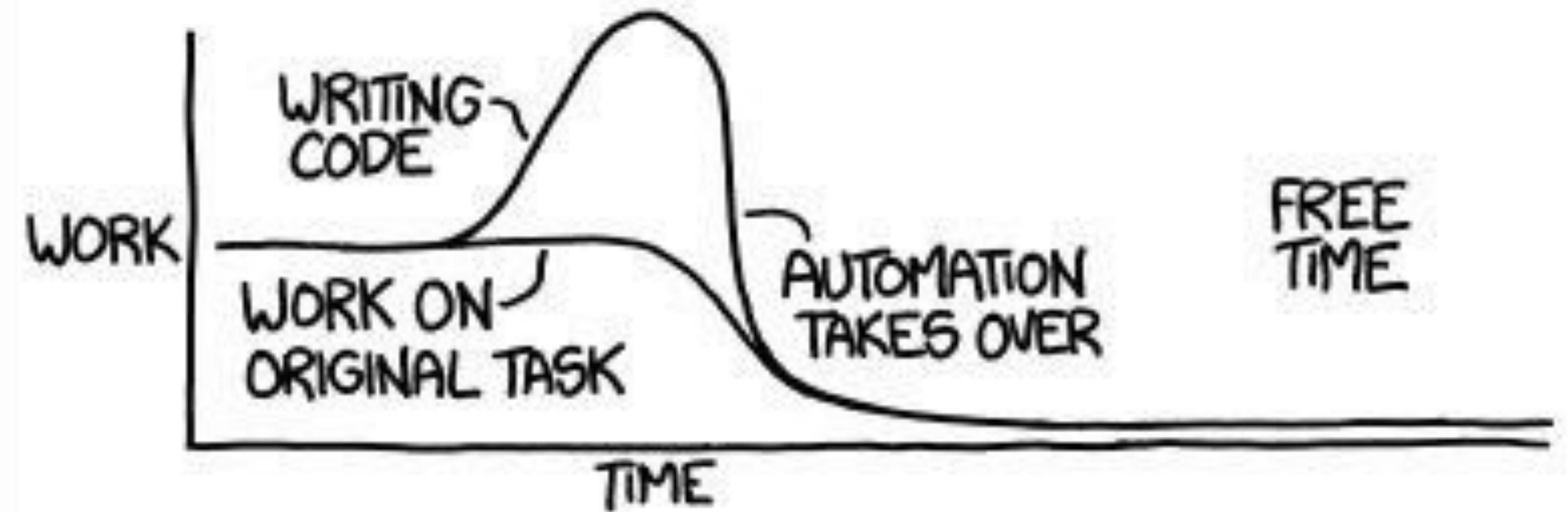
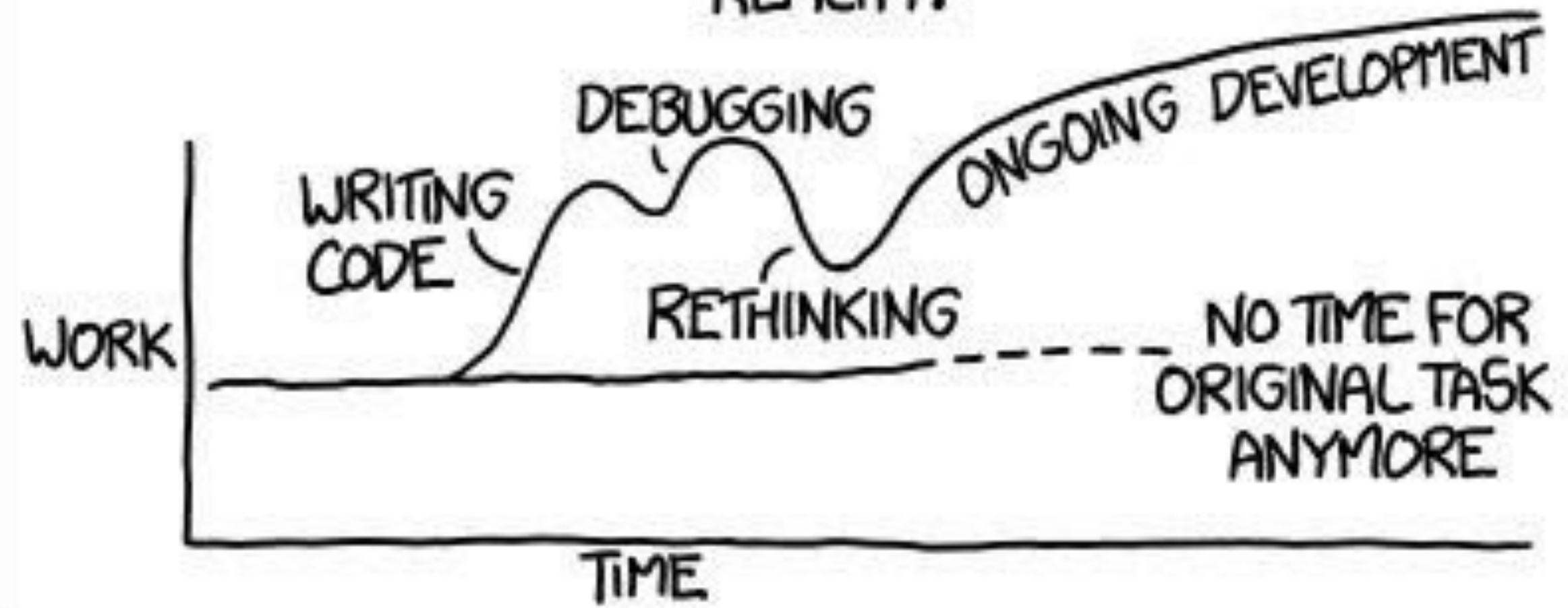


"I SPEND A LOT OF TIME ON THIS TASK.
I SHOULD WRITE A PROGRAM AUTOMATING IT!"

THEORY:



REALITY:



Early Generative Type

Metafont & Hershey Font

The LORD is my shepherd;
I shall not want.
He maketh me to lie down
 in green pastures:
 he leadeth me
 beside the still waters.
He restoreth my soul:
 he leadeth me
 in the paths of righteousness
 for his name's sake.
Yea, though I walk through the valley
 of the shadow of death,
 I will fear no evil:
 for thou art with me;
 thy rod and thy staff
 they comfort me.
Thou preparest a table before me
 in the presence of mine enemies:
 thou anointest my head with oil,
 my cup runneth over.
Surely goodness and mercy
 shall follow me
 all the days of my life:
 and I will dwell
 in the house of the LORD
 for ever.

MetaFont

“Hundreds of typefaces have appeared in this article, yet all of them belong to the Computer Modern Roman and Italic meta-fonts.”

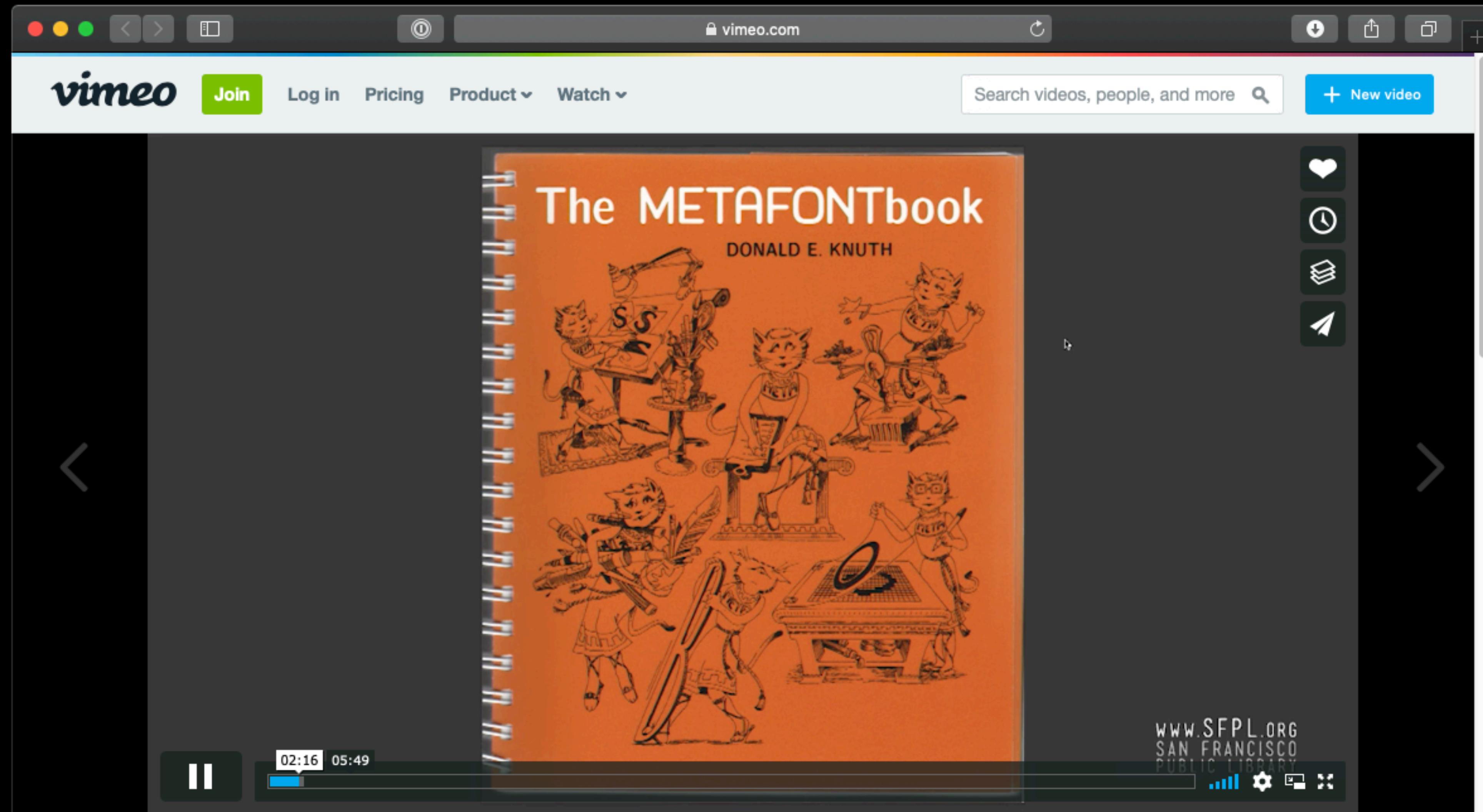
- Donald Knuth, *Concept of a Meta-Font*

Excerpt from Concept of a Meta-Font by Donald Knuth

George Forsythe once wrote that 'The question "What can be automated?" is one of the most inspiring philosophical and practical questions of contemporary civilization.' We know from experience that we understand an idea much better after we have succeeded in teaching it to someone else; and the advent of computers has brought the realization that even more is true: The best way to understand something is to know it so well that you can teach it to a computer.

Machines provide the ultimate test, since they do not tolerate 'hand waving' and they have no 'common sense' to fill the gaps and vagaries in what we do almost unconsciously. In fact, research in artificial intelligence has shown that computers can do virtually any task that is traditionally associated with 'thinking,' but they have great difficulty accomplishing what people and animals do 'without thinking.'

👉 <https://vimeo.com/184705112>



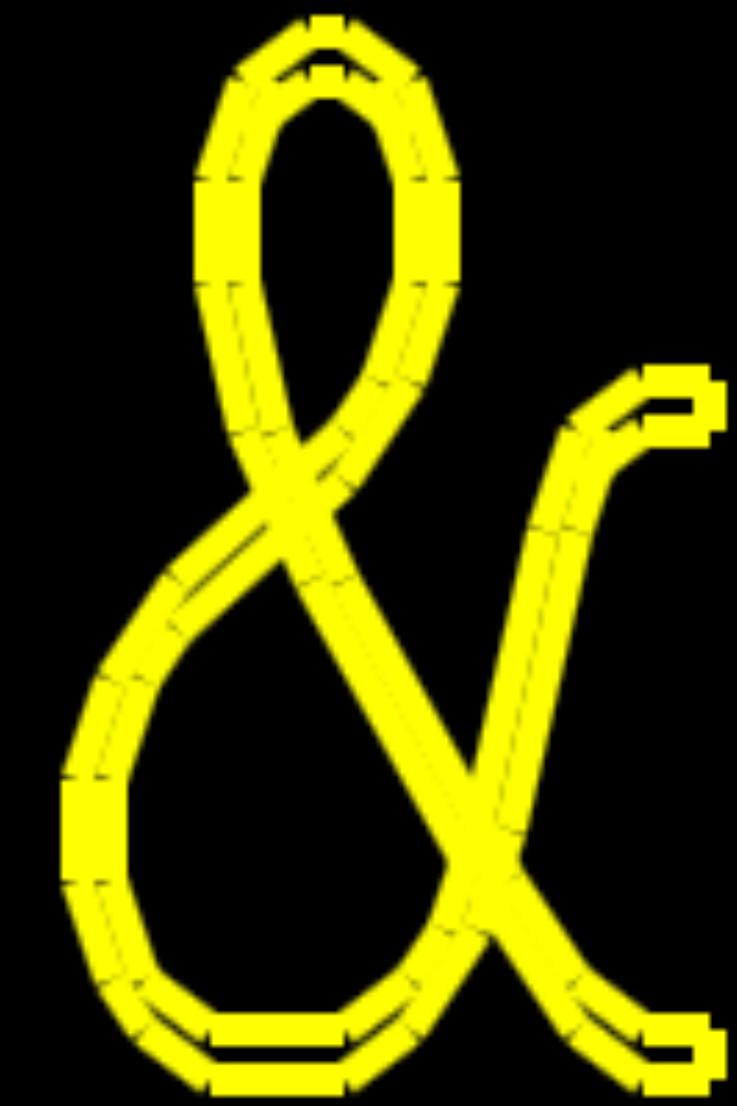
Font 3, Simplex Roman

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12x	P	Q	R	S	T	U	V	W	X	Y	Z	[\]	^	_
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Hershey Font



Simplex Roman



Duplex Roman



Triplex Roman

👉 <https://lingdong-.github.io/p5-hershey-js/>



👉 <https://github.com/LingDong-/p5-hershey-js>

The screenshot shows a GitHub repository page for 'LingDong-/p5-hershey-js'. The repository name is displayed at the top left. The page includes a navigation bar with links for Pull requests, Issues, Marketplace, and Explore. Below the navigation bar, there's a search bar and a header with the repository name, a star icon (Watch - 2), an unstar icon (Unstar 11), a fork icon (Fork 2), and a settings icon.

The main content area displays the repository details: 11 commits, 1 branch, 0 packages, 0 releases, 1 contributor, and MIT license. It also shows a dropdown for the branch (master) and a 'New pull request' button. A 'Clone or download' button is prominently displayed in green.

The repository's file structure is listed below, showing files like doc, LICENSE, README.md, hershey.txt, index.html, p5.hershey.data.js, and p5.hershey.js, along with their commit history and timestamps. The README.md file is expanded, showing the text 'p5.hershey.js'.

File	Description	Commit
doc	Center banner	2 years ago
LICENSE	Initial commit	2 years ago
README.md	Update README	2 years ago
hershey.txt	Initial Commit	2 years ago
index.html	custom demo	2 years ago
p5.hershey.data.js	Initial Commit	2 years ago
p5.hershey.js	fix typo	2 years ago

hershey fonts - Google Search | Hershey fonts - Wikipedia | p5.js Web Editor | Hershey Font Demo | +

p5* File ▾ Edit ▾ Sketch ▾ Help ▾ Hello, lynneyun! | My Account ▾

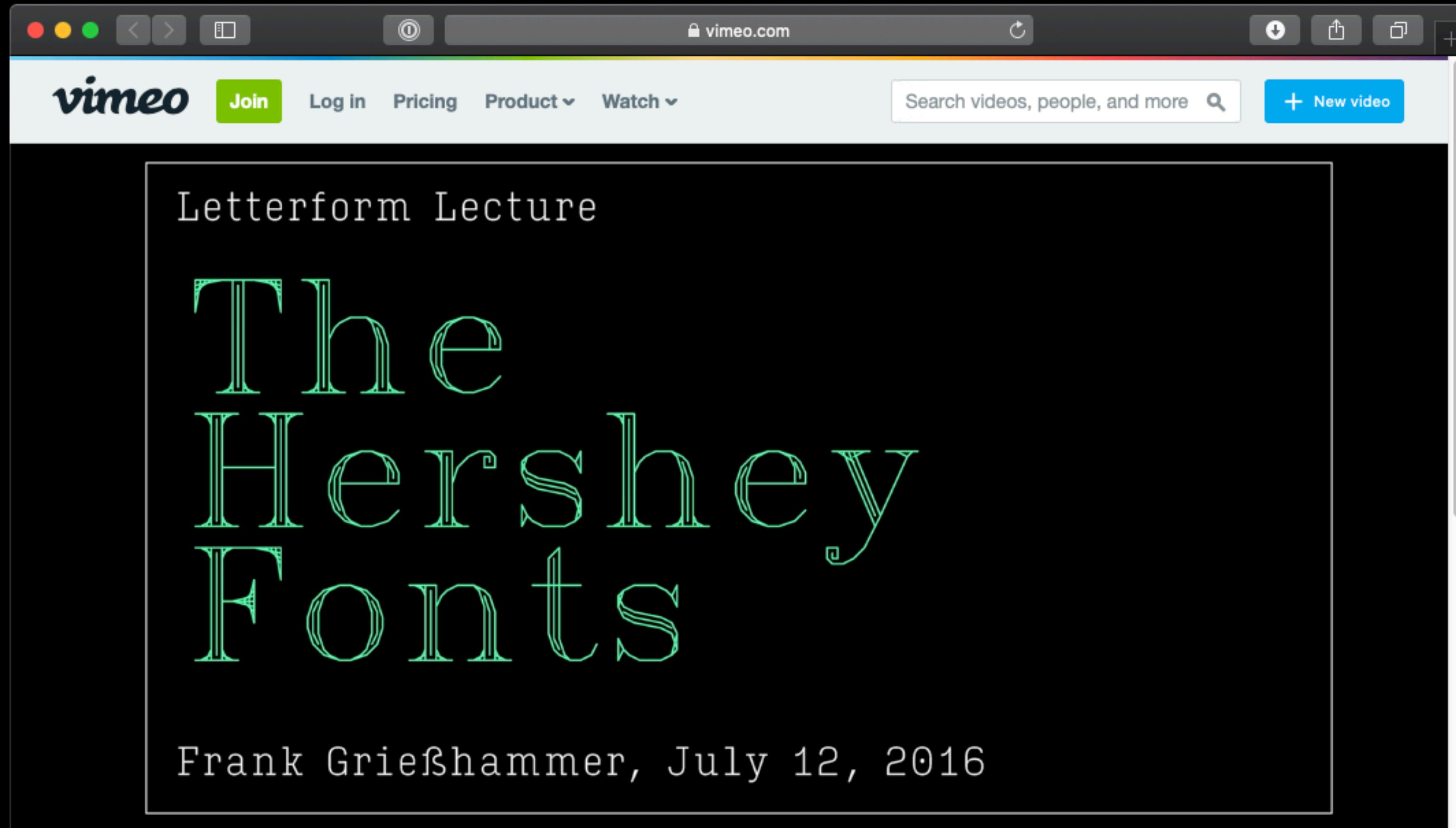
Auto-refresh Hershey Font Demo by lynneyun

sketch.js Saved: 1 minute ago Preview

```
1 function setup() {
2   createCanvas(400, 400);
3 }
4
5 function draw() {
6   background(220);
7
8   push();
9   translate(200,200);
10  scale(2);
11  noFill();
12  stroke(0);
13  strokeWeight(1);
14 // P5.hershey.putText("Hello World!");
15
16 P5.hershey.putText("Generative", {
17   cmap:
18   FONT_HERSHEY.GOTHIC_GERMAN_TRIPLEX,
19   align: "center",
20   noise: 0.8
21 });
22   pop();
23 }
```



👉 <https://vimeo.com/178015110>



The Hershey Fonts with Frank Grieshammer

©Lynne Yun 2020

4 years ago | More

More from Type@Cooper

Autoplay next video

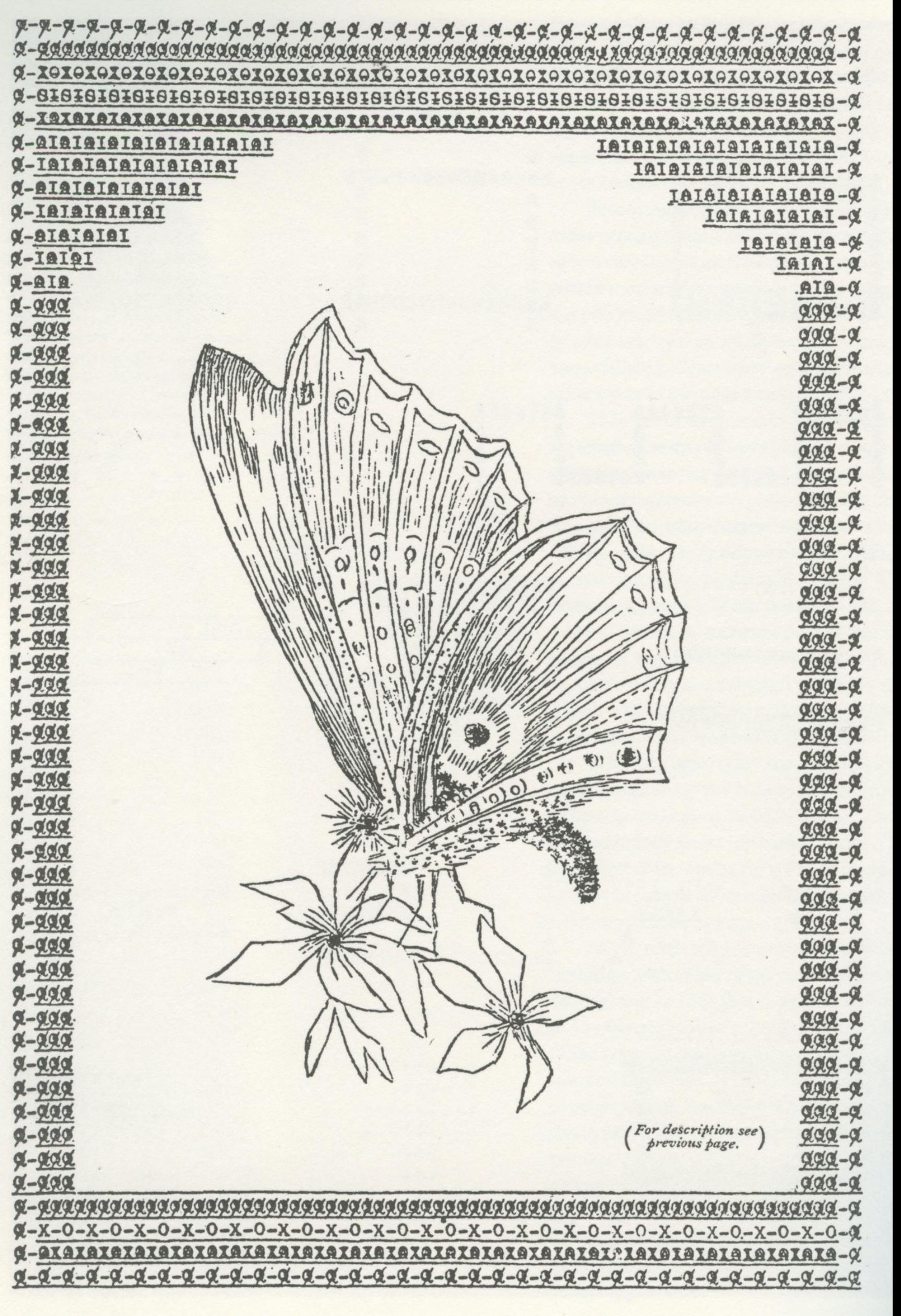


The Hershey Font...

Early Generative Mediums & Artists

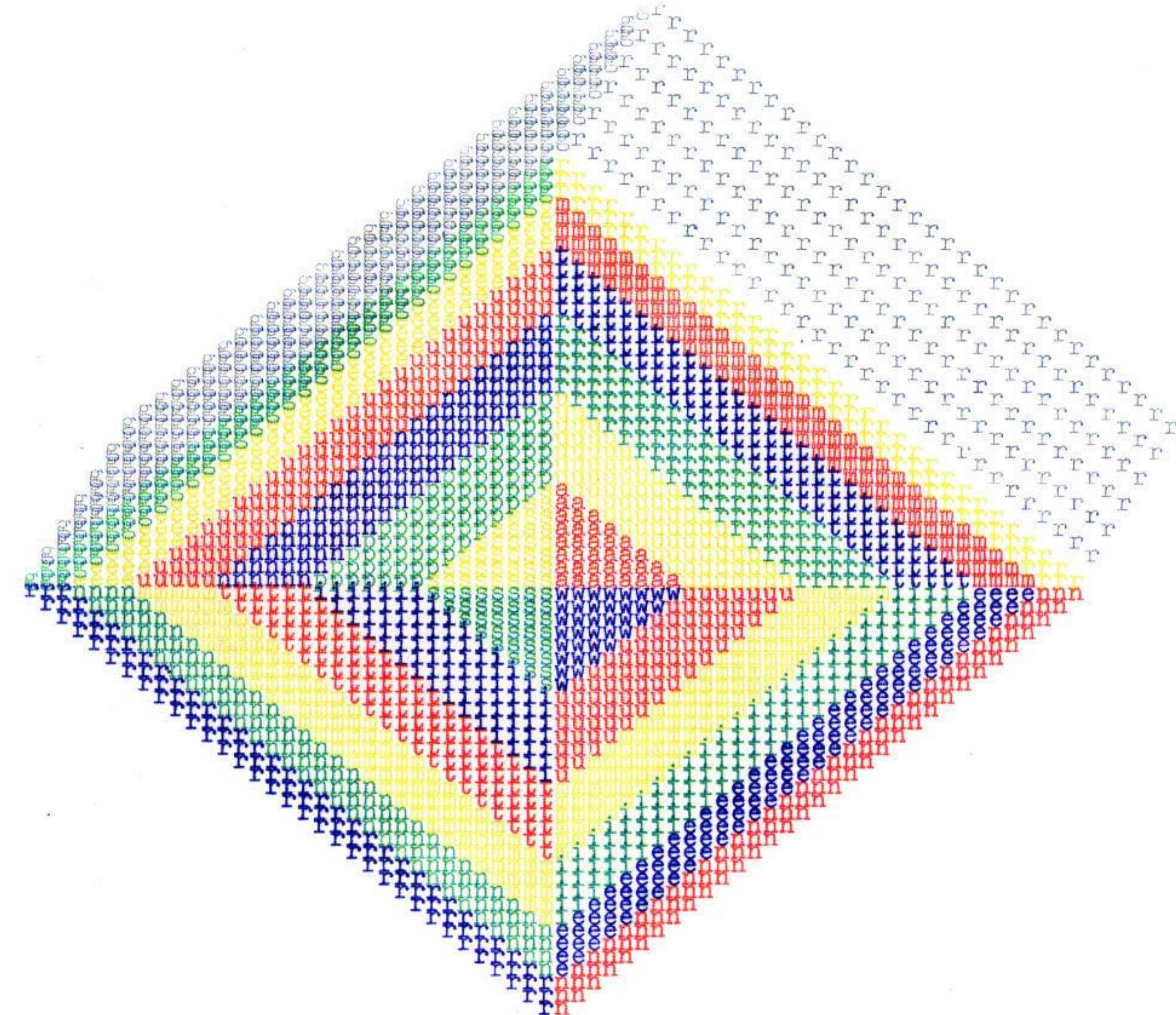
Typewriter Art, Concrete Poetry & ASCII Art

Typewriter Art



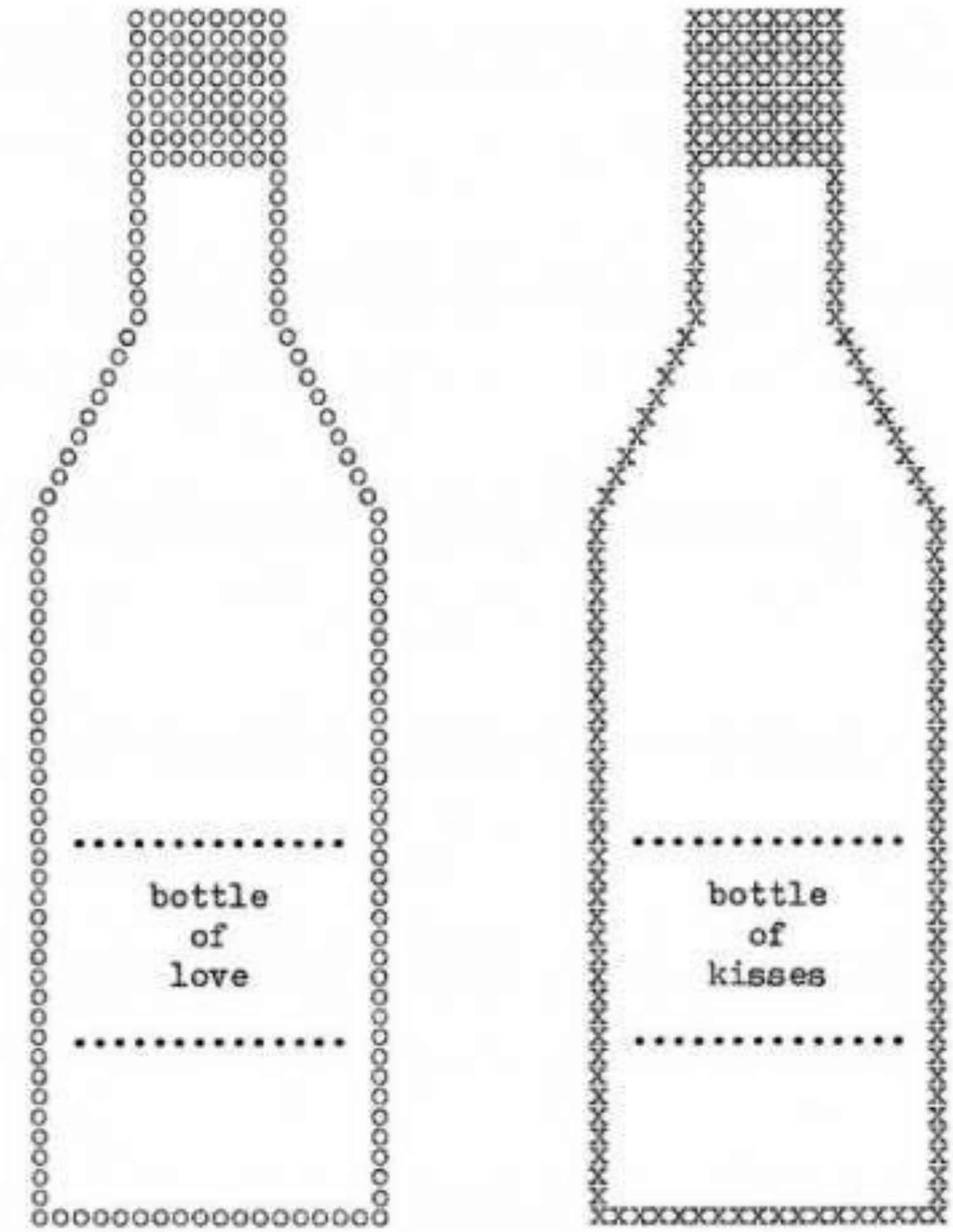
untitled, Flora Stacey, 1898

(enlargement of left

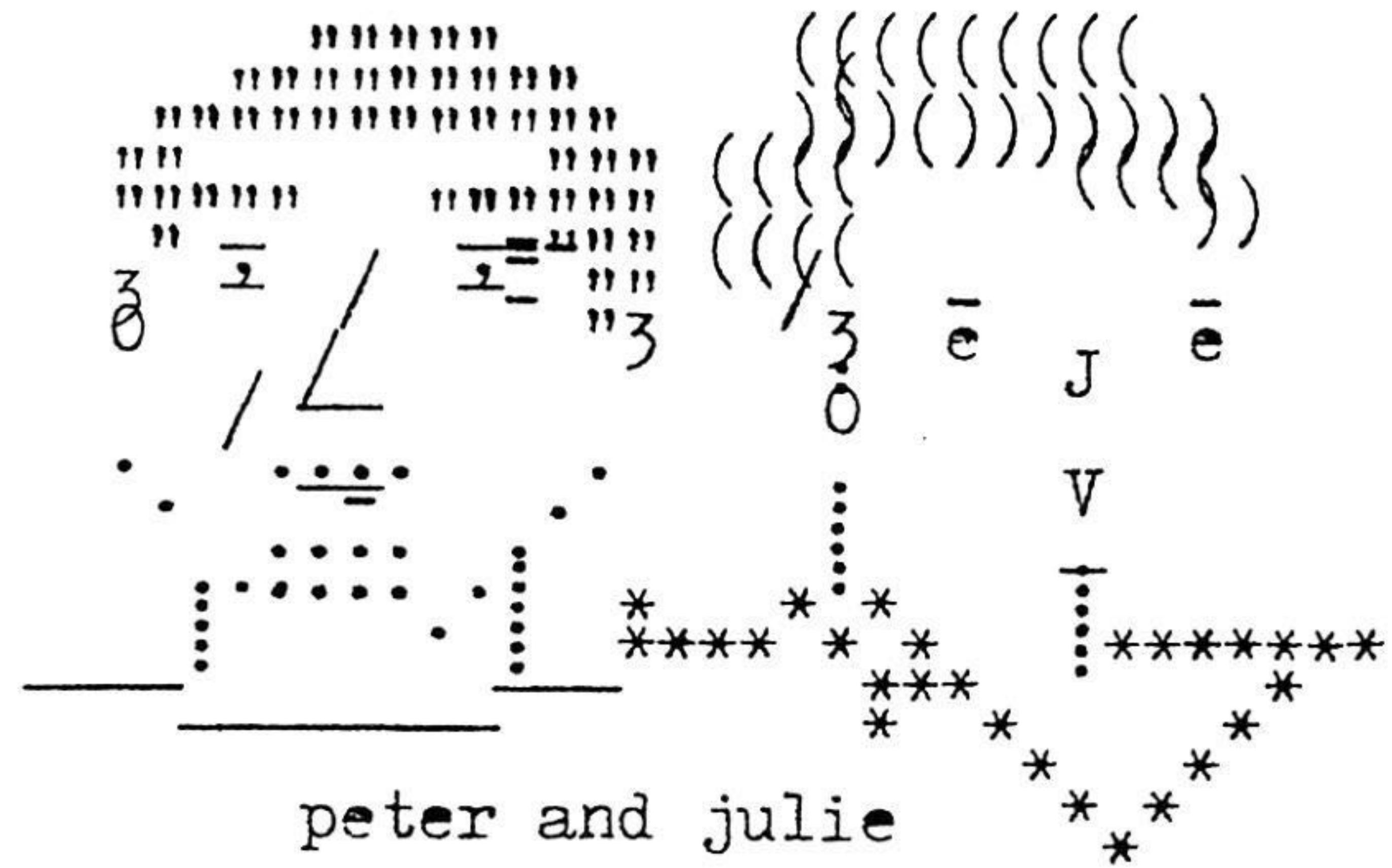


A serial visual poem, Alan Riddell 'o' from the Seasons Suite, 1975-1976

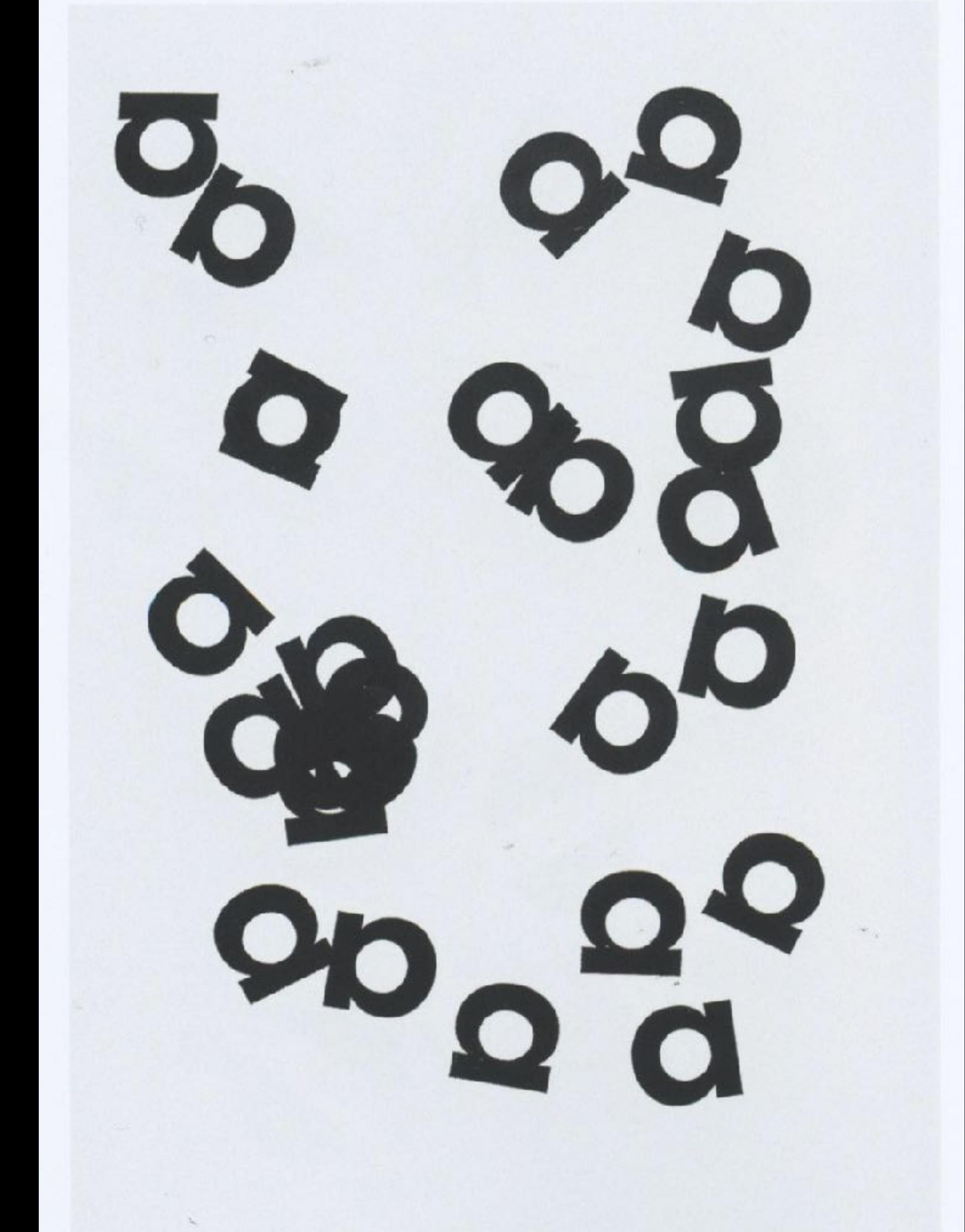
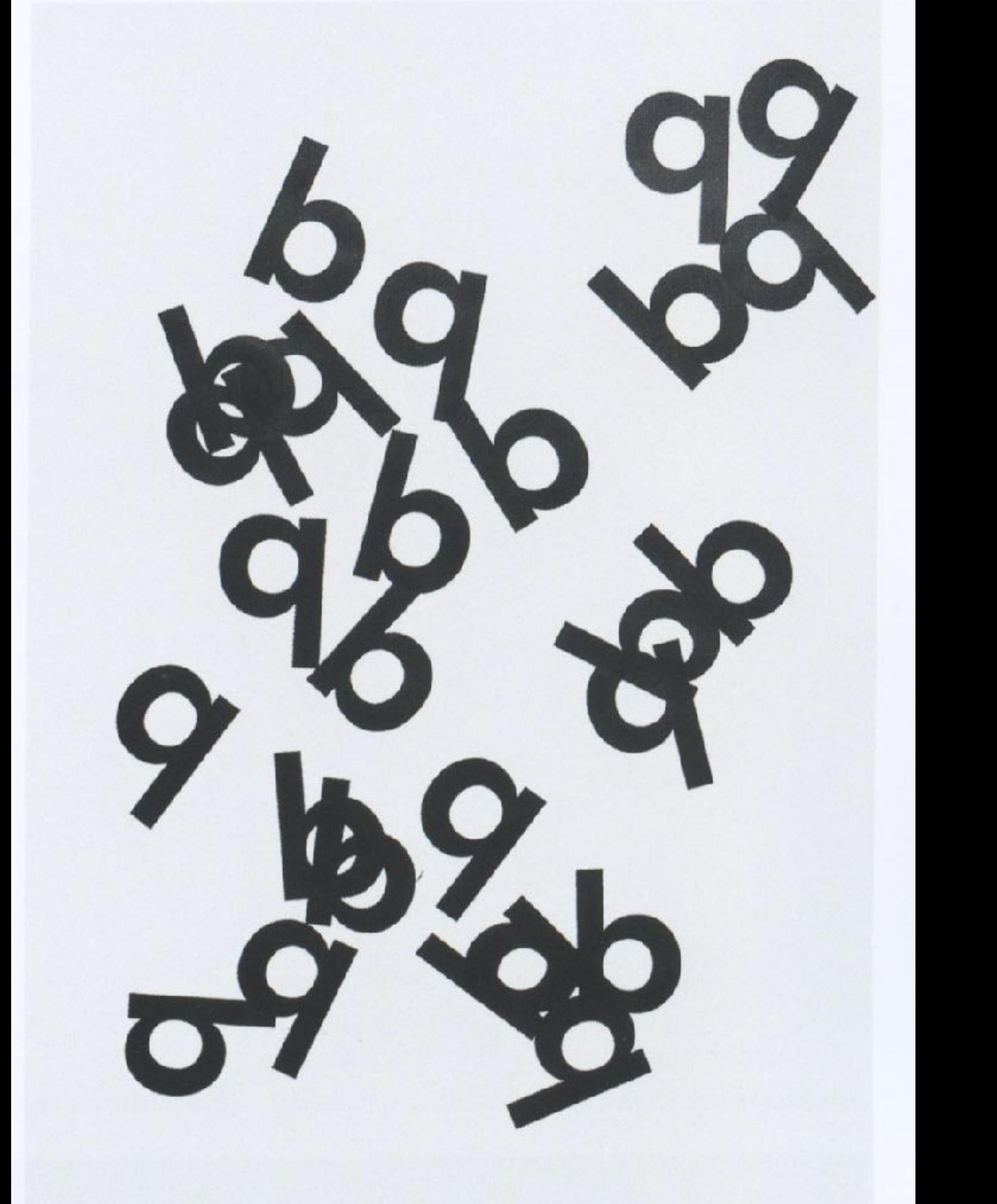
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Unusual Love Poem, Andrew Belsey, 1987



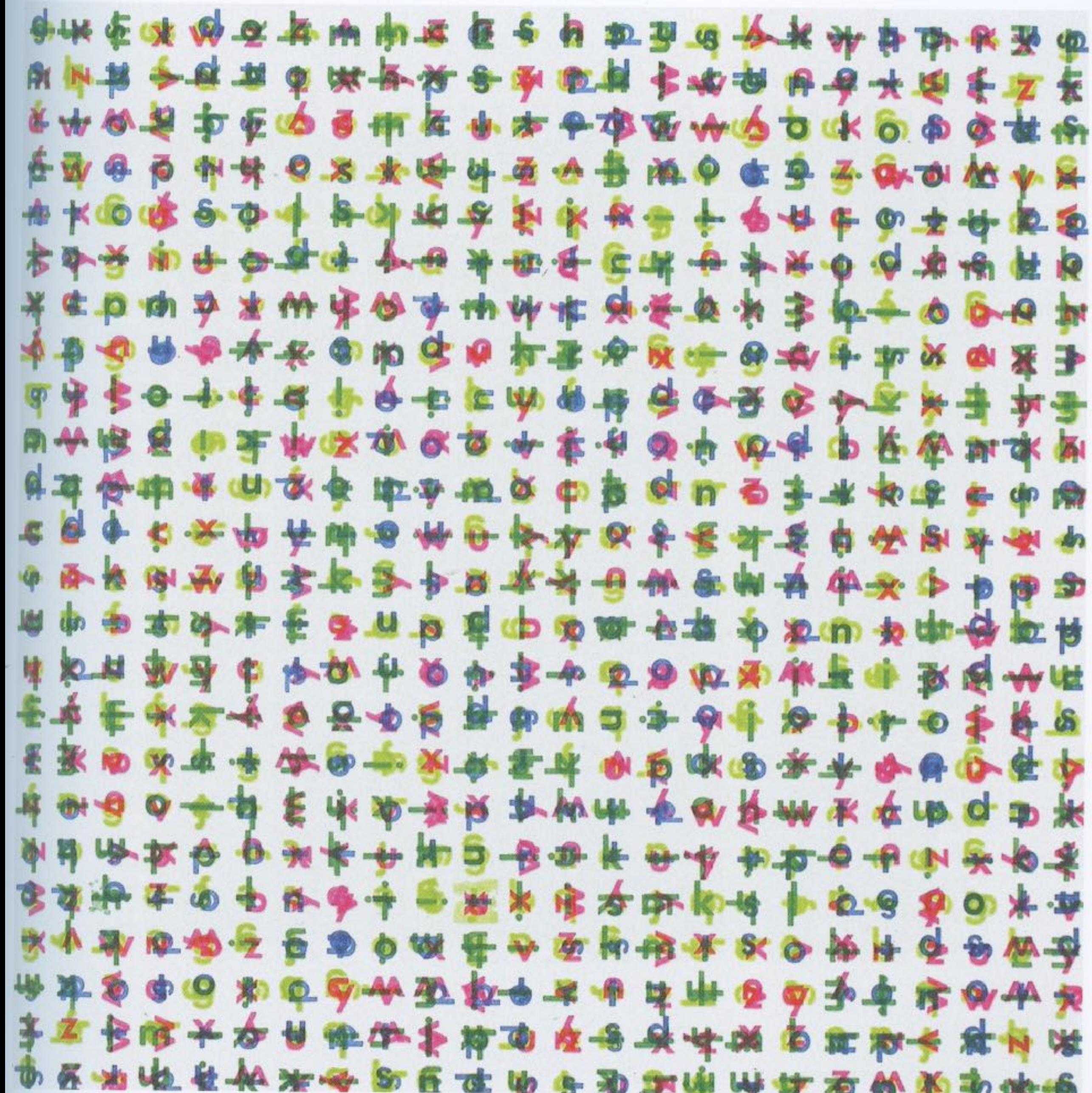
Concrete Poetry



Das letzte Alphabet (The last Alphabet), Hansjörg Mayer, 1969



Das letzte Alphabet (The last Alphabet), Hansjörg Mayer, 1969



Monotype (monotype), Hansjörg Mayer

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futura 1

mathias goeritz

die
goldenebotschaft

edition hansjörg mayer 1965

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futura 2

klaus burkhardt

coldtypestructure

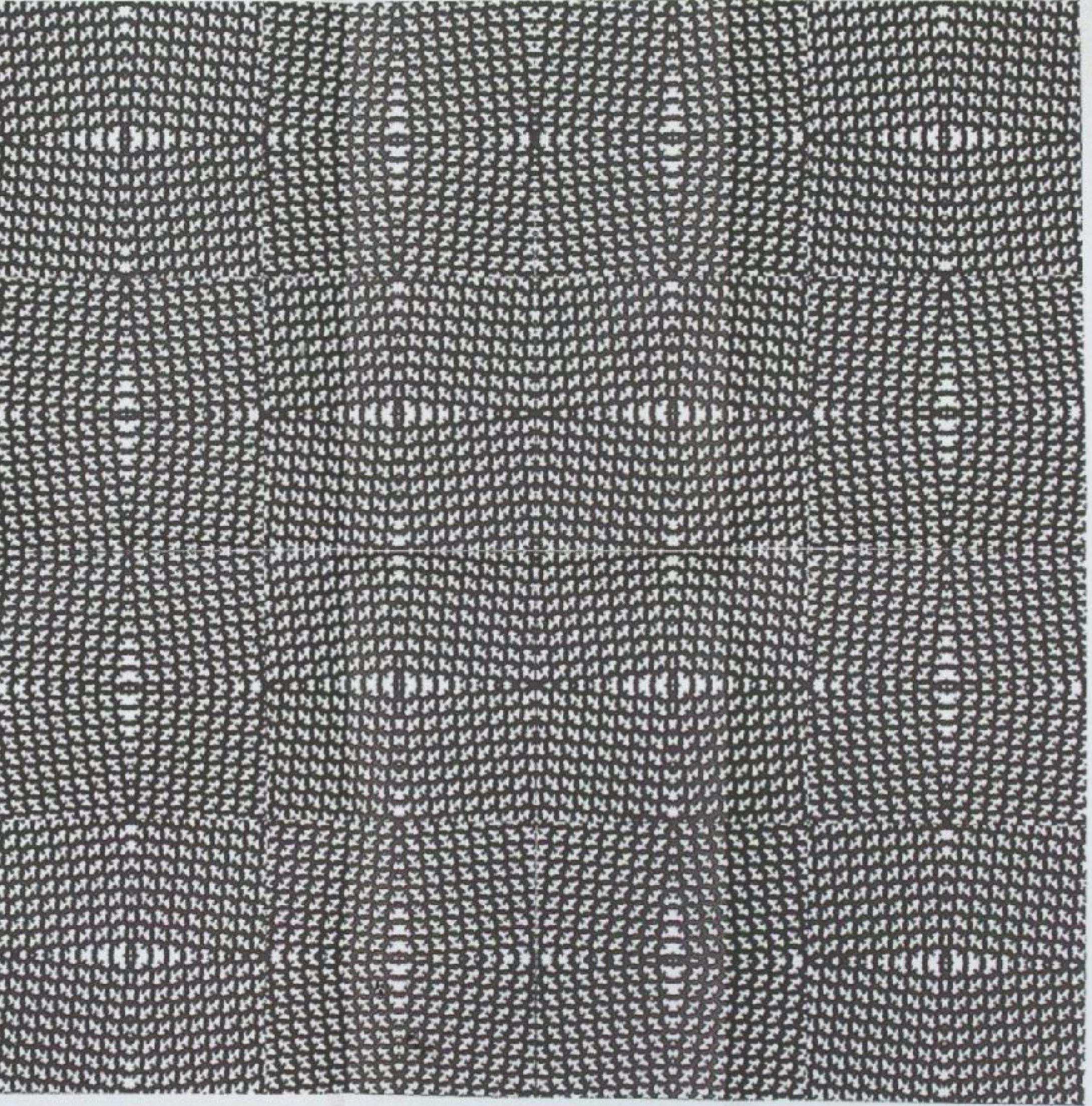
edition hansjörg mayer 1965

autors biografie
Klaus Burkhardt wurde 1923 in Thüringen geboren, einer Familientradition nachzuhause zunächst Schreiner und dann als Sohn eines Buchdruckers und eines Buchbinders und dessen Sohn selbst ebenfalls Buchdrucker und Buchbinder. Nach einer Lehre und Ausbildung in die Techniken des Drucks für eine von sechs Gründungsmitgliedern einer Galerie und der Fotografie beschäftigte er sich hauptsächlich als Lehrer für Typographie und Grafisches Gestalten in Stuttgart (seit 1954) und nebenberuflich als freiberuflicher Drucker (seit 1958) und originaler Buchdrucker (seit 1959).

inners biografie
als originaler drucker meinte er vor allem die offenen und ein gutes dauernd blickfester Werken: als originaler Buchdrucker er fand er vor allem die Druck & Buchdruckerei (1959-62) und seit 1967 die sogenannte coldtypestructure - das war von den Druck & Buchdruckerei-Zeiten bis zur coldtypestructure ist dabei fast progedreht - ein Weg von einer Art Informal zu einer Art Konzert - es ist der Weg vom zufälligen, oft zufällig schönen Druck & Buchdruckbild der handpressen zur konstanten hochwertigen Qualität des Schriftsetzes - dass Klaus Burkhardt bei dieser Innovation bestechend mit dem Erfolgszug reagiert auch diesen Erfolgslauf eingelobtes soff und rotete benötigt waren auf einen materialen Durchdringen und materialbewussten Löwenher - so hiervon an der Zahl dass die Kunst wieder vom Happening zum handwerk zurückfindet

postscriptum
von Klaus Burkhardt erschienen im 1961 der Buchtypenmarkt 1962 die megga viele Stimmen sprachen davon aber der stadt ist völlig sinlos und 1962 eine megga coldtypestructure

reinhard döhl

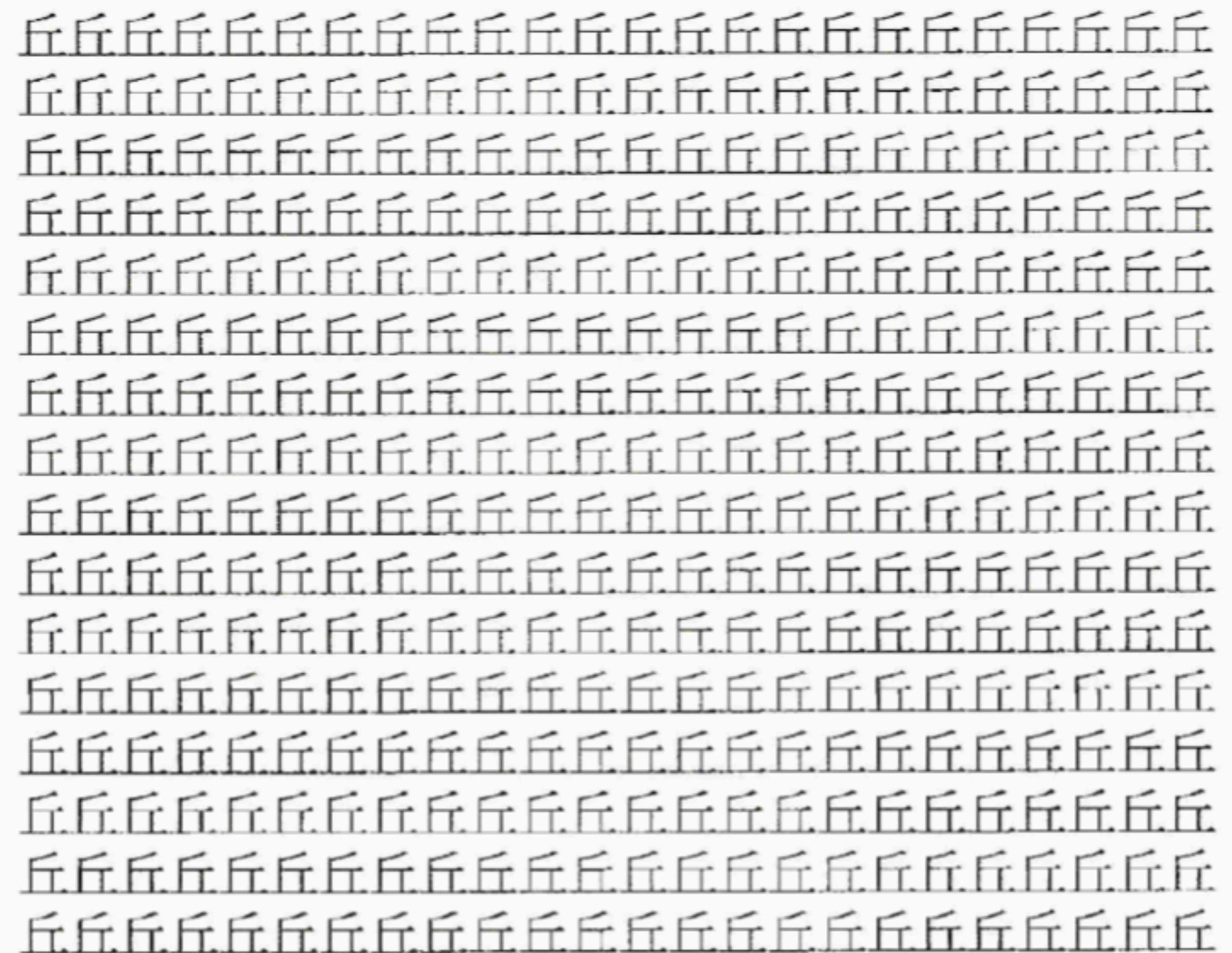


Futura by Hansjörg Mayer, 1965-1968

“The whole poem consists of many lines but only of four characters (you may even say that it is composed of only one character 兵 since the other three characters can be seen as its variants).”

“The first stanza is composed of hundreds of 兵 (bing), meaning ‘soldier.’

“The second stanza is made up of 兵 (ping) and 兵 (pong), which look like one-legged soldiers; they are onomatopoeic words, imitating the sounds of gunshots or collisions: when combined, they are associated with ping pong ('table tennis').”

A large grid of Chinese characters '丘' (qir) arranged in 10 rows and 10 columns. The characters are in a light gray color and are evenly spaced across the page.

“In the last stanza you see hundreds of 丘 (qir,) characters, which visually suggests a soldier without legs and literally means 'small hill,' having the implication of 'tomb.'”

'A War Symphony' by Chen Li

Translation by Bohdan Piasecki

ASCII control characters

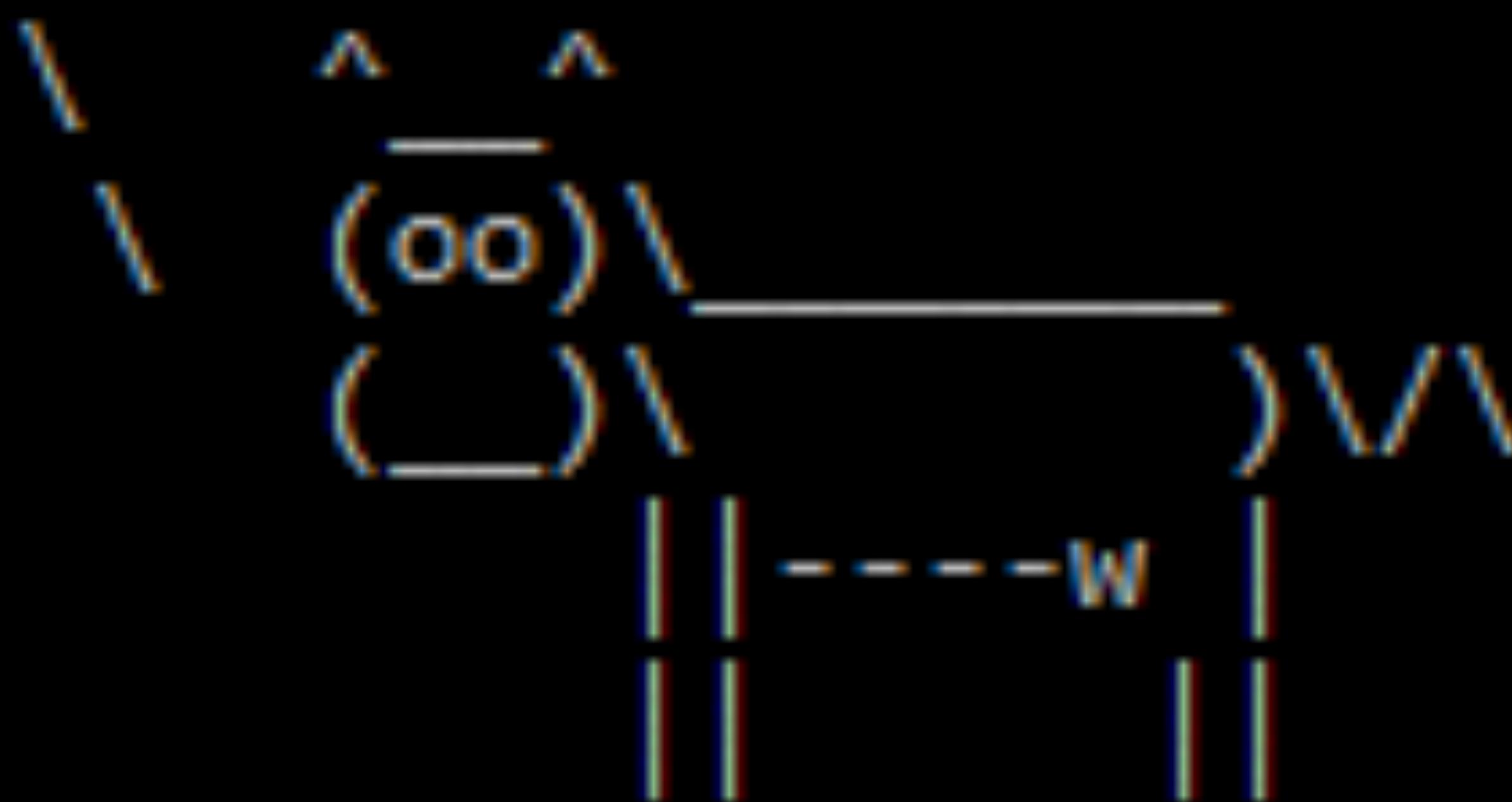
00	NULL	(Null character)
01	SOH	(Start of Header)
02	STX	(Start of Text)
03	ETX	(End of Text)
04	EOT	(End of Trans.)
05	ENQ	(Enquiry)
06	ACK	(Acknowledgement)
07	BEL	(Bell)
08	BS	(Backspace)
09	HT	(Horizontal Tab)
10	LF	(Line feed)
11	VT	(Vertical Tab)
12	FF	(Form feed)
13	CR	(Carriage return)
14	SO	(Shift Out)
15	SI	(Shift In)
16	DLE	(Data link escape)
17	DC1	(Device control 1)
18	DC2	(Device control 2)
19	DC3	(Device control 3)
20	DC4	(Device control 4)
21	NAK	(Negative acknowl.)
22	SYN	(Synchronous idle)
23	ETB	(End of trans. block)
24	CAN	(Cancel)
25	EM	(End of medium)
26	SUB	(Substitute)
27	ESC	(Escape)
28	FS	(File separator)
29	GS	(Group separator)
30	RS	(Record separator)
31	US	(Unit separator)
127	DEL	(Delete)

ASCII printable characters

32	space	64	@	96	`
33	!	65	A	97	a
34	"	66	B	98	b
35	#	67	C	99	c
36	\$	68	D	100	d
37	%	69	E	101	e
38	&	70	F	102	f
39	'	71	G	103	g
40	(72	H	104	h
41)	73	I	105	i
42	*	74	J	106	j
43	+	75	K	107	k
44	,	76	L	108	l
45	-	77	M	109	m
46	.	78	N	110	n
47	/	79	O	111	o
48	0	80	P	112	p
49	1	81	Q	113	q
50	2	82	R	114	r
51	3	83	S	115	s
52	4	84	T	116	t
53	5	85	U	117	u
54	6	86	V	118	v
55	7	87	W	119	w
56	8	88	X	120	x
57	9	89	Y	121	y
58	:	90	Z	122	z
59	;	91	[123	{
60	<	92	\	124	
61	=	93]	125	}
62	>	94	^	126	~
63	?	95	_		

ASCII Art

< Typical cowsay output! >



reddit: the front page of the internet

reddit.com

Apps Monies NYULib Proxy link

Search Get Coins

AN UPDATE FROM OUR CEO

Upcoming changes to our content policy, our board, and where we're going from here.

READ MORE

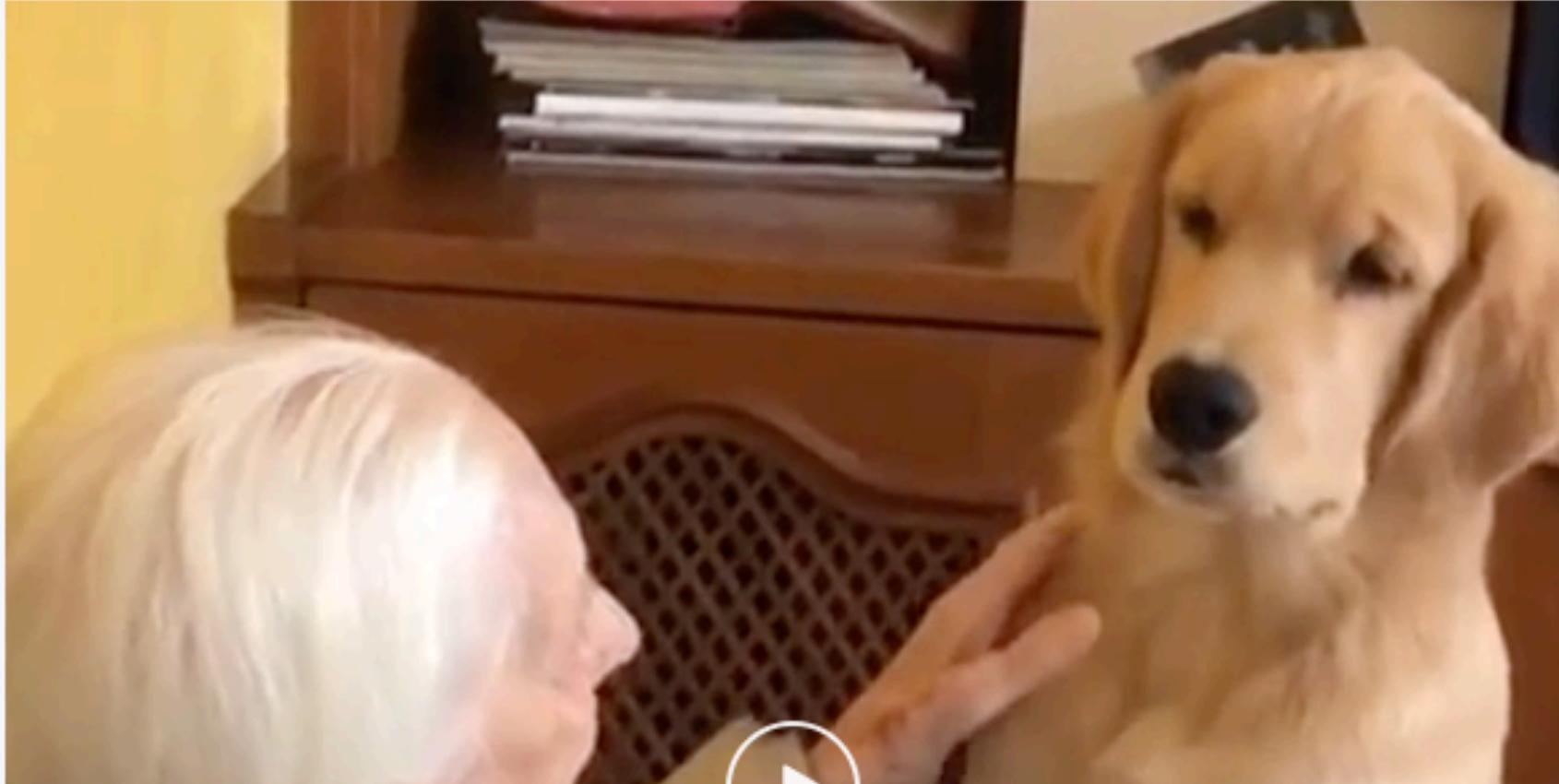
Create Post

Best Hot New Top ...

r/aww · Posted by u/vladgrinch 5 hours ago

36.9k

This 5 months puppy brings a lot of joy to his 100 years old grandma



A cookie associated with a cross-site resource at <URL> was set without the `SameSite` attribute. A future release of Chrome will only deliver cookies with cross-site requests if they are set with `SameSite=None` and `Secure`. You can review cookies in developer tools under Application>Storage>Cookies and see more details at <URL> and <URL>.

index.ts:5

```
,d"=,,q0p,  
,7' '2$( )  
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'b d'  
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z==>2==>2$==>2
```

Using Reddit at work? Work for Reddit.
<https://www.reddit.com/jobs>

Starting Raven release 098b916-production public url <https://6b5ce05...oops.redditmedia.com/11> index.tsx:174

The PerformanceObserver does not support buffered flag with the entryTypes argument. gpt.js:6

[Deprecation] 'window.webkitStorageInfo' is deprecated. Please use 'navigator.webkitTemporaryStorage' VM136:1 or 'navigator.webkitPersistentStorage' instead.

DevTools failed to load SourceMap: Could not load content for <https://www.reddit.com/user/jessicadeeeee/ModListi...ng~Reddit.197c1ca...css.map>: HTTP error: status code 404, net::ERR_HTTP_RESPONSE_CODE_FAILURE

Console What's New

Highlights from the Chrome 83 update

Emulate vision deficiencies from the Rendering tab
Get a visual approximation of how people with vision deficiencies might experience your site.

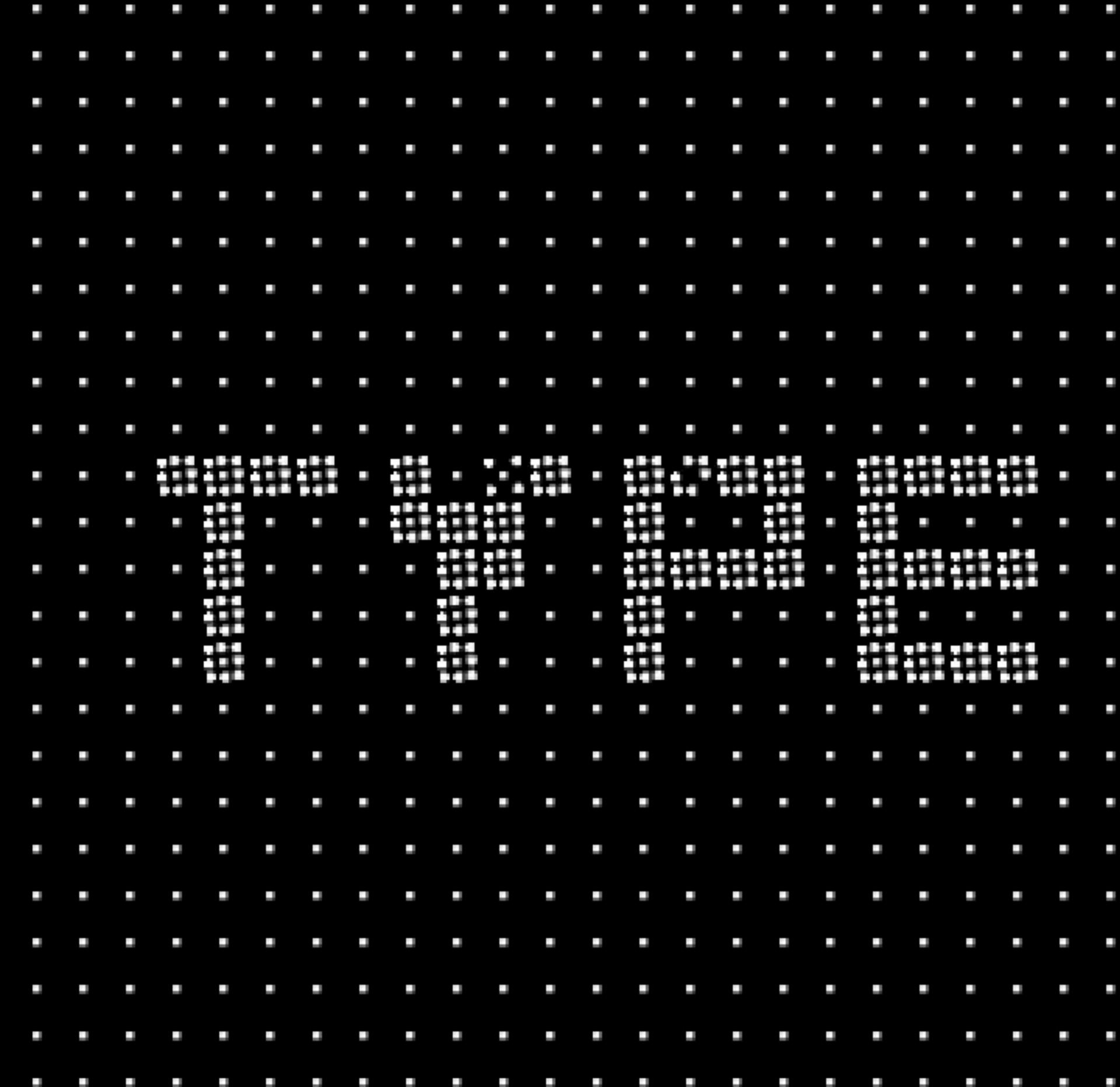
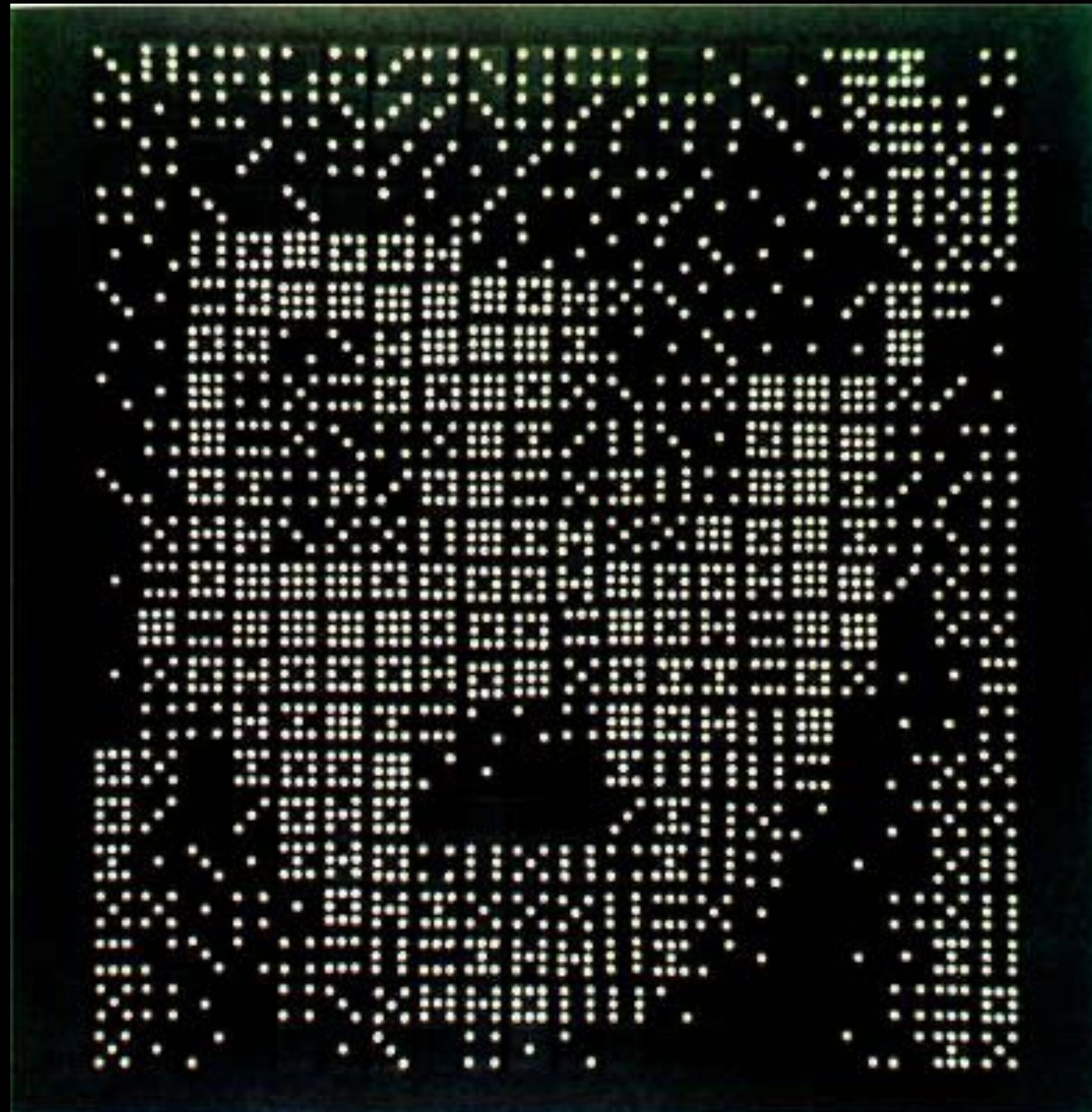
Emulate locales from the Sensors tab or Console
Emulating locales enables you to change the Accept-Language HTTP header that's sent with network requests.



STAR **ASCIIMATION** WARS

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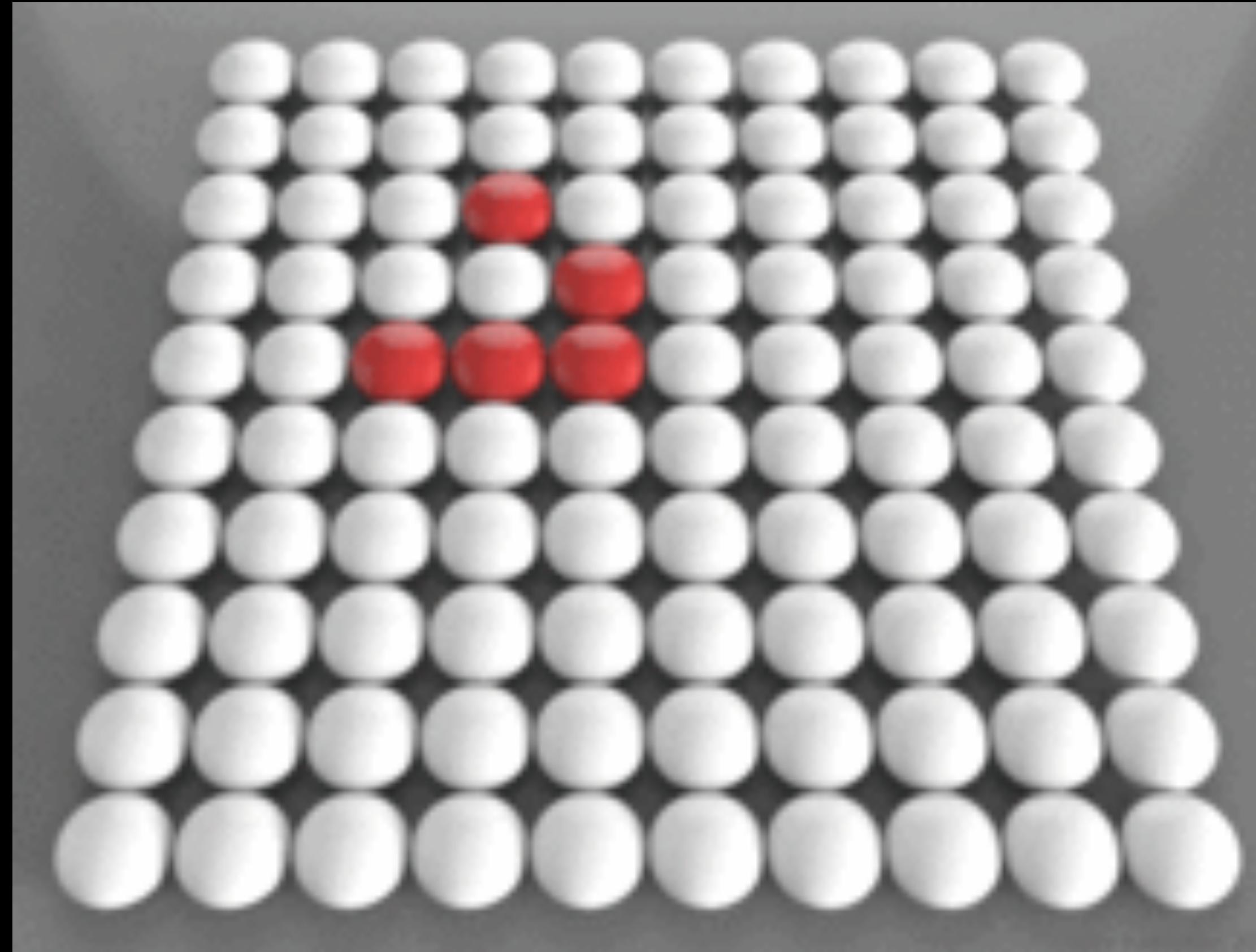
This week's assignment...





Intermediate+ Assignment: Game of Life

The Game of Life is a cellular automaton devised by the British mathematician John Horton Conway in 1970. It is a zero-player game, meaning that its evolution is determined by its initial state, requiring no further input. One interacts with the Game of Life by creating an initial configuration and observing how it evolves.



Rules:

Any **positive** cell with two or three **positive** neighbors stays **positive**.

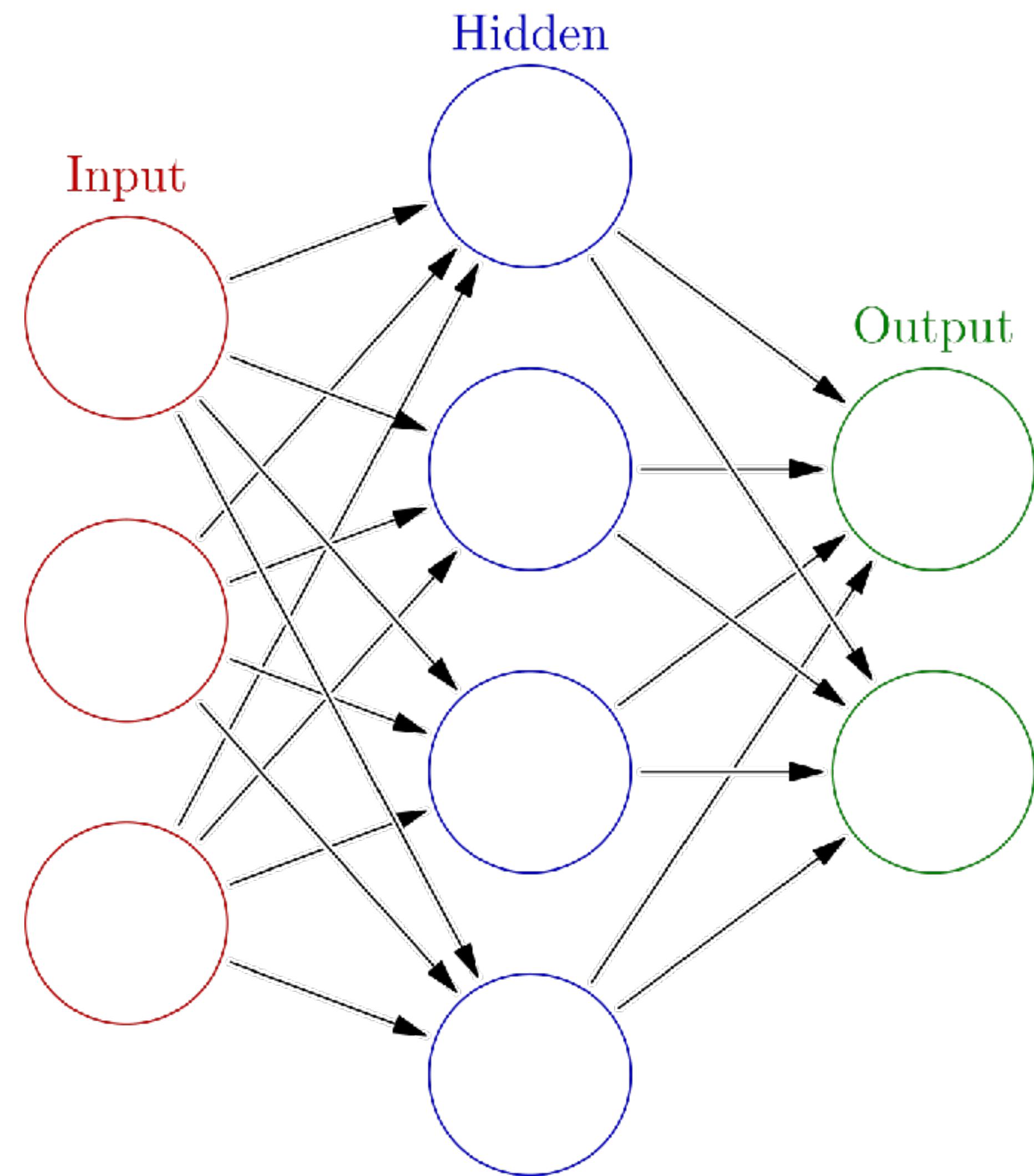
Any **negative** cell with three **positive** neighbors becomes a **positive** cell.

All other **positive** cells turn **negative** in the next generation. Similarly, all other negative cells stay **negative**.

Framerate	3
Off Neighbors	3
On Neighbors	1
gridsize	42

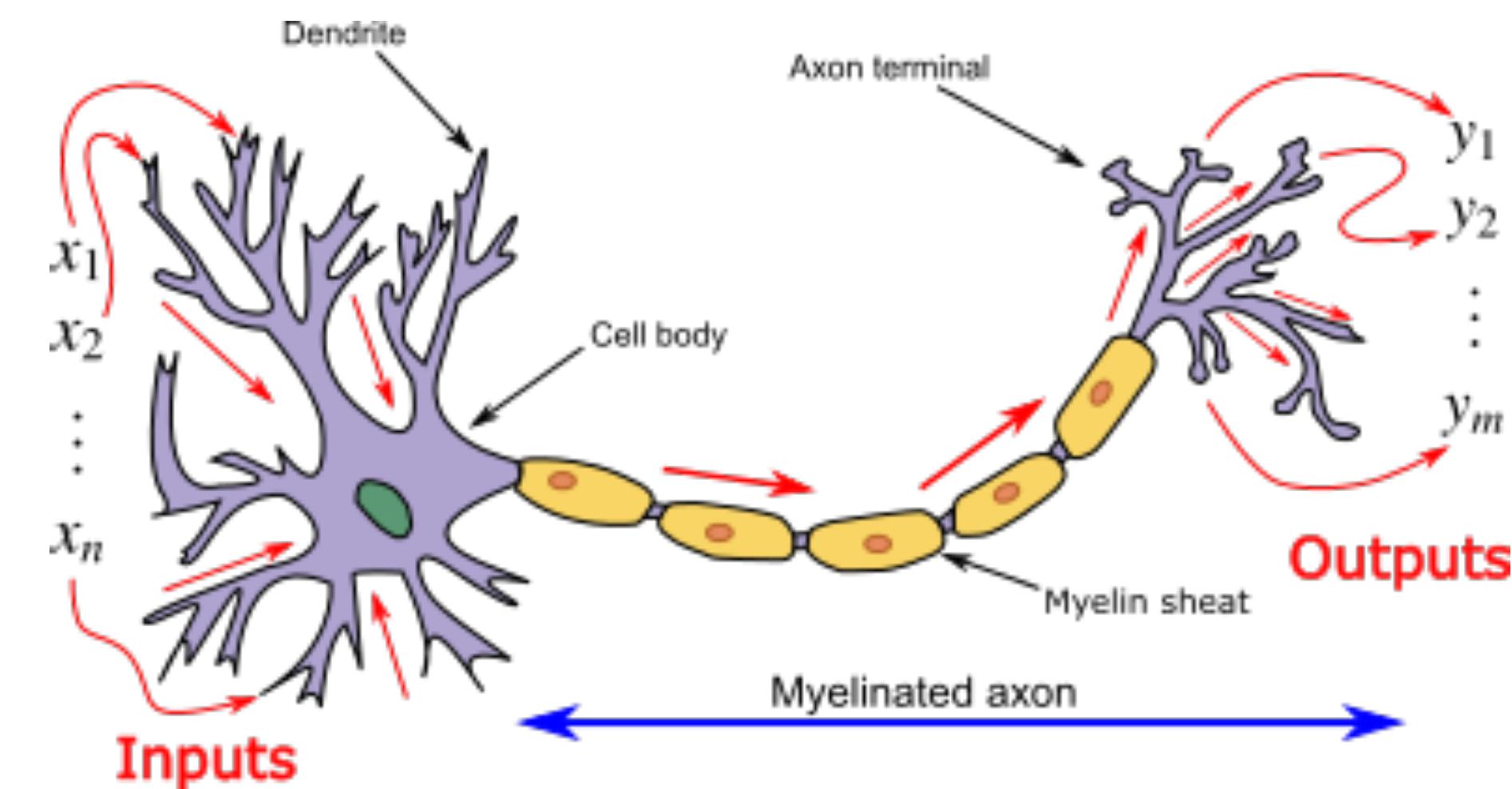


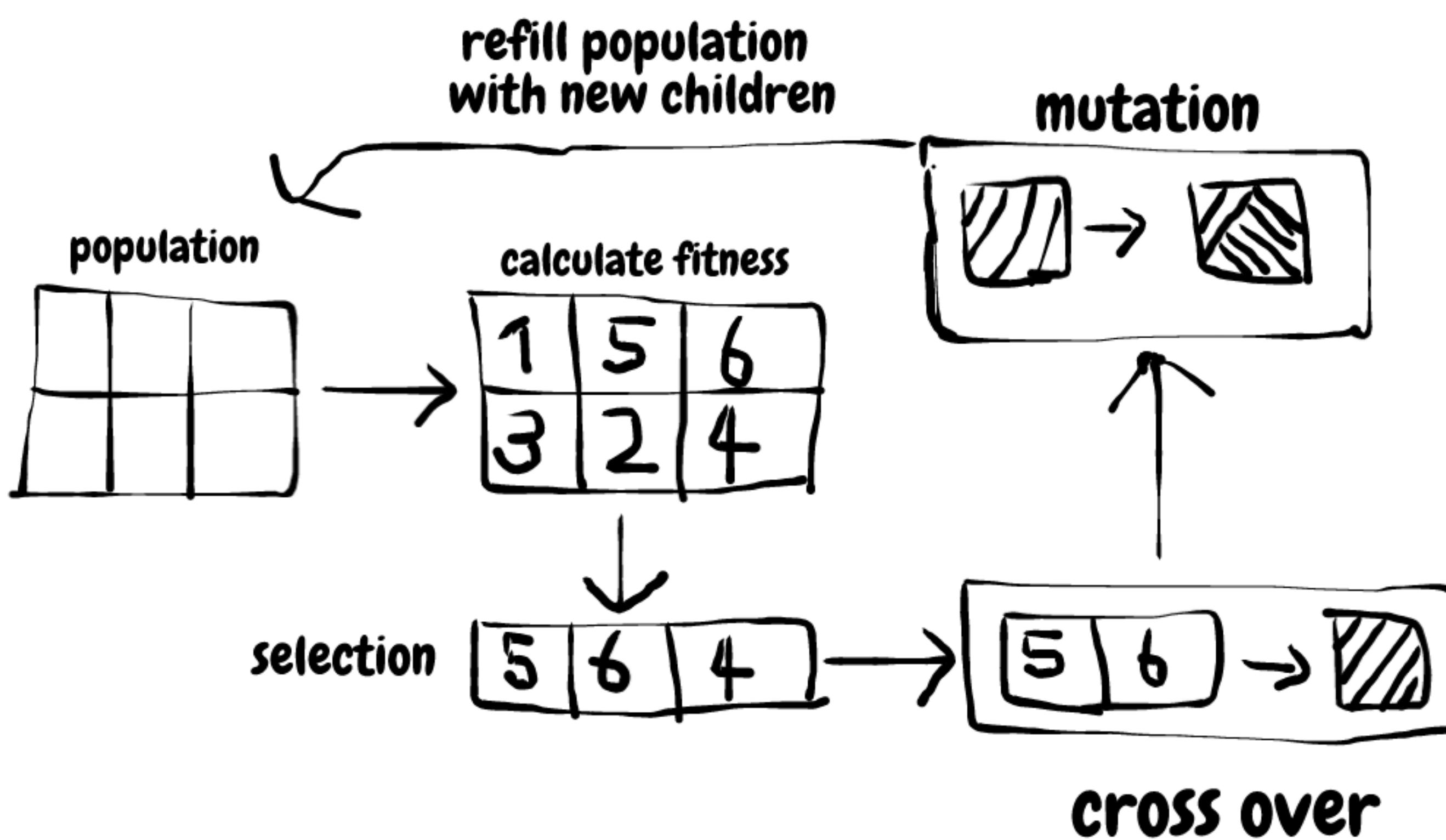
‘Generative’ via nature



Artificial Neural Network

Artificial neural networks (ANN) or connectionist systems are computing systems vaguely inspired by the biological neural networks that constitute animal brains. Such systems "learn" to perform tasks by considering examples, generally without being programmed with task-specific rules.



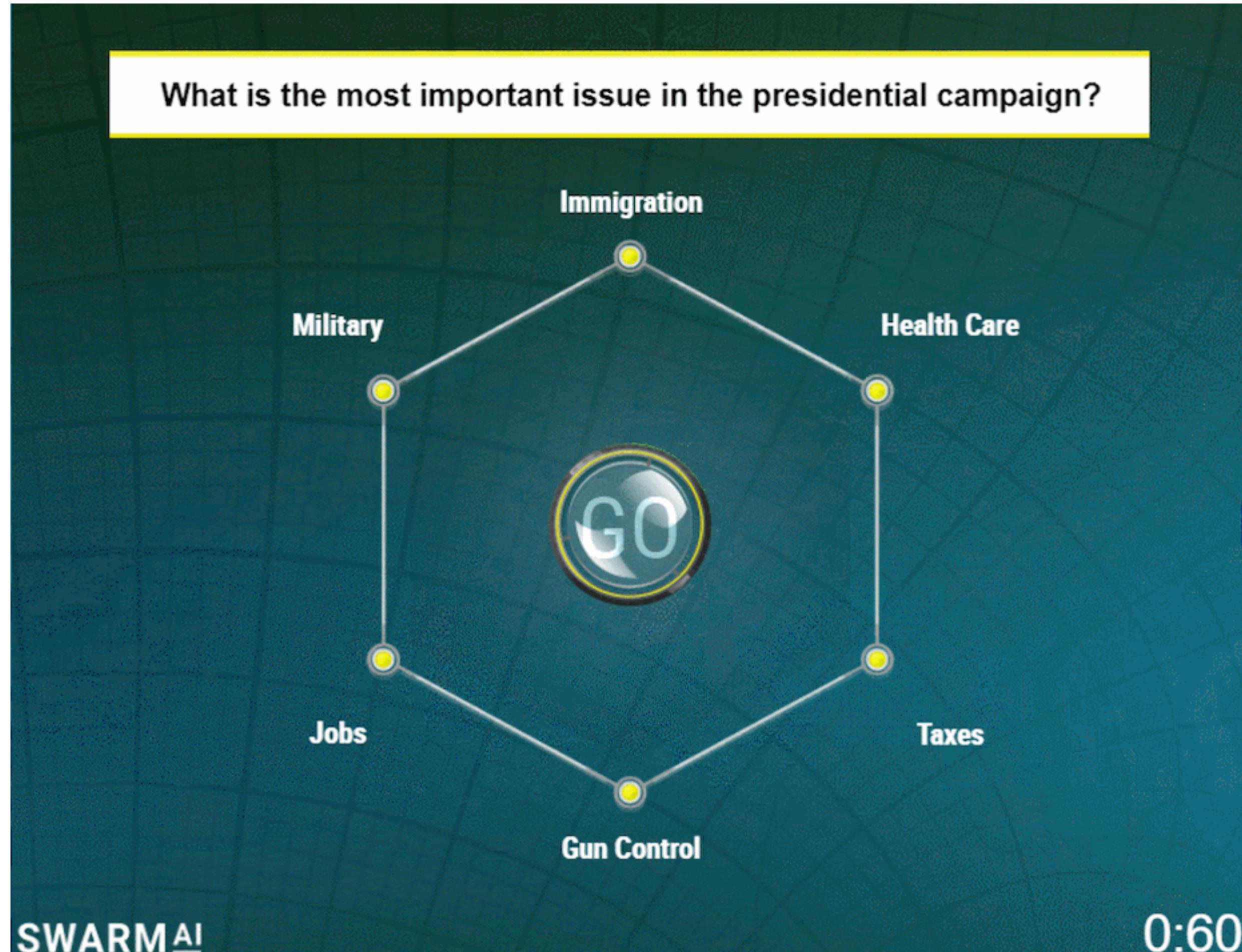


Genetic Algorithm

Genetic algorithm is basically a method that heavily inspired by the process of natural selection to find the best solution to a problem.

In nature, only the strong one survive, the process of eliminating the weak is called natural selection. Genetic algorithm use that same principle to eliminate the “weak” solutions and finally produce the best solution.

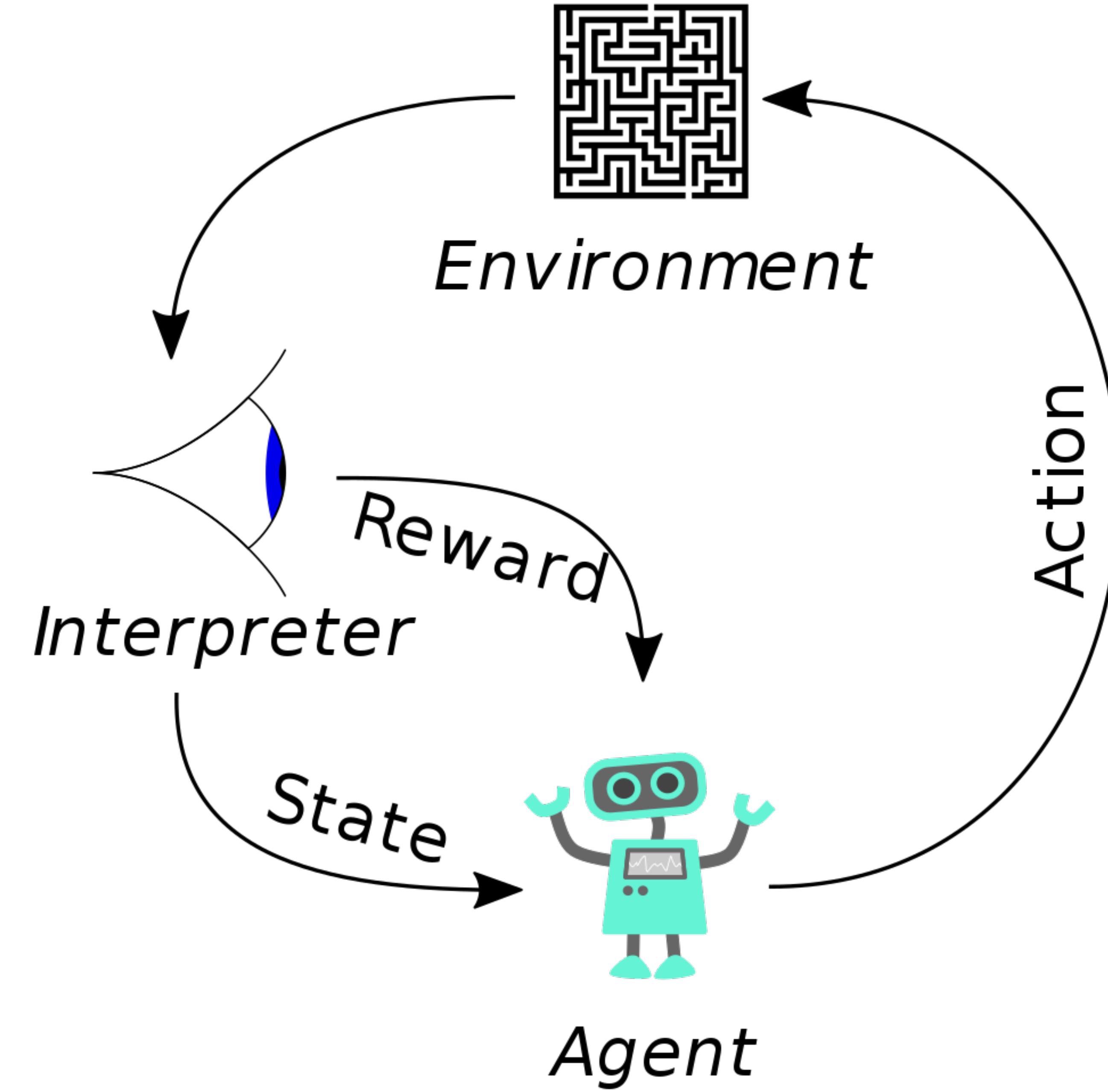
What is the most important issue in the presidential campaign?



Swarm intelligence

Swarm intelligence (SI) is the collective behavior of decentralized, self-organized systems, natural or artificial... SI systems consist typically of a population of simple agents or boids interacting locally with one another and with their environment. The inspiration often comes from nature, especially biological systems.





Reinforcement Learning

Reinforcement learning (RL) is an area of machine learning concerned with how software agents ought to take actions in an environment in order to maximize the notion of cumulative reward.

Reinforcement learning is one of three basic machine learning paradigms, alongside supervised learning and unsupervised learning.

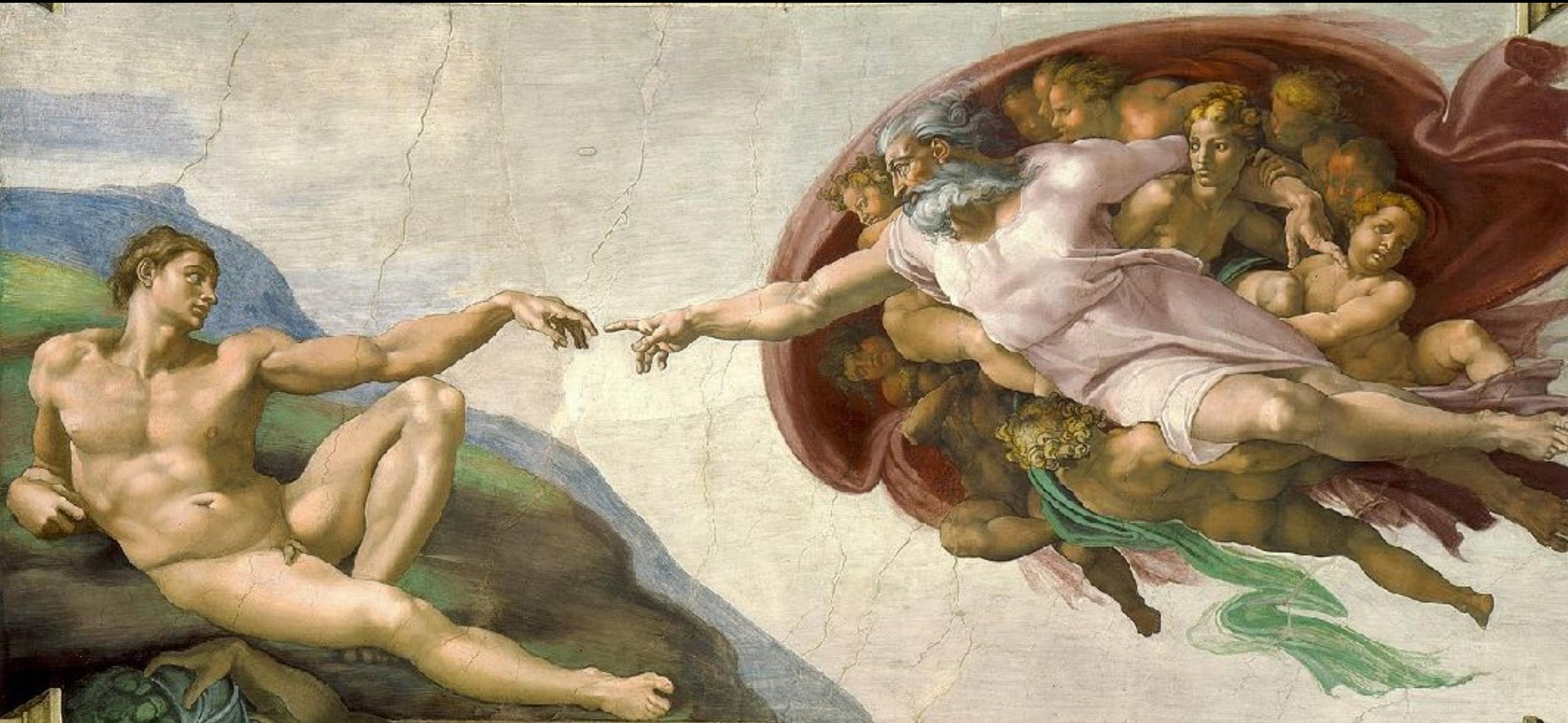




The Coding Train
@thecodingtrain

All technology is political.

12:55 AM · Jun 4, 2020 · Twitter for iPhone



why are black women so



why are black women so angry
why are black women so loud
why are black women so mean
why are black women so attractive
why are black women so lazy
why are black women so annoying
why are black women so confident
why are black women so sassy
why are black women so insecure

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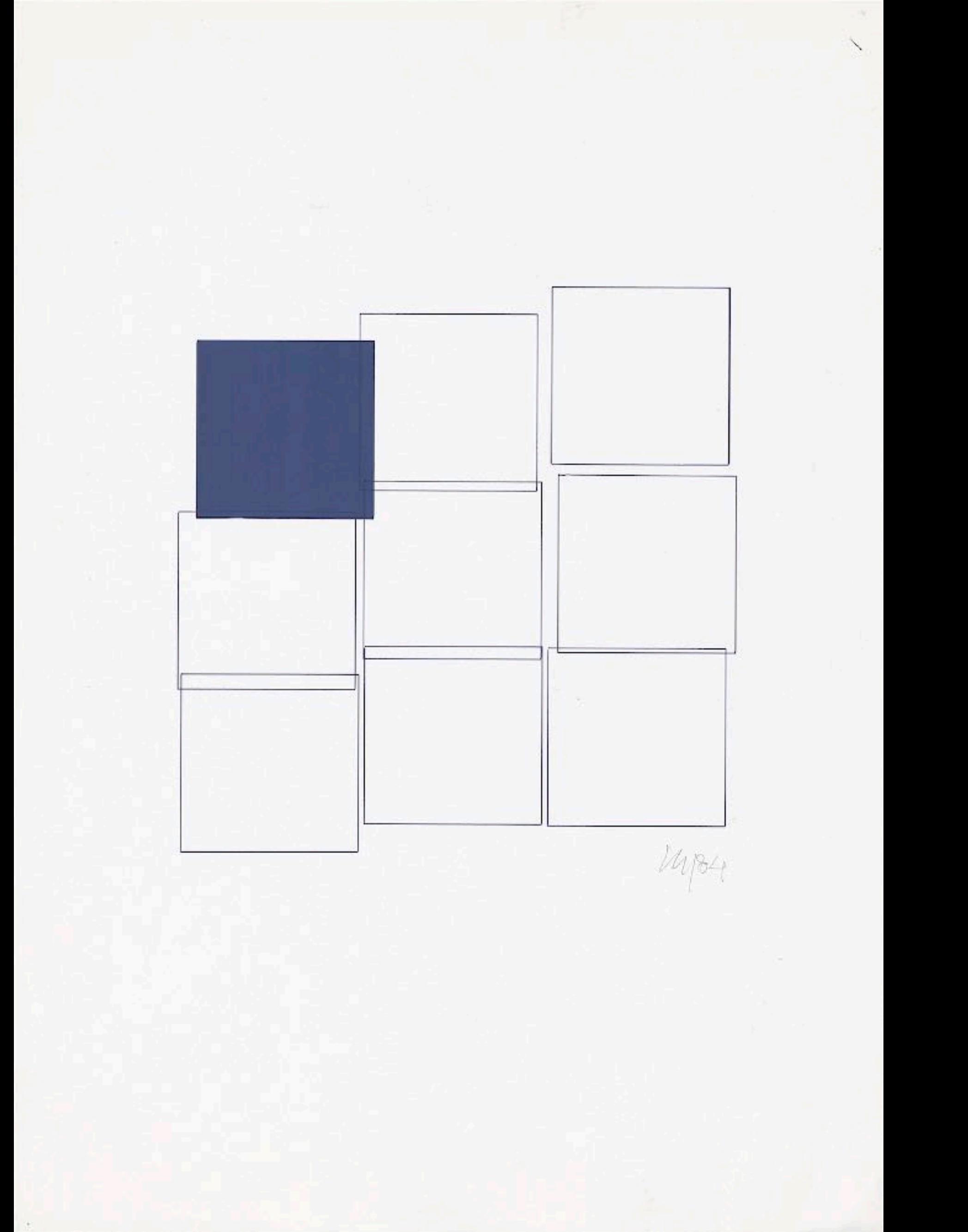
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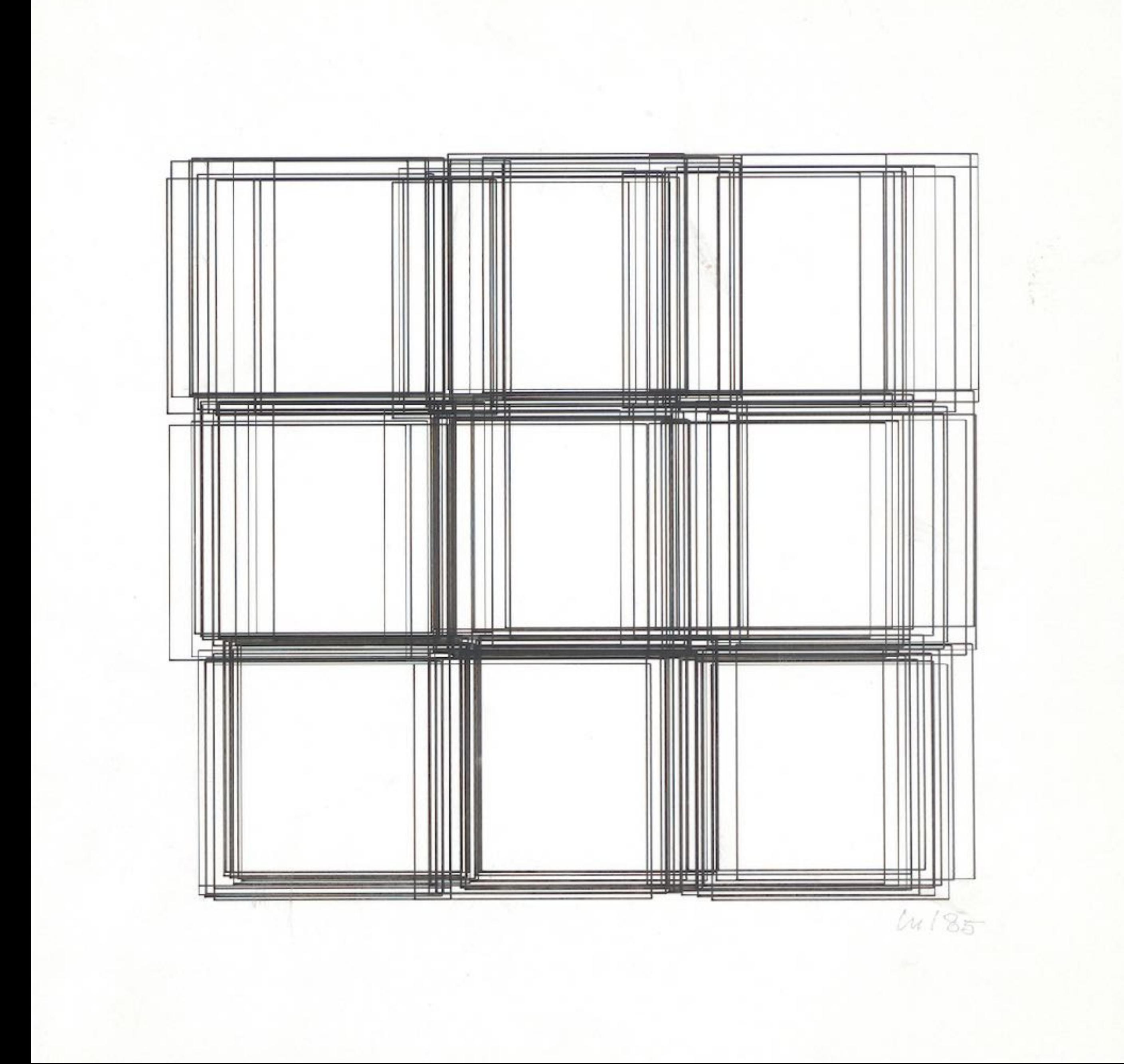
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