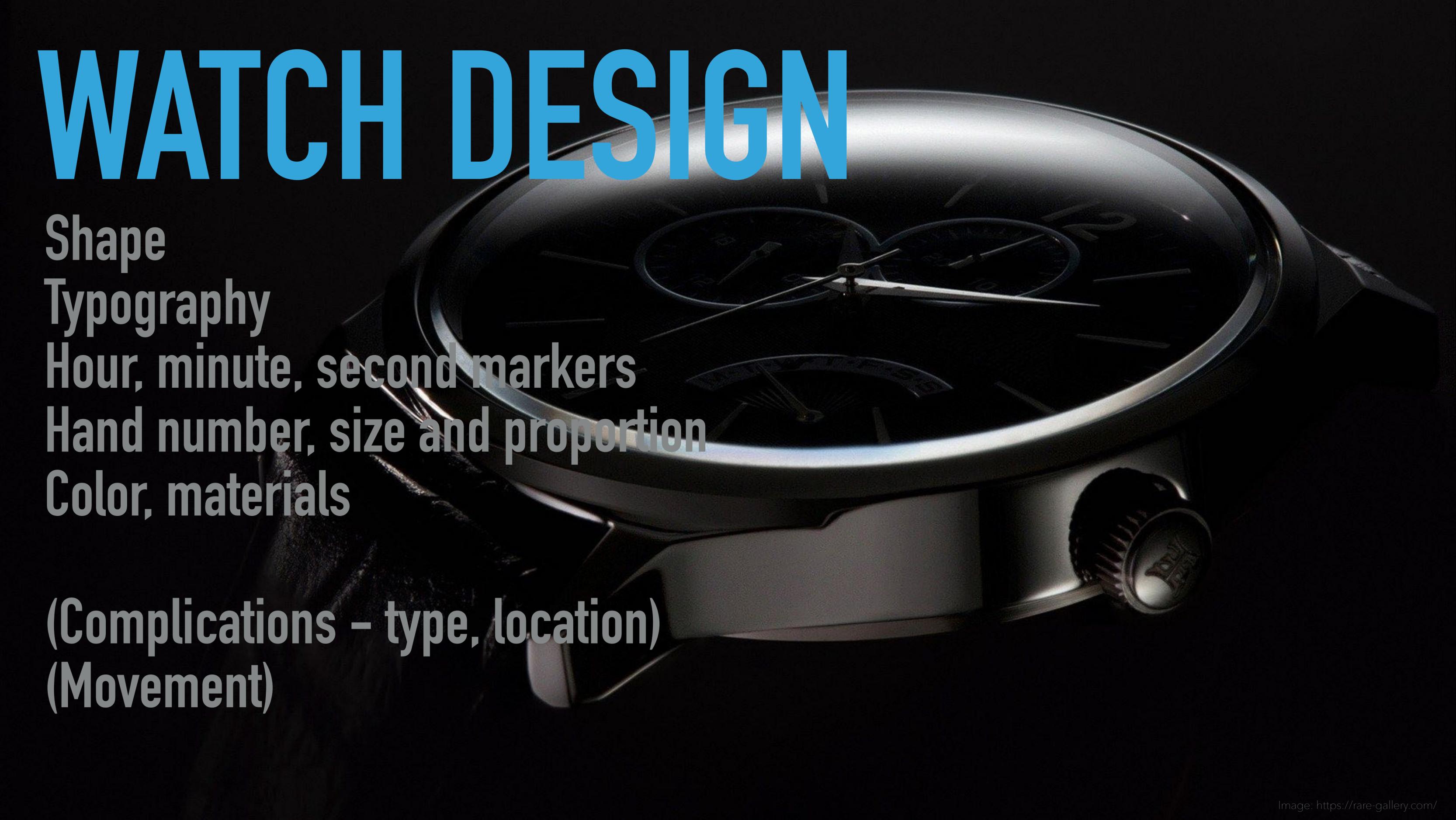


# WATCH DESIGN



Shape

Typography

Hour, minute, second markers

Hand number, size and proportion

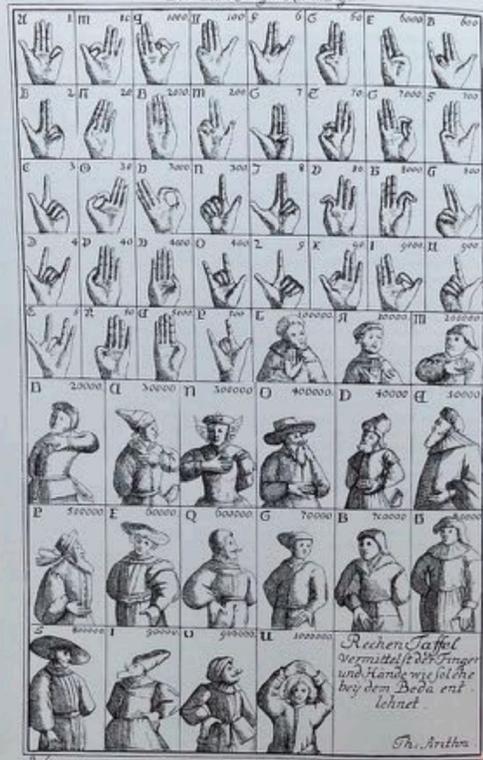
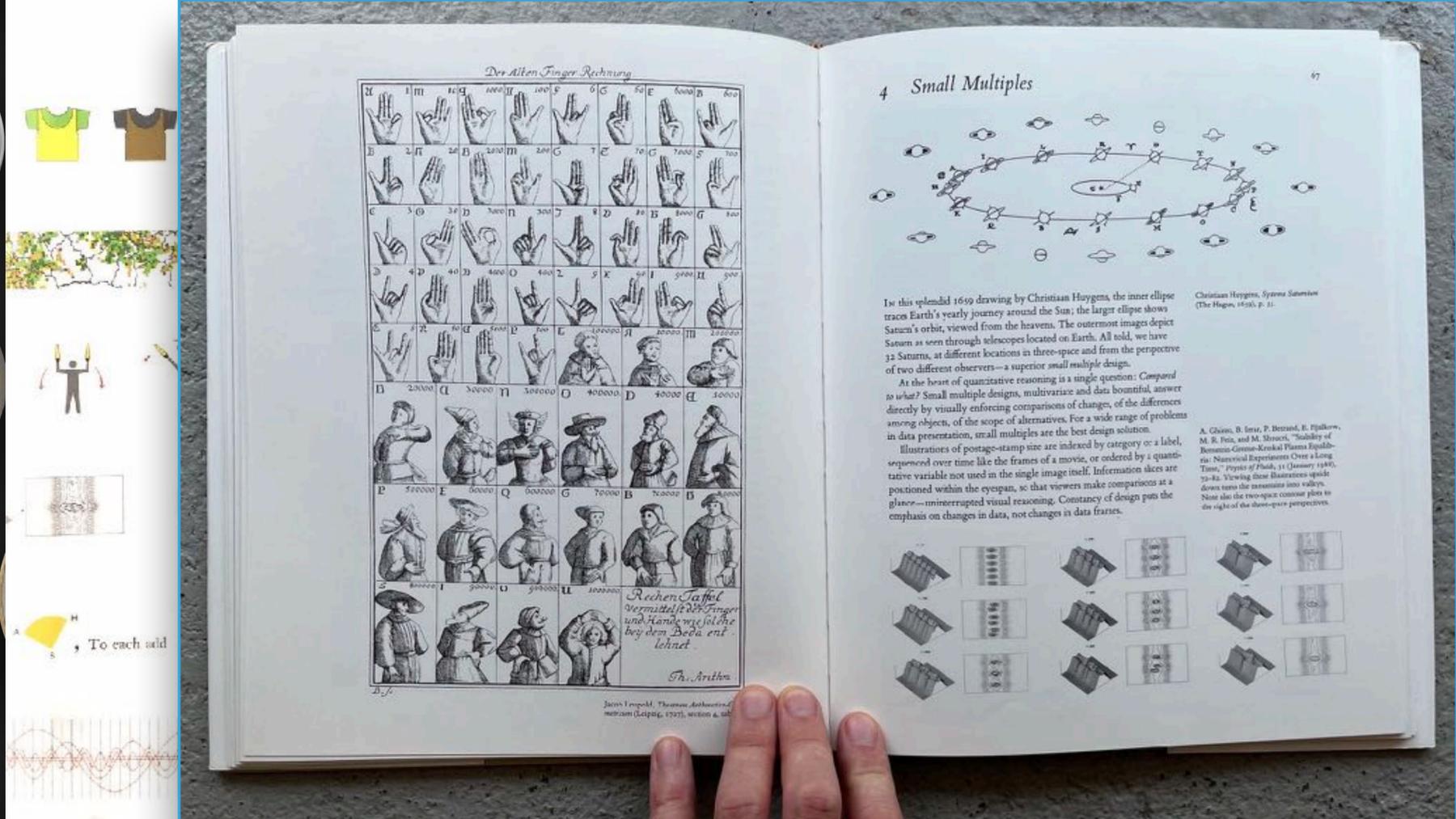
Color, materials

(Complications – type, location)

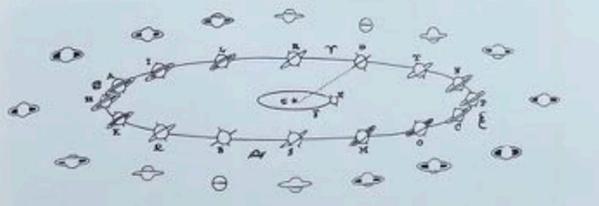
(Movement)

Edward R. Tufte

# Envisioning Information



## 4 Small Multiples



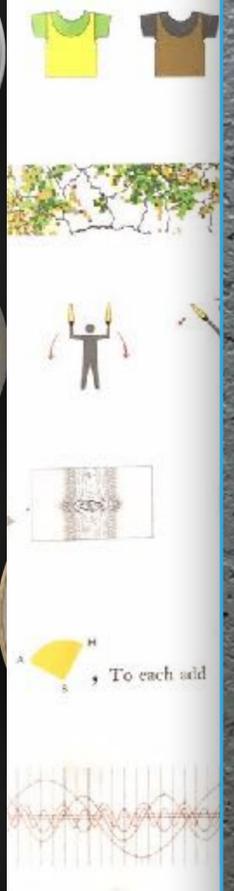
In this splendid 1659 drawing by Christian Huygens, the inner ellipse traces Earth's yearly journey around the Sun; the larger ellipse shows Saturn's orbit, viewed from the heavens. The outermost images depict Saturn as seen through telescopes located on Earth. All told, we have 32 Saturns, at different locations in three-space and from the perspective of two different observers—a superior small multiple design.

As the heart of quantitative reasoning is a single question: *Compared to what?* Small multiple designs, multivariate and data bountiful, answer directly by visually enforcing comparisons of changes, of the differences among objects, of the scope of alternatives. For a wide range of problems in data presentation, small multiples are the best design solution.

Illustrations of postage-stamp size are indexed by a label, sequenced over time like the frames of a movie, or ordered by a quantitative variable not used in the single image itself. Information slices are positioned within the eyespan, so that viewers make comparisons at a glance—uninterrupted visual reasoning. Constancy of design puts the emphasis on changes in data, not changes in data frames.

Christian Huygens, *Systera Saturni* (The Hague, 1656), p. 11.

A. Chisno, B. Esser, P. Bernold, E. Fjalkow, M. R. Fein, and M. Shorrock, "Stability of Benjamin-Gross-Krook Plasma Equilibria: Numerical Experiments Over a Long Time," *Physics of Fluids*, 31 (January 1989), 75-82. Viewing these dataframes upside down turns the trajectories into valleys. Note also the two-square cosine plots to the right of the three-pair perspectives.



To each add







STERNGLAS  
ZEITMESSER

AUTOMATIK

25

MADE IN GERMANY



STERNGLAS  
ZEITMESSER

AUTOMATIK

25

MADE IN GERMANY



Minute/second text  
1/2 minute/second track

Minute track  
Hour text

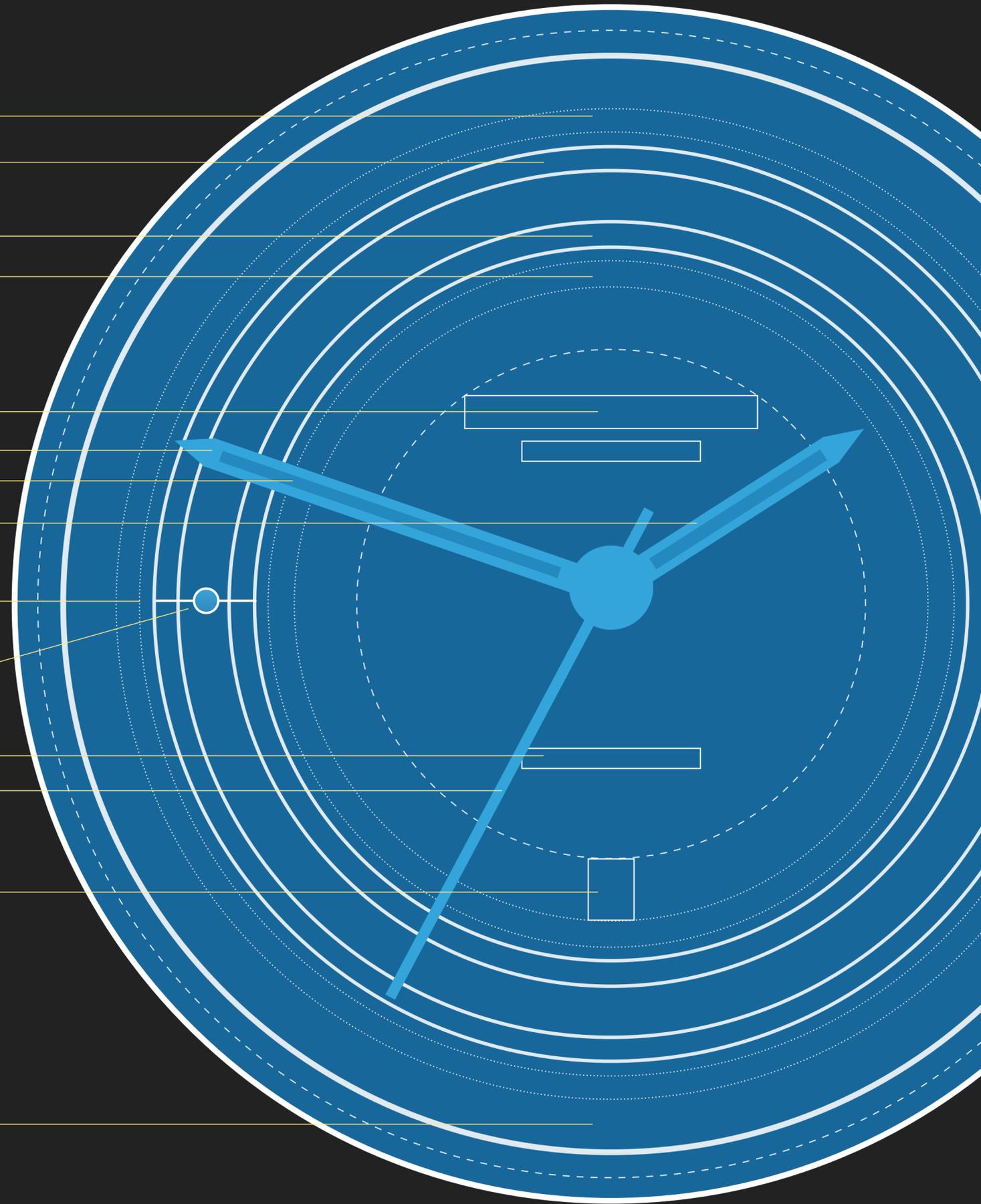
ID  
Minute hand  
Lume  
Hour hand

Hour divisions  
1/4 hour mark

Movement type  
Second hand

Date

Origin







Date complications



Power Reserve

24-hour time

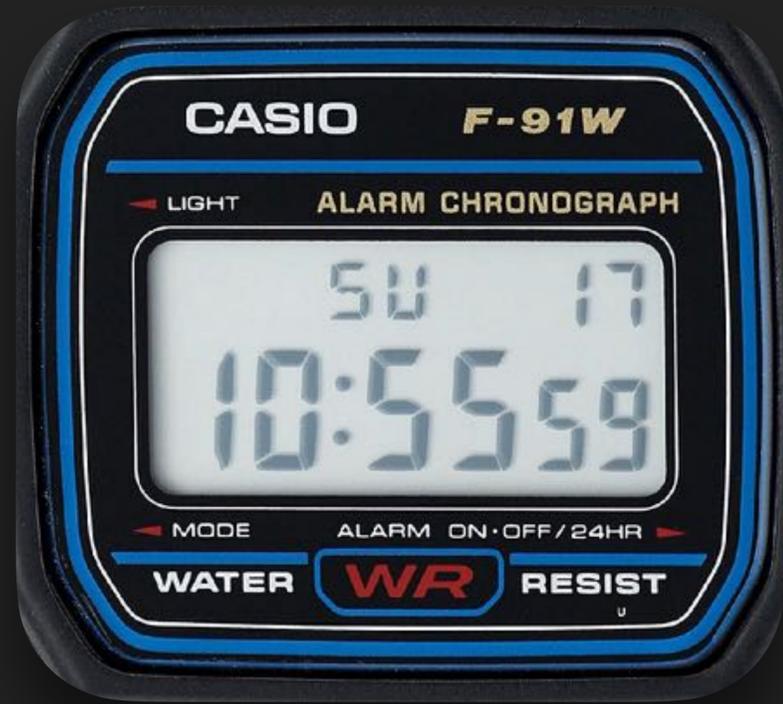
Germans



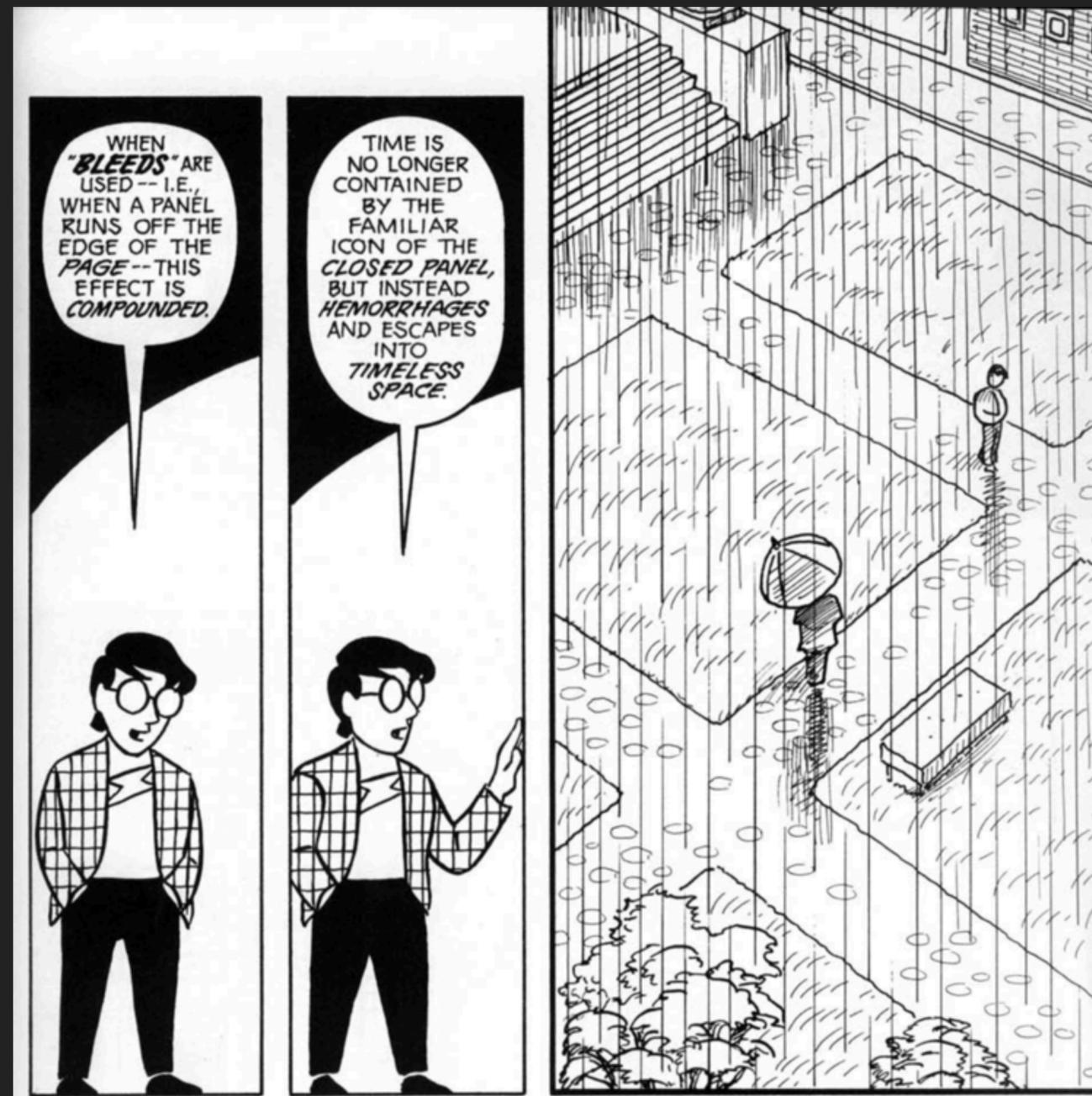
Modern/Bauhaus/Memphis design



Modern squares



Retro squares





Pillow-shaped case



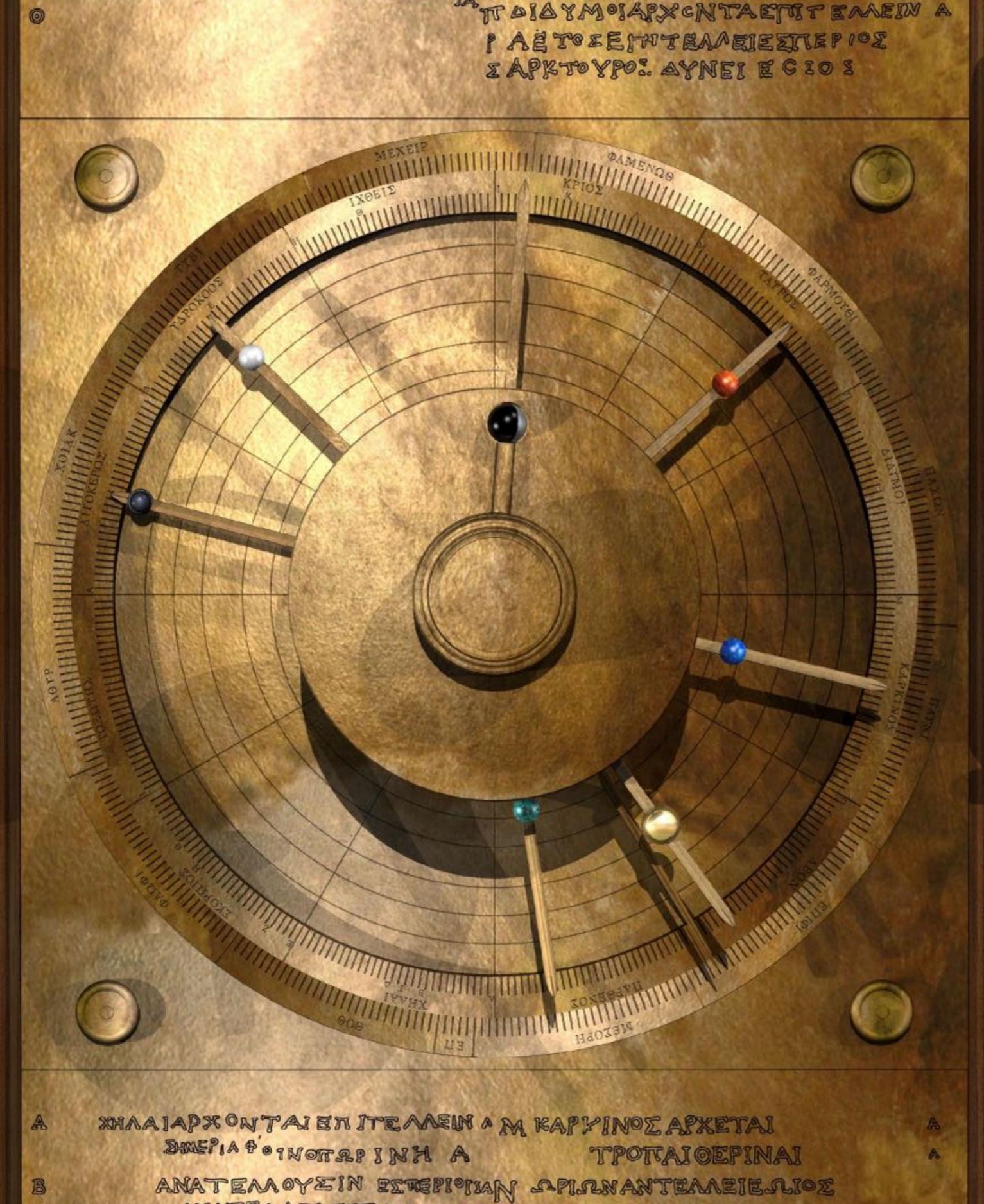
Astronomical complications



Astronomical complications



Astronomical complications



ΤΑ ΔΙΔΥΜΟΙ ΑΡΧΟΝΤΑ ΕΠΙΤΕΛΕΙΝ Α  
 Ρ ΑΕ ΤΟ ΣΕ ΠΗΤΕΛΛΕΙΣ ΣΤΕΡΙΟΣ  
 Σ ΑΡΚΤΟΥΡΟΣ ΔΥΝΕΙ Ε ΓΙΟΣ

Α ΧΗΛΑΙΑΡΧΟΝΤΑΙ ΕΠΙΤΕΛΕΙΝ Α Μ ΚΑΡΚΙΝΟΣ ΑΡΧΕΤΑΙ  
 ΣΗΜΕΙΑ ΦΘΙΝΟΠΩΡΙΝΗ Α ΤΡΟΠΑΙΟΕΡΙΝΑΙ  
 Β ΑΝΑΤΕΛΛΟΥΣΙΝ ΕΣΤΕΡΙΟΤΙΑΝ ΩΡΙΩΝ ΑΝΤΕΛΛΕΙΣ ΩΙΟΣ



Fancy and silver



Skeletonized



Colorful

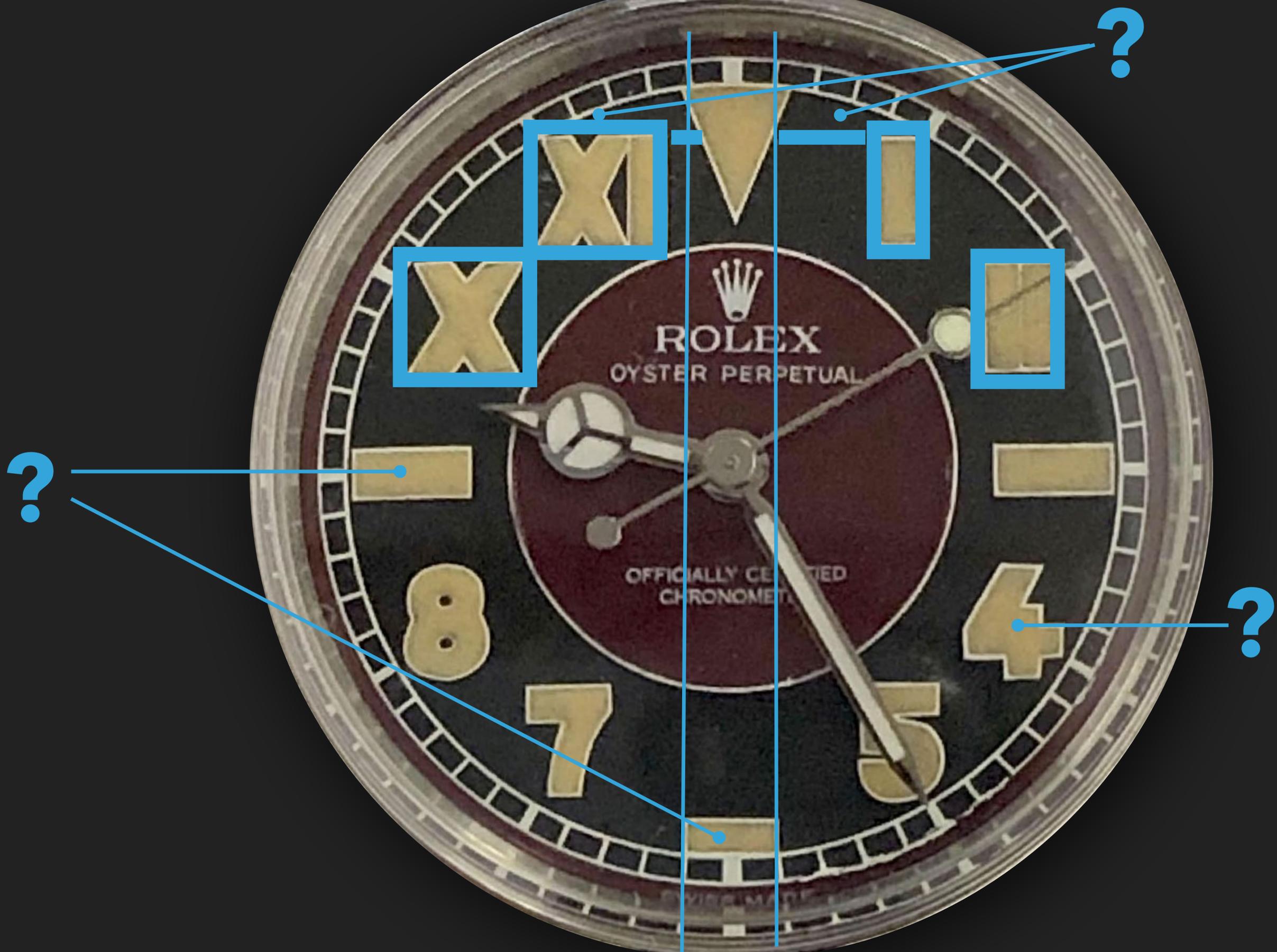


Dive





Memento Mori





L SWISS MADE L



