The view with the clocks
—On the street corners in Europe—

Period: From June 6th (Tue) to July 16th (Sun)
Venue: The Seiko Museum Ginza

1 Heilbronn Town Hall Astronomical Clock (Heilbronn, Germany)

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A beautiful astronomical clock is installed on the façade of the town hall of Heilbronn, a city on the Old Castle Road. On the hour, the hourglass turns, the horn sounds, the sheep butt their horns, and the rooster crows. In 1525 a mechanical clock was installed on the town hall, which was built in the 14th century, and in 1580 Isaac Habrecht (1544-1620), known a famous astronomical clockmaker, installed an astronomical display and automata. The clock is now powered by an electric motor by Hörtz of Ulm.

2 Greenwich Old Royal Observatory Gate Clock (London, UK)

The clock with a 24-hour scale on the gatepost of the Old Royal Observatory is an electromagnetic clock made by British clockmaker Charles Shepherd Jr. (1830 – 1905). In 1851, Observatory Director Sir George Biddell Airy (1801 – 92) commissioned Sheperd to complete the time network in the observatory by connecting the clocks and the time ball with wires. After that, the time network spread all over the UK and further to the world, leading to the establishment of Universal Time. This clock is the memorable one as the starting point of it.

3 Waterloo Station 4-face Public Clock (London, UK)

Waterloo Station opened as a terminal station for the South Western Railway in the mid-19th century. At the beginning of the 20th century the station underwent extensive renovations, and when they were completed in 1922, the four faced large dials clock were hung from the glass ceiling of the 224m main concourse. Since then, it has become a popular meeting place for people and has often been the subject of movies and novels. The station is the starting point for trips to the southwest of England, and is also the starting point for suburban trains to nearby Hampton Court Palace.

4 Canary Wharf Public Clock (London, UK)

Canary Wharf, a new area of London with banks, television stations, and commercial facilities, is the center of waterfront redevelopment in the West India Dock area on the Thames in the 1980s. 6 public clocks with 2 dials each are installed in the middle of the transfer passage from the subway to the DLR (Docklands Light Railway). The design of the simple dial and the second hand with a small red disc is that of a Swiss railway clock, and it is interesting that the numbers of the hours are written separately on the 12 dials.

5 Selfridges Angel Statue Clock (London, UK)

A sculpture titled "Queen of Time" is installed above the entrance of Selfridges, London's leading department store. This sculpture by the London sculptor Gilbert Bayes (1872 – 1953) in 1928 shows a winged angel holding a gem ball and a laurel and standing with a two-faced clock on the prow of a battleship. The small angel above the gem ball which represents the earth is the goddess of victory, Nike. These statues, together with the sailing ships on the dial, symbolize the British Empire as the maritime nation.

6 Big Ben and Boudicca Statue (London, UK)

Looking up at Big Ben through the statue of Queen Boudicca (by Thomas Thornycroft, 1815 – 85), a Celtic heroin who bravely fought up to the Romans at Westminster Bridge. Then "Big Ben" approaches with overwhelming power. The name Big Ben is actually the name of the big bell that tells the time, not the name of the clock tower. In 1859, the clock using a new type of gravity escapement devised by amature horological engineer Edmund Beckett Denison (1816 – 1905) began operating.

7 Clusone Astronomical Clock (Clusone, Italy)

Clusone is a small city in the mountains of northern Italy. An astronomical clock is installed on the wall of the city hall annex that retains the atmosphere of the Middle Ages. The dial features zodiac signs, a moon age scale and a moon phase. It features an astrological chart drawn on the central disc. The clock was built in 1583 by the mathematician and engineer Pietro Fanzago (? – 1589).

8 Astronomical Clock of the Capitaniato Palace (Padua, Italy)

The astronomical clock of the Capitaniato Palace in Piazza della Signori of the old town in Padua, Italy, emerges in the morning sun. The 5.6m-diameter astronomical display shows the medieval Italian time (24 hours) scale, the zodiac signs, the age of the moon, and also characteristic astrological charts. The clock was made by Jacopo Dondi (1290 – 1359), a professor at the University of Padua, in 1344, the earliest of the invention of the mechanical clock, and was installed in the façade of the palace.

9 Astronomical Clock in the Piazza San Marco (Venice, Italy)

The blue astronomical dial, the Madonna and Child, the winged lion of the incarnation of San Marco, the patron saint of Venice, and the two bell-striking Jacks on the roof. The astronomical clock in Piazza San Marco was built at the end of the 15th century, when Venice was at its peak, by the Venetian clockmaker Gian Carlo Raineri (?– 1529) and his father. Miguel Chijiwa (c. 1569 – 1633), one of the members of the Tensho Boys Mission to Europe who visited Venice in 1585, wrote about his impression of the clock "The structure and features are splendid".

10 San Giacomo di Rialto Church Clock Tower (Venice, Italy)

The church of San Giacomo di Rialto, built in the 11th century, is the oldest in Venice. The clock above the entrance, which is said to have been made in the first half of the 15th century, has a medieval Italian time scale that divides the day into 24 equal parts with sunset as the beginning of the day. In the trading of goods unloaded in the square in front of the church, time was necessary for fair trade, and the church clock fulfilled that role. Fair business transactions greatly developed the maritime city of Venice.

11 Munt Tower (Amsterdam, Netherlands)

The Munt tower was the city gate tower which was renovated and raised by the Dutch architect Hendrik de Keyser (1565 – 1621) in 1620. The name Munt Tower comes from the word "munt" which means coin and the building with the tower was used as a mint. The carillon was installed in 1668 by the Hemony brothers from Netherlands.

12 Prague Old Town Hall Astronomical Clock (Prague, Czech Republic)

An astronomical clock, known as the "Pražský orloj" (the clock of Prague), was designed in 1410 by Jan Šindel (1370 – 1443), professor of mathematics and astronomy at the Charles University, and built by the clockmaker Mikuláš of Kadaň. A typical astrolabe-type astronomical display shows the Prague local time, the temporal hours, the old Czech time, the position of the sun on the zodiac, the phases of the moon, and the rising and setting times of the sun and the moon.

13   **Count Eckert Clock Tower (Würzburg, Germany)**

The clock tower building facing the market square of Würzburg, which prospered as a bishopric in central Germany, is called "Grafeneckart (means Count Eckhart)" after the mayor Eckhart de Folo (? – 1201) who lived here in the 12th century. The sculpture on the roof of the clock which installed in 1453 is just the Count and on the dial is written "carpe diem" by the Latin. The sculpture Count still now calls "carpe diem" (have a nice day) to the people.

14   **Esslingen Old Town Hall Astronomical Clock (Esslingen, Germany)**

An astronomical mechanical clock is installed in the Renaissance old town hall of Esslingen, a small city in southern Germany. From the top the clock has a bell tower, a moon phase, an astronomical display, and a clock dial. The astronomical display features the zodiac signs, the eclipse year scale and the dragon's hand for predicting solar and lunar eclipses. In 1581, Esslingen clockmaker Marx Schwartz was commissioned to make the clock, which was completed in 1586 by Tübingen clockmaker Jakob Diem.

15   **Ochsenfurt New Town Hall Automata Clock (Ochsenfurt, Germany)**

A mechanical clock made in 1505 is installed above the entrance of the new town hall which is a historic building in the center of the old town of Ochsenfurt, a small city in the middle Germany. The clock shows the moon phase, while on the hour, the cows lock their horns one another, the skeleton turns over the hourglass and the mayor in the lower window bows to the citizens. The skeleton symbolizes death and the hourglass that measures the time until death.

16   **Nürnberg Frauenkirche Automata Clock Tower (Nürnberg, Germany)**

In the center of the old town of Nürnberg, an automata clock tower is installed in the Gothic Frauenkirche on the Hauptmarkt square. At noon, when the hour hand reaches 12 o'clock, the automata begins to work. When the bell starts ringing following the performance of the trumpeter and the drummer, the right door opens and seven red cloaked dolls appear, bow in front of the great king, and disappear into the left door. The great king is the Holy Roman Emperor Karl IV (1316 – 78, r. 1355 – 78), and the dolls are seven Prince-elector, including the Duke of Saxony and the Archbishop of Cologne. The clock was made by clock master Jörg Heuss (?– after 1520) in 1509.

17   **Bad Windsheim City Hall Astronomical Clock (Bad Windsheim, Germany)**

An astronomical clock is installed above the entrance of the city hall of Bad Windsheim in central Germany that is known for hot spring resort. The clock has an astronomical dial about 4 meters in diameter and a statue of Themis, the goddess of justice, holding a sword and scales. The dial has a scale of the zodiac and a moon phase mechanism. The mechanism that displays the phase of the moon by hiding the gold disc with a black disc is very rare.

18   **Villingen City Gate Clock Tower (Villingen, Germany)**

Villingen, a small city in southern Germany, is one of the hubs of the German clock and watch industry. Standing at the crossroads in the center of the old town, we can see the blue, green and red dial clocks in the west, north and east city gates respectively. The Kienzle company near here is known as famous clock and watch manufacturer, and here the Schwarzwald (Black Forest) region is also the birthplace of the "cuckoo clock".

19   **Munich Old Town Hall Astronomical Clock Tower (Munich, Germany)**

When we climb the clock tower of St. Peter's Church in the center of Munich, we can look down on the astronomical clock tower of the Munich Old Town Hall. The golden relief of the zodiac signs on the dial, the sun hand, and the moon phase ball painted half by half in gold and black are very beautiful. In the town hall building of which the construction dating back to the 14th century, the ground floor hall is still used for ceremonies and other important events, and the upper floor is used as a toy museum.

20 **Munich New Town Hall Automata Clock Tower（Munich, Germany）**

Automata perform on a two-level stage set in the middle of the 80-meter-tall clock tower of the neo-Gothic Munich New Town Hall. The upper stage shows the wedding parade in 1568 of the Duke of Bavaria Wilhelm V. (1548 – 1626) and the daughter of the Duke of Lorraine François I. (1517 – 1545), Renata. The parade is followed by a procession of clowns and musicians, followed by a tournament between the Bavarian and Lorraine knights. The lower stage is the dance of the beer barrel craftsmen, originating from the 16th-century plague epidemic of pest when they took to the streets to dance to cheer up the citizens.

21 **Rothenburg Council Banquet Hall Automata Clock (Rothenburg ob der Tauber, Germany)**

An automata clock was installed in the window of the bright pink wall of the Council Banquet Hall on the Marktplatz in the old town of Rothenburg. The automata called "Meister Trunk" (Mayor's heavy drinker) is a reenactment of the 17th-century story of Mayor Nusch, who saved the city by downing a big jug of wine. The clock and automata were made in 1684 by the Nuremberg clockmaker Johann Karl Landeck (1636 – 1712).

22 **Orsay Museum Clock (Paris, France)**

The boat on the Seine river cruise glides along the surface of the river in front of the building with the clock. Of course, the building in the background is the Musée d'Orsay, which exhibits Impressionist paintings. In 1900, at the time of the Paris World Exposition, Orsay station opened as a terminal station of the Paris-Orléans railway. However, the platform was not long enough for the growing trains, and by 1939 the building was no longer in use. The Musée d'Orsay was born in 1986 after a long period of deliberation on how to utilize it. The clock on the building is a remnant of the former terminal station building.

23 **Conciergerie Clock (Paris, France)**

France's oldest mechanical clock, made by Henri de Vic in 1370, is installed in a building called the Conciergerie on the Ile de la Cité in Paris. Both sculptures are of Themis, goddess of justice, the left one holding a shield of law, the right one holding scales to measure good and evil and a sword to judge. This shows an allegory that time is fair to all in court. For Marie Antoinette, Empress Louis XVI, who was imprisoned here in the French Revolution, the bells of De Vic's clock should have been a short-lived mourning bell.

24 **Rouen Big Clock (Rouen, France)**

A big clock is installed in front of and behind the Renaissance-style city gate in the old town of Rouen, an ancient city along the Seine in the Normandy region. The clock has a sun-designed dial with a diameter of 2.5 m, displays the phases of the moon, and is very impressive with its rich colors. The clock was first installed in 1398 and maintenanced in 1410 by Olivier Homo, a clockmaker of Rouen, and he also extended the dials to two sides of the city gate. It is said that the sheep design of the dial decoration and the tips of the hands are actually the ones that he adopted from the coat of arms of the city of Rouen.

Photographs and texts
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Katsuhiko Sasaki is the curator emeritus of National Museum of Nature and Science in Japan specialized in the history of science and technology such as development of time measurement, technical feature of Japanese traditional clocks and the time system in Japan as well as museology and scientific communication. He has written many theses on the Japanese traditional clocks. He is also well known for his variety of hobbies such as playing glass harp and boomerang.