

**Turrets of Time:
Clocks and Early Configurations of
Chronometric Time in Edo Fiction
(1780-1796)¹**

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The Edo period (1603-1868) witnessed a preponderance of technological advances in the areas of printing, textiles, construction, and mechanics, yet few were to impact the experience of everyday life as much as clockmaking. Over two hundred years before the abolition of the *fujiteihō* (variable hour time-keeping) system in Meiji 20 (1887), Japanese clockmakers realized their first successes at replicating and adapting Western chronometric technology for a society that ran on a variable, twelve-hour schedule of diurnal time. The consequences of these innovations, while not immediately manifest, would eventually prove far-reaching and profound. The introduction of the automated clock inaugurated a new regime of timekeeping in early modern Japan, one whose operation was directed by powerful political and economic forces. In the hands of the Tokugawa *bakufu* and the municipal authorities of Edo, automated clocks were used to instill punctuality in resident samurai and to synchronize the daily lives of the populace. Within the context of Japan's incipient market economy, the automated clock represented the possibility of reifying time's value with an unprecedented degree of mechanical accuracy. Notwithstanding the propensity of its escapement to trip and its springs to falter, the automated clock also captured the popular imagination with its complex and seemingly magical inner workings, which only the most practiced hand could calibrate. In eighteenth century print discourse, the clock emerged as a site of cultural inscription, as artists and writers imputed to this foreign technology connotative meaning, rendering it into a new emblem of the prevailing culture of play.

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In this study, I chart an area of research which remains largely underexplored in literary and cultural histories of Edo Japan—namely, material practices of timekeeping in eighteenth-century Japan and their concurrence with chronometric configurations of temporality in fictional narrative. I argue that the introduction of the automated clock into early modern Japanese society, which had a profound influence on the way people perceived and imagined time, also informed writers' approaches to representing time in their works of fiction. Accordingly, the greater part of this study is concerned with documenting early attempts by Japanese fiction writers to emplot, to call attention to Paul Ricoeur's useful term,² time in narrative. In its earliest instantiations, narrative time is indicated by an illustrated mechanical clock, a stylized cartouche that indicates the exact hour by name, or else by references in the text. Since there were no conventions for configuring chronometric time per se, writers arrived at different solutions to the problem of representing time's passage in their works, and in many cases, their approaches appear to have been dictated by the narrative and pictorial possibilities of the genres in which they wrote. There was no single mode of configuration to which every writer adhered. Rather, the problem of how to represent hourly temporal progression inspired a variety of solutions, many of which are as revealing about the art of fiction as they are about perceptions of time.

Admittedly, fictional narrative is just one of many textual practices that could be studied in the context of early modern timekeeping, and separate examination of diaries, histories, compendia of local lore, *kawaraban* (broadsheets) and other forms of narrative may yield very different conclusions than are offered here. While this study does refer to similar experiments using structures of chronometric time in late eighteenth and early nineteenth century poetry and visual arts, its principal focus is on the mimetic representation of time in fictional narrative, and in particular, on a collection of works that were produced during a sixteen-year period between An'ei 9 (1780), when a cluster of references to me-

² According to Ricoeur, "emplotment" is a mechanism of mimesis that mediates between time and narrative, between the preceding stage of practical experience and succeeding stage of represented experience. Ricoeur 1990, 52-88.

chanical clocks first appeared in the genre of *kibyōshi* (“yellow cover novelettes”), and Kansei 8 (1796), incidentally the same year as the publication of Hosokawa Hanzō Yorinao’s (1741-1796) *Karakuri zui* (Illustrated Guide to Technical Devices, 1796), a work that played a key role in the dissemination of technical knowledge about clocks and *karakuri* mechanisms in general. These years constitute a formative period when, in the advent of widespread technical or even general knowledge about clocks, popular fictional narrative was positioned to influence newly emerging notions about chronometric technology and to project the ramifications of its importation into early modern society. Within the basic context of storytelling, however, I argue that the presence of the automated clock coincides with the implementation of new mechanisms of authorial control over the temporal setting and pace of temporal progression—if not also over the temporal dimensions of the reading experience itself. These innovations had applicability in other areas of cultural production, as evinced by similar experiments with representing time in poetry collections like Ishikawa Masamochi’s (1753-1830) *Yoshiwara Jūnitoki* (*Twelve Hours in the Yoshiwara* c.1804) and series of *ukiyo-e* prints like Kitagawa Utamarō’s (1753-1806)—*Seirō jūnitoki* (*The Twelve Hours of the Cerulean Towers*, c.1794) and *Musume hidokei* (*Sundial of Maidens*, c. 1795). In a broader literary historical context, these early experiments with configuring chronometric time also demand our attention because they enable us to locate an important continuity between Edo and Meiji narrative, one which, while not fully developed in the space of this essay, will surely be familiar to those working in either period.

A History of Mechanical Timepieces in the Edo Period

As early as Genroku 1 (1688), we find one of the first illustrations of a mechanical clock in a work of popular fiction, attributed to Yoshida Hanbei and included in Ihara Saikaku’s (1642-1693) *Nippon eitaigura* (*The Japanese Eternal Storehouse*, 1688). In the illustration, set in a trading house in Nagasaki, a Chinese trader presents his Japanese client with a *yagura-dokei* 櫓時計 (“turret” clock) while discuss-



Figure 1. A Chinese trader and his Japanese client discuss business, while a *yagura-dokei* presides over the exchange from the edge of the veranda. Illustration from *Nippon Eitaigura*, in Noma Kōshin, ed., *Nippon eitaigura*, *Seken munesan'yō*, Saikaku oritome, in *Ihon koten bungaku taikei*, Vol. 91 (Iwanami shoten, 1969): 156.

ing business (Figure 1).³ While there is no direct description of this scene in the accompanying text, the implication of this new, imported technology for Japan is the subject of a satirical commentary that opens the story. According to the commentary, the three generations of Chinese inventors who putatively invented the clock and spent their entire lives perfecting its mechanisms would have never fared well in early modern Japan, where productivity was key, and craftsmen and merchants needed to work expeditiously if they were to realize profits from their ventures and remain in business.⁴ Notwithstanding its satirical tone, and its notion that the earliest clocks in Japan were of Chinese provenance, this commentary attests to how notions of time were changing during the Genroku period (1688.9-1704.3), especially among merchants, who increasingly saw the value in making efficient and economical use of the hours in the day. Saikaku reminds us that powerful market forces already were changing the way people thought about time nearly two centuries before the clock became a common

³ In his footnote to this illustration, Noma Kōshin suggests that the clock is a gift offered by the Chinese trader. See Noma 1969, 156.

⁴ Noma 1969, 155.

sight in daily life. However, as its collocation with Chinese traders in this illustration indicates, the clock itself, as a material object, was still very much viewed as the exotic product of foreign technology, even though clockmaking itself had emerged as a recognized trade in Japan by this time. A *senryū* from the period similarly locates the clock in a site characterized as “Chinese”:

町内で時計の鳴るはからもの屋⁵

*In town, clocks sound
From a Chinese goods shop*

In fact, the earliest automated clocks in Japan were not of Chinese provenance, but Western, and were brought to Japan by Spanish and Portuguese missionaries during the sixteenth century. The Jesuit missionary Fransisco de Xavier (1506-1552) presented what is believed to have been the first automated timepiece in Japan to Ōuchi Yoshitaka (1507-1551), daimyō of Suo province, in Tenmon 20 (1551). In the decades that followed, missionaries presented clocks to Oda Nobunaga (1507-1551) and Toyotomi Hideyoshi (1507-1551), as well as to regional daimyō as a prelude to securing permission to preach Christianity in their domains; however, no clocks from this period are extant.⁶ Based on documented accounts, many of these clocks are thought to have been the *yagura-dokei*, or “turret” clock—so called because Torii Mototada (1539-1600), vassal of Tokugawa Ieyasu (1543-1616), installed one on a turret of Fushimi Castle in Kyoto. Ieyasu himself was presented with multiple Western timepieces over the course of his reign as shōgun, including one from the missionary Rodrigues in Keichō 11 (1606), another from the Portuguese governor of Goa in Keichō 15 (1610), and yet another from Garcia Guerra (c.1547-1612), archbishop of Mexico and viceroy of New Spain, in Keichō 16 (1611).⁷ Records indicate that this last clock was a *makura-dokei* 枕時計 (literally, “a pillow clock”), which resembled the *yagura-dokei* but was fitted with a

chiming device.⁸ Incidentally, this particular clock also has the distinction of being the oldest datable mechanical timepiece in Japan.

While impressive in their own right as specimens of Western horological technology, these clocks held little practical use for their Japanese recipients. Aside from the fact that they ran on complex mechanisms that were prone to stalling, they were also built to calculate time according to the twenty-four hour model of diurnal time, not the variable twelve-hour model then prevalent in Japan. Prior to the demise of the *fujiteihō* system, day and night were apportioned into six hours each, and the counting of daytime hours began approximately at sunrise and ended approximately at sunset. While the practice of telling time by the signs of the Chinese zodiac continued, it became more common to refer to the hours by numbers, and to order time by the sequence of six o'clock, five o'clock, four o'clock, nine o'clock, eight o'clock and seven o'clock. At sunset, the counting of the nighttime hours would resume again at six o'clock and proceed in the same order. This meant, of course, that daytime hours were longer than nighttime hours in the summer, and shorter in the winter. If time did indeed fly like an arrow, to borrow one of the well-worn idioms of Edo fiction, then it might be said to have flown at dramatically different speeds during the day and night of the solstices.

Over time, mobilization of new manufacturing technologies resulted in the replication of imported models for a broader constituency of consumers, and custom-made mechanical clocks became fixtures in the homes of the political and commercial elite throughout Edo and other major cities. One of the figures at the center of this development was a metalsmith from Nagoya named Tsuda Sukezaemon I (d. 1638). After ably repairing a clock that had been presented to Tokugawa Ieyasu during a visit by Korean ambassadors, and producing a working replica of the damaged clock, Tsuda was invited to work in an official capacity as the maintainer of

⁵ Quoted in Tatsukawa 1996, 160.

⁶ Matsuda 1977, 121-154.

⁷ Tsukuda 1960, 28.

⁸ The very notion that one could be roused from a dream by the chiming of a clock led some writers to see, for example, Jippensha Ikku's preface to *Shingaku tokeigusa*, reprinted in Tanahashi Masahiro, ed., *Jippensha Ikku shū* (Kokusho-kankōkai, 1997): 7, and discussed below.

clocks for the Tokugawa family in Owari, beginning in Genna 9 (1623). Tsuda and his descendants managed to parlay this

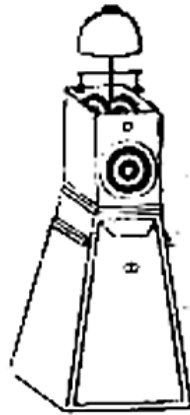


Figure 2. Early illustration of a *yagura-dokei* from *Wakan sansai zue* (*Illustrated Encyclopedia of Japan and China*, 1713), from Shimada, et al 1998, 10.

hands-on familiarity with cogs, springs and weights into a productive capacity and create *yagura-dokei* for the Tokugawa. Within less than a century, a number of clockmakers had opened up shops in other major cities, primarily catering to daimyō and high ranking retainers, and clockmaking itself came to be recognized as a craft, as attested by its inclusion in *Jinrin kinmō zui* (*Illustrated Encyclopedia of Humanity*, 1690), which refers to several clockmakers by name, including Hirayama Musashi, a master clockmaker in Kyoto who was active during the Jōkyō (1684.2-1688.9) and early Genroku periods.⁹ For clockmakers, one of the main problems of adapting horological technology for the Japanese market was how to adjust the speed of the clock hand to hours of variable length. With remarkable ingenuity, Japanese clockmakers developed two solutions to the problem. The first was the invention of interchangeable clock faces for different seasons, reflecting the variable length of the hours. The second was an elaborate system of weights that enabled

⁹ Shimada et. al. 1986, 10-12. *Jinrin kinmō zui*, an encyclopedia spanning 496 entries, describes nearly every form of manual labor and trade that existed in the late seventeenth century in Japan.

one to calibrate the speed at which the clock hand made its circuit at different times of the day.¹⁰ Neither were a perfect solution to the problem, and the latter entailed great attention to the adjustment of weights. Yet despite these complications, Japanese clocks became sought after by those who could afford them. The cost of custom work and the expensive accent details of many models—such as copper faces, silver numbers and pearl inlay in the wooden housing—explain why for the majority of the populace, the prohibitive costs of clocks made them an inaccessible luxury.¹¹ In a well known anecdote, even Isaac Titsingh (1745-1812), senior official of the Dutch East India Company, lamented that he could not afford to bring one of the Japanese-made timepieces back to his native Holland.¹²

Once the main technical difficulties were overcome, Tokugawa Ieyasu and his successors embraced the technology with such enthusiasm that, by the middle of the seventeenth century, Edo Castle had become a veritable bastion of punctuality. Major functions of the castle, such as the opening of the gates at six o'clock in the morning, the call to the daimyō to enter the castle at four o'clock in the morning, and the closing of the gates at six in the evening, were conducted in time with a large clock housed in the *tokei no ma* 土圭の間, or the clock chamber. Accuracy was safeguarded through the marshaling of numerous auxillary clocks throughout the castle and various back-up methods of keeping time like candles and incense. Of course, keeping time was one matter and notifying people of the

¹⁰ Early *yagura-dokei* clocks had a single, horizontally mounted bar with two adjustable weights that were used to calibrate the speed of the clock hand. Later models were fitted with two bars, for a total of four adjustable weights. The first *kake-dokei* 掛時計 (mounted clock) with adjustable weights was produced in Hōreki 10 (1760) by Hirota Riemon 広田利右衛門, and the first *kake-dokei* with two bars of adjustable weights was produced in Bunka 10 (1813) by Kanematsu Masatō 兼末正当.

¹¹ Sawada 1996, 32.

¹² In *Illustrations from Japan* (1822), Titsingh writes: “I was desirous of bringing one with me from Japan, but the high price deprived me of the gratification.”

time was quite another. Within the castle, there developed a sophisticated—and indeed, labor-intensive—system of time notification whereby staff would sound drums at various points throughout the castle to notify inhabitants and daimyō living nearby of important times. All in all, the Tokugawa fascination with clocks may be characterized as a concerted effort to calibrate shōgunal rule, with mechanical precision, to the rhythms of the cosmos. This enthusiastic adoption of technology was not without its drawbacks, however. In fact, the costs of procuring and maintaining the clocks, not to mention employing qualified staff to attend to these matters, placed a great strain on bakufu resources. So much so that in Hōei 7 (1701), Arai Hakuseki (1657-1725), advisor to Tokugawa Ienobu (1662-1712; r. 1709-1712), discharged over fifty members of staff who attended to the clocks in the *tokei no ma* in Edo Castle in an effort to reduce the operating budget of the bakufu.¹³

Beyond the periphery of the castle, clocks influenced the daily lives of samurai and commoners in similarly dramatic ways. By the early eighteenth century, an elaborate system of time notification developed whereby specially designated temples would toll the hours in time with a mechanical clock—a combination of old and new technology that became known as *toki no kane* 時の鐘, or “time bells”.¹⁴ The bakufu played an active role in regulating this system, issuing permits to the designated temples and centrally planning their distribution throughout the city. By bakufu order, the clocks in these temples were set to run early, so that daimyō required to be in attendance at Edo Castle would not arrive late.¹⁵ A survey conducted in Kan’en 3 (1750) enumerates ten different *toki no*

kane temples throughout the city of Edo, while also estimating how far the tolling of the bell at each temple could be heard. If this survey data is reliable, then we can conclude that, by the middle of the eighteenth century, nearly every resident of Edo was within earshot of a *toki no kane*. Residents in four districts—Nihonbashi Ishi-machi, Ueno, Shibakiritōri and Honjo Yokokawa—even paid fees for this municipal service.¹⁶ Perhaps because of its potential for revenue generation, the city experienced a modest increase in the number of bakufu-designated *toki no kane* during the remainder of the century, as well as a reportedly more dramatic increase in the number of unlicensed bell tollers. Even roosters got into the act—or at least that is the scenario presented in a scene from Santō Kyōden’s (1761-1816) *Mazu hiraku mume no akabon* (*First Flowering Plum Redbook*, 1793), in which an enterprising rooster explains that he has invested in a clock because it is his business to provide accurate notification of when the sun rises.¹⁷ In any event, it can be imagined that the passing of the hours was signaled more audibly at the end of the eighteenth century than at the beginning. Even Ōta Nanpo (1749-1823), the self-proclaimed “Sleepyhead Sensei” (*Neboke sensei*),¹⁸ was not immune to the clanging, as he comments in a *kyōka*¹⁹ from Tenmei 8 (1788):

煩惱の眠りをさます時のかね
きくやわたりに船橋の寺²⁰

*Rousing me from pleasurable slumber,
I hear the toki no kane, tolling*

¹³ Tsukuda 1960, 33-34.

¹⁴ The nine “time-bell” stations in Edo were: the Yotsuya Shinjuku bell at Tenryūji Temple, the Hon’ishi-chō bell in the Nihonbashi district, the Ueno bell, the Asakusa bell located in the environs of Sensōji Temple, the Hon’menji Temple bell, located in the Ota district, the Honsho bell, located in Tōenji Temple, the Akasaka Entsu-ji Temple bell, the Mejiro Shin Nagatani bell, and the Shibakiritōshi bell. Of these ten, the first six bells are still extant. For additional background and images, see Tsuda 1960, 39.

¹⁵ Tsukuda 1960, 39.

¹⁶ Yoshimura Hiro, *Ō-Edo toki no kane aruki* (Tokyo: Shunjūsha, 2002).

¹⁷ Mizuno Minoru, ed., *Santō Kyōden zenshū*, vol. 3 (Tokyo: Perinkansha, 2001), 355-356.

¹⁸ *Neboke sensei* is one of Nanpo’s *kyōgō* 狂号, or pseudonymous handles as a *kyōka* poet.

¹⁹ *Kyōka* (often translated as “crazy verse”, “madcap verse”, or “comic waka”) is a 31-syllable verse form which became popular during the eighteenth century.

²⁰ An image of the *kakejiku* on which Nanpo inscribed this poem can be found at: <http://www.city.funabashi.chiba.jp/kurashi/study/0005/p008872.html>.

At the temple in Funabashi ²¹

Diurnal time in Edo Fiction

While the tolling of *toki no kane* had become a commonplace of urban life during the latter half of the eighteenth century, its appearance as a literary motif—and later, as a device for structuring narrative time—is almost exclusively limited to stories set in the Yoshiwara, which was located within earshot of the *toki no kane* at Sensōji Temple in Asakusa. In the most common iteration, the sounding of the bell—usually at the wee hours of the tiger (about two to four in the morning) or the hare (about four to six in the morning)—signals a decisive end to a long night of revelry, and leads to tearful partings between courtesans and their patrons, as in the *kyōka* below:

刻限のとらに別るる花魁の袖も
涙の雨に濡らしつ²²

*Even the sleeves of the oiran,
Parting from her lover at the hour of the tiger,
Are dampened by a shower of tears.*

Notwithstanding her emotional response to the realization of time's passage, the high-ranking *oiran* is conventionally depicted in fiction and *ukiyo-e* 浮世絵 (“floating world prints”) of the period as having the ability to calibrate the complex mechanisms of the automated clock, and in a sense, to control time. This is in stark contrast to her male patron, who is often caught off guard by learning of time's passage via the *toki no kane*, and exhibits no profi-

²¹ There is a play on words between the name of the district, *Funabashi* (literally, “boat bridge”), and the figurative expression *watarifune* (“life boat”, also “heaven-sent help”). Within the context of the poem, the temple bell may be interpreted as “saving” the speaker of the poem by awakening him from a samsara-like illusion of worldly attachments. Of course, the overall tone of the poem is comic, and the gratitude of the speaker is probably ironic.

²² *Yoshiwara jūnitoku*, reprinted in *Ishikawa Masamochi shū* (Yūmeidō shoten, 1915): 703.

ciency at, or even familiarity with, the technical aspects of adjusting and maintaining a clock. This binary reflects an important dimension in the complex power relationship between the *oiran* and her patron, wherein the *oiran*'s ability to manipulate the inner workings of a clock is projected as analogous to her ability to manipulate her customers—emotionally, sexually and economically. The *oiran* is able to tantalize clients by making them wait beyond their prearranged time for a chance to meet with her, or in the case of undesirable clients, postponing appointments indefinitely. Time may be the only means by which the *oiran* is able to exert her own agency vis-à-vis the desires of her male clients, and the emblem of this power, an object nearly as inaccessible as the *oiran* herself, is the automated clock, which is subject to her calibrations.

In *Wakan sansai zue* (*Illustrated Encyclopedia of Japan and China*, 1713), the automated clock is classified under the category of *geiki* 芸器 (and instruments), along with other instruments of measurement like compasses and abacuses, and perhaps surprisingly, with materials for artistic pursuits, such as brushes and fine paper for calligraphy.²³ While this is not to say that timekeeping was regarded in its own right as an aesthetic pursuit, its implied affiliation with calligraphy and other arts in *Wakan sansai zue* comports with characterizations in numerous stories about courtesans who excel at adjusting and maintaining clocks. In Saikaku's *Kōshoku ichidai otoko* (*Life of an Amorous Man*, 1682), for example, the ability of the *oiran* Yoshino to adjust an automated clock, along with her proficiency in the arts of music, tea ceremony and flower arranging, convinces the skeptical parents of the protagonist, Yonosuke, that she is indeed a woman of high caliber and would make a suitable wife.²⁴ In Jippensha Ikku's (1765-1831) *Shingaku tokeisō* (*Gleanings of Philosophical Clock Grass*, 1795), discussed in detail below, one of the attributes that makes the *oiran* Kashiwade so successful is her adeptness at managing time—and the impossible expectations of her clients. A playful variation on the motif of the courtesan who controls time with her clock is Nishikawa Sukenobu's (1674-1754) *Hashira-dokei to bijin zu* (*Portrait of a Beautiful*

²³ See the *geiki* section of *Wakan sansai zue*, in Shimada et al 1986, 5-127.

²⁴ Teruoka 1971, 206.

Woman with Mounted Clock), in which a courtesan, ignoring the conventional mechanisms of calibrating the speed of the clock, ties the cords binding the weights into a knot—presumably, as Timon Screech has suggested in his convincing interpretation of this painting—to stop the advance of time and permit her more time with her lover.²⁵

Time—be it time indicated visually on the face of a clock or acoustically by the tolling of a *toki no kane*—features as a prominent motif in genres of popular fiction that were commonly set in the Yoshiwara, such as the *kibyōshi* and the *sharebon* (“fashionbooks”). It is in these same genres, I would argue, that we also see the first experiments with plotting chronometric time in narratives, often in those whose scope encompasses a full day and night. One of the earliest examples of this is *Yūshi hōgen* (*A Playboy’s Dialect*, 1770), generally regarded as the first *sharebon*, in which the entire narrative is plotted out over the span of about seven or eight *koku*. The general sweep of temporal progression is indicated by the titles of the five individual sections. After the long opening section entitled *hottan* (“Beginning”), which relates how the two main characters meet, take a boat to the Yoshiwara and settle in at the Odawara-ya teahouse, the remaining sections relate their misadventures in a sequence of tableaux progressing from evening to daybreak—*yoru no keshiki* (“A scene at night”), *yoi no hodo* (“Around evening”), *fukete no tei* (“A scene in the wee hours”), and *shinonome no koro* しの々めのごろ (“Around daybreak”). References to the tolling of the *toki no kane* appear in scenes in which the precise hour becomes a matter of concern, such as that in which the character Hira 平 prepares to leave for home, complaining that he has been kept waiting too long by his favorite courtesan. He claims that it is past the seventh *koku* 刻 (past four o’clock in the morning), but the apprentice courtesan, in an effort to get him to stay, tells him that it is not quite as late as that. Further debate about the time ensues when a blind man in the adjoining room makes a similar complaint, urging the sleepy apprentice courtesan with whom he has been paired to be more attentive. The courtesan, perhaps eager to get rid of him, claims that it is already daybreak, but the blind man

responds that it has been a half-*koku* since the *toki no kane* struck seven—making it five o’clock in the morning by the modern reckoning—and that, besides, it could not possibly be daybreak because the crows have not begun to caw.²⁶ In the course of these spirited exchanges between the apprentice courtesans and tea house patrons, the precise hour becomes a matter of debate, defined more by perceptual evidence or persuasive argument than by a mutually recognized point of reference. In this respect time may be regarded as a site of negotiation between the courtesans and patrons, a push and pull to determine how long a customer can remain in the company of his hired courtesan, or conversely, how long he can be made to wait.

Many works of *sharebon* follow *Yūshi hōgen* in terms of its general narrative structure—an opening *hottan* section followed by four or five sections whose titles refer to an important action or exchange—but few are as explicit in referring to the time of day or night in their section titles. Even if the story itself appears to unfold over the course of a day and night, ending, as many do, with the tolling of the *toki no kane* at daybreak, there are few overt contextual clues to indicate temporal progression at regular junctures in the narrative. This is true even of Nandaka Shiran’s 南陀加紫蘭 (d.1820) *Kotchi no yotsu* 浮世四時 (*Four O’ Clock in This Floating World*, 1784), whose title seems to promise a narrative structured around clocktime, but which ultimately only focuses on exchanges between courtesans and patrons leading up to the daybreak hour of parting.²⁷

The first experiment with implementing chronometric narrative time in a *sharebon* comes much later, with Santō Kyōden’s *Seiro hiru no sekai: nishiki no ura* 青楼屋之世界錦之裏 (*The Daytime World of the Cerulean Towers: Behind the Brocade*, 1791), in which Kyōden uses the figure of the clock, an illustration deployed within lines of text, to mark the temporal settings of five different scenes in the story. While this innovative approach to marking out narrative time has received much attention in scholarship on Kyōden’s works and on the *sharebon* in general, singular focus on *Nishiki no ura* alone has obscured experiments with the use

²⁵ Screech 2002, 83-84. See also Tatsukawa 1996, 158-160.

²⁶ Mizuno ed. 1986, 290-291

²⁷ Hayakawa 1915, 247-253.

of clocks in some of Kyōden's earlier works. In the following section, I would like to call attention to relevant examples from Kyōden's early *kibyōshi*, where clocks appear as part of the *mise-en-scene*, providing material context to a certain action or exchange, while also signaling readers to bide their time, as it were, in anticipation of resolutions to complications in the story.

The Figure of the Clock in Santō Kyōden's Early *Kibyōshi*

Santō Kyōden's earliest body of work as a writer and illustrator of *kibyōshi* evinces a sustained engagement with clocks. Four of the first five works of *kibyōshi* he is credited with writing and illustrating feature illustrations of *hashira-dokei* or *yagura-dokei* clocks. In An'ei 9 (1780), the same year that these four works were published, Kyōden also illustrated fifteen *kibyōshi* by other writers, under the artistic handle Kitao Masanobu. Of these, six include illustrations of clocks, such as *Kuruwa no hanaōgi no kanzemizu* (*Flowered Fan of the Bordello*, *Kanze Water*, 1780) by Hōseidō Kisanji (1735-1813) and *Yūjin sanbukutsui* (*Three Courtesans*, 1780) by Shiba Zenkō (1750-1793). In the context of Kyōden's career as an illustrator, this collection of early *kibyōshi* appears to constitute a series of études in the depiction of clocks, rendered from different angles and perspectives, and with seeming reliance on direct observation. *Kibyōshi*, especially those set in the Yoshiwara, demanded such attention to detail. In many ways, the authenticity of the work and the authority of the author were predicated upon accurate depiction of all manner of things in the pleasure quarters—be it clocks or the coiffure of an *oiran*—and the illustrator played a key role in this appeal to readers.

If Kitao Masanobu the illustrator was honing his craft in these renderings of the strange technology of time-keeping, as a form of “fan service” to readers, then we might imagine that Kyōden the writer was working at quite another task—rationalizing and contextualizing their appearance in his stories. While the inherent novelty of clocks as material objects may have been enough to pique the interest of readers, their placement in Kyōden's works never seems random or gratuitous. Within certain pictorial contexts, they are collocated with other commodi-

fied signifiers of wealth and status—fine clothing, decorated tea caddies and incense burners, tobacco pipes, swords, musical instruments and the hired company of courtesans—to give readers a sense of scene or the largesse of a particular character. Well beyond their associations with material wealth, however, I would argue that the figure of the clock also functions as a foreshadowing device in some of these early works, directing readers to wait out the passage of time—both the diegetical time of the narrative and the time it takes to read the story—in order for complications to be resolved and the story to end with a satisfying conclusion. In this respect, these early experiments with clocks as markers of narrative time in Kyōden's works seem to anticipate his more explicit use of *yagura-dokei* to mark out the hours in *Nishiki no ura* (1790). In the analyses that follow, I provide brief summaries of four early *kibyōshi* by Kyōden, focusing on the appearances of *yagura-dokei* and *hashira-dokei* clocks and their roles in the stories.



Figure 3. Shōjikiya Kōhee meets a matchmaker to finalize the details of his son's marriage. Note the *hashira-dokei* clock on the wall in the top left corner. From *Yone manjū no hajimari*. Santō Kyōden *zenshū*, vol. 1 (Perikansha, 1992): 66.

In a scene from *Yone manjū no hajimari* (*The Origins of the Rice Dumpling Woman*, *Yone*, 1780), a *hashira-dokei* appears mounted on the wall of a wealthy *chōnin* named Shōjikiya Kōhee, whose son, Kōkichi, has fallen in love with a courtesan named O-Yone (See Figure 3). Kōhee, determined to end the relationship between his son and O-Yone, and marry him off to a more respectable woman of comparable social standing, invites a matchmaker

over to his home to finalize the details of a marriage to the daughter of a wealthy merchant living in the Ryūkoku district of Edo. Little does Kōhee know that at the very moment he is discussing the matter of betrothal money and exchanging a celebratory cup of *sake* with the matchmaker, the usually compliant Kōkichi is secretly plotting to run away with his beloved, even at risk of his own disinheritance. At this important juncture in the narrative, where Kōkichi is about to make a fateful decision regarding his future, choosing love over wealth, the clock presiding over the discussion between his father and the matchmaker seems to indicate that reconciliation—and indeed, resolution of the story—will only be possible with the passage of time. The importance of time is re-emphasized in the narration of the following scene, which describes the elopement of Kōkichi and O-Yone in the following terms: “Kōkichi and O-Yone overheard the discussion between Kōkichi’s father and the matchmaker, and realized that there was no way his family would agree to their union. They eloped, determined to *bide their time* once they had left the house”—my emphasis here on the expression “*bide their time*” (*jisetsu wo matan*).²⁸ Kōkichi enters into a much more modest way of life with O-Yone, working as an umbrella vendor while she hires herself out as a prostitute. Eventually Kōkichi’s father is moved to pity when he learns of how deeply his son has fallen into poverty, and gives him the money to buy O-Yone out of indenture so that they can enjoy a married life secured by his largesse and, ultimately, start a successful business as dumpling vendors. If the passage of time is the main device of resolution in this story, then it is the figure of the clock that foreshadows this resolution, alerting readers to *bide their time*, as Kōkichi and O-Yone do, in anticipation of a happy conclusion.

In *Musume kataki-uchi kokyō no nishiki* (*A Young Girl’s Vendetta: Hometown Brocade*), the figure of the clock—this time a *yagura-dokei*—appears at the intersection of two important plot-lines in the story, one of which concerns the romance between the two main characters and the other a vendetta plot (see Figure 4). Its appearance in *Musume kataki-uchi* comes somewhat later than

²⁸ Translated from the passage that appears in Mizuno Minoru, ed., *Santō Kyōden zenshū*, vol. 1 (Tokyo: Perinkansha, 1992):27

in *Yone manjū no hajimari*—to be exact, in the fourteenth scene of the story, in which Shirōkurō, the son of a master swordsman, visits a young woman named Oyoshi to discuss their plans for marriage. Oyoshi’s guardian and Shirōkurō’s father have already agreed in principle to the match, but there remains one more important matter to be resolved before the two can wed—a vendetta. Several years before the setting of this scene, Oyoshi’s father, a daimyō named Ashimizu Sawanojō, is ordered to



Figure 4. Oyoshi and Shirōkurō discuss their wedding plans—and plans to avenge her father’s death—with a *yagura-dokei* towering in the background. Illustration from *Musume kataki-uchi kokyō no nishiki*. *Santō Kyōden zenshū*, vol. 1 (Perikansha, 1992): 50.

commit *seppuku* for allowing his retainer, Ashigaru Bansuke, to destroy a magical cherry tree. While the actual circumstances of this incident are not taken into consideration when Sawanojō is condemned to death, the reader is privy to the true story, and knows that the tree was really cut down by Bansuke in a fit of frustration after his advances on Sawanojō’s faithful wife, Shigarami, are rebuffed. Even after Sawanojō is dead, the treacherous Bansuke shows no remorse for his actions, and after mounting a second unsuccessful attempt on the chastity of widowed Shigarami, he murders her.

True to the title, this work follows some of the familiar maneuvers of vendetta narratives, but with a twist—the young Oyoshi, daughter of the late Sawanojō and Shigarami, is the one who takes up the sword and avenges her parents’ deaths. Customarily this would be the role of a loyal retainer, but in the

absence of an Ōboshi Yuranosuke, the responsibility falls to Oyoshi. Another matter hindering immediate resolution of the story is Oyoshi's age. Oyoshi is still very young when she pledges, on the eve of her father's suicide, to exact revenge on Bansuke—and so readers must wait, as they often must in vendetta stories of this kind, for various subplots to unfold before justice can be served. Justice is necessarily served cold in *Musume kataki-uchi*, for it is only after Oyoshi comes of age, and falls in love with Shirōkurō, that revenge becomes a possibility. The appearance of the *yagura-dokei* amidst Oyoshi and Shirōkurō's discussions about their vendetta killing and their wedding plans seems to signal readers to wait out the passage of time—in this case, only a few more scenes—for the kind of satisfying resolution that they had come to expect from vendetta stories. It is difficult to say which outcome readers would have found more satisfying—seeing Oyoshi and Shirōkurō exchange wedding vows or seeing Bansuke run through with a sword—but both make for a dramatic conclusion.

In other works by Kyōden, the appearance of the clock coincides with, rather than anticipating, the resolution of certain issues or complications in the story. In *Yakimochi hanashi* (*The Tale of a Rice Cake, Burnt with Jealousy*, 1780), for example, a *yagura-dokei* appears in the penultimate scene, when the well-meaning parents of Maruya Dangorō expose their ruse of pretending to divorce over his father's infidelity (see figure 5). Dangorō, who at the tender age of twenty-five has already been married and divorced five times, desires nothing more than a jealous woman, and goes to great expense in the pleasure quarters trying to find one. At an utter loss to put an end to their son's philandering, Dangorō's parents come up with the idea of putting on a charade. Dangorō's father follows him one evening to the Yoshiwara and pretends to become suddenly enamored of womanizing and revelry. His mother feigns jealousy at his father's sudden transformation, and goes so far as to track him down one night in the Yoshiwara and voice her displeasure. An argument ensues, and the two decide to get a divorce, much to the shock of Dangorō. Once the dust clears, Dangorō tries to reason with his mother and to persuade her not to go through with the divorce, and it is in this very scene that his father appears from the adjoining room to reveal that they have been acting out a charade all along, in hopes of getting Dangorō

to see the folly of his ways. In a somewhat hasty conclusion to the story, Dangorō foreswears his old habits of debauchery, and remarries his first wife.

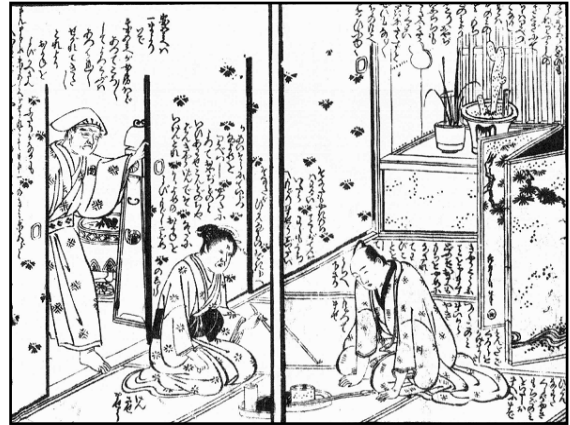


Figure 5. Dangorō's father, appearing from the sliding door to the left with a *yagura-dokei* in partial view, comes clean about his charade. Illustration from *Yakimochi hanashi*. *Santō Kyōden zenshū*, vol. 1 (Perikansha, 1992): 66.

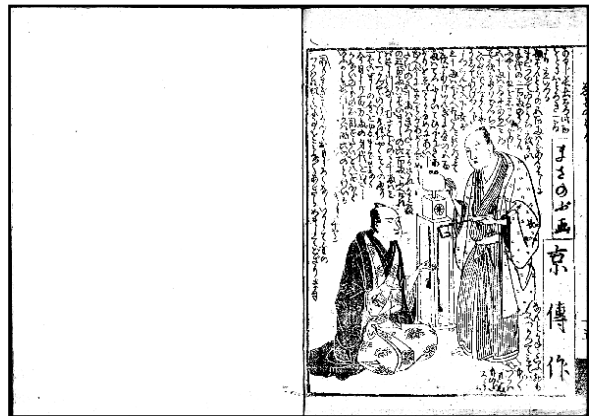


Figure 6. Mochimaruya presents his son with the key to his storehouse, with a clock chiming in the background. Illustration from *Edo no haru ichiya senryō*. *Santō Kyōden zenshū*, vol. 1 (Perikansha, 1992): 265.

The *kibyōshi* *Edo no haru ichiya senryō* (*One Thousand Ryō, on a Spring Night in Edo*, 1786) represents Kyōden's most effective joining of timekeeping to plot development. In this story, an automated clock serves as the functionary of a timed contest

devised by the wealthy merchant Mochimaruya Chōjaemon. The rules of the contest require that anyone who manages to spend a large amount of cash over the course of a single night will be rewarded with an exponential sum as a prize. The participants in the contest, who include the merchant's wife, shop manager, clerk, apprentice, kitchen staff and son, receive different amounts of money, all in small denominations—ranging from seven *ryō* for the apprentice to one thousand *ryō* for the merchant's son. The contest commences at the tolling of the *toki no kane* at six in the morning (represented in the text by the onomatopoetic expression *chan*), and is scheduled to end at six the following morning, giving each contestant exactly twelve hours to spend their purse. The task proves to be more difficult than it seems for most of the contestants, and ultimately, only the merchant's son manages to spend all of the money in time, just as the clock in his father's chamber strikes six (rendered onomatopoetically in the text as *giii chan*). For his prodigality in the pleasure quarters the night before, the son is rewarded with the sum of one million *ryō*, represented as the key to one of Mochimaruya's storehouses, which Mochimaruya presents to his son just as the clock chimes to signal the end of the contest (see figure 6).

Narrative Time, Hour by Hour

Kyōden's most sophisticated experiment with using the clock as a narrative device appears in *Seiro hiru no sekai: nishiki no ura* (1791), a *sharebon*.²⁹ *Nishiki no ura* tells of the love affair between Yūgiri, a courtesan of the Kanzaki house in Sesshū, and Izaemon, a townsman. It was a narrative with a long pedigree in Edo literature, beginning with the staging of a theatrical adaptation of the real-life love affair between Izaemon and Yūgiri, an *oiran* at the Shinmachi licensed quarter in Osaka, only a month after the latter's death in Enpō 6 (1678).³⁰ In his version of the story, Kyōden marshals an impressive knowledge of even the most minute details of life and business in the pleasure quarter, such as only a true habitué of the quarter like himself could have

²⁹ Reprinted in *Nihon koten bungaku taikai* (NKBT), Vol. 59 (Iwanami shoten, 1986): 417-440.

³⁰ Kornicki 1977, 163.

managed, and renders each scene with lapidary description. While the authenticity and stylistic originality of this version serve Kyōden's aim of resisting conventional depictions of the Yoshiwara, perhaps his most innovative choice is that of setting the story during the daytime and deploying an illustration of a *yagura-dokei* in five different sections of the text to indicate the passage of time. Following the established sequence of the hours, the clock strikes five (approximately eight o'clock in the morning) in its first appearance, four (ten) in its second, nine (noon) in its third, eight (two in the afternoon) in its fourth and finally seven (four o'clock) in its last appearance. Besides serving the practical function of marking out time in the text, the mechanical clock is also there to remind readers of the fundamental thematic premise of the piece—namely, that just as the hours of the day and the night are of differing length, so too is the Yoshiwara a different place, with different rhythms of activity, during the day and at night.

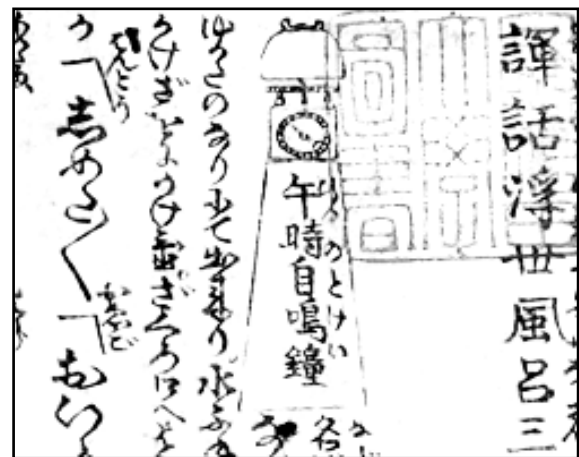


Figure 7. Illustration from *Ukiyoburō*, Vol.3. Waseda University Japanese & Chinese Classics Database.

Kyōden's approach to plotting narrative time through the deployment of an illustrated clock within the body of the text was emulated by later *sharebon* writers. We find the very same device in Kanda Atsumaru's (d. 1829) *Seirō yoru no sekai: misoka no tsuki* (*The World of the Cerulean Towers at Night: Dark Secrets Brought to Light by the Moon*, 1799), which opens with the tolling of the evening bell (cited with the onomatopoetic expression *koon, koon, koon*), followed by the sound of a

yagura-dokei clock (represented with the sound *giku giku giku*).³¹ In total, the clock appears five times in this work, the same number of times as *Nishiki no ura*, and in each case its function appears to be not only to indicate the time, but to invoke the inner temporal world of the Yoshiwara. Shikitei Sanba (1776-1822), a *sharebon* turned *kokkeibon* (“banter book”) writer, deploys an illustrated clock to the mark the time at the beginning and ending of certain sections of the third volume of his *Ukiyoburō* (*Bathhouse of the Floating World*, 1809-1813). The illustration of the clock in Sanba’s text is different from those in used in Kyōden’s or Kanda Atsumaru’s in that it indicates the time not only textually, through writing on the front panel of its base, but also by the position of the clock hand (see figure 7). The sound of the clock in Sanba’s text is also slightly different, rendered with the protracted onomatopoeic expression *giri giri giri giri chan*.³² Although adoption of illustrated clocks as markers of narrative time was not widespread enough to be characterized as a newly formed convention in narrative fiction, Mizuno Minoru notes that influence of *Nishiki no ura* was extensive. The tack of switching the temporal setting of stories set in the Yoshiwara from the nighttime to the daytime, for example, was adopted by a number of later *sharebon* writers, including Shinrotei (d. 1815) and Bisanjin (1790-1858).³³

Yet perhaps the first to follow Kyōden in marking out narrative time by the hours was Jippensha Ikku in his debut work, *Shingaku tokeisō* (*Gleanings of Philosophical Clock Grass*, 1795), a *kibyōshi* published four years after *Nishiki no ura*.³⁴ The protagonist of the story is an *oiran* named Kashiwade, whose beauty and proficiency at arts like poetry and incense identification make her sought after by habitués of the quarter. Although it seems to be at odds with the very nature of her profession, Kashiwade also espouses her own brand of *shingaku* 心学 (“mind study”) philosophy, eschewing the material and carnal excesses of *chōnin* life, and even lecturing the lower-ranking *yorō* and *kamuro*

on the practical ethics of being a courtesan.³⁵ One of the tenets of her philosophy is that there are certain absolute truths which can be understood by observing phenomena in the natural and social world—the rising and setting of the sun, the blooming and withering of flowers, the birth and death of humans, and the uniform allotment of the hours. Everything else, according to Kashiwade, is based on falsehood—from Buddhist sermons to the pledges of love made by courtesans to their clients. Kashiwade’s ethical philosophy, and especially her belief in the absolute truth of time’s passage, become the focal point of the story when, one evening, twelve eager patrons descend upon her establishment at the same time, demanding to hire out her company. Kashiwade’s solution to this dilemma is to allot each one of the twelve customers an appointment of one hour (two by the modern reckoning), and have them take turns visiting her. To prove that no one customer will be allowed to go over time, or to be short shrifted the full hour, she demonstrates that she will be relying on a clock in her chamber to keep time (see figure 8).



Figure 8. The courtesan Kashiwade adjusting her clock before patrons. Note the *yagura-dokei* clock on the right. From *Shingaku tokeisō*. *Santō Jippensha Ikku shū* (Kokushokankōkai 1997): 8-9

³¹ Mizuno 1983, 96.

³² Tanaka 1957, 193.

³³ Mizuno 1974, 138-140; 145-146.

³⁴ Reprinted in Tanahashi Masahiro, ed., *Jippensha Ikku shū* (Kokushokankōkai, 1997): 5-36.

³⁵ The *shingaku* philosophy of Ishida Baigan (1685-1744) and others provided a new ethics for urban commoners in response to the perceived material and carnal excesses of *chōnin* life, and attracted a popular following by the middle of the eighteenth century, amidst an economic recession in the Kyoto-Osaka region. For a creative treatment of *shingaku* philosophy and its relationship to the adoption of Western time-keeping technology, see Timon Screech 2002, 81-90.

What follows in the text is a series of twelve illustrated scenes, with a rectangular cartouche in the right corner of the frame identifying the hour. The story takes a strange turn when Kashiwade, who has promised to entertain her guests during twelve separate appointments, does not show up for any of them, leaving each one of them to bide their time with one weird character after the next—a hair pin dressed in a kimono, a talking frog with the name of the client inscribed on its back, and an anthropomorphic broom, to name a few. Naturally, Kawashide's customers feel cheated, and vent their ire when they come together as a group to confront her in the final scene of the story. What they do not know at the time is that Kawashide has purposely stood each of them up in order to teach them a lesson. When they accuse her of lying, she responds that courtesans are customarily paid to lie anyway, making false professions of love and the like. The twelve men quickly come to realize the folly of spending their money and time in the pleasure quarters, and in a felicitous turn, devote themselves to careers as successful merchants.

According to Kyokutei Bakin (1767-1848) in *Kinsei Mono-no-hon Edo sakusha burui* (*Categories of Recent Books and Edo Authors*, 1830), the concept of structuring a story according to the twelve hours of the clock was initially presented to Tsutaya Jūzaburō (1750-1797) by Ishikawa Masamochi (1753-1830).³⁶ Masamochi or Tsutaya, or perhaps both, then proposed the idea to the young Ikku, who made it the basis for his debut work. Even after the publication of *Shingaku tokeisō*, however, Masamochi appears to have remained interested in the concept, because several years later he went on to arrange a massive collection of *kyōka* poetry arranged into twelve sections, according to the twelve hours, entitled *Yoshiwara Jūnitoki* 吉原十二時 (*Twelve Hours in the Yoshiwara*).³⁷ Although of a very different genre, Masamochi's collection exhibits close filiations with Kyōden's *Nishiki no ura*, especially in its attention to some of more quotidian details of life in the Yoshiwara at different times of the day and night. Taken together, these two works by Ikku and Masamochi can be seen to have expanded upon

³⁶ Kimura Miyogo, ed., *Kinsei mono-no-hon Edo sakusha burui* (Yagi shoten 1988): 44-45.

³⁷ Reprinted in *Ishikawa Masamochi shū* (Yūmeidō shoten, 1915): 507-716.

the chronometric structure of Kyōden's *Nishiki no ura* by enlarging the temporal scope of the narrative from five to twelve hours. Not many writers followed Ikku and Masamochi in implementing the same model of chronometric diurnal time; however, there were a few attempts at experimentation, such as the unpublished *sharebon Jūnitoki* (*Twelve Hours*), also appearing under the alternative title *Nagamine Jūnitoki* (*Twelve Hours in Nagamine*).³⁸

While other *sharebon*, *kokkeibon*, and later, *nin-jōbon* ("books of sentiment"), writers co-opted the device of using clocks to mark out time in the prose narrative, the influence of Kyōden's *Nishiki no ura* is more evident in *ukiyo-e* prints of the late eighteenth and early nineteenth centuries. Worthy of note are two series of prints by Kitagawa Utamaro (1753-1806)—*Seirō jūnitoki* (*The Twelve Hours of the Cerulean Towers*, c.1794) and *Musume hidokei* (*Sundial of Maidens*, c. 1795).³⁹ In both series, Utamaro depicts scenes of courtesans and their attendants engaging in different activities at different types of the day—revealing, as Kyōden does in *Nishiki no ura*, what goes in the Yoshiwara during the off hours.⁴⁰ In the case of the former work, cartouches decorated with flower patterns and shaped like *kake-dokei* adorn the top right or left corners of the illustrations, indicating the time of each activity. The effect, as one views one print after the next in succession, is one of temporal progression—a story related in pictures unfolds hour by hour.

Conclusion

While descriptive references to clocks appear in Japanese fiction as early as the Enpō period, and illustrations of clocks about a decade later, their deployment as markers of narrative time cannot be seen until the late eighteenth century. During that intervening century, the institution of clock-regulated time, especially in major cities like Edo, may be said to have engendered a collective recognition of time's hourly passage, and, consequently,

³⁸ Mizuno 1988, 452-455. For a reprint of the work in its entirety, see Mizuno 1988, 294-298.

³⁹ Reproductions of both series of prints appear in Seigle, ed., *A Courtesan's Day: Hour By Hour*. Hōtei, 2004.

⁴⁰ Seigle 2004, 21-46.

to have informed approaches to narrating time in works of popular fiction. The Meiwa period (1764.6-1772.11) was witness to several attempts to construct narratives around the model of diurnal time, including *Yūshi hōgen*. Construction of chronometric narrative reached a watershed in the work of Santō Kyōden, whose deployment of the figure of the automated clock in four *kibyōshi* published in An'ei 9 (1780) anticipated the novel approach to marking out narrative time, hour by hour, in *Nishiki no ura* (1791). Writers like Jippensha Ikku and Ishikawa Masamochi developed similar approaches to structuring narratives around the unit of *koku*, in *kibyōshi* and *kyōka*, respectively. Within these and other works, the presence of the automated clock appears to coincide with the implementation of new mechanisms of authorial control over temporal setting and pace of temporal progression. While the scope of the present study does not allow for a more sustained consideration of other innovations in the representation of narrative time, from later Edo to early Meiji period literature, some of the theoretical issues introduced here may provide direction for future studies.

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