanishi, 1984, *ibid.*

perceive it first and foremost as a world of things and that "life" has to be tackled on with difficulty afterward. As Imanishi's intent is to discuss the nature of "life" as a whole, the term "living things" reflects his own starting point.

Finally, a word on reading the text itself. The apparently simple and nontechnical style of Imanishi's writing sometimes belies the subtleties of his points. This presented many challenges to translation, not only of style, but of rendering the author's intent. Those unfamiliar with Japanese writing will soon realize that an author often returns to a point from different perspectives, sometimes after quite a long digression. A very experienced translator's description of the process is apt for the present text. John Bester^[51] noted:

Nor is the Japanese feeling for the organization of an argument always the same as ours There is the tendency of Japanese logic to effect what I can only describe as a spiraling movement. This is not the same as going around in circles. The reader does not find himself back where he started – there has been progress, though not necessarily in the direction in which he appeared to be traveling at any given moment.

The river of its argument may flow at a leisurely pace, it may have its whirlpools and backwaters, but the river is still there, and the reader who lets himself be carried along on it is likely to find his outlook on the subject at hand subtly changed, whatever reservations he may have about specific conclusions or the methods by which they are reached.

Such a progression differs from the step-wise progression of argumentation with which English readers are familiar. It is, however, no less valid. It may seem more tentative, even less organized, but it should be appreciated as representing a different culture's written and spoken milieu.

The footnotes in the translated text were not in the original. They have been added to help clarify certain points and terms, but have been kept to a minimum in keeping with the spirit and style of the original.

Die deutsche Übersetzung des Buches *Seibutsu no Sekai* von Imanishi Kinji lautet *Die Welt der Lebewesen* und ist 2002 im Indicum Verlag erschienen.

⁵¹ N. Hasegawa, 1938, *The Japanese Character*. Tokyo. Trans. J. Bester, London: Ward Lock & Co., 1966: xii-xiii.