

---

# In the Name of Human Adaptation: Japanese American “Hybrid Children” and Racial Anthropology in Postwar Japan

**Jaehwan Hyun**

*Pusan National University,  
South Korea*

*By focusing on the emergence and integration of “hybrid children” (konketsuji) anthropology into the Human Adaptability section of the International Biological Program (HA-IBP) in Japan during the 1950s and 1970s, this paper presents how transnational dynamics and mechanisms played out in shaping and maintaining the racist aspects while simultaneously allowed them to be included in the HA-IBP framework. It argues that Japanese anthropologists operated a double play between their national and transnational spaces, that is, they attenuated racist aspects of their research in their international activities while authenticating race in their national work. This paper will conclude with reflections on the transnational nationalism of konketsuji anthropology.*

## 1. Introduction

In September 1965, Suda Akiyoshi (1900–1990), anthropologist at the University of Tokyo, reported a 15-year observation of physical growth in “American-Japanese hybrid children” at an international symposium on human adaptability held in Kyoto, Japan.<sup>1</sup> The term “hybrid children”

I wish to thank Ageliki Lefkadti, Amir Teicher, Edna Suárez Díaz, Elise K. Burton, Iris Clever, Jon Røyne Kyllingstad, Ricardo Roque, Soraya de Chadarevian, Thiago Pinto Barbosa, and the anonymous referees for their insightful suggestions. Thanks also to Cathleen Paethe and Ruth Kessentini for helping me consult archival materials in and outside of the MPWIG. This work was supported by a 2-Year Research Grant from Pusan National University.

1. All Korean and Japanese names in this article are listed surname first, followed by the given name. I transliterate names following the persons’ preferences as stated in their English written publications.

was an English translation of *konketsuji*, a derogatory reference used to describe the Japanese children of US soldiers stationed in Japan, particularly during the US military occupation in 1945–1952. In this report, Suda had no qualms about using racist terms such as “Negro hybrids” and “pure Japanese” to classify his research subjects. His conclusion seemed traditionally eugenicist, if not racist: “The larger teeth or the smaller jaws, is basically responsible for such a disharmony in the dental arch of the Negro hybrids” (Suda, Kondo, and Sato 1966).

Previous literature has considered Suda’s *konketsuji* anthropology as a belated, isolated eugenic enterprise occurring in a non-Western country.<sup>2</sup> For example, historians Sakano (2009) and Roebuck (2015) have speculated that Suda’s remarks were based on the “disharmony” theory devised by American eugenicist Charles Davenport (1866–1944) and refuted by American anthropologist Harry L. Shapiro (1902–1990) before World War II. In examining the prewar history of race mixing studies in Hawaii, historian Warwick Anderson points out that, in the United States, already in the 1930s race mixing was no longer considered a “compelling biological problem” (Anderson 2012, p. 104).<sup>3</sup> This story fits well in the common account of a postwar transition from scientific racism to population genetic research on human difference, which coincided with the fall of Nazi Germany (Stephan 1982; Barkan 1992). Along this line, previous scholars have overlooked the effect that internationally shared scientific inquiry might have had on Suda’s interest in *konketsuji* studies domestic, ideological concerns with pure-blood nationalism in Japan. Indeed, with the end of Allied occupation in 1952, the Japanese government tried to build a new nation-state based on the mythical idea of the Japanese nation bound by a unified bloodline (Oguma 2002). In this context, the mixed-blood (*konketsu*) of the “Negro hybrid children” was considered to pose a threat to postwar nation-building due to its potential to disintegrate the pure bloodline of Japan (*junketsu*) (Roebuck 2016). Reacting to this nationalistic response to *konketsuji*, Suda and other Japanese intellectuals turned their attention to the study of children’s race mixing (Sakano 2009; Roebuck 2015).

Recent literature exploring postwar human diversity studies has renewed race mixture studies as well as the common account. The term “population” newly suggested by postwar geneticists and anthropologists

2. In historical literature in Japanese eugenics, the postwar continuance of prewar eugenic thought and practices has been widely reported (Zenji 1983; Schaffner 2014; Yokoyama 2015).

3. Caballero and Aspinall (2018) describe that biological discussions on and interests in race-crossing seem to have stabilized and come to an end in the mid-1960s.

was in fact a new race concept, set in the same problematic framework, despite their official rejection of racism (Reardon 2005). This applies not only to the race concept itself, but also the research methods and conceptual tools used in prewar race science that were maintained in postwar human population studies (Lipphardt 2014). The role of the International Biological Program (IBP, 1964–1974), the global research initiative to collect and standardize biological data from all living organisms, in allowing the reintroduction of race concepts to science, has been newly addressed as well.<sup>4</sup> The Human Adaptability section of the IBP (HA-IBP) was the first worldwide study of human variation and thus crucial in shaping the research direction in various fields of human biology from the 1960s onwards. In their HA-IBP projects US anthropologists and geneticists focused on so-called “primitive” peoples and race concepts returned to science as a result of their research process (Radin 2018). This reintroduction was enabled by the practical and epistemic rationale of the global project: the HA-IBP leaders, who collected and summarized the heterogeneous dataset using different racial and ethnic categories from around the world, instrumentally maintained “the agnosticism towards the ontological status” of those categories (Molina 2017, p. 657). This allowed them to facilitate international collaboration instead of becoming embroiled in interminable arguments regarding the reality of race concepts.

Meanwhile, echoing with a renewed account of the postwar shift of racial thinking, the postwar history of anthropological and genetic research in Lusophone and Spanish speaking countries has challenged the narrative of the postwar decline of race mixture studies. In Brazil and Mexico, where race mixture (*mestizaje* in Spanish and *mestiçagem* in Portuguese) was central to the narration of their historical nation formation, scientists carried out race mixing studies intensively (Wade 2017; Anderson, Roque, and Santos 2019; de Souza and Santos 2014; Dent and Santos 2019).

This paper revisits the history of *konkestuji* anthropology by paying particular attention to the transnational dimension of the postwar Japanese research, engaging with the global historiography as described above.<sup>5</sup> The previous literature on *konketsuji* anthropology has overlooked its interaction, albeit equivocal, with a transnational research initiative in human variation. Suda’s seemingly outdated eugenic work was published in the context of an international workshop titled “Human Adaptability and Its Methodology” sponsored by the HA-IBP (Yoshimura and Weiner 1966). Rather than outdated, Suda’s paper was part of the cutting-edge

4. For the general account of the IBP, see Aronova et al. 2010.

5. For the use of the term “transnational,” see the introduction of this issue. See also Turchetti, Herran, and Boudia (2012) and Krige (2019).

workshop looking for the transnational enterprise's common research topics and approaches. Furthermore, his students later developed a *konketsuji* research project within the HA-IBP framework of physical growth studies and successfully integrated into the global initiative by initiating a bilateral cooperation project with US physiologists in the early 1970s. This old, Japanese scientist was not alone in committing to the race mixture studies at that time.

On the other hand, some parts of Suda's work would certainly have been considered unacceptable by "mainstream" contemporary race mixing studies since his interpretation seemed to attest to the negative effects of miscegenation. For postwar anthropologists and geneticists supporting the revised UNESCO statement on the Nature of Race and Race Differences in 1951, race mixing was officially considered biologically "at worst harmless" (Provine 1973, p. 796). In particular, in the context of the rise of the civil rights movement in the United States, leading anthropologists and geneticists in the HA-IBP took an anti-racist position claiming for the non-harmfulness of miscegenation (Radin 2018, p. 494). In other words, publicly, these scientists were anti-racists within the contemporary context of race politics but in their science they maintained their racialist beliefs in the biological existence of racial differences.<sup>6</sup> From their perspective, Suda's conclusion about the "disharmony" of hybrid children's teeth would have echoed racist claims. Given the complicated circumstances, some questions are raised: if Suda's pessimistic view of miscegenation was not shared by contemporary race mixing researchers, where did it come from? Were pure-blood nationalist and eugenic concerns about *konketsuji* in postwar Japan the only rationale driving Suda and his colleagues to maintain such a negative view? Furthermore, how did Suda and his Japanese colleagues cope with the tension created by their own and their foreign collaborators' conflicting viewpoints toward race mixing?

By focusing on the emergence and integration of *konketsuji* anthropology into the HA-IBP programs, this paper presents how transnational dynamics and mechanisms played out in shaping and maintaining the racist aspects while simultaneously allowed them to be included in the HA-IBP framework. It argues that Japanese anthropologists operated a double play between their domestic (or national) and transnational spaces—that is, they attenuated racist aspects of their research in their international activities while authenticating race in their national work.

6. I follow Staffan Müller-Wille's distinction between racialism and racism while taking the first as racial realism, not necessarily entailing racist ideas such as racial hierarchies (Müller-Wille 2014). Brattain (2007) claims, on the contrary, that scientists' racialist attitude allowed scientific racism to re-emerge in public discourse in the United States.

The Japanese scientists were eager to promote transnational collaboration in order to save national science from wartime isolationism and to move toward later being recognized as “model” members of international science. Simultaneously, they wanted to maintain their traditional understanding of human differences as it fitted with the pure-blood ideology widespread in postwar Japan. These contradictory tendencies led them to using a double-play—distinguishing linguistically, depending on the context and publication language—in their national and international writings.<sup>7</sup>

In order to discuss the above point, this paper proceeds in the following order. It first presents *konketsuji* as they were initially considered and the so-called *nisei*—Japanese immigrant children living in the Americas and Japanese colonial territories—in a growth studies context from the prewar period. It also looks into the way in which both terms became exclusively used to refer to Japanese-American children and what the impact of the change to initiating *konkestuji* research was in the postwar period. Second, it illuminates how Suda’s interaction with American racist anthropologists continued to shape his postwar research throughout the 1950s. Third, it observes the way in which his successors integrated *konketsuji* anthropology into the HA-IBP program via the double-play that manifested in the difference between their publications in different languages. A flexible use of the term “human adaptation” was one of the sources that Japanese anthropology could link to the transnational initiative while allowing Japanese researchers to maintain racist typologies and a negative view of miscegenation.

## 2. From Children for Imperial Eugenics to Children of Occupation Soldiers

In imperial Japan, race mixing was a hotbed of eugenic debate but not necessarily with negative connotations. When eugenic thoughts took a place in 1880s’ Japan, Japanese intellectuals suggested race mixing between the Japanese and white races as a way of improving Japanese physiques. Some Japanese popularizers even believed that miscegenation between “biologically similar races would be eugenically superior to both original populations,” so that after Japan colonized Korea in 1910, they actively promoted intermarriages between the Japanese and colonial Asians (Hyun 2019, p. 493). Their support of racial mixing was in harmony with the Japanese assimilation policy (*dōka seisaku*), which was more

7. It would be another version of transnational isolationism that historian Ricardo Roque suggests in his case study of the postwar enterprise of Portuguese anthropobiology. See Roque, in this issue.

officially promoted after nationwide anti-Japanese protests in colonial Korea in 1919.

It wasn't until the 1930s that eugenic concerns about race mixing were seriously raised. It corresponded with the period when colonial Korean and Taiwanese jobseekers moved in great numbers to mainland Japan and the number of colonial *konketsuji* increased significantly as a result of the Japanese Empire's decade-long assimilation policy as mentioned above. It coincided with the establishment of the Japanese Society of Racial Hygiene (*nippon minzoku eisei gakkai*) and its academic journal *Minzoku Eisei* in 1930. Although some popular eugenicists still maintained their support of the eugenic benefits of race mixing, eugenicists in the society with anthropology backgrounds decided to perform physical and intellectual tests on *konketsuji* to scientifically assess the potential threat of miscegenation to the Japanese race (Hyun 2019, pp. 493–494).

Ishihara Fusao (1883–1974) was the central figure, devoting his academic life to studying the physical growth of *konketsuji*.<sup>8</sup> Ishihara was a graduate of and former professor in the Department of Hygiene at Tokyo Imperial University Medical School. He sat on the editorial board for *Minzoku Eisei* in 1930 and set scientific research on *konketsuji* born to Japanese colonizers and colonized Asians as one of the most urgent scientific issues for his journal (Ishihara 1964). According to him, the physical and intellectual development of *konketsuji* should be monitored to gauge the influence of miscegenation on the quality of the Japanese racial stock. Ishihara was able to put it into practice when, in 1933, he was appointed Director of Tokyo Metropolitan Hygienic Institute, a governmental agency responsible for public health and hygiene practices in the metropolis. Exercising his governmental power to scrutinize Tokyo residents in the name of public hygiene, Ishihara kept records on the children born to colonial Chinese men and Japanese women living in the Tokyo area. He measured their bodies and compared the data with that taken from “pure Japanese” children. Ishihara and his colleague concluded that there was no decisive evidence of physical and intellectual degeneration for the colonial *konketsuji*. They supposed that the biggest problem might be the children's lack of patriotism in the wartime context (Ishihara and Sato 1941).

Previous literature on the history of *konketsuji* research has overlooked that Ishihara had already taken physical measurements of *nisei* living in Hawaii and California much earlier. From 1930 on, with help from

8. The Japanese surname “石原” can be pronounced in two ways: Ishiwara and Ishihara. Although Roebuck (2015) chose “Ishiwara” for his name's transliteration, here I use “Ishihara” because “Ishihara Fusao” is the name the Japanese scientist put in his article (Ishihara 1956).

Japanese immigrant physicians residing in those regions, he traveled to the United States to start measuring *nisei*'s bodies. The rationale for *nisei* research was to look for the "pure" growth traits of the Japanese race and ascertain the optimal hygiene conditions for stimulating the development of those traits. Ishihara found, for instance, that Hawaiian and Californian *nisei* had shorter sitting heights, but that their bodies were seemingly as well-shaped as those of "Caucasian white" children. He speculated that it was the floor-based culture, imported from ancient China that had stunted the development of the Japanese "pure" body shape, which had originally resembled that of the "white" race (Ishihara 1933).

The physical growth studies of *nisei* and *konkestuji* were inseparable for Ishihara because both were vital to obtaining an understanding of the "pure" quality of the Japanese stock and its eugenic future. Contemporary *konketsuji* researchers shared the same faith but for different reasons. Taniguchi Toratoshi (1902–1963), anthropological expert of "mixed-bloodness" at the time, conducted anthropometric research on Japanese settler's children simultaneously with *konketsuji* due to concerns about the influence of the harsh colonial territory environments on the growth of the children of Japanese settlers (Taniguchi 1942).

The defeat of Japan in the Pacific War in August 1945 and the subsequent collapse of the Japanese Empire rearticulated the social and scientific understanding of these children. This was also evident for *konketsuji*. Hundreds of thousands of American servicemen married young local women and their babies were celebrated as "the Occupation present," the embodiment of the love and friendship between Japan and the United States during the occupation period (Koshiro 1999, p. 159). Unfortunately, but expectedly, thousands of these "occupation babies" were abandoned by their American fathers on leaving Japan when US occupation ended in 1952. Their mothers were socially despised having served as "prostitutes" for American troops and sometimes labeled national traitors threatening the Japanese pure bloodline, resulting in them frequently leaving their children behind in an attempt to hide their past love affairs. Such hatred, in particular directed at black *konketsuji* and their mothers, was an outcome of the nationalistic reaction of the "foreign" occupation and anti-black racial attitudes widespread among the Japanese public at the time (Roebuck 2016).

The abandonment of *konketsuji* became a significant social concern in the early post-occupation period. A year after the end of occupation, the Japanese government announced a nationwide survey to assess the magnitude of the problem. Its primary aim was to figure out the quantitative number of abandoned hybrid children, identify possible social problems, and seek resolutions—either overseas adoption or segregated education

with a presumption that the children were foreigners as they did not have pure Japanese blood. The national survey committee defined *konketsuji* as “the children born to foreign military personnel and Japanese women from the end of the Pacific War onward.” Colonial *konketsuji*, Japanese children born to a Korean or Chinese parent and a Japanese parent were excluded because they were considered phenotypically identical to “pure” Japanese (Simoji-Lawrence 2018, pp. 82–3). *Nisei* underwent a similar but less radical transformation. Japanese settler children were redefined as repatriates, because the colonies in which they had settled no longer existed. In the US military occupation context, among the children of Japanese immigrants in North and South America, *nisei* became the descriptor of those residing in the United States.<sup>9</sup>

Ishihara continued his *konketsuji* and *nisei* research in the transition period. He became a principal investigator for the government-funded project, “Anthropometric Influences of Emigration and Blood Mixture on Japanese Race,” initiated as part of the governmental response to the “*konketsuji* problem” in 1952.<sup>10</sup> In this project, Ishihara confined his *konketsuji* research subject to the children born to American soldiers and Japanese women and his work on *nisei* to American-born Japanese children (Jinmonken 1954). Although the research subject became confined to Japanese American children, it was exactly the same kind of research that he had done before the war and its objective was to contribute to the “racial improvement” (*minzoku kaizen*) of the Japanese stock. His team therefore investigated “the change of Japanese physiques as a result of race mixing” and “the improved physical fitness of the American-born immigrant children by immigration (environment)” (Jinmonken 1954). His conclusion was no different to the one drawn from his prewar *nisei* research: the shorter leg length and longer sitting height of the native Japanese compared to the American-born Japanese, was a result of the first group’s sedentary habit of daily life. For the occupation babies, their age was at most around eight years old so that he inconclusively speculated that there

9. For the role of American *nisei* as cultural liaisons between American military officials in occupied Japan, see Nakamura (2008). It is also worth noting that the Japanese government had officially promoted their citizens’ migration to South America from the late nineteenth century on, but the Japanese interest in *nisei* in Brazil or other South American countries was comparatively much lower than interest in *nisei* in the United States before the late 1980s.

10. The starting point of this project is debatable. According to Ishihara’s introduction of the project in the popular science journal *Iden* (*Heredity*), it began in 1952 (Ishihara 1953). Yet the project’s explanation in the official report stated that it had already started in 1948 (Jinmonken 1954). A possible explanation for this is that Ishihara had privately conducted research on *konketsuji* from 1948 and then began officially funded research from 1952 onward.



would be some possible “disharmony” in physical development, particularly among “Negro” *konketsuji*, as American eugenicist Davenport had suggested (Jinmonken 1954).

In this respect, Ishihara’s postwar *konketusji* research was indeed an outdated eugenic project as identified by previous scholars. This, however, does not apply to Suda’s work. Despite superficial similarities, Suda’s anthropometric research on *konketsuji* had quite different origins. His work was shaped by transnational exchange with American racial anthropologists in the post-occupation period.

### 3. The *Konketsuji* Orphanage and American Anthropologists

Suda and his anthropologist colleagues at the University of Tokyo became involved with *konketsuji* in 1949 when Ishihara asked for his assistance with anthropometric research, but their own project took place in 1951 (Suda and Hoshi 1970; Suda et al. 1965). Ishihara had already begun collaborating with Sawada Miki (1901–1980), a social activist and the founder of a *konketsuji* orphanage, the Elizabeth Saunders Home in Oiso, Kanazawa, in 1948. As a response to the “mixed children problem,” social activists established orphanages exclusively for housing *konketsuji* abandoned by their American fathers. Sawada’s home was one of the earliest and biggest orphan asylums for abandoned mixed-blood children. With Sawada’s endorsement, Ishihara brought Suda and Tokyo anthropologists to the orphanage; Suda also obtained Sawada’s permission to conduct long-term anthropometric research on the orphans (Suda 1952). Retrospectively, for Suda, the biggest advantage of this study was that the environment for the child subjects was strictly controlled: “the children living under exactly the same living conditions” and having “the same meals, the same facilities of various kinds” (Suda 1968, p. 92). The orphanage was the best place to observe how race-crossing impacted growth without having to deal with concerns about environmental influences.

It was while Suda was developing his research framework for studying *konketusji* that Reginald Ruggles Gates (1882–1962) visited the home for research purposes. Although trained in botany, the Canadian-born eugenicist and former professor of biology at King’s College London had been studying race mixing since the late 1920s. Owing to his convictions that race mixing was a eugenic threat and that anti-racist propagandists were distorting and polluting academic science, Gates was quickly ostracized from mainstream genetics and the anthropology community in the post-war period. In spite of such academic isolation, the retired professor was named a fellow at the Department of Anthropology, Harvard University, and the Peabody Museum of Natural History, at the urging of his colleague Earnest Hooton (1887–1954) (Schaffer 2007). His Cambridge

profile appealed to Japanese scholars eager for a partnership with the American scientific community in the context of the postwar “reconstruction” of Japanese science. During wartime, Japanese academia was isolated from the international scientific community, in particular from Anglophone scholars, and this continued until the late 1940s. For that reason, Japanese scientists strived to reconnect themselves to the international community by increasing scientific exchange in diverse forms, for instance, dispatching young Japanese scholars to the US research institutions and inviting prominent American researchers to Japan throughout the 1950s (Iida 2010). Both the Japanese government and US private foundations, including the Rockefeller Foundation, actively supported such exchange. Gates’ visit to Japan was understood in this context and thus warmly welcomed by Japanese scientists. They respected him as an “honorable American anthropologist” committed to the study of race mixing while working at prestigious universities in London, England and Cambridge, Massachusetts.<sup>11</sup>

Gates’ two-month visit to Japan in the spring of 1954 consisted of a series of university lectures on race crossing, interviews with newspapers, and his study of *konketsuji* and the Ainu people, an indigenous ethnic group, in appearance resembling Europeans more closely than the Japanese. Senior geneticists at the National Institute of Genetics, Mishima, arranged his itinerary.<sup>12</sup> They ensured Gates’ access to the Elizabeth Sanders Home and secured the assistance of Ishihara’s team.<sup>13</sup>

Suda helped Gates to study his *konketsuji* research subject at the orphanage during his Japanese trip (Gates 1958, p. 129). He also invited Gates to deliver a lecture on color inheritance at his institution.<sup>14</sup> In 1933, Suda had written a textbook on race classification relying heavily on Gate’s pre-war research. The textbook surveyed the worldwide research on skin, eye, and hair color and hair texture as “racial characteristics” (*Rassenmerkmal*) and race classification based on the data (Matsumura and Suda 1933,

11. Letter from Oshima Kanshiro to R. Ruggles Gates, May 17, 1954, Reginald Ruggles Gates MSS, Liddell Hart Archive, King’s College London (hereafter RRG), Box 7, Folder 22-2, Part 6. Young Japanese geneticists would have been skeptical of Gates’ theory of race mixing and his theories of human genetics (in fact, eugenics). But not all Japanese biologists challenged Gates’ lecture and theory, so this encouraged Gates to think of himself as an important international figure. For Gates’ thought on his fame in Japan, see his diary “Japan 1954”, RRG, Box 2, Folder 5, Part 1.

12. Letter from Shinotou Yoshito to R. Ruggles Gates, Feb 23, 1954, RRG, Box 7, Folder 22-2.

13. Letter from Komai Taku to R. Ruggles Gates, Jan 30, 1954, RRG, Box 7, Folder 22-2, Part 1.

14. “Dr. R. R. Gates’ Schedule at Tokyo (March 15-22, 1954)”, RRG, Box 7, Folder 22-2, Part 1.

p. 3). In the book, Gates's work was intensively cited when discussing the effect of race-crossing in the change of racial characteristics (Matsumura and Suda 1933, pp. 67–71). The postwar interaction with Gates would have reinforced Suda's prewar perspective of race and race mixing studies as still academically valid.

It was Carleton S. Coon (1904–1981) who provided Suda's team with a theoretical backup for their postwar race-mixing research. Hooton's student and professor of anthropology at the University of Pennsylvania, Coon sought to reconcile racial typologies with postwar physical anthropology based on modern evolutionary synthesis (Goodman and Hammonds 2000). His book *Races: A Study in the Problem of Race Formation in Man* (1950), co-written with Stanley M. Garn (1922–2007) and Joseph Birdsell (1908–1994), was the first attempt to explain racial classification in terms of evolutionary theory, and particularly human adaptation. Garn, a supporter of new physical anthropology based on the evolutionary synthesis and a genetic approach, moderated Coon's racial tendency and resistance to population genetics (Collopy 2015, p. 244). Coon and his colleagues introduced thirty races as "the tentative list," just as he had described in the prewar period. The difference from the prewar work was that they explained the process of race formation in terms of the interaction between heredity and environment. Adaptation was the best rationale for explaining the past and future of racial differentiation (Goodman and Hammonds 2000, p. 31). It was positively received as a turning point in physical anthropology showing the acceptance of genetic thought and an evolutionary approach at least in the 1950s (Collopy 2015, pp. 241–242).

Coon visited Japan in October 1956, as part of his world trip supported by the US Air Force and *LIFE Magazine*. The Anthropological Society of Japan invited him to deliver a lecture at the University of Tokyo and later Coon accompanied Japanese anthropologists on his research visit to the Ainu villages in Hokkaido where Suda was one of his travel companions (Coon 1958, p. 30). Unfortunately, there is no documentation of Suda's interaction with Coon; yet Suda must have considered Coon's *Races* a crucial academic contribution, because he went on to translate it a year later and used it as a replacement for his own prewar textbook on racial anthropology (Suda and Kohara 1957). It soon became a new canon for postwar Japanese anthropologists studying physical traits as racial characteristics.<sup>15</sup> Owing to Coon's *Races*, they could feel at ease continuing their prewar racial research while still using genetic terms like genetic frequencies,

15. Even in the mid-1990s, physical anthropologist Yamaguchi Bin, who had been trained at the University of Tokyo, placed Coon's *Races* as an epoch-making text in the history of race research (Yamaguchi 1997).

isolated pools, and adaptation.<sup>16</sup> Even *The Origin of Races*, which resulted in Coon being ostracized from mainstream American anthropology after its publication in 1962, was received by the Japanese anthropology community without debate (Terada 1977). Gates and Coon's work would become the backbone of *konketsuji* anthropology, as we will see in the next section.

#### 4. Race Classification for Studying Human Adaptability

While interacting with American racial anthropologists, Suda's team diligently continued their *konketsuji* research. From 1951 onwards, they visited the orphanage twice a year to measure the children's growth. The biannual examination included "anthropometric measures on 52 items, somatoscopic observations on eye, skin, hair, and other traits, dentitional observations, photography, radiography, and other sorts of physical examinations" (Suda et al. 1965, p. 22). Rudolf Martin's (1864–1925) anthropometric method was extensively used for the measurements, but new methods were also adopted, such as X-raying and the Greulich-Pyle atlas for bone age (Suda and Hoshi 1970, pp. 149, 157–8). The number of research subjects varied since as time went on many of the orphans were adopted. The initial survey, during the 1950s, was carried out with around 150 children but by the mid-1960s the number had decreased to fifty-nine (Suda 1968, p. 89; Suda, Kondo, and Sato 1966, p. 27). They also collected the data of American White and "pure" Japanese children and *nisei* residing in San Francisco for the comparison of growth rates (Suda, Kondo, and Sato 1966, p. 258–59). Finally, they adopted racial classification—pure (native) Japanese and Negro and White hybrids—endorsed by their American racial anthropologist colleagues (Suda et al. 1965, pp. 22–3; Suda 1968, p. 90; Suda, Kondo, and Sato 1966, p. 257).

Coon's *Races* was the backbone of their understanding of race. Suda's team defined race as "a genetically isolated population having different genetic characteristics from other populations" (Suda and Hoshi 1970, p. 122). For them, genetic characteristics were equal to "racial characteristics," and the miscegenation of two different races could form a new race possessing the physical traits of both parent races. As Coon and colleagues described in *Races*, they also claimed that all human races were hybrid and that there was no "pure" race in the world, in contrast to Suda's old racial anthropology textbook explaining races (*jinsbu*) as distinct species (Suda and Hoshi 1970, p. 122). Their reservations about genetic markers being superior to anthropometric ones for racial classification were also in line with Coon's position (Suda and Hoshi 1970, p. 122–3). Irrespective of

16. For the case of blood-group genetics in Japan, see Hyun (2019).

recognizing the difficulty of identifying appropriate markers as the standard for race classification, Suda and his student assigned the “major races” (*dai-jinshu*)—Caucasoid, Mongoloid, Negroid, and Primitive People like Negrito—as taken for granted. Using the classification of “major races,” they put Japanese into a category of “yellow race”: the contemporary Japanese population had been formed as a result of intermarriage between neighboring ethnic groups that belonged to the Mongoloid group. As a result, modern Japanese did not have the racial characteristics of Caucasoid or Negroid, even though they were “mixed-blood” (Suda and Hoshi 1970, p. 124). For this reason, they construed *konketsuji* as the first genuine mixed-race in contemporary Japan, comparable with Mestizo and Mulatto, which had been forming in Latin America and Africa since the fifteenth century (Suda and Hoshi 1970, p. 124–5).

In terms of their connection to Coon’s work, it would be also worth noting that their identification of the racial origin of the children was very problematic. Paternal lineages were hard to trace as the children had mostly been abandoned by their parents. Suda’s team relied on the Japanese mothers’ accounts of the paternal race if available, and in the worst case, they resorted to identifying the fathers’ racial origin by inferring it from the children’s skin and hair color and hair texture, eye color, and other “racial characteristics” (Suda and Hoshi 1970, p. 127). In this respect, their racial identification and classifications were inherently circular.

Since their project proceeded under the Coonian vision, they saw their work as concerned with human adaptation and thus it would be a definitive study in “the field of human adaptability” (Suda, Kondo, and Sato 1966, p. 257). Therefore, Suda and his colleagues proudly submitted their longitudinal observation research conducted at the *konketsuji* orphanage to the “Human Adaptability and Its Methodology” workshop scheduled for Kyoto in September 1965. The workshop was intended to assist Japanese HA-IBP participants to articulate methodological and topical issues in human adaptation research and help the Japanese national HA-IBP committee to identify possible regional research projects through a lively discussion with internationally renowned anthropologists and physiologists, such as British environmental physiologist and HA-IBP Convener Joseph Sidney Weiner (1915–1982) and the US HA-IBP’s leading anthropologist Paul Thornell Baker (1927–2007). Indeed, physiological adaptation-centered projects in the Japanese HA-IBP program, were established a year later, mostly based on the outcomes of the 1965 workshop (Yoshimura 1975). This international event and subsequent scientific collaboration with “scientifically advanced” countries through the IBP framework were crucial in order to restore Japanese scientists’ confidence in their own scientific capabilities, confidence which had been lost for a while as a result of

wartime isolation. Presenting their research as internationally recognized, they could have a restored self-conviction that they were recognized as being “at the same world-class level (*sekai no ichiryu*) with the US, USSR, and the UK” (Tamiya 1974, p. 12). Suda’s group also craved international recognition for their work in this sense.

International reception turned out to go against their expectations, however. Not one person commented on the *konketsuji* paper (Yoshimura and Weiner 1966, p. iii–v). This silence would force them to reassess the problematic nature of their research agenda. It was urgent for Suda’s team to address the chilly reception from the “international scene” in order to assure that their *konketsuji* project join the national HA-IBP programs. Immediately after the workshop they changed their tone and refashioned their *konketsuji* research. In the English report published in 1970, having removed proclamations about disharmony in the dental arch of Negro hybrids, Suda’s faithful student Hoshi Hiroshi (1928–2008) focused in more depth on discussing the effects of genetic and environmental influences upon growth (Hoshi 1970). In the same year, Suda and Hoshi paid more attention to discussing the implications of their research in relation to hybrid vigor in the national HA-IBP interim report, which was also passed to the HA-IBP headquarters (Suda and Hoshi 1970). Though they had not yet begun to diversify their publications with respect to the language they were being published in, this marked the first moment that *konketsuji* researchers began to recognize the necessity to downplay the negative connotations of miscegenation in their reports for the international community.

Meanwhile, the transnational initiative did not abandon the race concept. At the 1965 Kyoto workshop, while commenting on the papers, Weiner never problematized the use of racial categories in itself. In fact, instead of establishing well-defined standards for classifying human populations, the HA-IBP headquarter implicitly allowed local scientists to use various groupings such as ethnicity, race, nationality, and regionality (Molina 2017). Physiologists working in the field of growth studies went even further. For instance, James Mourilyan Tanner (1920–2010) and his student Phyllis B. Eveleth at the Institute of Child Health, London, which assumed the editorship of the HA-IBP growth studies summary edition, reintroduced three “geographic” races—European, African, and Asiatic—into their volume in order to sort out results from hundreds of national HA-IBP reports, adopting messy and heterogenous grouping categories (Eveleth and Tanner 1976, pp. 2–3). Robert M. Malina (born in 1937), growth studies scholar at the University of Texas, Austin, was seriously worried about the possible “misrecognition” of their field’s collective achievement as an outdated “typological racial anthropology” (Malina 1978). But the editors of the summary volume believed in the necessity

of “the rather arbitrary classification of race” to study the role of human adaptation in child growth from a global perspective:

Selective pressures led to different physiques and different growth patterns. Present-day populations will reflect the genetic differences underlying these differing phenotypes, unless, indeed, the phenotypic differences are all due to the immediate effect of the environment on the growth ... [Racial] comparative research is necessary because today we have descendants of Africans growing up in the temperate climate of Northern America and sharing the same nutritional habits and style of life as their European-descended neighbours. (Eveleth and Tanner 1976, pp. 3–4)

Adaptability was an urgent question because today’s human populations inhabited regions to which they had not yet adapted. For example, Africans who had lived in tropical climates have had to adapt to the “temperate climate of Northern America” and adopt the “European” diet and lifestyle (Eveleth and Tanner 1976, p. 4). Concerning the matter of food assistance to developing countries, the question about whether hereditary or environmental factors were more influential in variations in child growth became important, despite the fact that it sounded very outdated to population genetics colleagues (Spencer 1997, pp. 268–70; Tanner 1981, pp. 249–50). HA-IBP scientists believed that comparative racial research in child growth would answer these questions (Eveleth and Tanner 1976, p. 2).<sup>17</sup> Emphasizing the contemporary situation of human populations living in a different environment to the one their ancestors had adapted to, they paved the way for Japanese anthropologists to use adaptation idioms in explaining contemporary issues—like *konketsuji* in Japan. The HA-IBP growth studies’ instrumentalism of typological racial concepts and adaptation idioms would allow Japanese anthropologists to continue promoting racial anthropology domestically.

##### 5. A Double-Play between the Transnational and National

When Suda retired, Kondo Shiro (1918–2003), who co-wrote the *konketsuji* report with him in the 1965 Kyoto workshop, assumed leadership of *konketsuji* anthropology in the HA-IBP era (JIBP 1967).<sup>18</sup> Once Suda’s

17. It would be worth noting that looking at the “genetics” of child growth includes non-adaptive (or complex) traits not following Mendelian law. For this reason, contemporary geneticists did not consider it a proper subject for studying heredity.

18. Suda retired from the University of Tokyo in 1960 but worked as a full-time instructor at Keio-Gijuku University until 1969. Also, Suda took a lead on anthropological research on the fitness of the Ainu people within the national HA-IBP committee (JIBP 1969).

young colleague, but never his protégé, at the University of Tokyo and later a professor of anthropology at the Primate Research Institute at Kyoto University, he led the growth studies team on the national HA-IBP committee from 1968 onward (JIBP 1969). Kondo tried to align the *konketsuji* anthropology with the transnational human variation project by relocating its aims to fit the HA-IBP growth studies' agenda. In the course, he promoted a new bilateral initiative for *nisei* as a companion project to the *konketsuji* research.

As stated in the previous section, HA-IBP growth studies encouraged racial comparisons with the purpose of figuring out “the relative contributions of environment and heredity” to child growth. At the same time the US-Japan Committee on Scientific Cooperation and bilateral projects began to be supported by the US National Science Foundation (Nakayama 2006). Japanese HA-IBP scientists endeavored to obtain bilateral support and comparative research on child growth consistent with the funding scheme. With Yoshimura Hisato (1907–1990), the physiologist who had convened the national HA-IBP, Kondo established cooperative comparative research on physiology and growth in *nisei*, native Japanese, and Caucasians. Steven M. Hovarth (1938–1992), director of the Institute of Environmental Stress, UC Santa Barbara, and one of the international participants in the 1965 Kyoto workshop, accepted to serve as their US counterpart (JIBP 1970). The project went on for two years from 1971. Kondo and his growth studies team were dispatched to California and performed anthropometric measurements on *nisei* relying on *The IBP Handbook No. 9* (Weiner and Laurie 1969). For the “native” Japanese data, they carried out a similar anthropometric survey of Japanese children living in Nagoya. They included the *konketsuji* data as a reference (Kondo and Eto 1975, p. 21). Due to its international nature, the official language of their project was English.

By partnering with the new *nisei* project, the *konketsuji* anthropology turned to anthropometric data to answer questions concerning the impact of heredity and environment on children's growth. Kondo's team first construed that the *konketsuji* data showed puberty as a tipping point at which genetic factors came to outweigh environmental ones. *Konketsuji* born to Caucasian fathers showed a growth curve similar to that of prepubescent Japanese children and of Caucasian children in California after puberty. The *nisei* showed the opposite. Immigrant children in California followed the growth curve of the Caucasian children by puberty but became similar to Japanese thereafter. Their second discovery was of differences within hereditary factors. According to their data, among *konketsuji* “Mongolian traits” were more pronounced than “Caucasoid or Negroid traits.” They avoided confirming them as “racial” traits because it could have been



interpreted that maternal lines had a stronger hereditary influence than paternal ones (Kondo and Eto 1975, pp. 20–24).

While reconciling *konketsuji* anthropology with global growth studies by synthesizing *konketsuji* and *nisei* studies, Kondo's group used different terminologies, speculations, and arguments in the English and Japanese summaries of their research. When the team submitted the results in their official English summary report for the HA-IBP, they offered a dry description of the implications of their comparative research. Following the instrumentalism of race categories in the global HA-IBP studies, Kondo's team did not explain or examine their use of racial classification, nor did they define what race was. Furthermore, they attenuated the racist characteristics of early *konketsuji* anthropology by replacing derogatory terms with less offensive ones: "Negro hybrids" was replaced with "Japanese American hybrids," "pure Japanese" with "the Japanese," and "racial characteristics" with "ethnic or genetic characteristics" (Yoshimura 1975, pp. 165–7). When it was sent to the global collection of the HA-IBP growth studies, edited by Tanner and Eveleth, "the Japanese" was replaced again with the "Japanese sedante" (Eveleth and Tanner 1976).

It was Harry L. Shapiro, Davenport's rival in prewar studies of race mixing, who coined the term "sedante." By using this neologism, Shapiro hoped to avoid the connotation of the term "native" with the idea of racial purity in his Japanese and Chinese immigrant research in Hawaii (Teslow 2012, pp. 206–16). Shapiro wrote a UNESCO booklet, *Race Mixture*, that supported "racial mosaics" as an integral part of human history (Spencer 1996). It is impossible to confirm whether it was British editors who replaced the Japanese anthropologists' wording of "native Japanese" with "sedante" or whether the Japanese anthropologists themselves reported their data with this terminology already in place. If it was indeed the latter, one could say that Japanese anthropologists finally brought "political correctness" to miscegenation studies in postwar anthropology.

Their Japanese texts were a stark contrast to the English reports. Co-opting the adaptation-based account of racial differences in the HA-IBP growth studies, they corroborated the racial typological approach reflecting a more negative tone to miscegenation. Two years after the publication of the official summary report, the Japanese national HA-IBP committee published "Japanese Life and Human Adaptability Series" to introduce the outcome of the national HA-IBP activities to a wider domestic audience. Kondo edited its first volume, titled *The Origin and Evolution of the Japanese (nibonjin no kigen to shinka)*. In it, Kondo explained in detail why, in their comparative research, the HA-IBP growth studies had categorized three geographical races.

Just as Suda had done, Kondo's description of race formation relied on Coon's *Races* (Kondo 1977, p. 205). According to him, each race had a

distinct set of “physical characteristics as a result of adaptation” to its environment (Kondo 1977, p. 128). “African, European, Asiatic” races were formed in the interaction between genetics and environment (Kondo 1977, pp. 129–30). Kondo also explained the rationale of *konketsuji* and *nisei* research in terms of adaptation. For instance, the *nisei* research was a perfect window into understanding how child growth in the “Japanese race,” viewed by Coon and Garn as a local race, became varied in an environment that they had not adapted to. The *konketsuji* research was the supplementary data for the *nisei* studies. *Konketsuji*, the “non-Japanese race,” shared the environment with “the pure Japanese” as both groups resided in Japan. Thus, the data shows the role racial differences play in child growth under a controlled environment. (Kondo 1977, pp. 165–74).

Hoshi Hiroshi went even further in terms of racial anthropology. If Kondo’s work was entirely Coonian, Hoshi’s was closer to the Gatesian approach. It should be pointed out that Hoshi was impressed by Gates’ work on *konketsuji* research and asked the race-crossing authority to advise his own research in 1958.<sup>19</sup> In 1977, he wrote a chapter of “Race Mixing and Race” (*konketsu to jinshu*) in an edited volume titled *Race (jinshu)*. The book was one volume of *Contemporary Anthropology Lecture Series* edited by the Japanese Association of Anthropology in order to disseminate state-of-the-art anthropological knowledge to general readers and students. Following Coon, Hoshi also acknowledged that a race-crossing of humanity had always happened while presuming that three major races had a distinct complex of genetic and physical traits as a result of adaptation to their given environment. At the same time, echoing more with Gates, he explicitly speculated on the potentially disastrous results of race mixing and appealed the need to study its biological dimension.

The notion of adaptation was central to his argument on the necessity of race mixing research. Hoshi first claimed that it remained unanswered whether race-crossing between major races was “intraspecies hybridization” (within a single species) or “interspecies hybridization” (genetic mixing between species) (Hoshi 1977, p. 187). He supposed that, although all human races are *Homo Sapiens*, the biological distance between major races could be almost as great as between species, as the divergence of these populations had occurred half a million years ago in the adaptive processes to given environments. Further, he questioned the hybrid vigor thesis by claiming its environment-dependent nature. Hemoglobin S (HbS), sickle-cell hemoglobin heterozygotes, is a well-known case for heterosis or a heterozygote advantage due to its malaria resistance. Hoshi reinterpreted the

19. Letter from Hiroshi Hoshi to R. Ruggles Gates, 28 April 1959., RRG, Box 7, Folder 27-2.

case by highlighting that individuals possessing HbS were only truly at an advantage in an environment where there were frequent malaria outbreaks and that they were rather at a disadvantage in all other regions, due to the risk of sickle-cell anemia (Hoshi 1977, pp. 189–90).<sup>20</sup>

Lastly, Hoshi co-opted Dobzhansky's concept of coadaptation to claim a potentially disastrous effect of race-crossing on the descendants. Studying the geographical distributions of chromosomal inversions in *drosophila pseudoobscura*, Dobzhansky found that inversion heterozygotes were superior to homozygotes in fitness, and that it was a result of the chromosomes with different gene arrangements that are co-adapted as the gene complexes under the influence of natural selection. Later, he also discovered that the superiority of inversion heterozygotes became lost in hybrid *drosophila* populations of different geographic origins (Wallace 1994). Following the observation, Dobzhansky and Pavlovsky (1958) suggested that interracial hybridization caused a sort of break-down of co-adapted complexes of polygenes. Borrowing the results of interracial hybridization experiments on *drosophila* races, Hoshi speculated that miscegenation could bring about the break-down of the co-adapted polygenetic complexes of physical traits of paternal races, which major races had obtained in the adaptative processes to different localities. At that point, he brought in Davenport's disharmony theory and his observation on the high frequency of irregular teeth in the children of hybridized Americans as cases of coadaptation break-down by interracial hybridization in human species (Hoshi 1977, pp. 191–2). Despite his understanding of the possible biological harms of race-crossing, Hoshi did not oppose miscegenation explicitly. He thought that it was almost impossible to decide on which physical traits were disadvantageous today, since human species lived in an artificially made environment away and protected from the wild. He thus suggested that the fitness of new, mixed races should be examined in terms of their adaptability to the complex of environment (for example, climates) and culture in a given locality (Hoshi 1977, pp. 193–6).

The instrumental racial categories in the HA-IBP growth studies offered a basis for *konketsuji* anthropologists to maintain their traditional perspective of race mixture in their domestic publications. Both Kondo and Hoshi took the race classification of the HA-IBP growth studies summary volume as a starting point to explain their research and their idea of race. Their explanation about race concepts and race mixing was

20. Although Hoshi discussed the HbS case at the gene level, his argument seemed to have in mind Gate's criticism of UNESCO's 1951 statement on race using a case of the higher incidence of sickle-cell anemia among "American Negroes" with white ancestry than among "pure Negroes" (Gates 1952).

dogmatized within the domestic physical anthropology community and not refuted by their domestic cultural anthropologist colleagues. Indeed, Baba Yuko (born in 1941), cultural anthropologist who graduated from the same university with the above-mentioned anthropologists, wrote a chapter “Racism and Racial Prejudices” (*jinsbushui to jinsbutekihenken*) in the same volume with Hoshi’s one. Baba defined race as a social construct and considered racial anthropology a pseudo-science that had only existed in the prewar period. Most of all, she harshly criticized the biological determinism of authors, including Reginald Ruggles Gates, in *Mankind Quarterly*, the postwar keeper of scientific racism (Baba 1977). Despite her explicit criticism of Gates’ racist argument from a sociological point of view, the cultural anthropologist did not point out the similarity of Hoshi’s research with racial anthropology. Probably Japan’s strict academic hierarchy, which did not allow young scholars to challenge senior researchers, would have prevented her from criticizing Hoshi’s research to his face. At the same time, his participation in the HA-IBP might also have played a role in her silence. The cultural anthropologist highlighted that, in general, the international scientific community had overcome the old racial typology despite some exceptions like Gates (Baba 1977). The HA-IBP was the transnational enterprise carried out by the very same international community, so she would not have dared to challenge Hoshi’s work even though it seemed to hold suspicious views of miscegenation. In this respect, the transnational initiative gave racial anthropologists the authority to justify their racial anthropology in the domestic scene.

## 6. Conclusion

In this paper, I have tried to illuminate the way in which *konketsuji* anthropology emerged and was developed in the course of a transnational exchange from the early postwar period to the mid-1970s. Instead of repeating prewar eugenic research on race mixing without modification, anthropologists at the University of Tokyo formed their research by mixing with Coon’s race concept and Gates’ presupposition of miscegenation. Their research program implicating the possible biological harms of miscegenation fitted well into the postwar nationalist narrative but soon turned out to be unacceptable by the standards of the international community. Hoping to become a member of international science while maintaining their racial anthropology program, Japanese researchers began to devise a strategy to diversify reporting ways of research outcomes according to the language in which they were to be published. By downplaying the racist aspects of their work in the transnational space but allowing them to remain in the national space, they were able to pursue two seemingly contradictory goals: simultaneously being nationalistic and transnational.

The transnational nationalism of *konketsuji* anthropology is worth further examination, given the previous literature in physical anthropology and nationalism in postwar Japan. As this paper has illuminated, transnational exchange was crucial in shaping and maintaining their research program. The early postwar exchange with Gates and Coon offered them a “scientific” basis for discussions on the mixture of Japanese and other races and its potentially negative biological implications. The HA-IBP growth studies’ instrumentalism of typological race concepts and adaptation idioms allowed them to bolster their authority to speak about the nature of race and race mixing in the domestic scene. They were able to re-narrate their old racial typology-oriented explanations in terms of adaptation due to the transnational initiative. Examining the historical trajectories of two different anthropology schools in Japan, historian Arnaud Nanta has remarked that postwar physical anthropology served Japanese nationalism by constructing the Japanese as a biologically homogeneous race, a belief that continued to be held until the 1980s (Nanta 2008). This case study presents that such nationalist anthropology was a result not only of the domestic, internal conflict and confluence but also of circulations of people and knowledge across national borders.

The Japanese view of race mixing is also noteworthy for the growing body of research on postwar race mixing studies. Though this type of research continued in the postwar period and even flourished in Latin America, postwar researchers essentially positioned their science within an anti-racist position committed to finding scientific evidence against the anti-miscegenation sentiment (Dent and Santos 2019). The *konketsuji* researchers were different. They felt pity for their research subjects but did not defend the children from contemporary racist criticism. Those children should be pitied because they would not survive within Japanese society; they were not pure Japanese and were thus unable to adapt to the unique, Japanese culture. Going to the United States would not be an answer for them either since they were not pure Americans either. Japanese anthropologists’ early findings indicated that biology would make their situation worse, considering discrepancies in the children’s teeth as a bad signal of eugenic disharmony.<sup>21</sup> The Japanese anthropologists’ negative perspective towards miscegenation in both terms of culture and biology did not share the “anti-racist moral economy of midcentury human sciences” that Latin American race mixing studies pursued (Dent and Santos 2019, pp. 147–49). It instead strengthened domestic racism. Such difference was closely linked with the different role of race mixing in their post-colonial nation-

21. For details about Japanese anthropologists’ negative view of *konketsuji* and its resonances with domestic racism, see Roebuck (2015).

building: in Latin America, the idea race mixing was supportive of post-colonial conciliatory nationalistic projects, whereas in Japan, it was the threat to the postcolonial national integration based on racial purity.

Finally, this historical episode suggests decentralizing the, thus far, population genetics-centered history of race science in the postwar period. Japanese race mixing research fell into the category of human growth studies, not population genetics. The interdisciplinary field in human development was a postwar haven for physiologists and anthropologists who studied human populations using traditional anthropometry. As this paper has illuminated, they believed that comparative research between races was necessary to understand human adaptability in growth and development (Tanner 1981). Historian Vanessa Heggie correctly points out that the previous scholarship on the postwar race science has focused exclusively on population genetics and as a result has neglected the role of physiology and other disciplines in the formation of the concept of race after 1945 (Heggie 2019). Human growth studies is one of the very fields that has been relatively overlooked by historians of biology and still awaits further exploration.

## References

- Anderson, W. 2012. "Racial Hybridity, Physical Anthropology, and Human Biology in the Colonial Laboratories of the United States." *Current Anthropology* 53: 95–107. <https://doi.org/10.1086/662330>
- Anderson, W., R. Roque, and R. V. Santos 2019. *Luso-Tropicalism and Its Discontents: The Making and Unmaking of Racial Exceptionalism*. Oxford: Berghahn.
- Aronova, E., K. S. Baker, and N. Oreskes. 2010. "Big Science and Big Data in Biology: From the International Geophysical Year through the International Biological Program to the Long Term Ecological Research (LTER) Network, 1957—Present." *Historical Studies of the Natural Sciences* 40: 183–224. <https://doi.org/10.1525/hsns.2010.40.2.183>
- Baba, Y. 1977. "Racism and Racial Prejudices." In *Race: Contemporary Anthropology Lecture Series, Vol. 7*. Edited by K. Terada. Tokyo: Oyama-kaku (in Japanese).
- Barkan, E. 1992. *The Retreat of Scientific Racism: Changing Concepts of Race in Britain and the United States between the World Wars*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511558351>
- Brattain, M. 2007. "Race, Racism, and Antiracism: UNESCO and the Politics of Presenting Science to the Postwar Public." *The American Historical Review* 112: 1386–1413. <https://doi.org/10.1086/ahr.112.5.1386>
- Caballero, C., and P. J. Aspinall. 2018. *Mixed Race Britain in The Twentieth Century*. London: Palgrave. <https://doi.org/10.1057/978-1-137-33928-7>

- Collopy, P. S. 2015. "Race Relationships: Collegiality and Demarcation in Physical Anthropology." *Journal of the History of the Behavioral Sciences* 51: 237–260. <https://doi.org/10.1002/jhbs.21728>, PubMed: 25950769
- Coon, C. S. 1958. "An Anthropogeographic Excursion around the World." *Human Biology* 30: 29–42. PubMed: 13513113
- Coon, C. S., S. M. Garn, and J. B. Birdsell. 1950. *Races: A Study in the Problem of Race Formation in Man*. Springfield, IL: Charles C. Thomas Publisher.
- De Souza, V. S., and R. V. Santos. 2014. "The Emergence of Human Population Genetics and Narratives about the Formation of the Brazilian Nation (1950–1960)." *Studies in History and Philosophy of Biological and Biomedical Sciences* 47: 97–107. <https://doi.org/10.1016/j.shpsc.2014.05.010>, PubMed: 24954151
- Dent, R., and R. V. Santos. 2019. "‘An Immense Mosaic’: Race Mixing and the Creation of the Genetic Nation in 1960s Brazil." Pp. 135–156 in *Luso-Tropicalism and Its Discontents: The Making and Unmaking of Racial Exceptionalism*. Edited by Warwick Anderson, Ricardo Roque, and Ricardo Ventura Santos. Oxford: Berghahn.
- Dobzhansky, T., and O. Pavlovsky. 1958. "Interracial Hybridization and Breakdown of Coadapted Gene Complexes in *Drosophila Paulistorum* and *Drosophila Willistoni*." *Proceedings of the National Academy of Sciences of the United States of America* 44: 622–629. <https://doi.org/10.1073/pnas.44.6.622>, PubMed: 16590252
- Eveleth, P. B., and J. M. Tanner. 1976. *Worldwide Variation in Human Growth*. Cambridge: Cambridge University Press.
- Gates, R. R. 1952. "Disadvantages of Race Mixture." *Nature* 170: 896. <https://doi.org/10.1038/170896b0>
- Gates, R. R. 1958. "Studies in Race Crossing: VIII. Japanese War Children." *Zeitschrift für Morphologie und Anthropologie* 49: 129–147.
- Goodman, A., and E. Hammonds. 2000. "Reconciling Race and Human Adaptability: Carleton Coon and the Persistence of Race in Scientific Discourse." *Kroeber Anthropological Society Papers* 84: 28–44.
- Heggie, V. 2019. "Blood, Race and Indigenous Peoples in Twentieth Century Extreme Physiology." *History and Philosophy of the Life Sciences* 41: 1–26. <https://doi.org/10.1007/s40656-019-0264-z>, PubMed: 31197607
- Hoshi, H. 1970. "Physical Growth of Japanese-American Hybrids from 6 to 15 Years of Age, with Special Reference to Genetic-Environmental Relationships." *Monographs of the Society for Research in Child Development* 35: 49–54. <https://doi.org/10.2307/1165813>, PubMed: 5508384
- Hoshi, H. 1977. "Mixed-Blood and Race." In Kazuo Terada. *Race: Contemporary Anthropology Lecture Series Volume 7*. Tokyo: Oyama-kaku (in Japanese).

- Hyun, J. 2019. "Racializing Chōsenjin: Science and Biological Speculations in Colonial Korea." *East Asian Science, Technology and Society: An International Journal* 13: 489–510. <https://doi.org/10.1215/18752160-8005053>
- Iida, K. 2010. "Practice and Politics in Japanese Science: Hitoshi Kihara and the Formation of a Genetics Discipline." *Journal of the History of Biology* 43: 529–570. <https://doi.org/10.1007/s10739-009-9194-z>, PubMed: 20665083
- Ishihara, F. 1933. "Preface." *Minzoku Eisei* 4: 103–104 (in Japanese).
- Ishihara, F. 1953. "How is Mixed-Blood Children Research Progressing." *Iden* 7: 25–29 (in Japanese).
- Ishihara, F. 1956. "A Comparative Study of the Structure of Nisei and of Native Japanese." *Jinruigaku Zasshi* 65: 62–66 (in Japanese). <https://doi.org/10.1537/ase1911.65.62>
- Ishihara, F. 1964. "The Recollection of the Early Period of the Journal *Minzoku Eisei*." *Minzoku Eisei* 30: 1–2 (in Japanese).
- Ishihara, F., and H. Sato. 1941. "Medical Survey of Japanese-Chinese Mixed Children." *Minzoku Eisei* 9: 162–165 (in Japanese).
- Jinmonken [Jinkō mondai kenkyūsho]. 1954. *Research Material No. 97: Anthropometric Influences of Emigration and Blood Mixture on Japanese Race*. Tokyo: Kōseishō jinkō mondai kenkyūsho (in Japanese).
- JIBP. 1967. "HA." *JIBP nyūsu* 2: 8–10 (in Japanese).
- JIBP. 1969. "The Seventh IBP Special Committee Seminar." *JIBP nyūsu* 10: 1 (in Japanese).
- JIBP. 1970. "HA." *JIBP nyūsu* 14: 9–12 (in Japanese).
- Kondo, S. 1977. *The Origin and Evolution of the Japanese*. Tokyo: Shakai Hoken Shinpōsha (in Japanese).
- Kondo, S., and M. Eto. 1975. "Physical Growth Studies on Japanese-American Children in Comparison with Native Japanese." Pp. 13–46 in *JIBP Synthesis Human Adaptability Volume 1: Comparative Studies on Human Adaptability of Japanese, Caucasians and Japanese Americans*. Edited by S. M. Hovarth, S. Kondo, H. Matsui, and H. Yoshimura. Tokyo: Japanese Committee for the International Biological Program.
- Koshiro, Y. 1999. *Trans-Pacific Racisms and the U.S. Occupation of Japan*. New York: University Press
- Krige, J., ed. 2019. *How Knowledge Moves: Writing the Transnational History of Science and Technology*. Chicago: University of Chicago Press. <https://doi.org/10.7208/chicago/9780226606040.001.0001>
- Lipphardt, V. 2014. "'Geographical Distribution Patterns of Various Genes': Genetic Studies of Human Variation after 1945." *Studies in History and Philosophy of Biological and Biomedical Sciences* 47: 50–61. <https://doi.org/10.1016/j.shpsc.2014.05.006>, PubMed: 25049107



- Malina, R. M. 1978. "Book Reviews: Worldwide Variation in Human Growth. By Phylis B. Eveleth and James M. Tanner. Cambridge University Press, New York, 1977." *American Journal of Physical Anthropology* 49: 283–288. <https://doi.org/10.1002/ajpa.1330490218>
- Matsumura, A., and K. Suda. 1933. *Humanity and Race*. Tokyo: Iwanami Shoten.
- Molina, S. J. 2017. "Amerindians, Europeans, Makiritare, Mestizos, Puerto Rican, and Quechua: Categorical Heterogeneity in Latin American Human Biology." *Perspectives on Science* 25: 655–679. [https://doi.org/10.1162/POSC\\_a\\_00258](https://doi.org/10.1162/POSC_a_00258)
- Müller-Wille, S. 2014. "Race and History: Comments from an Epistemological Point of View." *Science Technology Human Values* 39: 597–606. <https://doi.org/10.1177/0162243913517759>, PubMed: 25684833
- Nakamura, K. Y. 2008. "'They Are Our Human Secret Weapons': The Military Intelligence Service and the Role of Japanese-Americans in the Pacific War and in the Occupation of Japan." *Historian* 70: 54–74. <https://doi.org/10.1111/j.1540-6563.2008.00203.x>
- Nakayama, S. 2006. "US-Japan Scientific Cooperation: Japan's Changing Role in the International Scientific Community." Pp. 157–166 in *A Social History of Science and Technology in Contemporary Japan Volume 3: High Economic Growth Period, 1960–1969*. Edited by S. Nakayama and G. Kunio. Melbourne: Trans Pacific Press.
- Nanta, A. 2008. "Physical Anthropology and the Reconstruction of Japanese Identity in Postcolonial Japan." *Social Science Japan Journal* 11: 29–47.
- Oguma, E. 2002. *A Genealogy of Japanese Self-Images*. Victoria, Australia: Trans-Pacific Press.
- Provine, W. 1973. "Geneticists and the Biology of Race Crossing: Geneticists Changed Their Minds about the Biological Effects of Race Crossing." *Science* 182: 790–796. <https://doi.org/10.1126/science.182.4114.790>, PubMed: 4583525
- Radin, J. 2018. "The Unnatural History of Human Biology." Pp. 491–503 in *Worlds of Natural History*. Edited by N. Jardine, J. A. Secord, H. A. Curry, and E. C. Spary. Cambridge, UK: Cambridge University Press. <https://doi.org/10.1017/9781108225229.031>
- Reardon, J. 2005. *Race to the Finish: Identity and Governance in an Age of Genomics*. Princeton: Princeton University Press.
- Roebuck, K. 2015. "De-Provincializing Eugenics: The Persistence of 'Race Hygiene' in Japan after Its Decline in the West." In *Asia and Africa across Disciplinary and National Lines*. Edited by N. Kondo. Tokyo: Tokyo University of Foreign Studies Press.
- Roebuck, K. 2016. "Orphans by Design: 'Mixed-blood' Children, Child Welfare, and Racial Nationalism in Postwar Japan." *Japanese*

- Studies* 36: 191–212. <https://doi.org/10.1080/10371397.2016.1209969>
- Sakano, T. 2009. “From Blood-Mixing to Adaptability: Racial Research in Japan in the 1930s and 1970s.” Pp. 188–265 in *Representations and Social Realities of Race*. Edited by Y. Takezawa. Tokyo: Iwanami Shoten (in Japanese).
- Schaffer, G. 2007. “‘Scientific Racism Again?’: Reginald Gates, the *Mankind Quarterly* and the Question of ‘Race’ in Science after the Second World War.” *Journal of American Studies* 41: 253–278. <https://doi.org/10.1017/S0021875807003477>
- Schaffner, K. 2014. *Eugenics in Japan*. Fukuoka: Kyushu University Press.
- Simoji-Lawrence, Y. 2018. *Mixed-Blood and Japanese: A Social History of Half, Double, and Mix*. Tokyo: Aonisha (in Japanese).
- Spencer, F. 1996. “Harry Lionel Shapiro, March 19, 1902–January 7, 1990.” *Biographical Memoirs Vol. 70*. Washington D.C.: National Academy of Sciences.
- Spencer, F. 1997. *History of Physical Anthropology: An Encyclopedia*. New York: Garland Publishing, Inc.
- Stephan, N. 1982. *The Idea of Race in Science: Great Britain 1800–1960*. London: Macmillan.
- Suda, A. 1952. “A Face to Face with Mixed-Blood Children.” *Iden* 6: 6–9 (in Japanese).
- Suda, A. 1968. “Introduction to Our Anthropological Studies on the Japanese-American Hybrids.” *Jinruigaku Zasshi* 76: 89–94 (in Japanese). <https://doi.org/10.1537/ase1911.76.89>
- Suda, A., and H. Hoshi. 1970. “Mixed-blood Children Research, especially in Relation to the Age Change.” Pp. 122–160 in *The Adaptability of the Japanese: Research Methods and Outcomes*. Edited by The Biosphere Dynamics and Human Adaptability Research Society. Tokyo: Kōdansha (in Japanese).
- Suda, A., and Y. Kohara. 1957. *Race: A Japanese Translated Version of Races: A Study in the Problem of Race Formation in Man written by Carleton S. Coon, Stanley M. Garn and Joseph B. Birdsell in 1950*. Tokyo: Misuzu Shobō (in Japanese).
- Suda, A., B. Yamaguchi, H. Hoshi, B. Endo, and M. Eto. 1965. “Longitudinal Observation on the Stature and Body Weight of Japanese American Hybrids from 6 to 15 years of Age.” *Jinruigaku Zasshi* 73: 54–63 (in Japanese). <https://doi.org/10.1537/ase1911.73.54>
- Suda, A., S. Kondo, and M. Sato. 1966. “Physical Growth of American-Japanese Hybrid Children.” Pp. 157–260 in *Human Adaptability and Its Methodology: Papers Given at a Symposium held in Kyoto, Japan, under Auspices of the International Union of Physiological Sciences*

- and the International Biological Programme. Edited by H. Yoshimura and J. S. Weiner. Tokyo: Japan Society for the Promotion of Science.
- Tamiya, H. 1974. "Reflect on the IBP Activities in Japan." Pp. 11–12 in *JIBP. The IBP Outcome Symposium*. Tokyo: JIBP (in Japanese).
- Taniguchi, T. 1942. *The Physical Characteristics of Oriental Races*. Tokyo: Yamamasafusa (in Japanese).
- Tanner, J. M. 1981. *A History of the Study of Human Growth*. Cambridge, UK: Cambridge University Press.
- Terada, K. 1977. "Classification and Distribution of Race." In Terada, Kazuo ed. *Race: Contemporary Anthropology Lecture Series Volume 7*. Tokyo: Oyama-kaku (in Japanese).
- Teslow, T. 2012. *Constructing Race: The Science of Bodies and Cultures in American Anthropology*. Cambridge, UK: Cambridge University Press. <https://doi.org/10.1017/CBO9780511996443>
- Turchetti, S., N. Herran, and S. Boudia. 2012. "Introduction: Have We ever Been 'Transnational'? Towards a History of Science across and beyond Borders." *The British Journal for the History of Science* 45: 319–36. <https://doi.org/10.1017/S0007087412000349>
- Wade, P. 2017. *Degrees of Mixture, Degrees of Freedom: Genomics, Multiculturalism, and Race in Latin America*. Durham: Duke University Press. <https://doi.org/10.1515/9780822373070>
- Wallace, B. 1994. "Theodosius Dobzhansky Remembered: Genetic Coadaptation." Pp. 155–162 in *The Evolution of Theodosius Dobzhansky: Essays on His Life and Thought in Russia and America*. Edited by Mark B. Adams. Princeton, NJ: Princeton University Press. <https://doi.org/10.1515/9781400863808.155>
- Weiner, J. S. and J. A. Laurie 1969. *Human Biology: A Guide to Field Methods (IBP Handbook No. 9)*. Davis, Philadelphia: Blackwell Scientific.
- Yamaguchi, B. 1997. "On the Race Concept." *Minzogaku Kenkyu* 62: 103–105 (in Japanese). [https://doi.org/10.14890/minkennews.62.1\\_103](https://doi.org/10.14890/minkennews.62.1_103)
- Yokoyama, T. 2015. *The History of Eugenic Society in Japan: Scientific Enlightenment, Media, and Politics of Reproduction*. Tokyo: Keisō Shobō (in Japanese).
- Yoshimura, H., and J. S. Weiner. 1966. *Human Adaptability and Its Methodology: Papers Given at a Symposium held in Kyoto, Japan, under Auspices of the International Union of Physiological Sciences and the International Biological Programme*. Tokyo: Japan Society for the Promotion of Science.
- Yoshimura, H. 1975. "Studies on Human Adaptability." Pp. 159–206 in *Summary Report on the Contribution of the Japanese National Committee for IBP, 1964–1974*. Edited by Hiroshi Tamiya. Tokyo: University of Tokyo Press.
- Zenji, S. 1983. *Japanese Eugenics: Its Ideas and Locus of Movement*. Tokyo: Sankyo (in Japanese).