

REVOLUTION

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Linear Progression: The Patek Philippe Cobra 3414

REVIEW

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The linear display of information is a retro-futuristic style that is today made famous by URWERK emerged first from a almost forgotten watch by Patek Philippe: the Cobra 3414.

When designs appear both old and new together, there is a term for it: retro-futurism. This is not the remembrance of times gone by but a past impression of a possible future; a nostalgia for anticipation if you like. When it comes to information display technology, it is remarkable how the mid-20th century implied “futuristic” by a change from rotary to linear display. From the 1950s to the 1970s car makers gave dashboards a cutting-edge appearance by fitting a linear speedometer. These varied from a pointer that swept a segment along a horizontal scale, (a bit of a

cheap really, as the motion wasn't linear, but cheap and commonly found) to a pointer that ran along the scale, as used by Daimler Benz in 1954. The ultimate linear display was a bar that filled within the speedometer scale, as seen in the Buick Electra of 1961 and the 1966 Lincoln Continental.



Speedometer on a 1961 Buick Electra (Photo: Mecum Auctions)

Watchmakers have periodically toyed with the linear concept, although it is a greater challenge than that of a speedometer which, by nature, begins at and returns to zero, whereas a time display has to indicate continuous forward motion, hence the rapid return action of the retrograde function. The horological equivalent of the cheap and cheerful sweep speedometers appeared in the 1970s with the closest being the LIP Secteur from 1972. This watch had retrograde hours and minutes with a date display in an aperture above the dial. The scale is particularly hard to read in the central section as the numerals bunch so closely together, the time not being shown in a true linear progression.



LIP Secteur (Photo: crazywatches.pl)

A time display in the same vein as the Buick and Lincoln speedometer is hard to achieve. The two most recent examples come from HYT and Urwerk. Since HYT's unique time indication method is the progression of a coloured liquid along a tube, it is ideally suited to display time in a linear format, the brand's usual circular display being merely a way of extending the scale to its maximum length for clarity. Working with a shorter straight length of tube, HYT's 2015 H3 incorporated a clever jump hour into the movement. The scale that the liquid progresses against is a square rod allowing each side to be made up of only 6 sections to encompass the 24 hours of the day, once the full length of the scale has been covered, the liquid indicator quickly moves back to the left while the scale rotates to present the next six numbers.



HYT's H3 has a dual linear display for the hours and minutes, with a liquid tube that is combined with a jumping mechanism for a row of six hour markers which rotate to indicate the specific hour as the liquid goes back and forth on the display. A linear minutes display further indicates the exact time.

Prior to HYT, the sole producer of true linear time display watches was Urwerk with their UR-CC1 produced in 2009. This watch displays seconds minutes and jumping hours in linear fashion with an additional digital display for the passing seconds. A vertical triple cam lifts a toothed rack converting the horizontal motion of the movement into a vertical rotation of the display cylinders. These cylinders are coloured green and black in a spiral pattern so as they rotate the green progresses from left to right. As the guide rod passes the peak of the cam, it drops down, resetting the minute cylinder back to zero and moving the hours cylinder one step forward. Although utilising exotic metals and advanced production methods for its components, notably the honeycomb rack and beryllium cam, this watch is a reissue, or rather a reimagining of a far older piece. As referenced in the full name of the watch, Urwerk UR-CC1 King Cobra, this is a tribute to the unique and bizarre linear Cobra watch created by Gilbert Albert and Louis Cottier for Patek Philippe.



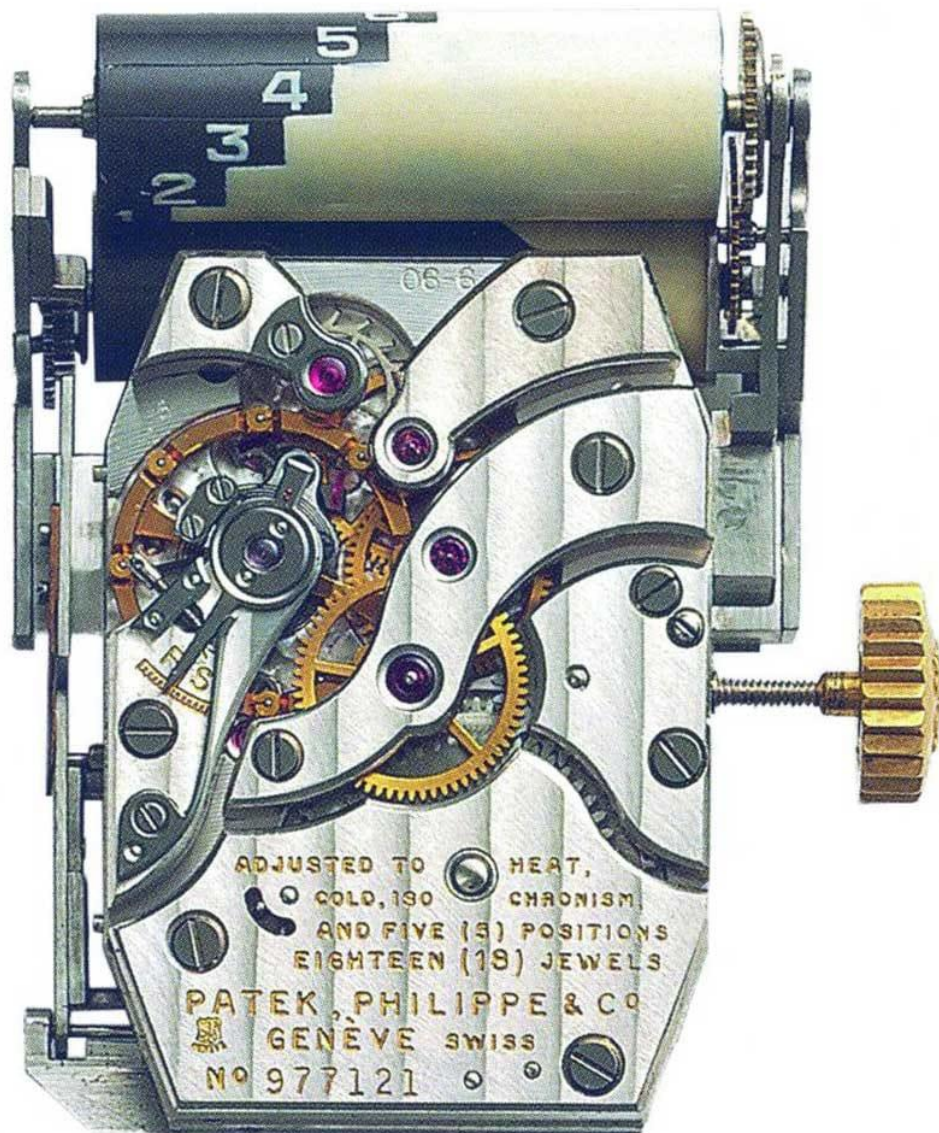
URWERK's UR-CC1, with a linear display of seconds, minutes and jumping hours, all coordinated by the use of a vertical triple cam.

By 1958, Louis Cottier had already established his reputation as an important horological innovator with his development of a practical world-time mechanism in 1931 and its subsequent improvement in the 1950s with the addition of a second crown. Gilbert Albert studied Jewellery and Design at the Ecole des Arts Industriels before working with Patek Philippe as a designer, becoming head of the workshop from 1955 to 1962. During this period, he was responsible for some of the most abstract and audacious watch designs in Patek's typically conservative history. When a master of movements and a design maverick came together in 1958 the result was the remarkable Cobra Ref 3414.



The Patek Philippe Cobra reference 3414, designed Gilbert Albert for the brand and featuring a fully linear digital display of time.

This was a “side-view” watch almost 20 years before LED quartz technology made them, if not popular, then widely available. The time display was like nothing ever seen before in watches with minutes shown as a steadily progressing black line on a white background and the hour line advancing in jumps with the number of the hour shown on the line. Based on the beautifully crafted calibre 9-90 this movement appears to have its cylinder-drive mechanism on the left-hand side, in the same manner as the Urwerk and what appears to be a leaf-spring retrograde device on the right. A patent on the mechanism was filed in 1959 but the watch never went into serial production and the solitary example resides in the Patek Philippe museum. Would it have worked? We cannot know for sure...



The calibre 9-90 by Patek Philippe, showing how the hours jumped to create the illusion of a linear display.

The production of the UR-CC1 shows that the initial concept was sound but with Urwerk requiring so much advanced technology for their version, albeit more ambitious in scope, perhaps the first Cobra was just too fragile to survive in the wild. The snake is sometimes regarded as a symbol of transformation and creativity but sadly Patek's Cobra remains an isolated example. After four more years of Gilbert Albert's asymmetric imagination, Patek Philippe returned to what they are celebrated for, exquisitely made classism.

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