conducted their cultural and social lives as they imagined the *yangban* of other regions did. She asserts that the allegations that there were no *yangban* in the north were manifestations of the prejudices and biases held by the central elites. The *sajok*, however, were different from the *yangban*, and repeated statements by Confucian literati during the late Chosŏn period that there were no *sajok* in the northern region cannot be treated as a product of mere prejudice. The life and accomplishments of Yi Sihang, as put forward in this book, do not convince me that the literati of P'yŏngan Province, represented here by Yi Sihang, were in possession of academic and cultural assets comparable to those of officials and scholars from the central and southern regions. Praise of and commiseration with Yi Sihang emanating from governors and Yi's friends at the private level are not enough to confirm his qualifications for bureaucratic success. Yi's historical studies did not advance beyond the region in scope. He did not speak to national policies nor participate in academic debates that could have impressed literati and officials from across the country. Kim's cautious suggestion on Yi Sihang's influence on later ideas and social changes seems to lack sufficient evidential basis.

An example that shows the passive nature of the northern literati's effort at asserting their regional legitimacy is a series of discussions on Tan'gun. According to Kim's explanation, although Yi Sihang thought that P'yŏngyang's historical genealogy started with Tan'gun, he did not mention Tan'gun in his 1714 memorial, most likely because he did not want to go against the central elites who were inclined to respect the heritage of Kija more than that of Tan'gun. In a previous article Kim emphasized the fact that Paek Kyŏnghae, a P'yŏngan literatus, gave Tan'gun equal footing with Kija in 1802. But, as I have explained elsewhere, King Yŏngjo and King Chŏngjo worked to enhance Tan'gun's authority more actively and much earlier than Paek. For example, King Yŏngjo bestowed a hanging board on the shrine of Tan'gun in 1724, not much later than the year of Yi Sihang's memorial.

I am on the same page with Kim in criticizing the practice of regional discrimination in Chosŏn politics. But I think that criticism alone does not suffice because discriminatory practices and discourses evolved out of certain structures and logics that governed politics and society, transformation of which was thus necessary to end the discriminatory practices. What is important is to see how Neo-confucian literati, government officials, and the kings understood the reasons and effect of such discrimination against northern people and what directions their effort to reform the system took and why.

Thanks to Kim's hard work we now can hear the clear voice of an intellectual from the north who lived in the seventeenth- to eighteenth-century Chosŏn, and I congratulate her for pushing the field toward a new direction with an engaging and important book. I do think, however, that Yi Sihang was a provincial intellectual not closely enmeshed with ordinary people's lives and the commercial development of the region. He thus represents rather a small slice of the P'yŏngan society, whose case serves as a rather narrow window to look into the complex politics of the late Chosŏn period.

'Motazaru kuni' no shigen ron: Jizoku kanō na kokudo o meguru mō hitotsu no chi 「持たざる国」の資源論——持続可能な国土をめぐるもう一つの知.
By Satō Jin 佐藤 仁. Tokyo: Tokyo Daigaku Shuppankai, 2011. Pp. xix + 268.
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Satō Jin's book provides a thought-provoking history of the term "resources" (*shigen*) in Japan from the late nineteenth century until the present through an analysis of numerous documents from the realms of policy, scholarship, diplomacy, and civil society. Its goal, however, is to reveal an

alternative knowledge of resources in modern Japan that has been critical of the narrow, quantitative sense of resources as "raw materials" (*genryō*) to be secured and economically exploited. What it uncovers instead is a consistent attempt by figures from a variety of areas to define resources more organically or comprehensively – as incorporating conceptions of both use and preservation, as involving the perspectives of multiple disciplines and institutions, as always in dynamic connection with other resources, and as tied to a practical knowledge of a region's particular conditions. It does so not by romanticizing local efforts or "tradition" against the state but rather by focusing on figures close to the state who addressed the gap between local and national needs through policy formation.

The preface outlines what is at stake in the question of resources. The beginning of industrialization in the Meiji period brought about the decline of a "living" view of resources as having multiple uses and being organically related to other resources at specific localities. Instead, a view of resources as isolated from each other in the form of rivers, forests, and lands each to be productively exploited for economic growth became predominant. The market economy's encouragement of specialization, increased state militarization campaigns, and a naïve confidence in technology's ability to resolve resource scarcity contributed to a general foreclosure of attempts to think about resources more organically. In a vivid example of the alternative definition of resources that Satō endeavors to uncover, he cites a diagram from a 1952 middle-school society textbook describing a "good mountain and bad mountain" (p. 14). The good mountain efficiently uses the local river through the construction of a dam that provides electricity to modernize nearby households, irrigates fields for agriculture, increases water supply to maintain fish populations, and protects residents from floods. The bad mountain is one where the river is nearly dried out, there is no electricity, and fields and forests are dying. Hence, a comprehensive definition of natural resources synthetically plans the utilization of scarce resources from multiple, interrelated perspectives – agriculture, disaster prevention, modernization, and sustainability – rather than just one. From this and numerous examples throughout the book, Satō defines resources generally as "the bundle of possibilities that become objects to be worked upon" (*hatarakikake no taishō to naru kanōsei no taba*) thereby qualitatively expanding the conventional understanding of resources as quantitative objects to be isolated and instrumentally exploited (p. 17).

Chapter 1 examines the history of the term "resources" from the Meiji to the early Shōwa era. The concept first literally meant "fountain of wealth" (*fugen*) during the Meiji era, thereby capturing the popular frontier spirit of developing forests, rivers, and fields as a means to prosperity. The folklorist Yanagita Kunio employed the term to raise important issues of who controls distribution, thereby revealing a definition of resources that was open to various possibilities. In light of World War I, army officers such as Koiso Kuniaki introduced the notion of resources as raw materials for total war mobilization whereby human beings were also incorporated into the category of resources to be rationally mobilized for national defense. Finally, Japanese observers who attended important meetings of the US conservation movement in the early 1900s introduced holistic notions of resource preservation for human welfare to Japan. Thus, the seeds were laid for alternative definitions of resources in the future.

Chapter 2 continues the critical genealogy of "resources" from the early Shōwa to the early postwar era. Satō examines the first national policy debate over resources in parliament in 1919, which pitted local government officials such as Izawa Tokio, who advocated conservation efforts, against national ministers such as Hara Kei, who put his faith in technology to resolve issues of scarcity. Even during the years of total war mobilization, Satō discovers alternative definitions in institutions such as the state's Resources Bureau, where Matsui Haruo put forth a total or "comprehensive" (*sōgō*) view of resources as the long-term planning of material and human resources so as to realize their maximum potential for improving national life. The chapter ends with the introduction of the

Tennessee Valley Authority's framework of multi-purpose resource planning grounded in grassroots democracy by New Deal-inspired American officials such as Edward Ackerman during the Allied occupation era. Such a comprehensive approach to resource planning was appropriated and reformulated by early post-war Japanese officials such as Ōkita Saburō and Aki Kōichi, who sought to overcome tendencies toward ministerial specialization and narrow-mindedness in economic policy-making.

Chapter 3 examines the little-known history of the Resources Investigation Committee, a transministerial organization under the prime minister charged with drawing up Japan's resource policy for reconstruction and economic growth immediately after the war. As an emerging economy between what later became known as the developed and developing worlds, Japan was in a position to carve out its own unique path towards economic development. This committee seized the opportunity to mobilize experts from a variety of areas to put forth policy recommendations that incorporated a perspective of resource preservation rather than solely focusing on productivity. Despite ultimately being weakened by business and ministerial interests, the committee proved to be a "treasure house of ideas" (p. 129) for establishing sustainable resource development policies that respected the importance of localities in knowledge formation and problem solving, harmonized cultural, social, political, and economic interests, and brought together the social sciences, humanities, and natural sciences under a common disciplinary umbrella for the study of resources (*shigengaku*).

Chapter 4 historicizes the conventional understanding of Japan as a nation poor in resources, which has to therefore rely on foreign sources. He locates the origins of this idea from the time of World War I when an understanding of the world as being divided into the "have" nations with empires and abundant resources and "have-not" nations without such access grew among Japanese elites. But even as Japan pursued the route of imperialism during the early twentieth century, there were still some who questioned the view of Japan as a "have-not nation" (*motazaru kuni*). For example, the journalist Ishibashi Tanzan put forth the idea of "small Japanism" (*shō Nihonshugi*) whereby Japan would abandon colonial expansion and instead mobilize its creative energies towards domestic resource development and peaceful global trade. The chapter's remainder tells the story of how Japan shifted to a diplomatic strategy of securing natural resources overseas, thereby abandoning its early efforts towards developing a domestic sustainable resource strategy.

Chapter 5 introduces the critical resource theories of contemporary geographers, some of whom had experience working on the Resources Investigation Committee. Satō interviews and reads the works of Ishii Motosuke, Ishimitsu Tōru, Kuroiwa Toshirō, and Kurosawa Kazukiyo. In their different ways, each thinker puts forth a "living" conception of resource planning by, for example, placing class dynamics at the center of analysis (Ishii) or incorporating the voices of citizens through local "resource investigation teams" (Kuroiwa) or attempting to understand the full array of interrelations between nature and society rather than thinking solely from the perspective of human requirements (Kurosawa).

The conclusion sums up the four main contributions of a critical theory of resources, as well as makes proposals on how the Japanese government could stimulate a dynamic debate on resource sustainability and thereby establish bold, new policies. A theory of resources should always be comprehensive in vision, encourage imaginative solutions over quantitative ones, be rooted in an abductive reasoning that seeks a common axis among multiple variables, and generate broad solutions from local, practical knowledge. Satō's proposals include establishing a "Green New Deal" to send young people to work on regional sustainability projects, introducing educational reforms to encourage broad, comprehensive thinking, and involving citizens at the intellectual, policy, and practical levels.

This book opens up an innovative and engaging perspective on the history of modern Japanese development. My comments centering on Satō's key notion of "comprehensive" (*sōgō*) are not so much a critique as a route for further historical inquiry that is raised by his book. At times, Satō

draws too firm a line between a qualitative, "comprehensive" view of resources that offers critical possibilities and the narrow, specialized view of resources as isolated, quantitative objects to be exploited. Resource Investigation Board members such as Ōkita Saburō and Aki Kōichi developed their notions of "comprehensiveness" during the Asia-Pacific War (1937–1945) while serving as Asia Development Board engineers who conducted studies in occupied China on river basin planning and power development respectively. Japan planned and built a number of colonial infrastructure projects such as the Fengman Dam in Manchukuo, which while largely serving military purposes, also included "comprehensive" visions of urban planning, agricultural development, flood control, and transportation improvement. Matsui Haruo, who Satō credits with developing a critical comprehensive perspective, was only one of many wartime Cabinet Planning Board members such as Miyamoto Takenosuke and Mōri Hideoto who pushed for visions of wartime planning that emphasized long-term vision, interrelatedness, and local knowledge. "Comprehensiveness" was also developed in other organizations such as the South Manchuria Railway's research institutes and the Asia Development Board. In short, Japan's wartime and colonial system did not only emphasize a narrow, quantitative notion of natural resources but incorporated the qualitative, comprehensive types of visions that Satō examines as well.

Should we therefore classify these various efforts as somewhat critical of Japan's wartime/colonial system of total mobilization and exploitation of resources for state goals (or merely dismiss these as empty propaganda)? What were the specific power dynamics behind such comprehensive projects and visions that may have also mobilized people's energies for wartime and colonial objectives? This, of course, is not to say that the comprehensive perspective as Satō exhaustively explores cannot serve as the basis for a more critical theory of resources. But a closer consideration of the power dynamics, mechanisms, and relations within pre-war and wartime notions of "comprehensiveness" is also necessary, especially since many of these visions continued into the post-war era via influential figures who Satō examines such as Ōkita and Aki, both in Japanese domestic policy and in Japan's overseas development policies. Efforts to broadly mobilize vision and imagination constituted a key component of Japan's wartime/colonial system as well as its post-war "developmentalist" system, and therefore need to be researched more thoroughly. On the whole, however, this book not only introduces a variety of exciting new materials and opens up interesting avenues for historical research, but also manages to speak to a generalist audience in its attempt to revive a more meaningful conversation on resource planning – a relative rarity in academic publishing.

Technology of Empire: Telecommunications and Japanese Expansion in Asia, 1883–1945.
By Daqing Yang. Cambridge, Mass.: Harvard University Asia Center, 2010. Pp. xvii + 446.
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Technology of Empire by Daqing Yang is a thoroughly researched history of Japanese telecommunications, administration, technology, and imperialism from the Meiji period through World War II. In fact, it constitutes a history of the Japanese empire from the standpoint of telecommunications. It will certainly be a standard work on the subject in English. It also contributes to the history of telecommunications in general. Finally, *Technology of Empire* contributes to the international history of the connections between technology and imperialism, as developed by writers such as Daniel Headrick. Yang suggests, for example, that Japanese technical advances not only provided the means of conquering and attempting to administer a truly enormous imperial space between 1931