Seeing Like a Pilgrim: The Alpine Imaginary of Early Modern Japanese Maps

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Work in progress; comments welcome.

Maps are increasingly appreciated as instruments of the modernist imagination, thanks in no small part to scholars of Southeast Asia. Thongchai Winichakul and Benedict Anderson taught us to rank the map alongside the museum and the census as an essential tool for imagining the nation; James Scott identified cadastral cartography as both case study and master metaphor for the "simplification, legibility, and manipulation" that drive the modern state;² and Rudolf Mrazek showed how the clean geometries of the map served to distance powerholders from the messy realities of colonial life.³ Compelled by these scholars' insights, yet convinced that many of the operations they identify predate the modern era, I have begun looking closely at Japanese cartography from the Tokugawa period (1600-1868). To start with, I have focused on depictions of mountains: a ubiquitous feature of Japanese topography and, as it turns out, an increasingly conspicuous feature on Japanese maps as the period progressed. The present essay is based on the holdings of the Beans Collection at the University of British Columbia, the richest archive of Tokugawa maps in North America.⁴ By analyzing the way mountains are depicted in that collection's representative printed maps dating from the 1660s to the 1860s, I aim to assess what forms the popular alpine imaginary took, how it changed over time, and how maps functioned in this distinctive early-modern context.

First, a word about the social setting. The thousands of woodblock printed maps that have come down to us from eighteenth- and nineteenth-century Japan have no precedent in the medieval era. During the Tokugawa period (1600-1868), the Japanese archipelago witnessed an intellectual revolution of sorts: an explosion of print commodities of all kinds, including maps in a myriad of styles and scales.⁵ Historians of cartography have traditionally parceled the resulting archive into various categories⁶ and

¹ Thongchai Winichakul, *Siam Mapped* (Hawaii, 1994); Benedict Anderson, *Imagined Communities* (Verso, 1991), especially chapter 11.

² James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (Yale University Press, 1998), especially chapter 1.

³ Rudolf Mrazek, *Engineers of Happy Land: Technology and nationalism in a colony* (Princeton, 2002), especially chapter 3.

⁴ Unno Kazutaka, "Buritisshu Coronbia daigaku shozo no edo jidai chizu" [English title: "Edo map collection housed at the University of British Columbia Library: A summary of its survey and its most important maps."] Unpublished report in Japanese, submitted to the Japan Foundation. 1985. 86 pages. UBC accession number: SPAM 23042 (SP). The other outstanding archive for Japanese maps in North America is the Mitsui collection at the University of California at Berkeley, now available on-line at www.davidrumsey.com/Japan.

⁵ Mary Elizabeth Berry, *Information and Nation in Early Modern Japan* (University of California Press, forthcoming).

⁶ A conventional list would include world maps (*sekaizu*), maps of the whole country (*Nihon sozu*), domain maps (*kuni ezu*), regional maps (*chihozu*), city maps (*toshizu*), and itinerarires or road-maps (*dochuzu*).

gone on with the business of cataloguing and comparing them. But recent work points up an urgent preliminary question: what brought these maps into existence in the first place?

One set of preconditions, we now know, unfolded at a global level. The early modern world saw the rise of a transnational cartographic regime, whose basic elements —including mathematical astronomy, survey technology, and shared boundary norms—were quickly adopted by competing states across Eurasia. Through Chinese and Jesuit intermediaries, the Japanese had begun to engage this pan-Eurasian cartographic culture by the late sixteenth century. A second condition was met by political unification of the archipelago, which called forth significant investments in state mapping. After achieving military supremacy in 1600, the Tokugawa rulers undertook five successive comprehensive efforts to survey the national territory—the first such efforts in nearly a thousand years. Although the resulting documents did not circulate publicly, textual evidence suggests that they formed the basis for several popular print maps of Japan (including some discussed below).

But the unprecedented profusion of maps in the Tokugawa public sphere required more than global exchange and state patronage. Equally vital were new habits of reading and new habits of travel. By the eighteenth century, books were no longer confined to Japan's ruling classes; thanks to the spread of commoner schooling, the economies of woodblock technology, and an infrastructure for renting as well as selling books, Edo boasted one of the largest publishing industries in the world. At the same time, the commercial boom that followed unification stimulated a national culture of travel—one that embraced peasants and merchants as well as samurai. As more and more readers took to the road, gazetteers, guidebooks, travel accounts, and maps came to constitute staples of the burgeoning print market. Cunningly rendered by skilled artisans in Kyoto and Edo, woodblock-printed maps became a regular feature of early modern Japanese life, joining *ukiyo-e* prints as affordable, attractive consumables for souvenir hunters and armchair travelers alike. As more and more readers to the road armchair travelers alike.

The present essay takes up examples from two major categories of printed maps: the *atlas*, a compact form covering the whole country, and the *itinerary*, confined to one or more transportation routes. For the sake of making meaningful comparisons across time, I will further confine my examples to two regions: Shinano Province (the landlocked setting of the Japanese Alps) and the Tokaido (the coastal strip running from Edo to Kyoto) (see **Figure 1**). Setting these parameters helps bring into clearer focus the changing depiction of mountains over the course of the Tokugawa period. As we will see, for both regions and across both genres, alpine iconography grew more elaborate between

⁷ Laura Hostetler, *Qing Colonial Enterprise: Ethnography and Cartography in Early Modern China* (Chicago, 2001); see especially her introduction, "Cartography and ethnography as early modern modes of representation." For the Jesuit influence on cartography in Japan, see Unno Kazutaka, "Cartography in Japan," *in J.B. Harley and David Woodward, eds., The History of Cartography,* v.2 Book 2 (*Cartography in the Traditional East and Southeast Asian Societies*) (Chicago, 1994), pp. 376-386.

⁸ These five large-scale mapping projects took place in 1605, 1633, 1644, 1697, and 1835. See Appendix 11.8 in Unno 1994, p. 472.

⁹ Peter Kornicki, *The Book in Japan: A Cultural History from the Beginnings to the Nineteenth Century* (Hawaii, 2001); Brian Platt, *Burning and Building: Schooling and State Formation in Japan, 1750-1890* (Harvard, 2004).

¹⁰ Constantine Vaporis, Breaking Barriers: Travel and the State in Early Modern Japan (Harvard, 1994).

¹¹ Berry, *Information and Nation*; Marcia Yonemoto, *Mapping Early Modern Japan: Space, Place, and Culture in Tokugawa Japan (1603-1868)* (University of California Press, 2003).

the 1660s and the 1860s. The first task of this essay is to document that elaboration. The second task is to interpret it. While the argument here remains provisional, I will suggest that the gaze through which mountains increasingly came into focus was in effect a stereoscopic one, wedding scientific technologies to the sensibility of the pilgrim.

Lest the term "pilgrim" conjure visions of ascetic piety, it is worth stating at the outset that pilgrimage in Edo Japan was also a pretext for earthly fun. Paying one's respects at a famous shrine or temple might have been a sincere objective in its own right, but it was also a stock excuse for tourism; after the rituals of cleansing, offering, and praying, most travelers happily turned back to the business of eating, drinking, and shopping. In the process, they supported thriving market towns—and bustling brothel districts—at the base of every pilgrimage precinct in the country. In the felicitous formulation of Nam-lin Hur, prayer and play were two sides of the same coin.¹³ When mountains came into clearer focus on nineteenth-century maps, they did so in an idiom inflected by this mixture of reverence, commerce, and fun.

Equally salient for our purposes is another feature of Japanese religious practice: its acceptance of miniature or virtual journeys as a substitute for full-scale pilgrimage. As Melinda Takeuchi points out, Buddhist material culture is filled with replicas designed for short-cut rituals. Like relics, such simulacra could go beyond indexing an "authentic" original elsewhere to become potent sacred objects in their own right, concentrating the manna of a large sacred form into a smaller one. Through multiplication and circulation, small-scale reproductions also offered the benefits of pilgrimage to women, the weak, children, and the aged, who were otherwise excluded from visiting distant and often circumscribed sites. Miniature replicas of Mount Fuji, which proliferated in the Edo vicinity during the 1800s, offer a prime example of this phenomenon. Accommodating throngs of devotees (and sight-seers), the "mini-Fujis" became popular local landmarks in their own right. 14

Even for those who could climb a real mountain, the profusion of such simulacra helped shape what it meant to see like a pilgrim in early modern Japan. In Takeuchi's words, replicas had the effect of transforming a massive landscape, "revealed to the intrepid pilgrim [only] episodically, segment by segment," into an intimate one "whose totality is immediately apprehensible on a human scale." Tokugawa maps achieved precisely the same effect. In the sweeping panoramas and detail-studded atlases of nineteenth-century Japan, as in a mini-pilgrimage to a mini-Fuji, time and space were collapsed; on paper as on a three-dimensional mound, "miniaturization replaced narrative with tableau." For this reason, too, it seems fruitful to interpret the alpine symbolism on these maps as imbibing of a pilgrimage mentality. The curious career of the resulting imagery during the Meiji period (1868-1912), Japan's heyday of high modernism, will be briefly addressed at the end of the paper.

¹² Apologies for the poor reproductions here; I will bring color slides on November 4.

¹³ Nam-lin Hur, *Prayer and Play in Late Tokugawa Japan: Asakusa Sensoji and Edo Society* (Harvard, 2000). See also Susanne Formanek, "Pilgrimage in the Edo period: Forerunner of modern domestic tourism? The example of the pilgrimage to Mount Tateyama," *in* Sepp Linhart and Sabine Fruhstuck, eds., *The Culture of Japan As Seen Through Its Leisure* (SUNY Press, 1998), 165-193.

¹⁴ Over a hundred artificial Mount Fujis were built during the later Edo period, mostly in Eastern Japan. Melinda Takeuchi, "Making mountains: Mini-Fujis, Edo popular religion, and Hiroshige's *One Hundred Famous Views of Edo.*" *Impressions* No. 24, 2002, 25-47.

¹⁵ Takeuchi 2002, 44.

Atlases

The Beans collection includes four printed atlases, published in 1666, 1701, 1837, and 1867, respectively. Three constants define the genre across this 200-year span. First was their small size. Printed atlases were compact reference books, about the size of a modern trade paperback. A second constant was organization. Each Tokugawa atlas presented the sixty-eight provinces (*kuni*) of Japan in a conventional spatial sequence, following the spine of the archipelago from north-east to south-west. Finally, all Edoperiod atlases suggest a holistic vision. The cartographic snapshot provided of each province was an integral one, combining physical topography with geopolitical and economic data to represent the *kuni* as a social-ecological microcosm. Yet within these parameters of compaction, organization, and holism, there remained considerable room for the idiom of the Edo-period atlas to evolve over time.

The oldest atlas in the collection, the *Nihon bunkei zu* (Separate maps of Japan) by Nakano Kozaemon, is a copy of the earliest Japanese atlas ever printed. Published in 1666, it takes the form of a small album (just 5" x 7") covering Japan in sixteen colorful maps, each including a cluster of three to five neighboring provinces. In **Figure 2**, for instance, the Pacific coastal provinces of Mikawa, Totomi and Suruga, as well as the southern tip of Shinano, are treated on a single page. (Later atlases, by contrast, would typically treat the provinces as isolates, allotting two or more pages to each.) Since the maps were printed on single sheets that were folded in half before binding, the reader has to turn a page to see both halves of a given region. Shinano Province is thus cut down the middle and cannot be taken in at a glance; Northern Shinano ends up on an adjacent page (**Figure 3**), along with the province of Kai and a corner of Suruga.

The data chosen for display in the *Nihon bunkei zu* present a veritable X-ray of the geopolitical order. Each province is identified in bold outline and tinted in vivid color (later atlases were usually printed in black-and-white). Within and across provincial borders, the mapmaker's attention fastened on power-centers and their links to the shogun's capital at Edo. White squares denote castle-towns; white circles show important post-stations; red lines denote turnpikes; blue lines, rivers. The mapmaker has also taken pains to include distance notations for water as well as land routes. All of these highlighted features were of strategic importance to the unification regime. By contrast, information about the local environment is sparse. Cultural landmarks such as temples and shrines are absent altogether, as are smaller settlements and landforms.

It is no accident that this earliest of all Japanese printed atlases conveys so clearly the priorities of the state. The *Nihon bunken ezu* turns out to have been based closely on the Keicho *kuniezu*, the first large-scale national map compiled by the Tokugawa shogunate. The atlas maker has simply subdivided the Keicho model into sixteen sections, reduced the scale uniformly to reproduce the contours of the original, and transferred intact the shogun's spatial taxonomy. ¹⁸ The upshot is a top-down vision of the national terrain as hierarchically ordered space. It is also a vision where topography can be represented solely through the shorthand of river systems—the element of

¹⁶ Three of the *Nihon bunkei zu*'s sixteen maps are unfolded and reproduced in color in Miyoshi Tadayoshi and Onoda Kazuyuki, *Nihon kochizu korekushon* (Tokyo: Kawade Shobo Shinsha), p. 29.

¹⁷ Note that this map puts West at the top, so that the Tenryu river, which drains south toward the Pacific Ocean, runs on Figure 2 from right to left. Lake Suwa, the source of the Tenryu River, is on the other side of the fold, visible toward the left margin of Figure 3.

¹⁸ For a color reproduction of the Keicho map, see Unno 1994, plate 26 (after p. 740); for a discussion of its relationship to this atlas, Unno 1994: 411-412.

paramount interest to the ruler. Remarkably, in a region that would later become famous as the home of the Japanese Alps, not a single peak is in evidence.

If the 1666 atlas faithfully reflects the priorities of the agrarian state, however, a second specimen—published just 35 years later—seems to emanate from a different vantage point altogether. This is the *Shinkan jinkoku ki* (Newly published notes on the provinces and their inhabitants) of 1701. In lieu of a geopolitical X-ray, this two-volume black-and-white work depicts the landscape of each province as a disembodied jumble of settlements (**Figure 4**).¹⁹ The road network is missing entirely, and the unified plan view of the earlier atlas has given way to a kaleidoscope of perspectives. Toponyms point every which way, with a marginal majority facing uphill (i.e., away from the nearest river). Mountain symbols, which fill much of the space between them, are drawn in the opposite perspective (i.e., as they would be seen from below). The resulting need to continually reorient oneself within the map, combined with the absence of a clear hierarchy to organize its signs, renders it a visual jungle.

This 1701 design creates a very different impression of central Japan than the first atlas did – and suggests a different sensibility toward the landscape. Not only is the spatial hierarchy effectively flattened, but each province—and indeed each settlement—appears to float free in space. While Shinano is given a good deal more space than before (three full pages for the map alone, plus another two pages of ethnographic description), we learn a good deal *less* than before about its context; neighboring *kuni* are identified by name, but rendered as blank space, and the geography of connection that was so richly presented in the previous atlas is strikingly absent. The text passages reinforce this sense of separateness, highlighting the quixotic local customs and character of this remote region as though it were virtually a foreign country.²⁰

If the emphasis on physical and ethnographic separateness is one novel feature of this atlas, equally new are its mountains. Invisible in the earlier atlas, Shinano's alps are here its most conspicuous feature. Yet note how generic these mountain symbols are. The entire province is filled with the same stylized hill-signs, only two of which are named (the generic sounding "Kiso no take" being one). Moreover, just as all peaks are drawn alike, so all provinces are depicted in virtually identical form as a sea of alps (compare Iga, **Figure 5**). In short, while the reader gets a clear sense that mountains are present, this rendering of the alpine terrain remains impressionistic. No new empirical data about the nation's physiognomy can be gleaned from this map.

By contrast, the third entry in this chronological series, the *Kokugun zenzu* (Maps of all the provinces and counties) of 1837, offers an order of magnitude more information. This nineteenth-century atlas not only restores the emphasis on connection that had marked the seventeenth-century *Nihon bunken ezu*, but magnifies it. The hundreds of named settlements that are identified across Shinano province in **Figure 6** are now linked up by an equally dense network of turnpikes and side-roads (printed in red on the original); where these roads cross the provincial boundary, the map-maker has

¹⁹ Note that the map as a whole has been rotated clockwise from the previous example; Lake Suwa appears toward the top, with the south-draining Tenryu river flowing toward the bottom of the page.

²⁰ The national context remains implicit, to be sure, inasmuch as the ethnographic notes imply an author who has traveled throughout the archipelago – and a reader who can similarly roam across the countryside at will, in mind if not in body—comparing one region to another within the framework of the nation. For elaboration of this point, see Mary Elizabeth Berry, "Was Early Modern Japan Culturally Integrated?" *Modern Asian Studies* 31(3), 1997, pp. 547-581.

added annotations to tell us where they lead.²¹ The resulting profusion of text on the map's surface is organized smartly for the convenience of the stationary reader, all toponyms (except those outside the province) facing in one direction.

Equally novel is the representation of alpine terrain. In both placement and labeling, mountain symbols here convey specific information. Rather than being randomly scattered across the landscape, hill-signs have been organized into meaningful ridge-lines between the river valleys and along the borders of the province. Rather than being identically sized, they appear to have been roughly scaled in proportion to the peaks they depict. And rather than being left white, they are now tinted in vivid color. Finally, over a score of peaks in Shinano are named. To be sure, alpine toponyms are not rendered as consistently, nor framed as formally, as those of villages and towns. The lack of boxes or circles around their names—a flourish reserved for the labels on villages, towns, and counties—suggests a less rigorous approach to uninhabited spaces (or perhaps a sense that such spaces are themselves less formally bounded). A few other landscape elements are treated in the same way: a hanging bridge, an old road, castle ruins, a small waterfall, and several mountain passes are likewise marked as secondary sites by the absence of an enclosing frame. While such elements had become worthy of the atlas, they were still treated as incidental scenery, secondary to the network of settlement that was its proper focus.

The same could not be said, however, of the last atlas in the collection, the *Dosen Dai Nihon Koku Saizu* (Copper engraved pocket atlas of great Japan, 1865). Shinano (oriented now with south at the top) is printed here in simple black and white, in a design that largely echoes the *Kokugun zenzu* of 1837 (**Figure 7**). But unlike its woodcut predecessors, this popular late-Edo atlas was printed from etched copper plates, whose finer lines allowed for denser detail. And to a remarkable extent, that additional density has been devoted to mountains. Hill-signs positively crowd the maps in this atlas, and although their shapes remain somewhat generic, their placement and naming is anything but. A close-up from the adjacent page (**Figure 8**) shows Shinano's northern border in a way that would be instantly recognized by modern Japanese as the Northern Alps: a dramatic string of high, steep peaks, every one of them named.

Itineraries

A second domain in which we can trace growing attention to alpine geography is the itinerary or route map (*dochuzu*). What characterized this broad category was its accent on the experience of travel; each map presented a miniature landscape that tended to draw the viewer into an imagined or remembered journey. Whether organized around a national turnpike or a pilgrim's path, the typical *dochuzu* identified fixed stoppingpoints, noted distances between them, marked alternate routes or by-passes, and labeled landmarks. So long as they preserved the essential topology of these features, however, the itinerary's designers could bend, twist, stretch, or compress the surrounding landscape at will.²² The resulting images range from the dryly compressed to the artfully embroidered. Unno Kazutaka identifies five chief variants: picture scrolls, labyrinths,

²¹ Note that the cartographer has rotated Shinano yet again, putting East at the top. The Tenryu and Kiso Rivers thus flow toward the right-hand side of the figure.

²² For an extended appreciation of this type of variably-scaled topological map, see Hori Jun'ichi, *Ipponmichi to nettowaaku: Chizu no bunkashi, kotoba hajime (Straight Roads and Networks: A Cultural History of Maps—A Discourse on Method)* (Tokyo, 200X).

diagrams, conformal maps, and mandalas.²³ I will focus here on the last three sub-genres, since the Beans collection contains both early (17-18c) and late (19c) examples of each.

Figures 9 and **10** illustrate the abstract, linear design of the diagram or strip-map. These ubiquitous travelers' aids functioned much as subway maps or triptychs do today. For the sake of convenience, Edo-era diagrammatic maps typically compressed the topography of the Japanese islands to fit on a long, thin strip of paper (as little as six inches wide but ten feet or more in length) that could be folded accordion-style and put between durable covers. By unfolding the resulting "book" from right to left, the traveler could track a series of more or less parallel routes between the southern tip of Kyushu and the northern tip of Honshu.

Figure 9 reproduces a page from the prototype of diagrams, a black and white itinerary published by Yorozuya Seibei in 1724.²⁴ This particular page shows a cross-section of central Honshu; the Pacific Ocean is just visible along the upper edge, mirrored by a narrow strip of the Japan Sea along the bottom of the map. The same features are easier to read in Figure 10, reproduced from a color-printed diagram published during the nineteenth century.²⁵ Some indication of the plasticity of topography in this genre can be seen in the shifting relationships between Mt. Fuji and the castle-town of Kanazawa, which migrates from Fuji's left to its right in these two figures.

By design, stylized maps like these left little room for landscape depiction. Distance notations, side roads, and navigable waterways are all squeezed in. But under the dual imperatives of clarity and compression, almost everything else has been squeezed out. Provincial names appear in small cartouches, for instance, but no attempt is made to specify their boundaries. Likewise, while flattened hill-signs are ubiquitous, they serve more as running borders between the roads than as meaningful representations of topography. As the sea is symbolized by waves, so the land is symbolized by hills (indeed, in this stylized rendition, the two look almost identical). Yet even within this attenuated form we can see a modest increase in attention to alpine geography over time. In the 1724 diagram, no peaks are named. In its nineteenth-century counterpart, by contrast, a score of named mountains (including three on this page) have become visible.

The same turn can be seen more dramatically in areal or conformal route maps, whose designers took care to document not only the roads but the landscape through which they passed. These maps convey a rich store of information about their key concern, the routes and station-stops themselves; the vividly marked national turnpikes and their post-stations are typically color-coded to signal their relative importance at a glance. But they also make room for the surrounding countryside. An early example is Ishikawa Ryusen's enormously popular *Honcho zukan komoku* [Outline map of Japan], originally published in 1687 (**Figure 11**).²⁶ Ryusen's map is fairly crowded with landscape features: provincial names and boundaries (blocked out in vivid colors); castle-

²³ Unno 1994:424. Later (on page 426) he adds *sugoroku* game boards to the list.

²⁴ Labeled in the Beans catalogue as *Kairiku nihon dochu kotei ki* (Itinerary of the sea and land routes of Japan), the same map is identified by Yamashita Kazumasa simply as *Nihon dochu koteiki*. According to Yamashita, Yorozuya's handy, compact design proved so popular that his map was revised and reprinted regularly for over 100 years. For an illustration from a 1771 edition, see Yamashita Kazumasa, *Edo jidai kochizuu o meguru* [English title: Japanese Maps of the Edo era] (NTT Shuppan, 1996), p. 121.

²⁵ Shinzo nihon dochu kotei ki zen (Newly enlarged complete itinerary map of Japan), date unknown. Published in Nagasaki by Kokuryusan and Heiryusan, 18--.

²⁶ On the influential Ryusen map, which circulated as far as Europe, see Yonemoto 2000, 26-35.

towns and bakufu commandaries (identified in yellow rectangles and circles, respectively); ruling families and their landholdings (spelled out in textual addenda on or next to each castle-town label); major shrines and temples (important destinations of travel, as well as impressive landmarks on the traveler's horizon); lakes and rivers (drawn in exaggerated detail where they cross the traveler's path); and unofficial side roads (shown as orange lines linking one turnpike to another, but without other distinguishing details). Wherever room permits, he has also included generic in-fill in the form of pictorial scenery icons. These include waves (for the sea), trees (symbolizing forest), rooftops (to represent settlements), and hill-signs (to represent mountains).

With the important exception of Mount Fuji (which is drawn in the stylized three-line form reserved to that famous peak), these generic tent-shapes are the only form in which mountains appear on this seventeenth-century map, rendering upland topography in an idiom that is, again, more decorative than empirical. But conformal maps produced a century and a half later speak a very different language. **Figure 12** shows how Shinano was depicted in an 1855 example, the *Dai nihon dochu saikenki* (*Detailed route map of Great Japan) by Gyokuransai [a.k.a. Hashimoto Sadahide]. On this large sheet-map, settlements and roads are rendered visible down to a very fine level of resolution, offering an almost microscopic view of northern Honshu's circulatory system.²⁷ But the most arresting feature of this map is its vivid depiction of the physical landscape. Mountains here are not generic and decorative but specific and integral; one can see at a glance how they channel flows of movement through the landscape.

A close-up of the Matsushiro / Suzaka region in northern Shinano (Figure 13) highlights the care with which Gyokuransai depicts individual peaks, drawing them in profile view as they would have been seen from the road. Each appears, at least, in an individualized form, although more research would be required to determine whether these correspond to their actual physiognomy. The mapmaker has further heightened their stature in four evocative ways: through the application of color (deep green), through the generous allocation of map space, by drawing them so as to emphasize their majestic ruggedness, and finally, by giving them dignified labels. Alpine toponyms are not only supplied but formally framed (in distinctive gourd-shaped cartouches at that), suggesting that mountains have finally gained the status of a formal cartographic object.

Different techniques produce similar effects in the so-called mandala map, a topological genre that emphasized the symbolic qualities of a given landscape. Adapting the cosmic diagrams of continental Buddhism to local religious practice, the Japanese had long since extended the term *mandara* to include relatively naturalistic paintings of shrines and their surroundings.²⁸ In a series of conceptual leaps, the scale of such depictions was expanded during the Tokugawa period to include larger swaths of terrain, ultimately, in the remarkable work of Kuwagata Keisai, encompassing Japan as a

²⁷ The dense detail is enabled by Gyokuransai's large scale; his 1855 map covers only half as much terrain as Ryusen's, yet it is twice as big.

²⁸ As Elizabeth ten Grotius observes, it was natural for mandals in the kami-worshiping tradition to emphasize the physical beauty of specific sites in Japan, where hills and trees are often imbued with sanctity. Elizabeth ten Grotius, *Japanese Mandalas: Representations of Sacred Geography* (University of Hawaii Press, 1999), 3. On medieval mandala maps of shrine lands, see Unno 1994:364-66; for in-depth discussion of imagery from one site, see Caroline Hirasawa, "Hellbent on Heaven: Female damnation and salvation in Tateyama's Mandalas" (unpublished Ph.D. dissertation, Stanford University, 2005).

whole.²⁹ Although the resulting images are far removed from the iconography of esoteric Buddhism, they retain three defining features of the classic mandala: the deployment of a hypothetical aerial perspective, the visualization of a three-dimensional realm in a two-dimensional plane, and the intent to enable and encourage "interior pilgrimages."³⁰

The Beans collection includes three mandala maps of the Tokaido, spanning some 200 years of cartographic development. **Figure 14** shows a detail from the *Tokaido michiyuki no zu* (Itinerary map of the Tokaido) of 1654, a rare copy of the oldest surviving printed itinerary in Japan; **Figure 15** shows a similar map of the same name published a decade later, in 1667. In keeping with mandala convention, both are designed vertically, depicting the coastal road as though it were a winding mountain path with Kyoto as its lofty shrine. Their Tokaido zig-zags upward from the shogunal headquarters at Edo (lower right), past a modest Mount Fuji (rising from the clouds in the lower left), along the Ise Bay coastline, past the shores of Lake Biwa (in the upper quadrant), before reaching the imperial capital. Along the way, the road winds in and out of view between hills, castles, and other protruding landmarks. Distant points on the landscape are folded together on each map through classic mandala techniques: the curving of straight lines, the use of cloud-barriers as a short-hand for elapsed space, and the deployment of variable perspectives and scales.³¹ (For a sense of how imaginatively the east-west route has been reconfigured here, compare with **Figure 1**.)

Despite competition from increasingly accurate conformal maps during succeeding decades, the mandala form remained hugely popular with the Japanese public. Indeed, by the early nineteenth century, it had given rise to a new variant that took even more liberties with topography: namely, the panoramic view-at-a-glance, or *ichiranzu*. Continuing the mandala's conceit of a viewpoint outside the landscape, the view-at-a-glance adopts a hypothetical aerial perspective, offering a sweeping vista that seems to defy the limits of the flat picture plane.³² But in contrast to the classic mandala, which directs the viewer's gaze upward through a landscape that is vertically conceived (in a physical as well as a spiritual sense), the gaze of the *ichiranzu* pans across a landscape that appears to unfurl below the viewer's feet.

One early panoramic print is the *Tokaido meisho ichiran* (The famous places of the Tokaido at a glance), published in 1818 (**Figure 16**). Designed by the famous woodblock artist Hokusai, this nineteenth-century mandala echoed its seventeenth-century predecessors in putting West (Kyoto) at the top, and East (Edo, represented here by the Nihonbashi bridge) at the bottom. But rather than having the road wind toward Kyoto up a vertical surface, Hokusai takes the Tokaido on a convoluted journey through a predominantly horizontal space. From Edo, the turnpike makes an exaggerated leftward loop, circling an outsized Mt. Fuji before threading its way back to the center of the

²⁹ Henry D. Smith II, "World without walls: Kuwagata Keisai's panoramic vision of Japan," *in* Gail Lee Bernstein and Haruhiro Fukui, eds., *Japan and the World: Essays in Japanese History and Politics* (St. Martin's Press, 1988), 3-19.

³⁰ "All ... types of mandalas offer their pilgrims journeys away from home (or the recollections of those journeys), transformation (or the hope of transformation), and reintegration once mental journeys are complete and the pilgrims return to their everyday lives." ten Grotius 1999, 4-5.

³¹ See Jilly Traganou, *The Tokaido Road: Traveling and Representation in Edo and Meiji Japan* (RoutledgeCurzon, 2004), 31.

³² As Henry Smith notes, the English panorama (originally a circular painting that completely surrounded the viewer) was a product of the same era as the *ichiranzu*, both having emerged in the last decades of the 1700s. Smith 1988:254-55, n. 12.

printed page, thence to ascend past the familiar landmarks of the Ise Bay and Lake Biwa on its way to the capital.³³ One senses a tension in the composition: while experimenting with a bold new panoramic perspective, Hokusai still feels constrained to keep Kyoto in the position of honor at the top of the map.

What can we say about the treatment of alpine geography in these figures? First, from its earliest incarnation, the mandala landscape was a landscape of mountains. Of all the seventeenth-century maps in the Beans collection, Figures 14 and 15 boast by far the most prominent and elaborate hill-signs. No doubt this reflects their religious origins; in Buddhism as well as kami worship, high places were holy places. Yet over time, in the mandala as in other map genres, alpine iconography became more vivid, more individualized, and more pronounced. By 1818, through color as well as design, Hokusai had all but buried the turnpike in its mountainous surroundings. One has to look hard at Figure 16 to pick out the road at all. It is the peaks that have been illuminated and pushed to the fore, creating a dazzling yellow-green brocade whose contours are unabashedly the primary objects of the viewer's gaze. The looming Mount Fuji—rivaling Kyoto itself by virtue of its placement, size, slope, and brilliance—provides a luminous exclamation mark to this ecstatic alpine vision.

Hokusai's image proved prophetic. Over succeeding decades, novel mandalas would come on the market in which Fuji eclipsed Kyoto altogether. A stunning example is the Fuji ryodo ichiran no zu (View-at-a-glance showing two ways to climb Mt. Fuji), designed by Hashimoto Sadahide and published in Edo in 1859 (Figure 17).³⁴ This itinerary begins conventionally enough in Edo, depicted as a mass of grey rooftops in the lower lefthand corner of the print, from which it traces the winding Tokaido alongside the Pacific Ocean, where a fleet of small boats is anchored peacefully. But instead of bypassing the mountain and proceeding on to the capital, Hashimoto turns inland to follow two pilgrimage paths to the top of the great volcano itself. By compressing the landscape from Edo to the base of Fuji, he makes room for a detailed depiction of the ascent up the mountain, marking every rest-stop on the cone itself with a cartouche of the same size as those flagging post-stations on the Tokaido. The result is a new Fuji-centric vision—one that finds even more flamboyant expression in another ezu of the same period, the Fujimi jusanshu yochi zenzu (Map of the thirteen provinces from which Mount Fuji is visible) of 1843 (**Figure 18**). In sharp contrast to every other map in the Beans collection, this one shows Fuji in plan view and tints it a glorious yellow, turning the sacred peak into a golden orb around which the lush green landscape of Honshu seems to pivot.

The Stereoscopic Vision of Tokugawa Maps

In an article published earlier this year, I made a case that the Japanese Alps loomed up on the national horizon in the 1890s as an object for unprecedented economic and symbolic investment.³⁵ What this excursion through the Beans collection has taught me is how deep a vein that process was able to tap in the Japanese geographical

³³ The success of this print inspired Hokusai to design similar panoramic views for three of the major national roads. For a color reproduction of his Kiso *ichiran*, see Yamashita Kazumasa, *Chizu de yomu edo jidai* [English title: *Japanese Maps of the Edo Period*] (Kashiwashobo, 1998), 186-87.

³⁴ The two routes start from Oomiya (near the coast) and Kami Yoshida (farther inland), respectively.

³⁵ "Discovering the Japanese Alps: Meiji mountaineering and the quest for geographic enlightenment," *Journal of Japanese Studies* 31(1), Winter 2005, 1-18.

imagination. By the late eighteenth century, across diverse regions and genres, mountains were already becoming prominent on popular maps. Whether designing a compact atlas or a conformal *ezu*, an abstract triptych or an embroidered mandala, the cartographers of Edo evidently felt compelled to give considerable space and definition to alpine forms long before the Meiji period. And while the range known today as the Japanese Alps would remain unmarked until the 1890s, Mount Fuji was already swelling to magnificent symbolic proportions a hundred years earlier. The compelling question is, why was this so? What made Japan's upland places in general, and Mount Fuji in particular, "come onto the map" so vividly around the turn of the nineteenth century?³⁶

One factor was undoubtedly the growing importance of mountains in the Tokugawa economy. For urban dwellers and peasants alike, by the mid Edo period, alpine resources simply could not be taken for granted. As the wooden cities of the early modern archipelago were built, burned, and built anew, timber grew scarce; as population doubled (and proto-industries that needed charcoal developed apace), fuel grew scarce; as cultivated land doubled, even green manure became subject to court battles. (It may be significant in this connection that many later maps show hilltops along the Tokaido, a heavily populated region, as yellow or pale green, reserving dark green for what appear to be fringing woodlots.)³⁷ Meanwhile, deforestation in the heavily used uplands combined with massive reclamation in the lowlands to create episodes of severe flooding and siltation downstream. Finally, devastating volcanic eruptions—including at least two (those of Mt. Fuji in 1707 and Mt. Asama in 1783) sizeable enough to alter the archipelago's weather patterns—disrupted life for millions. Economically and ecologically, then, mountains could not but be on the minds of the nation's people (as well as its rulers) by the end of the eighteenth century.³⁸

Compounding the ecological factors were cultural ones. By the eighteenth century, Japan's cultural center of gravity had shifted decisively from Kyoto to Edo. Where this frontier city of merchants and warriors had formerly seen itself as inferior to the refined capital of the emperor, Edoites in the later 1700s began to express pride in their rough-and-tumble style—and to celebrate the rugged landscapes that matched it. Through the course of the century, Edo's playwrights, publishers, and *ukiyoe* artists elevated Fuji (alongside the macho kabuki actor Danjuro) into a symbol of the shogun's city. In the process, they brought an Edo mascot to country-wide prominence, helping to transform a local cult into a national one.³⁹

Yet if ecological crises and cultural caché may have prompted the public to pay attention, other things had to happen before a heightened interest in mountains could manifest itself in the kinds of maps we have seen here. One set of enabling developments had to take place in the social sphere. As noted above, it took the growth of a large lay

³⁶ The phrase comes from James A. Millward, "'Coming onto the map': 'Western regions' geography and cartographic nomenclature in the making of Chinese empire in Xinjiang." *Late Imperial China* 20(2), December 1999, 61-98.

³⁷ The best example may be the Fuji mandala of 1859 (Figure 17). The lighter coloring upslope, where village commons were traditionally located, suggests a prevalence of denuded grasslands and "bald" spots at those elevations—a phenomenon also detectable in nineteenth-century landscape photographs. Given that this particular map takes pains to depict Fuji itself in realistic ash-grey lends credibility to an ecological reading of its color scheme in general.

³⁸ Conrad Totman, Early Modern Japan (University of California Press, 1993), chapters 12 & 13.

³⁹ Henry Smith, "The floating world in its Edo locale, 1750-1850," *in* Donald Jenkins, ed., *The Floating World Revisited* (Portland Art Museum and University of Hawaii Press, 1993), 25-46; H. Byron Earhart, "Mount Fuji and Shugendo," *Japanese Journal of Religious Studies* 1989, 16(2-3), pp. 205-226.

readership—one blessed with leisure, keen for spatial knowledge, and versed in sophisticated visual codes—to translate *desire* for alpine imagery into effective *demand*. Meanwhile, another set of enabling developments took place within the field of cartography. Pivotal here was the introduction of imported telescopes, which reached Edo in the last decades of the 1700s.

Telescopes revolutionized Japanese mapping on multiple levels. In practical terms, they made possible the technique of triangulation, deployed by Ino Tadataka from the 1790s to the 1820s to produce precise surveys of the coastlines and borders of Japan.⁴⁰ In the conceptual realm, meanwhile, magnifying lenses altered the very sense of sight. Whereas vision in Japan "had previously been imagined as something discursive or extrapolatory, ... passing along links that were historic, artistic, or poetic," the new gaze made possible by Western scientific lenses was "rooted in close and objectifying observation."⁴¹ Landscape artists and map-makers alike were fascinated by the possibilities. Already by the 1790s, magnifying lenses were turning up everywhere in woodblock prints—both as objects and as instruments of a new artistic vision.

For the history of cartography, what was revolutionary about that vision was the way it combined focal depth with a downward gaze. Lenses gave the map-maker the ability to see landmarks near and far at a comparable level of resolution: "the close study of a distant landscape through a telescope enabled the identification of named places not visible to the naked eye." Even more novel, perhaps, was the way lenses rewarded looking from an elevated perch. Before the advent of the telescope, elevated views were by and large associated with the ancestors or the sovereign. In a religious context, as Yanagita Kunio observed, mountaintops were the abode of the spirits; in this sense, the bird's-eye-view was tantamount to the perspective of the dead. Even those who climbed sacred peaks were encouraged to turn their gaze inward and upward, rather than out and down; "any sights spreading below were incidental to the fulfilling rigour of the effort of climbing up." In a secular context, of course, panoramic seeing had military value. But as it was not given to commoners to command, neither was it their place to look down. In many places, "the downward gaze, aided or naked, was fenced around and closed off."

⁴⁰ Watanabe Ichiro, ed., *Tadataka to Ino zu* (Tokyo: Awa Puranningu [Our Planning Corp.], 1998).

⁴¹ Timon Screech, *The Western Scientific Gaze and Popular Imagery in Later Edo Japan: The Lens Within the Heart* (Cambridge, 1996), p. 2.

⁴² Smith 1988, p. 16.

⁴³ Mizumoto Kunihiko, *Ezu to keikan no kinsei* (Tokyo: Kashiwa Shobo, 2002), p.13.

⁴⁴ Screech 1996, p. 228. Landscape mandalas confirm this notion, inasmuch as they embody an upward gaze onto the sacred heights rather than a downward gaze from above.

⁴⁵ Screech 1996, 214. The author goes on to claim that, as the period progressed, the shoguns themselves "shunned" the surveying gaze, moving instead towards an ideology of rule through virtue. Thus when existing castle towers were destroyed by lightning, fire, or earthquake, they were seldom replaced: "keeps were public announcements of rulers' fears, and stripped of its panoramic sway a government seemed rhetorically better." As a result, Screech posits, "by the eighteenth century, looking down had collapsed as a cogent structure for knowledge" (1998:215). Cartographic evidence discredits this claim. The shoguns certainly never shunned the surveying gaze in official maps. On the contrary, despite growing financial hardship, they intermittently invested massive resources to update and enhance those maps, supporting new surveys to extend their reach as well as their accuracy. Moreover, while some castle towers may have fallen into disrepair, their presence symbolically loomed as large as ever; stylized donjons continued to represent castle-towns on most maps of the period.

With the introduction of the telescope, however, looking down evidently became a respectable and pleasurable past-time, accessible to the public at large. Hilltop teahouses in and around Japanese cities began to rent out telescopes for a small fee, a phenomenon documented in numerous prints of the 1790s.⁴⁶ For landscape artists who had cultivated "the proper sense of manipulative viewpoint and spatial breadth," this in turn suggested "the idea of looking at [a vast region] from a great distance and identifying its separate places."⁴⁷ That perspective was soon transferred to maps, bringing mountains across the country into cartographic focus. In a dual sense, then—by allowing clear identification of distant landmarks, as well as by giving elevated sites a new functional importance in cartographic practice itself—telescopes contributed to the alpine sensibility that later Edo maps so vividly record.⁴⁸

Especially significant for our purposes is that this sensibility found expression in popular idioms as well as official ones. The boundary between the two categories was not always a sharp one; as we have seen, state cartography proceeded alongside its commercial counterpart, and greatly influenced it. But the consuming public of Tokugawa Japan had its own tastes, and as the period progressed, artisans catered to those tastes with increasing boldness and sophistication. The result was a profusion of cartographic commodities, some of which rendered landscapes legible in forms that differ strikingly from those of the modern map. In this pluralistic marketplace, the same telescopes that enabled Ino Tadataka to extend the X-ray vision of the ruler also made possible the swooping surfaces of the Hokusai view-at-a-glance. Even as magnifying lenses were being applied to extend the shogun's grasp of his terrain, they were simultaneously deployed to enhance the traveler's imagined or remembered itinerary.

What made late-Edo commercial cartography distinctive, I now believe, was the canny ability of its practitioners to hitch the apparatus of magnification to a tradition of virtual/visual pilgrimage. The telescope did not destroy the mandala genre; on the contrary, it enhanced it. As a result, rather than being presented with an objectified landscape stripped of religious overtones, late Tokugawa map-readers were invited to visualize a familiar, culturally saturated landscape in new depth and breadth. The resulting cartographic archive preserves what we might call a stereoscopic view, fusing the technology of surveillance with the sensibility of the pilgrim. It also confirms Timon Screech's suggestive argument about Tokugawa visual culture more broadly: that in this archipelago, for at least a brief moment in time, imported technologies were subordinated to indigenous sensibilities.⁴⁹

And what became of those sensibilities as the Tokugawa period came to a close? Did the perspective of the pilgrim finally yield to that of the bureaucrat? Some seem to

⁴⁶ Timon Screech (1988) reproduces half a dozen such prints, starting on page 230; see also Figure 1.16 in Smith1988.

⁴⁷ Smith 1988, p. 16.

⁴⁸ See, for instance, the Sado Island map (catalogued as 1830, but probably made in 1842) in the Beans Collection, a rare hybrid that plots a splendid bird's-eye-view image of the island's topography (rendered in exaggerated profile) onto a mathematically precise longitude/latitude grid. For discussion of this map, see Unno 1985, p. 22.

⁴⁹ As an art historian, Screech is particularly interested in new modes of seeing, but he makes a broader claim: "The West never invaded Japan nor blockaded it, and it never had the writ to command. Japan, consequently, remained fully independent. This was felicitous ... for the historian, as eighteenth-century Euro-Japanese interaction represents a genuinely unique case study in almost egalitarian cultural collision." Screech 1996, p. 3.

argue that it did—indeed, that it had to: "spatial homogenization and secularization were the premises of Japan's becoming a nation-state ... and it goes without saying that [such principles] are incorporated in [Meiji] maps."50 But the fate of the mandara imaginary was more subtle than that. As Japan became swept up in the geopolitical crises of the mid nineteenth century, its mountains, far from being stripped of their sacred aura, seem to have been imbued with ever more resonant symbolic layers.⁵¹ And while Meiji ideologues readily took advantage of that process, they did not initiate it. Well before the installation of an imperial regime in Tokyo—one that would eventually co-opt the mandala modality into its own propaganda, even as it enfolded sacred peaks into state Shinto—mountains in general, and Mount Fuji in particular, were already emerging as icons of the nation.⁵² In closing, let me leave you with one final image from the detailed copperplate at las of 1865: its dramatic depiction of Suruga Province (Figure 19). This map, like others we have seen, attests to the tremendous importance that Fuji had acquired on the eve of the Meiji revolution. It also points forward to the symbolic manipulation of mountain imagery in the years to come, when the pilgrim's geocultural imagination would be appropriated for the state's geopolitical purposes. But that is a topic for another paper.

⁵⁰ Traganou 1004, 62.

⁵¹ This point was elaborated by Sarah Thal, Kenneth Ruoff, and Andrew Bernstein in a recent panel on "Mountains in the Remaking: Sacred Peaks in Twentieth-Century Japan." See especially Bernstein's essay, "Whose Fuji? Religion, region, and state in the fight for a national symbol." Unpublished paper presented at the April 2005 meeting of the Association for Asian Studies, Chicago, Illinois.

⁵² According to Andrew Bernstein, this was partly due to the Fuji-fixation of visiting foreigners. See also *Kurobune wa Fuji-san o noboru!* ... *

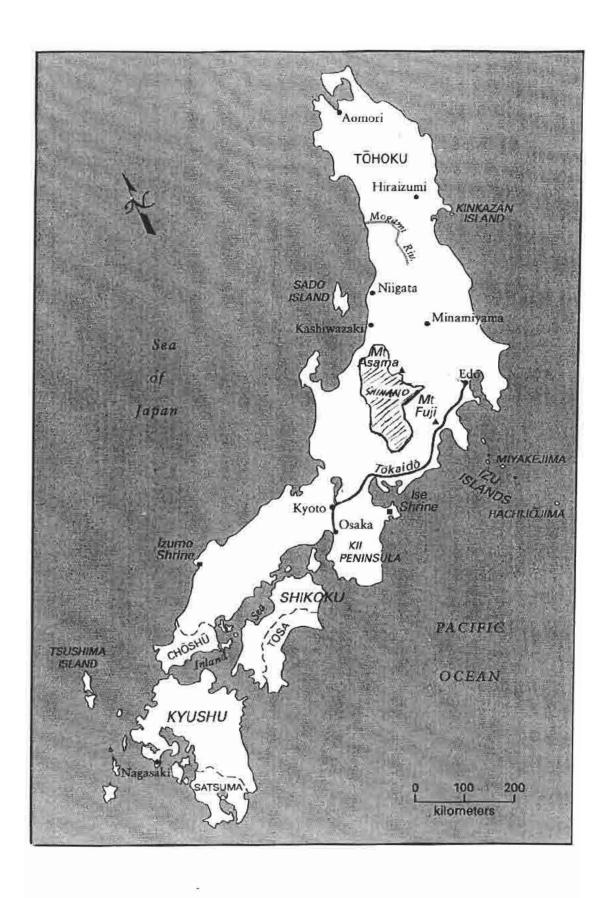
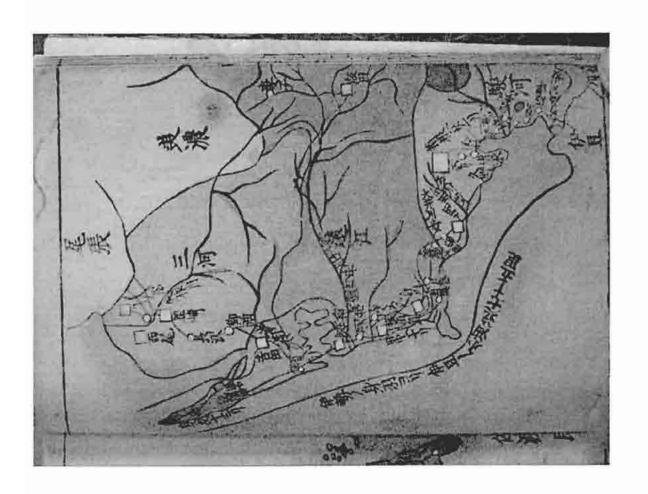


Figure 1. Map of Japan showing Shinano and the Tokaido.



Nihon bunkei zu, 1666 - Pacific coastal provinces Figure 2.

Figure 3. Nihon bunkei zv -- Northern Shinano

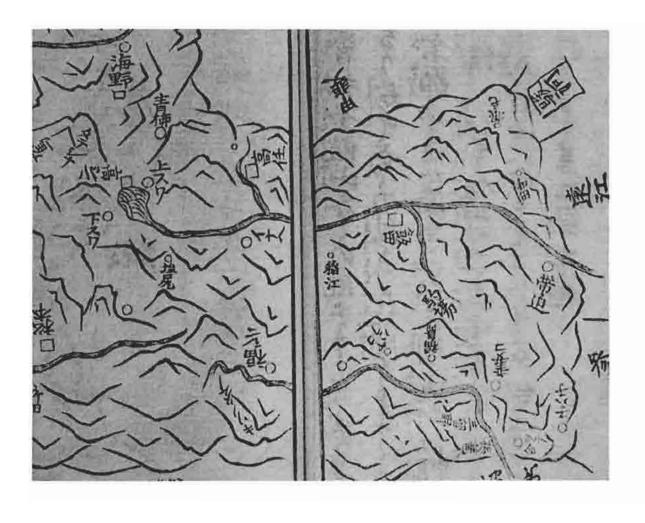
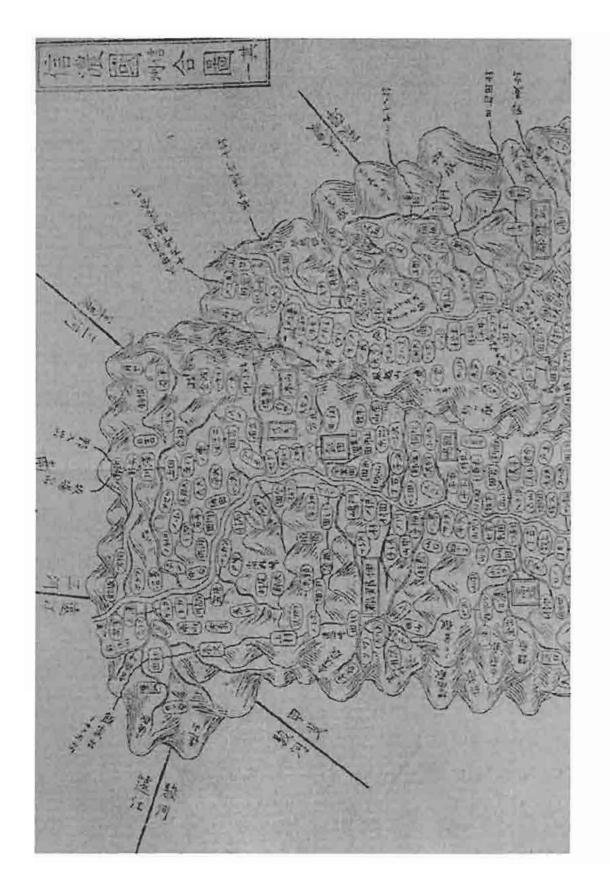


Figure 4. Shinkan jinkoku ki, 1701 -- southern Shinano

Figure 5. Shinkan jinkoku ki -- Iga province

Figure 6. Kokugun zenzu, 1837 -- Shinano



Dosen dai nihon koku saizu, 1865 -- Shirano Figure 7.

Dosen dai nihon koku saizu -- Shinano border detail Figure 8.

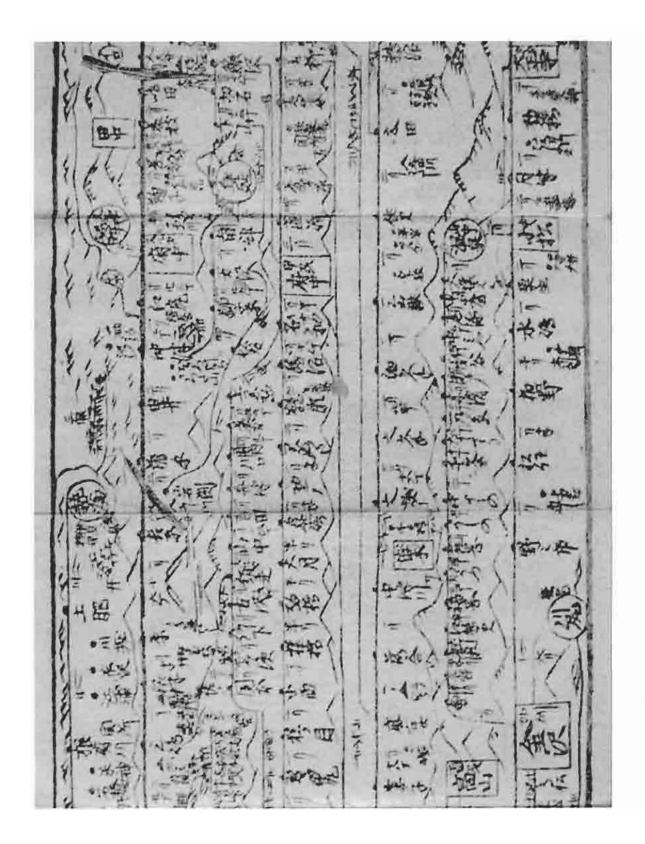


Figure 9. Nihon dochu kotelki, 1724

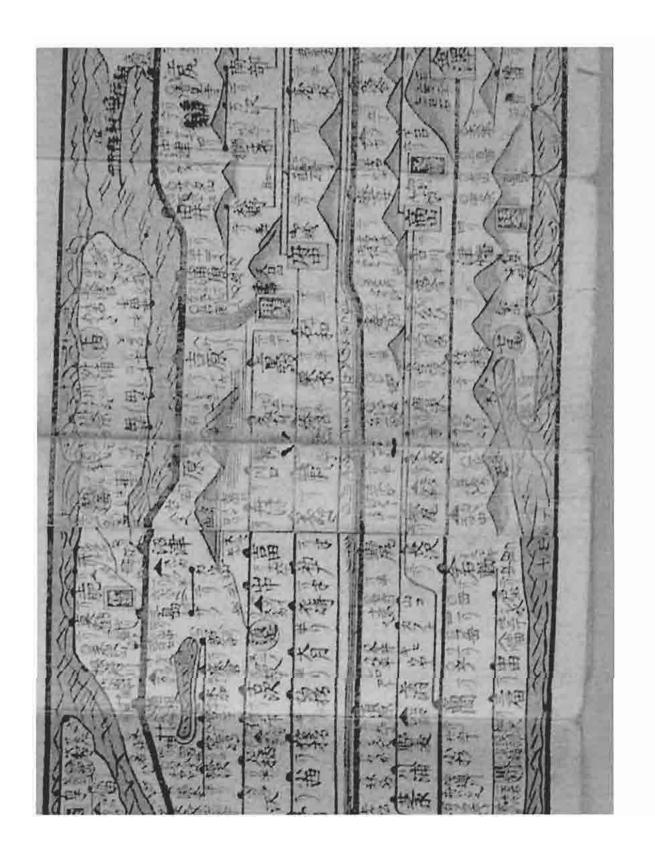
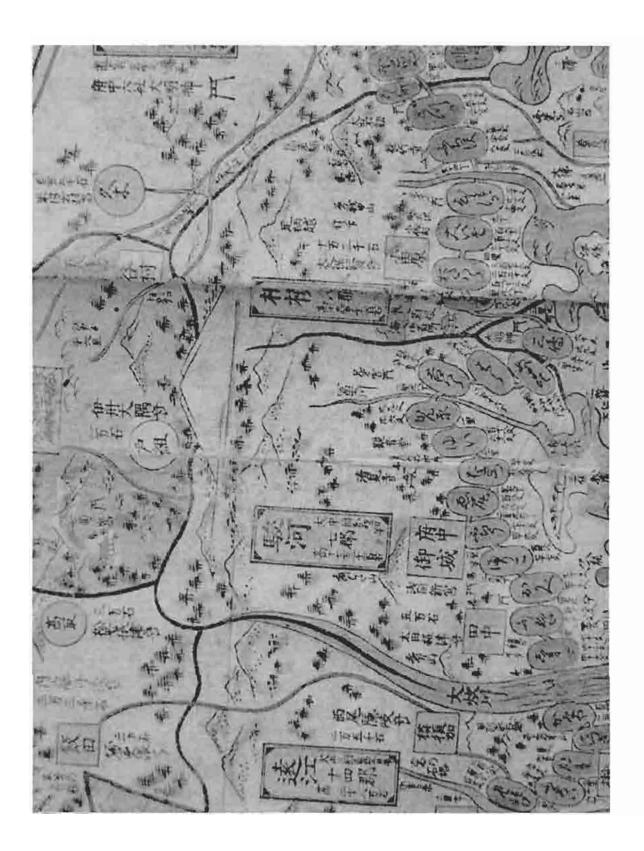


Figure 10. Shinzo nihon dochu kotelki zen



Honcho zukan komoku (Ishikawa Ryusen), 1687 Figure 11.

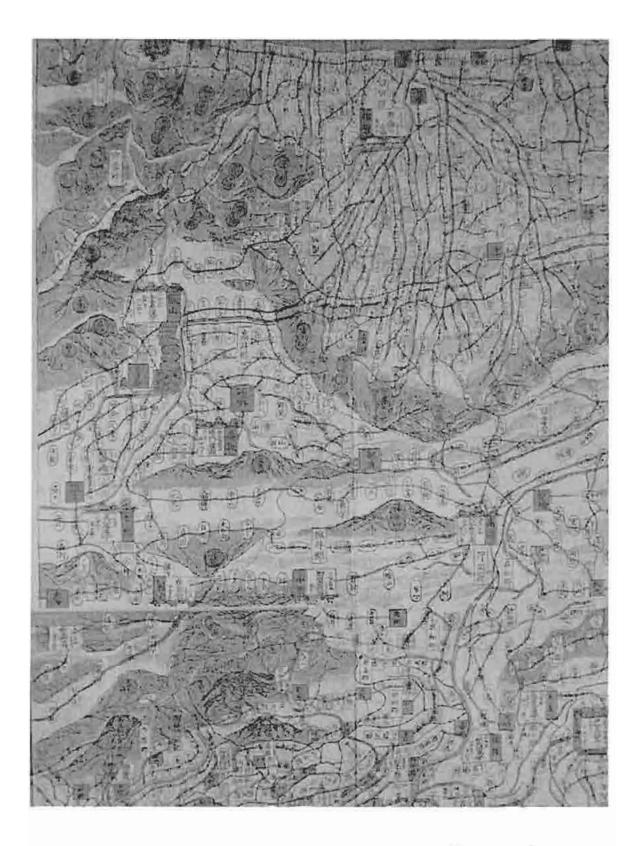


Figure 12. Dai nihon dochu saikenki, 1855 -- Shinano

Dai nihon dochu saikenki -- Matsushiro detail Figure 13.

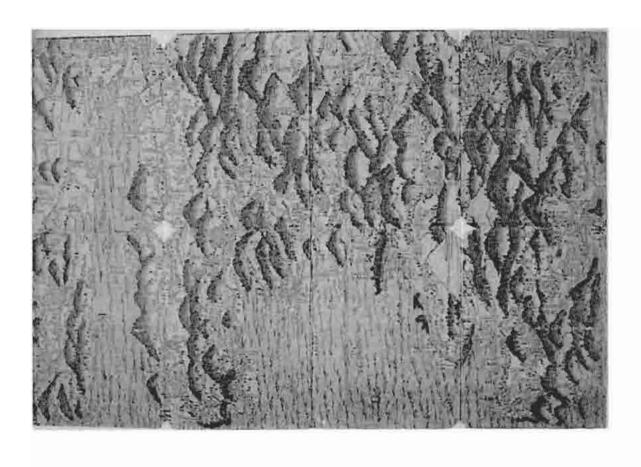
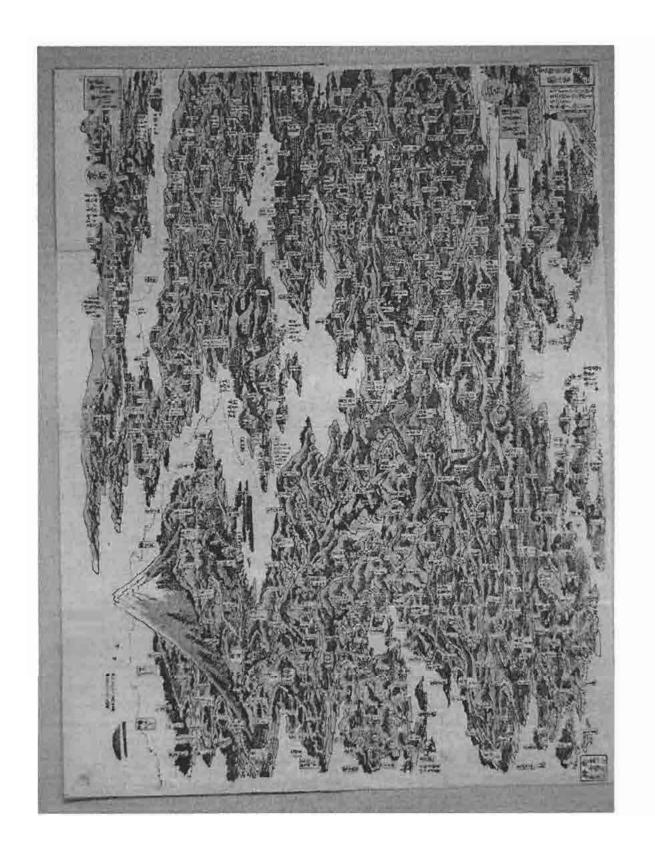


Figure 14. Tokaido michiyuki no zu, 1654

Figure 15. Tokaido michiyuki no zu. 1657



Tokaido meisho ichiran (Katsushika Hokusai), 1818 Figure 16.

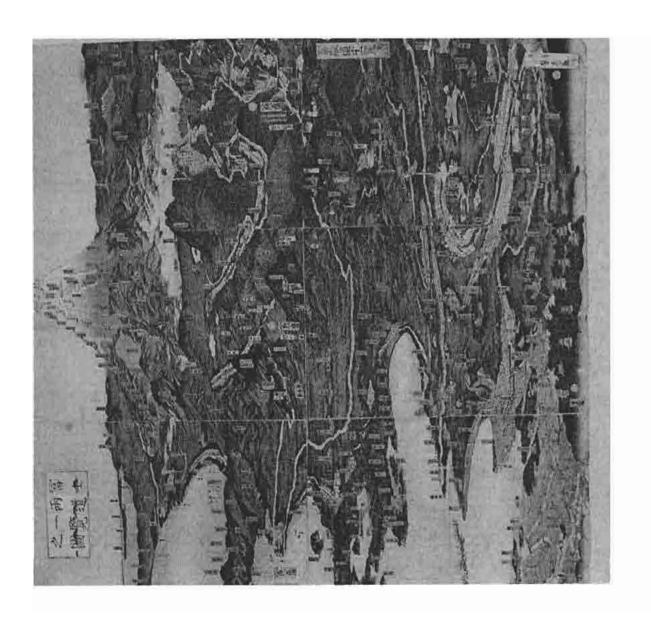
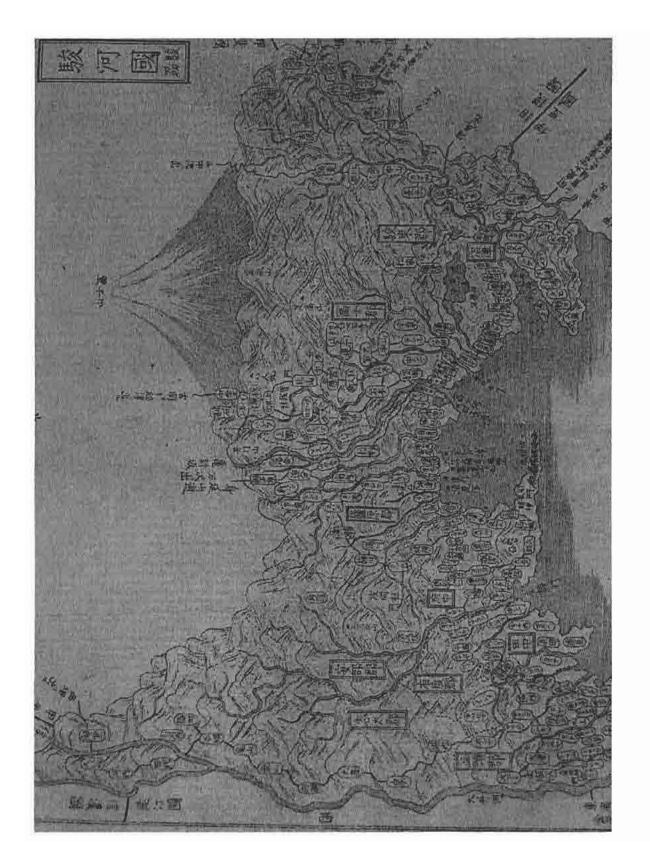


Figure 17. Fuji ryodo ichiran no zu, 1859



Figure 18. Fujimi jusanshu yochi zenzu, 1843



Dosen dai nihon koku saizu -- Suruga province. Figure 19.