

THANK YOU :)

ICTS & art@CERN &
Prohelvetia

Poème du tic-tac

2023 - WIP – generative sound installation, 4 channels

recordings of clocks and watches from the collection of the Musée international d'horlogerie de la Chaux-de-Fond

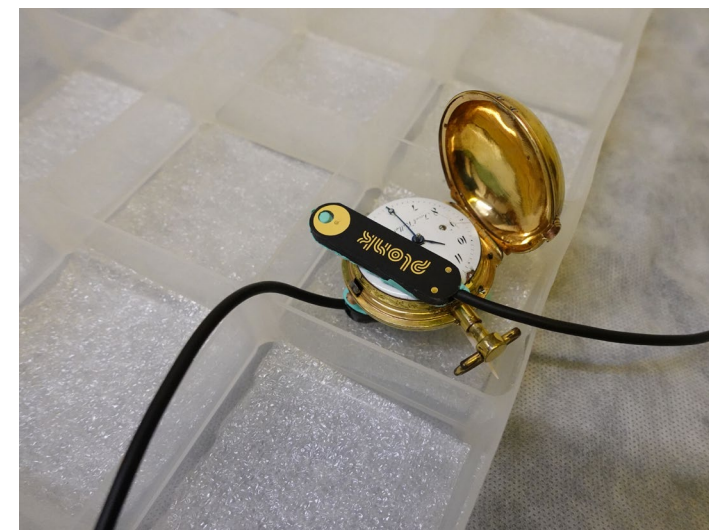
Rapid rhythms and overlapping metallic sounds come from the speakers. The noises are recorded mechanisms of clocks and watches from the collection of the Musée international d'horlogerie (MIH) in La Chaux-de-Fond. The selection includes the ticking sounds of about 30 pieces of various kinds: tower clocks, pendulum clocks, and various

watches that shaped the history of watchmaking since the 16th century. The clock is an invention that literally changed the global idea of time: it is almost impossible to imagine it being something else than an accumulation of seconds. Clocks run the world: contemporary technology, science, transportation, economy and medicine is un-

thinkable without timers and time stamps. They are one of the most passive aggressive and powerful machines ever invented. The sounds of clock mechanisms that are barely perceptible in everyday life become the loud protagonists of the piece.



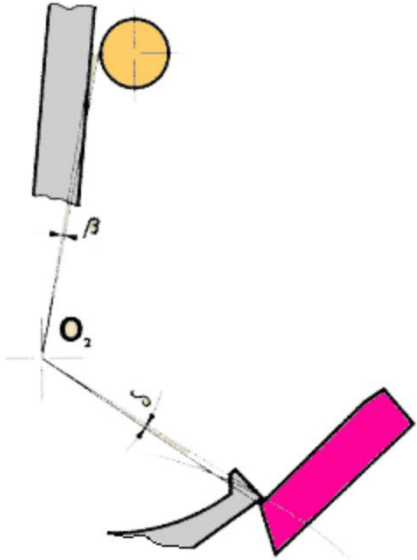
Montre dite "œuf de Nuremberg". Boîte en cuivre de chappement à roue de rencontre. XVI^e-XVII^e siècle.





THE LOST WAY

The name of a small part of the movement performed by the escapement mechanism of a mechanical clock, a movement that is apparently useless but necessary for the oscillation of the clock to function properly.



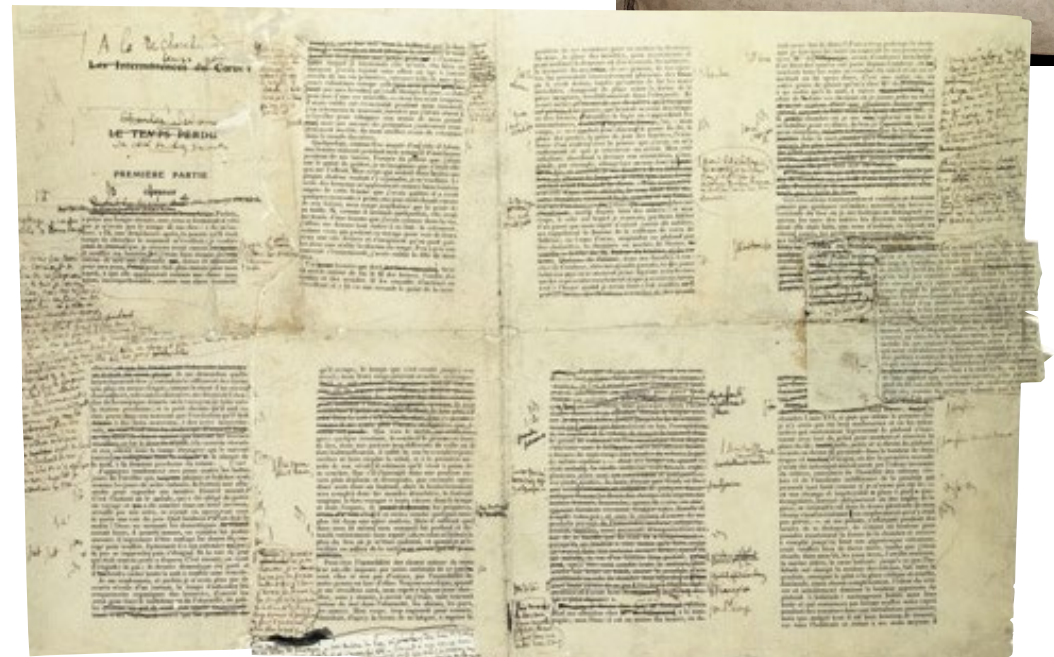
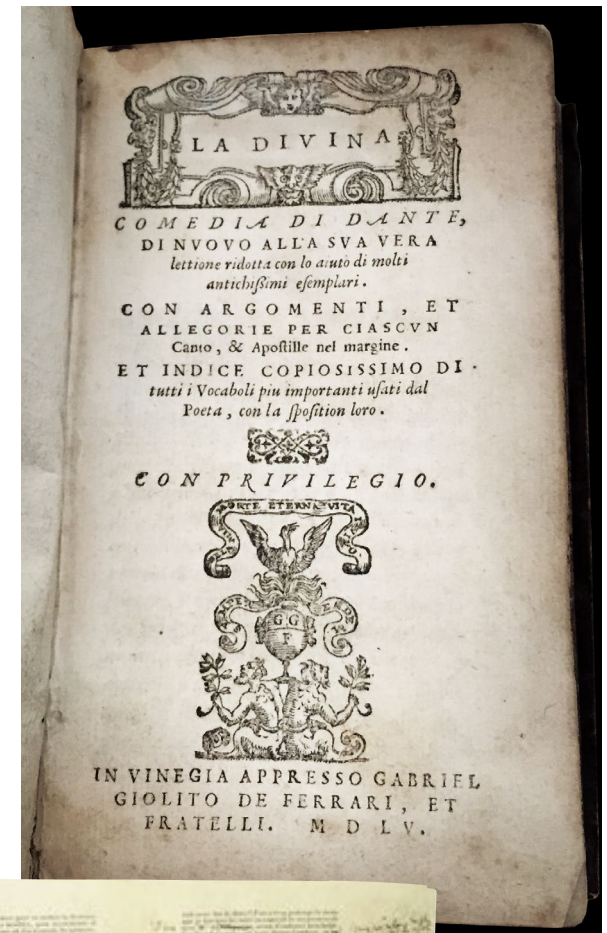
Lorsque la dent tombe sur le plan de repos de la palette, l'ancre n'est pas encore appuyée contre la goupille de limitation.

L'angle d'engagement de la dent, à ce moment précis, est nommé : angle d'engagement virtuel (delta)

Puis par la vitesse acquise, l'inertie de l'ancre et l'action du tirage, l'ancre parcourt le chemin perdu formé par l'angle β (Béta).

Cet angle est également parcouru en pure perte et doit être aussi faible possible.

La chute de la roue d'échappement et le chemin perdu de l'ancre, sont des sécurités nécessaires au bon fonctionnement de l'échappement.



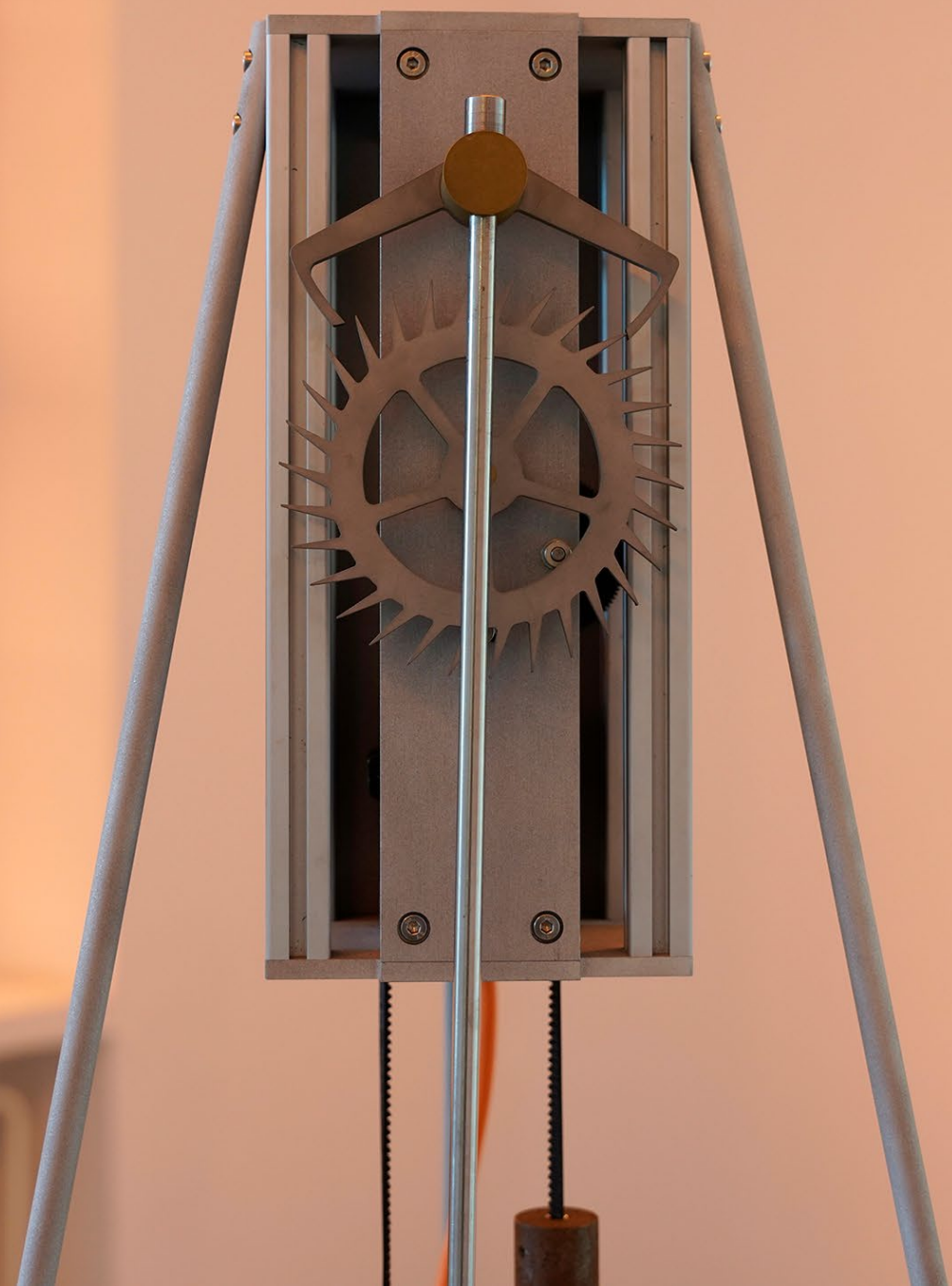
Time Piece (Martian Deadbeat)

2018 — aluminium, stainless steel, steel, electronic and mechanical components (50 x 50 x 170 cm)



Time Piece (Martian Deadbeat) is a clock built to tick with every Earth Second. Yet the pendulum is manipulated to swing as it would on Mars: because the gravity on Mars is weaker, the ticking is about 20% slower. The work is inspired by sci-fi. Mars is a metaphoric planet; many stories take place on its fantasized ground, with the intent to paraphrase terrestrial situations or dreams. The sculpture therefore beats to the time of imagination, transferring the martian ticktocking to Earth. It also reminds us that a time standard such as the Second is relative and that the shape of time we are used to, made of minutes and hours of a fixed duration, is nothing else but a convention.

The clock beats to the time of imagination, transferring a martian ticktocking to Earth.



Un amalgame de pierres, d'atomes reliés par des forces imaginables.

Gravité et électromagnétisme, rotation de la terre et magna.

Les Alpes en sont la preuve, pierres africaines et pierres européennes, une cicatrice d'imp

ainsi, la plaque africaine se déplace vers le nord, et les Alpes

simplement par le changement des saisons.

CHRONOMORPHOLOGY

the study of how time changes over time

TIME MEASUREMENT SYSTEMS

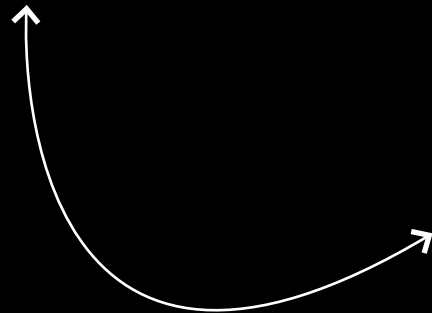
clocks and timepieces, calendars and time systems (the instruction to read and create clocks, time pieces and calendars)

THE BODY

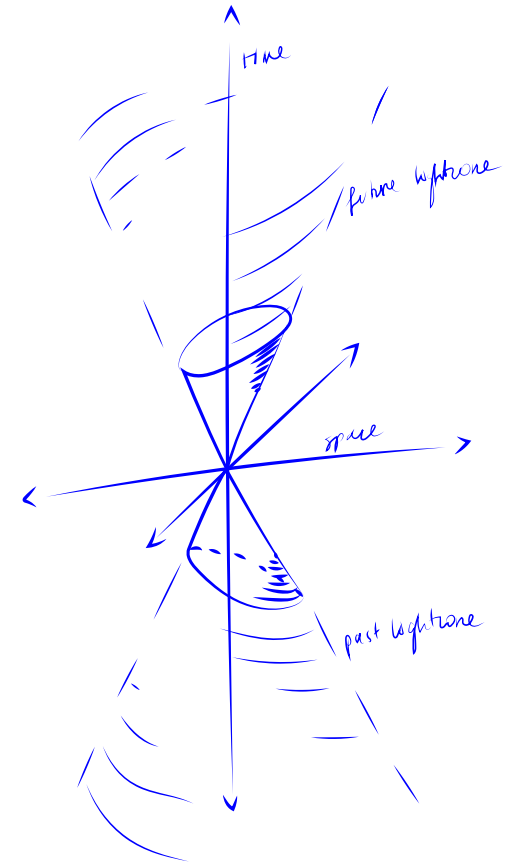
feeling, perceiving, analysing and understanding time

LANGUAGE


our way of communicating both how we calculate time, how we feel it and how we remember it







Every event is ever evolving. It diffuses in the past and in the future. This diffusion is in the form of a cone. The Minkowski Einstein spacetime description, with the light cone, shows us that the light and shadow of each event might continuously travel towards the infinity of the past, and the infinity of the future.



The ellipse is an archive of pulsating archaeological time durations in the proximity of the second.

BLUE 1000ms - the standard of the second in use until 1960: tacitly and universally defined as the duration of $1/86.400$ of a mean solar day.

OR **BLUE 1000ms** - the standard of the second in use between 1960 and 1967: equal to $1 / 31.556.925,9747$ of the tropical year for 1900 January 0 at 12 hours ephemeris time.

PURPLE 864ms - the second measured in accordance with the time system developed during the French Revolution: one day of 10 hours, each consisting of 100 minutes which, in turn, had 100 seconds each.

WHITE 8640ms - the Fen of the Sui dynasty. In ancient China the day, understood as the interval between two successive midnights, was divided into 12 equal parts. Those "double hours" were further divided into Ke, and each Ke consisted of Fen. Apart from certain exceptional periods, throughout history the "double hour" would be divided into 100 Ke. The length of Fen, though, depended on the dynasty.

PINK 5978ms - the Fen of the Song dynasty

YELLOW 10286ms - Byo, an ancient Japanese unit similar to the Fen. Between the years 862 and 1684, within the Xuanmingli calendar, each day was divided into 12 "double hours" composed, in turn, of 100 Koku. The Koku comprised 84 Byo.

RED 4000ms - an approximation of Prana. In the Vedic time system Prana represents the duration of a complete breath.

LIGHT BLUE 88ms - an approximation of Nimesha. The Vedic unit defined by the single wink of an eye.

Neocortex

2017 — sound performance, four channels, duration approx 30 min.
In collaboration with Constantin Engelmann

<https://vimeo.com/242453859>

password: warsaw

The sound piece explores the illusion of auditory continuity and the phenomenon of spoken language becoming just sounds.

Auditory stimuli are perceptually organised, for sounds are either heard as a whole or divided into individual components and made into streams. Neocortex explore this neurological phenomenon and take advan-

tage of the glitches in our auditory system, leaving it undecided on which components of the sound should be joined together into a continuous stream or perceived as discrete units.



Simultaneity and Polyphony in Speech Based Audio Art

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ABSTRACT

author discusses the use of simultaneous speech in the of radiophonic sound compositions. He begins with a on of speech in pre-literate societies and shows how eity is a characteristic of speech prior to the influence ng and print, and discusses the how the linearity of communications has tended to eliminate aspects of words that cannot be duplicated in print. The author cusses the design of radiophonic sound projects, by and others, which utilize the ability of the ear to keep multiple simultaneous spoken narratives and which may osely simulate thought patterns of eye entered cultures. he relates how the differences between eye-culture on and ear-culture perception might impact the design related to the sonification of data.

1. INTRODUCTION

n a society which has been shaped by an emphasis on culture, it is easy to overlook forms of sound ication for which there is not a visual equivalent. As a rtist, I am interested in producing sonic forms which the unique properties of sound perception and ication.

hese is the so-called "cocktail party" effect: the ability r to "tune in" to multiple simultaneous conversations in d room. There is no equivalent ability in the perception n text. A reader would not be able to simultaneously t from the two columns on this printed page, for . Visual perception is linear. Even when a person take in a complex visual image "all at once" a careful of eye movements will show that the image must be bit by bit by the eye in order for all elements to be

Ong [1], Carpenter [2], McLuhan [3], Schwartz [4] and others have described a number of characteristics of speech communication in those societies that bear striking differences from the roles of speech in eye cultures -- the term I will use for cultures that heavily communicate with writing and printing.

One characteristic is the lack of a strong sense of temporal placement in terms of historical events. There is no sense of "time line" as in eye cultures because it is written text, with its linear organization, that has given us a sense of past, present and future. In addition, written words can be stored, re-examined and tested against other stored data to develop a sense of structure and organization.

In ear cultures a body of quasi-historical oral stories does evolve and are repeated and learned by troubadours, but as the stories are passed down -- and contrary to a number of myths that have evolved about ear cultures -- the events and characters in the stories are altered, and a strong sense of the exact dates and times of events is lost. [5]

Speech in ear cultures consists of three inseparable components: diction (in its original meaning of "choice of words"), inflection (tessitura and loudness) and body position and movement (apparent, of course, only to sighted persons). [6]

Prior to the invention of writing and printing, there was no way that diction could be separated from the other two elements.

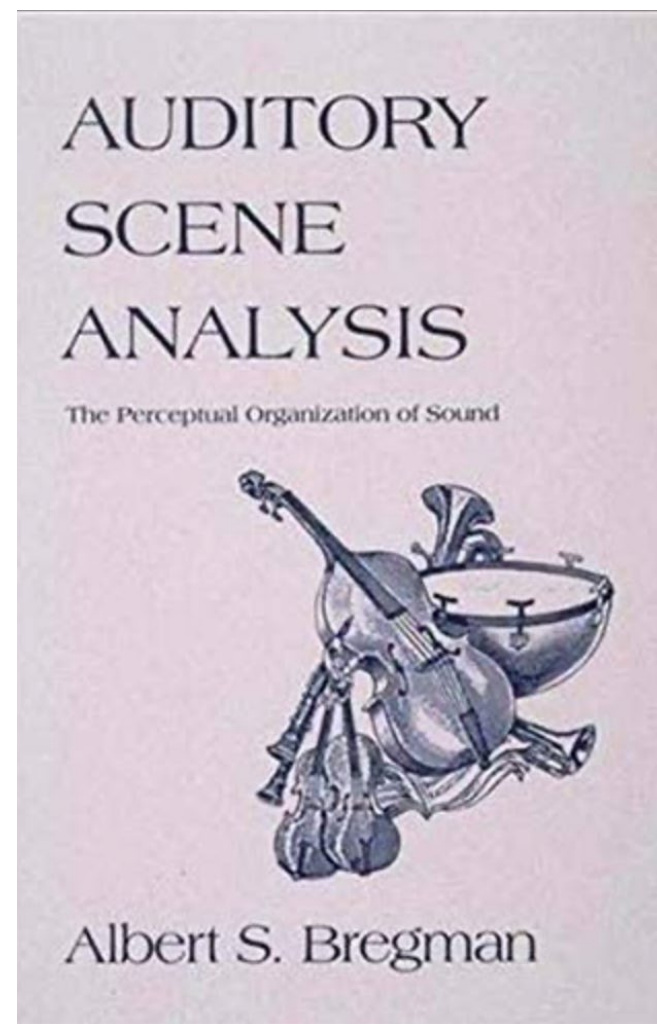
In a spoken culture it is not uncommon for more than one person to speak at the same time. Indeed, the act of "listening" often involves speaking. More about this below.

2.2 Eye dominance brought about by writing and printing

The written word preserves only the diction or choice of words. Spoken intonation and inflection as well as body gestures, position and movement in speech are not preserved.

According to McLuhan, Ong and others (previously cited),

Through our mother tongue, we learn to distinguish speech from music, and while listening to other languages we are sometimes misled. In this composition, this aspect is enhanced with the use of spectral techniques. Understandable spoken concepts gradually turn into distorted vibrations, but sometimes those vibrations are similar to voices.



A PARACHRONOLOGY OF ATOMS AND STARS

CONTENT

facts about

- chronology from all around the world
- tool of chronology from all around the world
- system of historical recordings from all around the world
- relation between astronomy and graphology from all around the world
- the development of writing systems from all around the world

NARRATIVE SYSTEM

the framework
the red thread

the tell facts we rely often to:
biographies
timelines
genealogy

Inspired by quantum or cosmological mechanisms I want to try to find another way to deal with the narration

My goal is to create a story, a scientific narration, not a fiction though. Inspired by the image of particle collisions, I want to produce an image of collision myself. Instead of particles' tracks, my image will reveal historical facts about the (de-)construction of chronology from all around the world, from the past and from various domains.

DISCLAIMER:

Image/lecture/performance/sounds/story are to be understood as synonyms here

help!

invent a particle with some consistency
it might actually exist but we haven't detect it

follow the particle and its interaction to events
this is the logic of the narration

which events?

A selection of interesting facts about the ideas of
chronologies from all around the world and the tech-
nologies that were developed along it

Are events themselves particles (field excitation)?

Is the field history?

Can the field store information?

....

too many questions, better do something





Time Piece (All The Time Of The World)

CLOCK

division of the day

prediction & recording of events

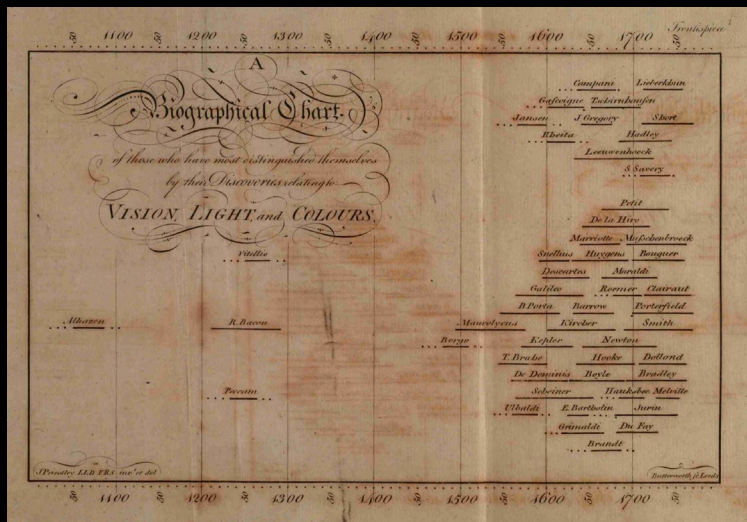
CALENDAR

collection of days
(rotation of the Earth)

DISCLAIMER: nowadays both clocks and calendars are constructed with the second unit (which itself is constructed with quantum phenomena (mainly atomic clocks)) - day is less important as a basic unit

BUT they still serve to record and predict events. and they still are put in relation to the sun

CHRONOLOGY: the study of historical events



TIMELINE

graphic tool to record data in a simplified way

Joseph Priestley, a scientist, developed "the first complete and fully theorized visual vocabulary for a time map" (A history of the timeline, Rosenber& Grafton, 2010)