





@hj_chen













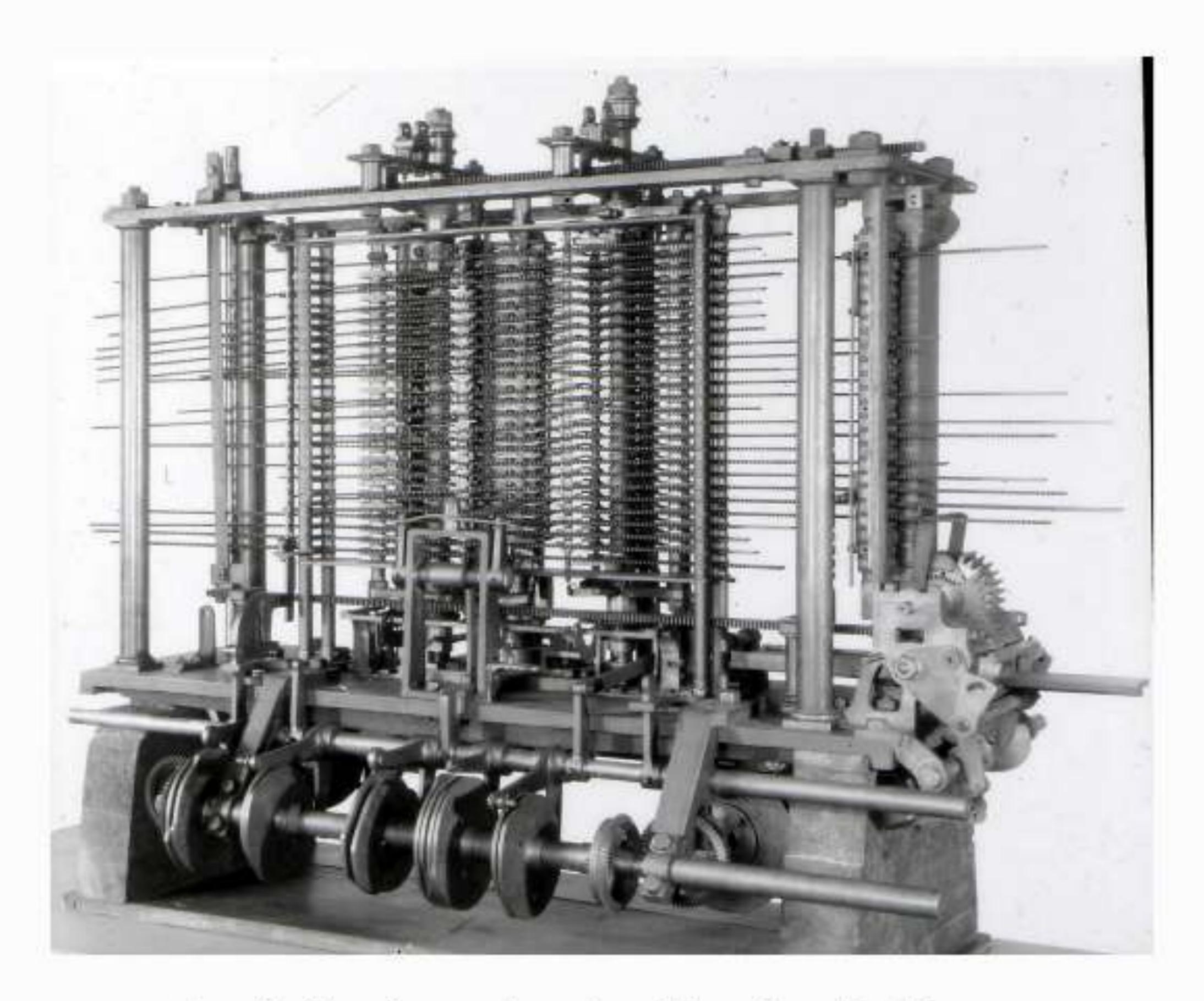
https://events.mozilla.org/techspeakers



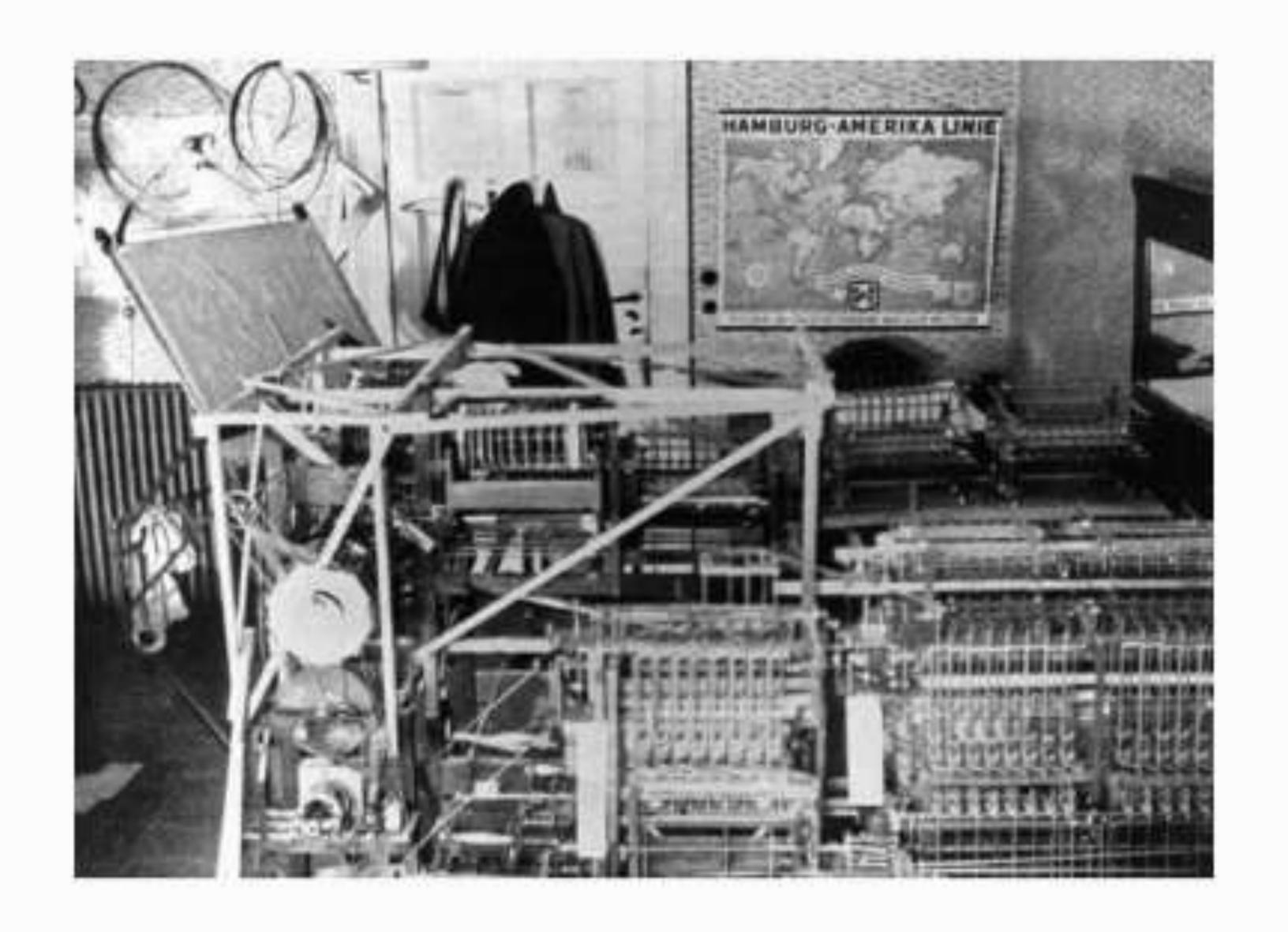




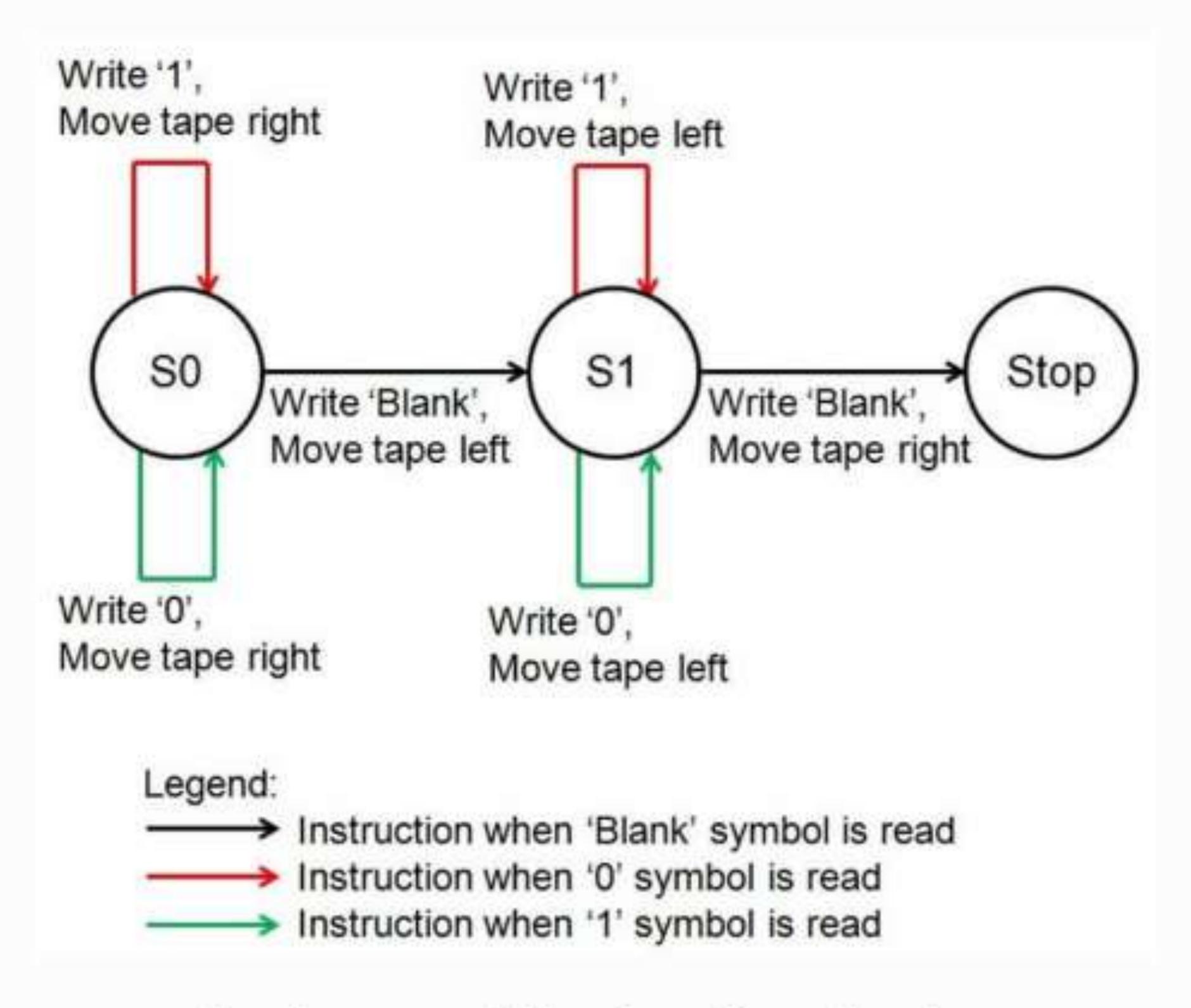
Let's look at some old pictures...



Analytical engine by Charles Babbage



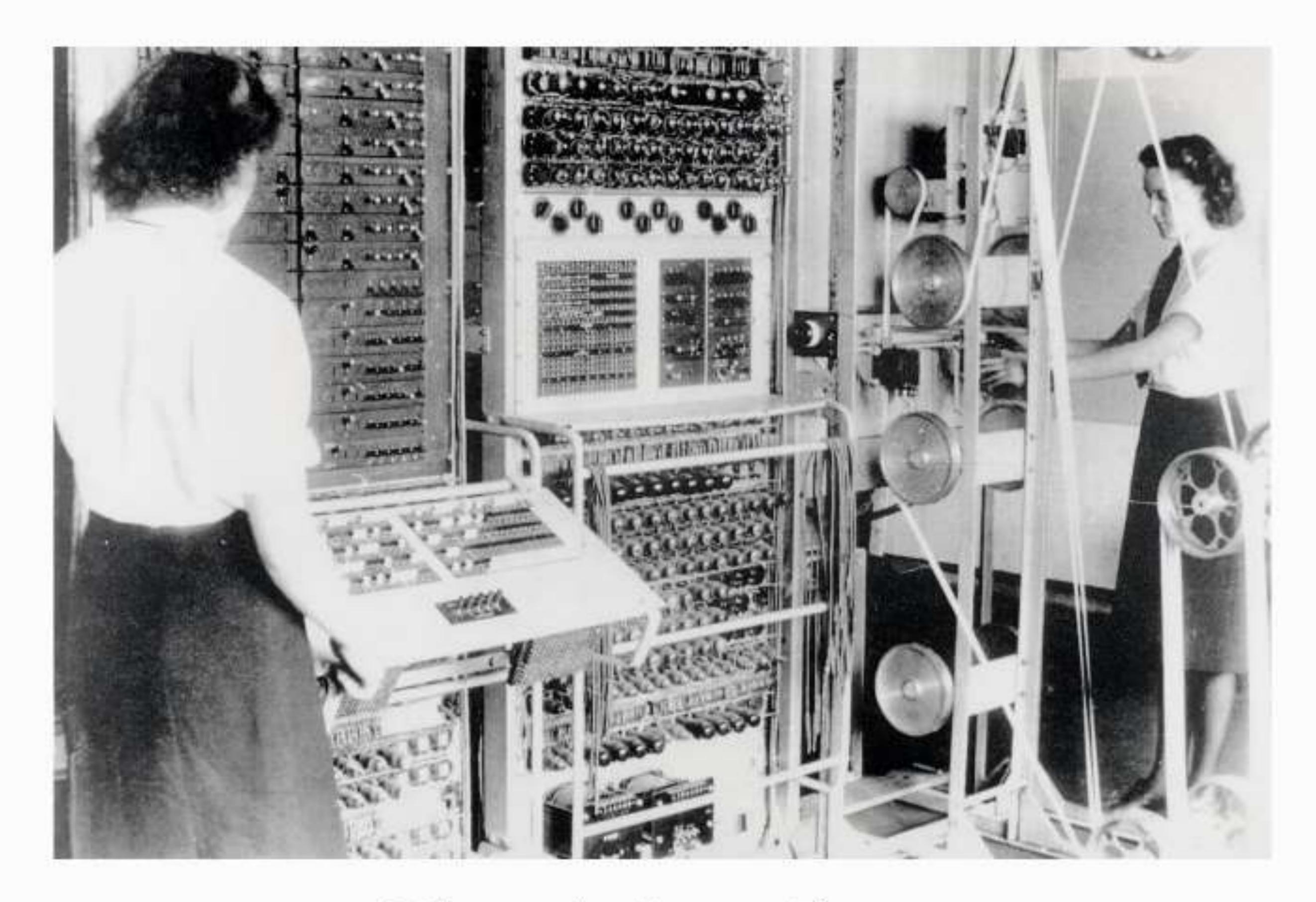
Z1 by Konrad Zuse



Turing machine by Alan Turing



Atanasoff-Berry Computer by John Vincent Atanasoff and Cliff Berry



Colossus by Tommy Flowers

What do all these early computers have in common?

Made in western countries





Writing directions on the web

Unicode Bidirectional Algorithm

Unicode Vertical Text Layout

CSS Writing Modes Level 3

Fire and Cato

Vertical text

"Computers aren't the thing.

"How did we all get here today? The choices we made, the sheer force of our will, something like that? Here's another answer... the winds of fate. Random coincidence, some unseen hand just pushing us along. Destiny."

```
.wm-cont1 .vert-rl {
 writing-mode: vertical-rl;
 color: #f48136;
.wm-cont1 .vert-lr {
 writing-mode: vertical-lr;
 color: #f9d056;
.wm-cont1 .upright {
 text-orientation: ;
  font-size: ;
```

Fun with flexbox directions

1-	2=	3=	4四	5五	6六	7七	8/\	9九	10+

11+	 12+=	13十三	14十四	15十五	16十六	17十七	18十八	19十四	20=+

```
.directions .wrapper {
 display: flex;
 flex-wrap: wrap;
 writing-mode: horizontal-tb;
 flex-direction: row;
 width: 100%;
 height: 100%;
.directions .box {
 height: 4em;
 width: 4em;
 border: 1px solid;
```

Changing directions with grid

(also density of packing)

Α	В	C		D		F	
			Н				
		j	К				
M		N		0		P	Q
						S	
-				\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			

```
.autoflow {
 display: grid;
  grid-template-columns:
repeat(auto-fit, minmax(120px,
1fr));
  grid-auto-rows: 120px;
  grid-auto-flow: row;
.autoflow_item:nth-child(3n)
  background-color: #4abc41;
```

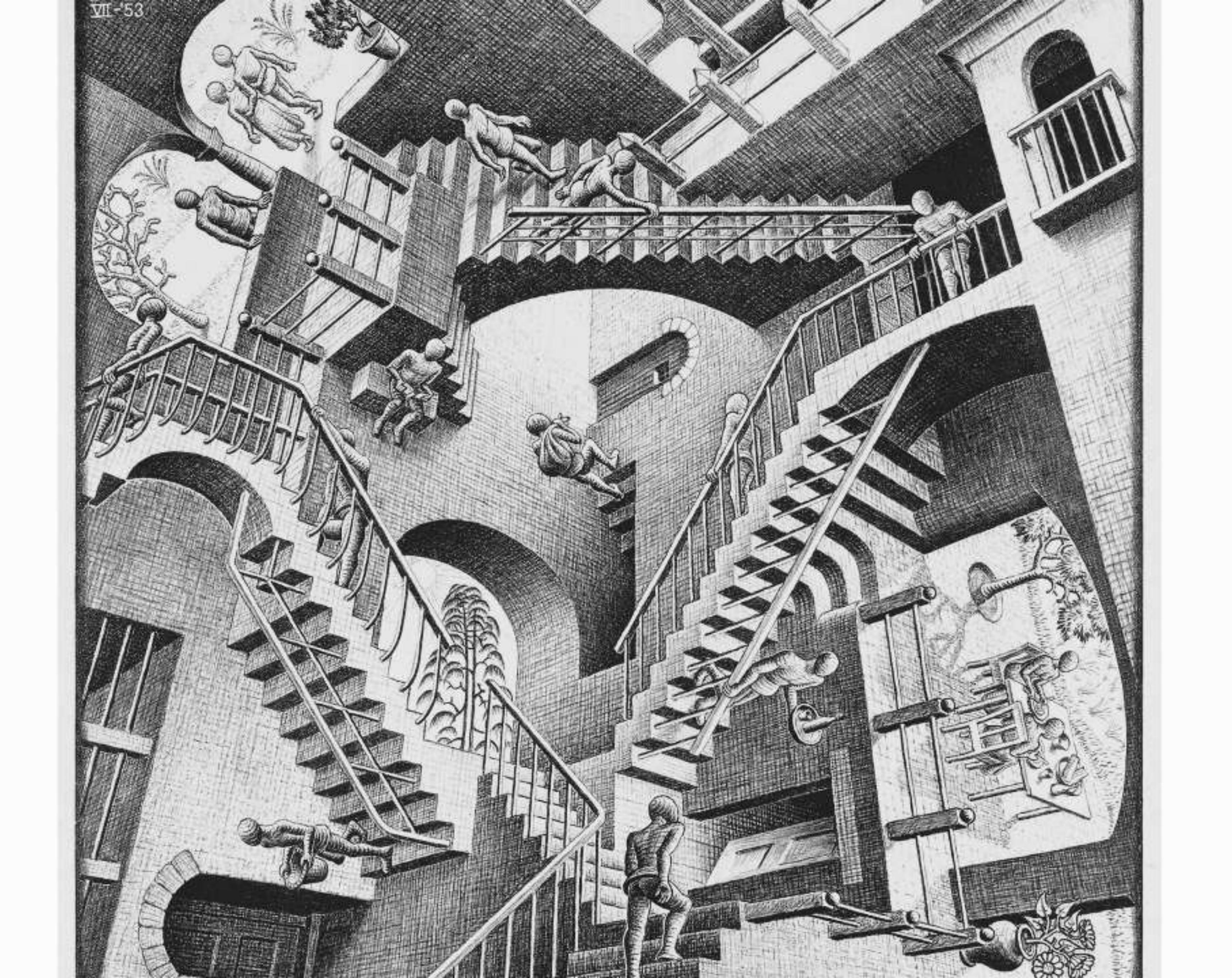
All the directions

- horizontal-tb
- vertical-rl

- LTR

- RTL

- vertical-Ir
- sideways-Ir
- wrap
- wrap-reverse
- row
- row-reverse
- column
- column-reverse



Thank you!



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- (%) Chuijing

Font used is Magnetic Pro, by Olivier Gourvat