

TRANSCRIBING SIGN LANGUAGES WITH TYPANNOT

A Typographic System Which Retains
and Displays Multiple Levels of Information

Speakers:

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Morgane Rébulard

Chloé Thomas

Jean-François Dauphin

Mathieu Réguer

gestual
script,

ésad _ AMIENS





Multiple sheets of paper with handwritten notes and diagrams are pinned to the yellow wall. Some of the notes appear to be organized into columns and rows, possibly representing a schedule or a list of items.





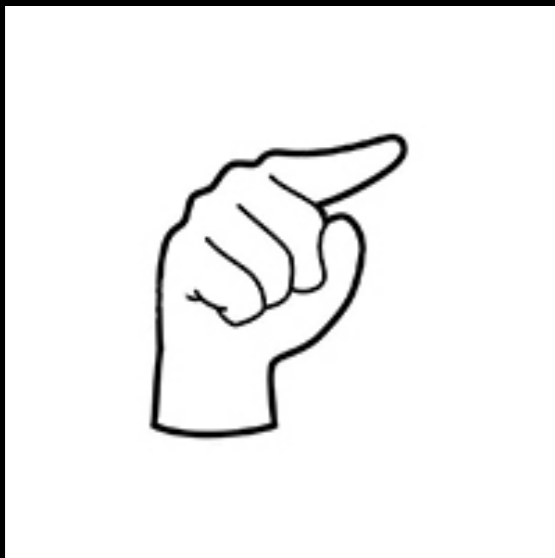
1. SIGN LANGUAGES
2. ANNOTATION
3. EXISTING SYSTEMS
4. TYPANNOT'S SOLUTION
5. TYPANNOT'S METHODOLOGY
6. TOOLS
7. FURTHER

SIGN LANGUAGES

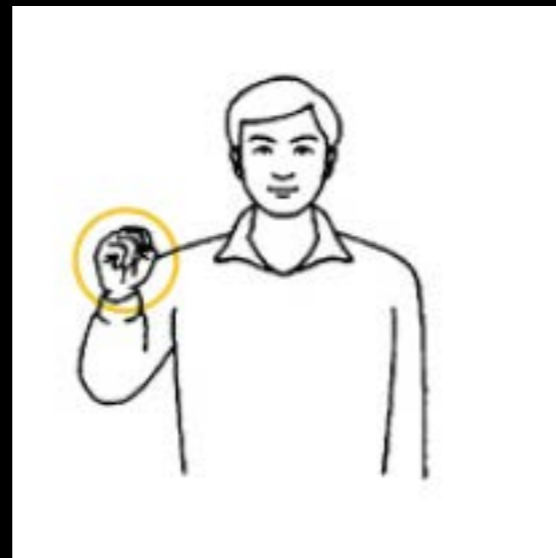


SIGN LANGUAGES

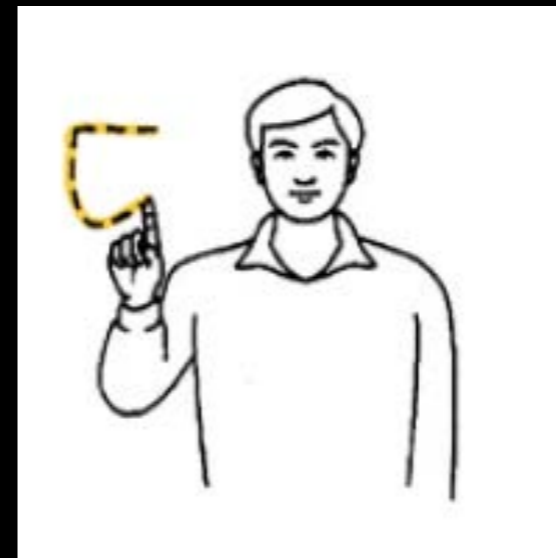
Gestural Languages



Handshape



Position



Movement



Face Action

ANNOTATION

ANNOTATION

Elan - HSG1.eaf

File Edit Annotation Tier Type Search View Options Window Help

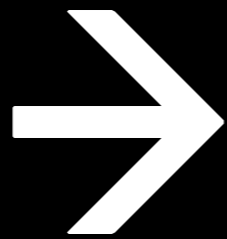
The screenshot displays the Elan software interface. At the top, there is a menu bar with options: File, Edit, Annotation, Tier, Type, Search, View, Options, Window, Help. Below the menu bar is a video player showing two men sitting in chairs against a blue background. The video player has a timeline at the bottom with a current time of 00:00:17.470 and a selection range of 00:00:17.370 - 00:00:17.470. Below the video player is a control bar with various playback icons and checkboxes for Selection Mode and Loop Mode.

On the right side of the interface, there is a table of annotations. The table has columns for Nr, Annotation, Begin Time, End Time, and Duration. The current annotation selected is PT:loc.

| Nr | Annotation | Begin Time | End Time | Duration |
|----|-------------|--------------|--------------|--------------|
| 1 | SAME | 00:00:15.140 | 00:00:15.330 | 00:00:00.190 |
| 2 | SCOTLAND | 00:00:15.330 | 00:00:15.630 | 00:00:00.300 |
| 3 | HOLD-FLAG | 00:00:17.040 | 00:00:17.270 | 00:00:00.230 |
| 4 | PT:loc | 00:00:17.270 | 00:00:17.590 | 00:00:00.320 |
| 5 | G | 00:00:17.590 | 00:00:17.890 | 00:00:00.300 |
| 6 | PEOPLE-LOOK | 00:00:19.380 | 00:00:19.640 | 00:00:00.260 |
| 7 | NORTH | 00:00:19.650 | 00:00:19.860 | 00:00:00.210 |
| 8 | IRELAND | 00:00:19.870 | 00:00:20.310 | 00:00:00.440 |
| 9 | SAME | 00:00:20.320 | 00:00:20.550 | 00:00:00.230 |
| 10 | PEOPLE-LOOK | 00:00:20.550 | 00:00:20.930 | 00:00:00.380 |
| 11 | PT:pro1 | 00:00:24.420 | 00:00:24.610 | 00:00:00.190 |

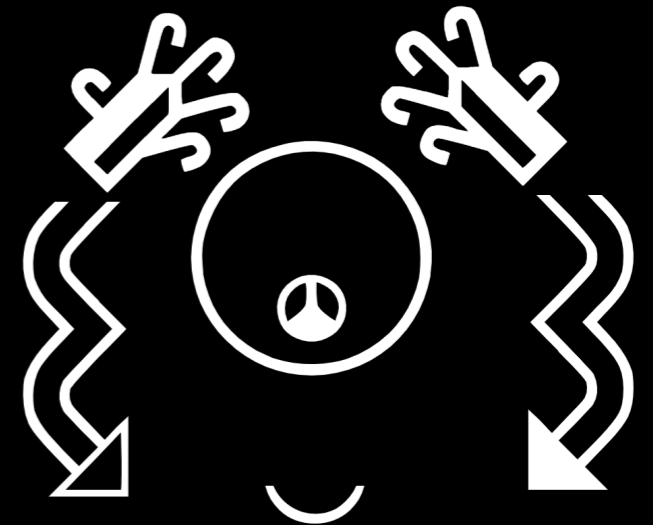
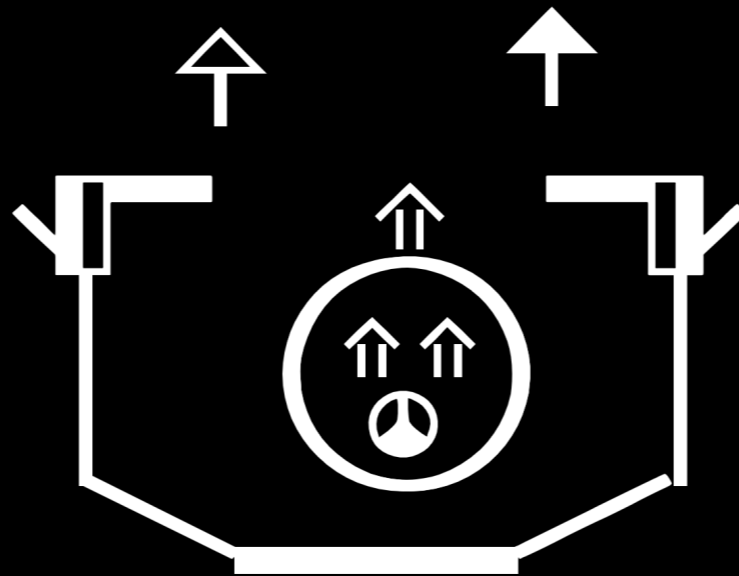
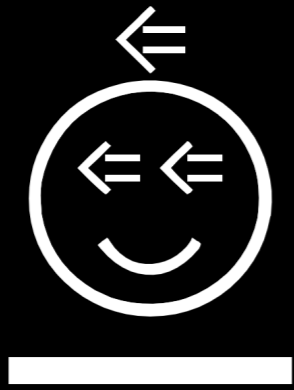
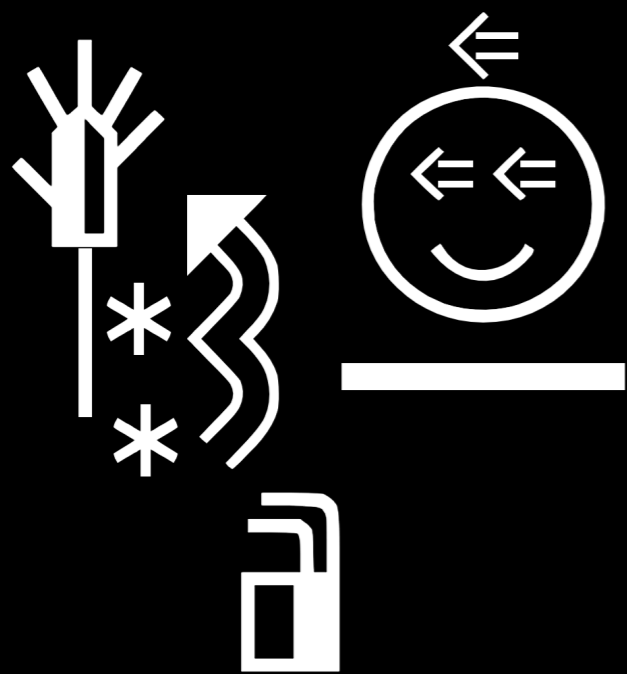
Below the table, there is a detailed annotation grid. The grid has a time axis at the top ranging from 00:00:16.000 to 00:00:29.000. The grid contains several rows of annotations, each with a label on the left and a series of vertical bars representing the duration of the annotation. The labels include: RH ID gloss, LH ID gloss, Dependent variable, 1-handed/2-handed, Grammatical function, HS preceding target, HS following target, Genre of text which, Summary, and Social.

A



EXISTING SYSTEMS

Sign Writing (1985)



EXISTING SYSTEMS

HamNoSys (1985)

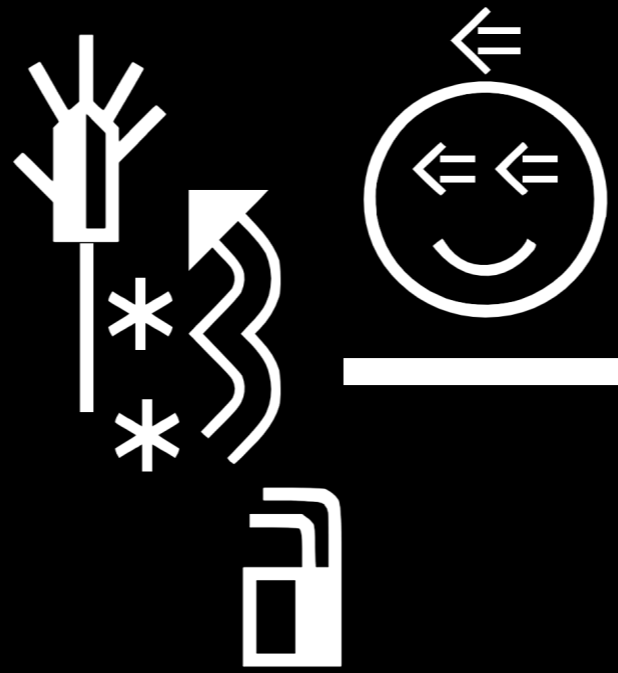
∩ ■ χ ∅ ↗ 0 [↕ ↘ 0]

∩) (∅ ↘ 0

∩ ∩ 2 3 χ ∩ 2 3 ↘ 0

∩ ∩ 2 χ ∅

∩ ∩ 2 3 χ ∩ 2 3 ↘ 0



TYPANNOT'S SOLUTION

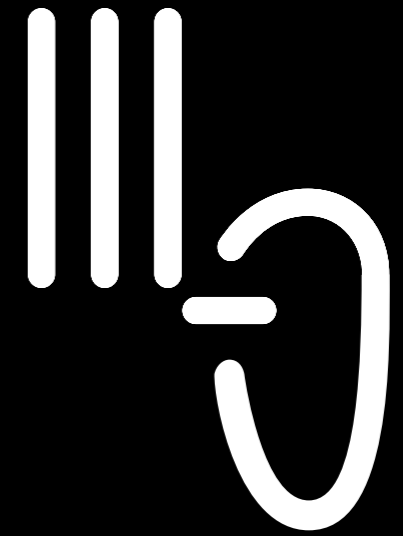
TYPANNOT'S SOLUTION



Handshape



Glyph



Generic characters



Generic characters



Right Hand

Finger 1

Finger 2, 3, 4

Finger 5



Generic characters



Index Curved Semi closed

Generic characters



Thumb Opposed Curved



Semi closed Contact Index

Ligatures

et → &

Typannot Handshape

Typannot

- ☑ Ligatures
 - Rare Ligatures
- ☑ Alternative Stylistic Sets
 - Stylistic Set 1

| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|---|---|---|---|
| ... | | ∩ | ... | ... | ... | ○ | ○ | ∩ | ∩ |
| ... | ... | ... | ... | ○ | | ∩ | ○ | | ∩ |
| ... | ... | ... | ... | ≡ | | ∩ | ○ | | ∩ |
| ... | ... | ... | ... | ≡ | ∩ | ∩ | ○ | | ∩ |
| ... | ... | X | | ∩ | ... | ○ | | ∩ | |



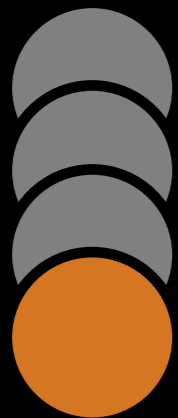
TYPANNOT'S METHODOLOGY

TYPANNOT'S METHODOLOGY

1. literature analysis

TYPANNOT'S METHODOLOGY

1. literature analysis
2. graphematic formula



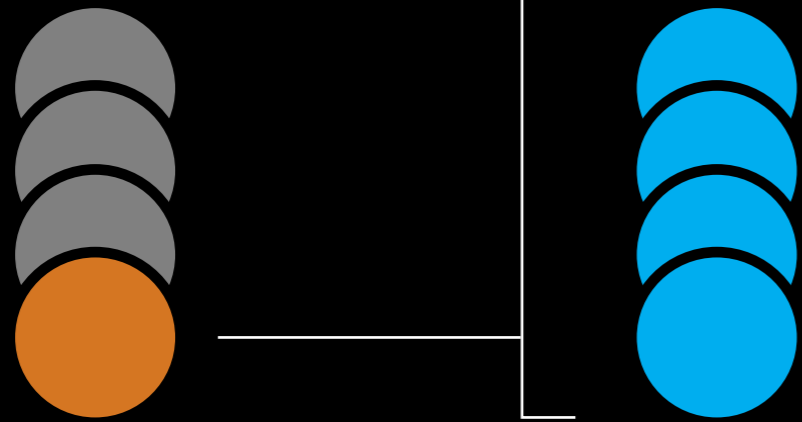
1. PARAMETER

handshape

upper limbs position

mouth actions

movement

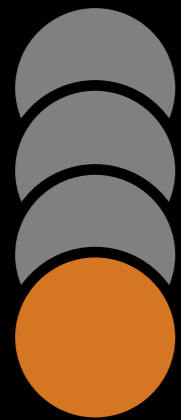


1. PARAMETER

handshape
upper limbs position
mouth actions
movement

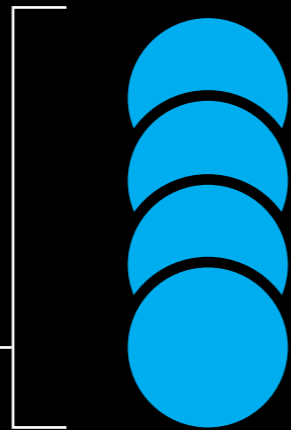
2. PARTS

fingers
thumb
arm
forearm
lips
...



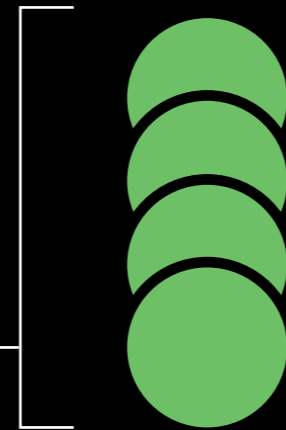
1. PARAMETER

handshape
upper limbs position
mouth actions
movement



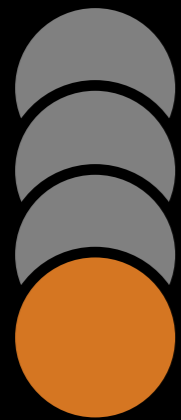
2. PARTS

fingers
thumb
arm
forearm
lips
...



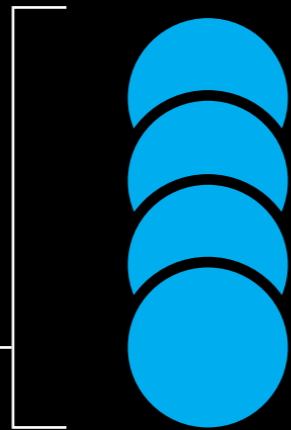
3. VARIABLES

form
angle
rotation
vergence
events
...



1. PARAMETER

handshape
upper limbs position
mouth actions
movement



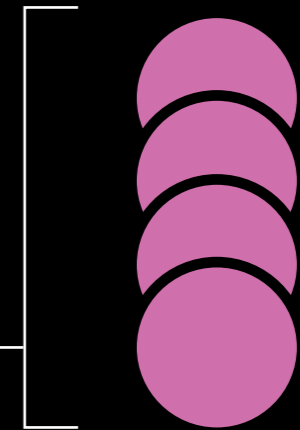
2. PARTS

fingers
thumb
arm
forearm
lips
...



3. VARIABLES

form
angle
rotation
vergence
events
...

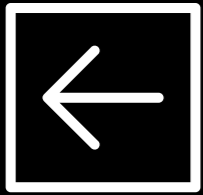


4. VALUES

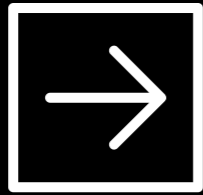
flat, curved, bent
open, semi-closed, closed
degrees
contact
...

TYPANNOT'S METHODOLOGY

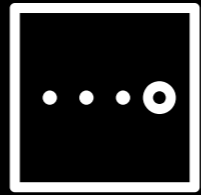
1. literature analysis
2. graphematic formula
3. designing generics



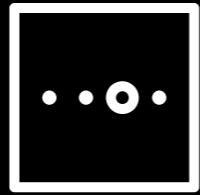
Left



Right



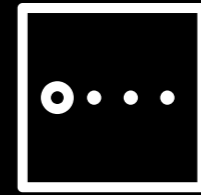
Index



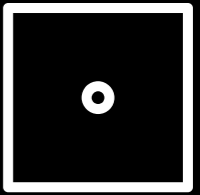
Middle



Ring



Pinky



Thumb



Grouped



Crossed



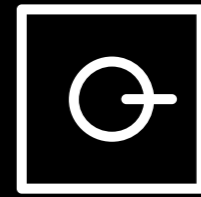
Stacked



Reverse



Hidden



Contact



Flat



Curved



Bent



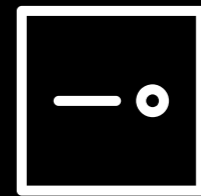
Open



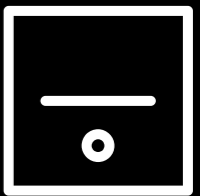
Semi closed



Closed



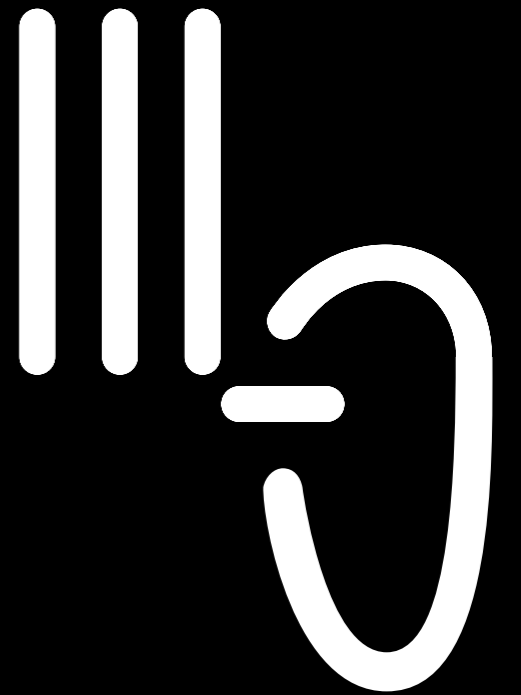
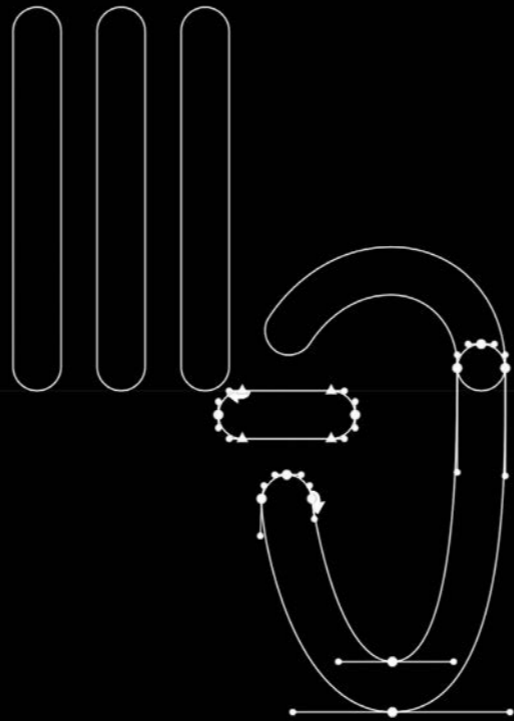
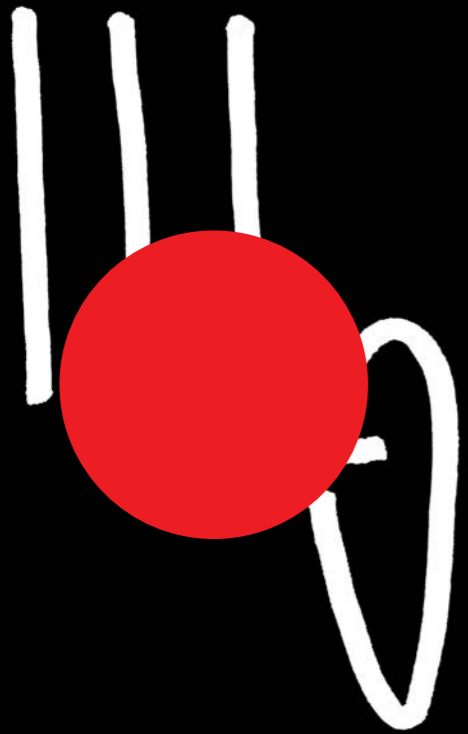
Non opposed



Opposed

TYPANNOT'S METHODOLOGY

1. literature analysis
2. graphematic formula
3. designing generics characters
4. designing glyphs composed



TYPANNOT'S METHODOLOGY

1. literature analysis
2. graphematic formula
3. designing generics characters
4. designing glyphs composed
5. modularity

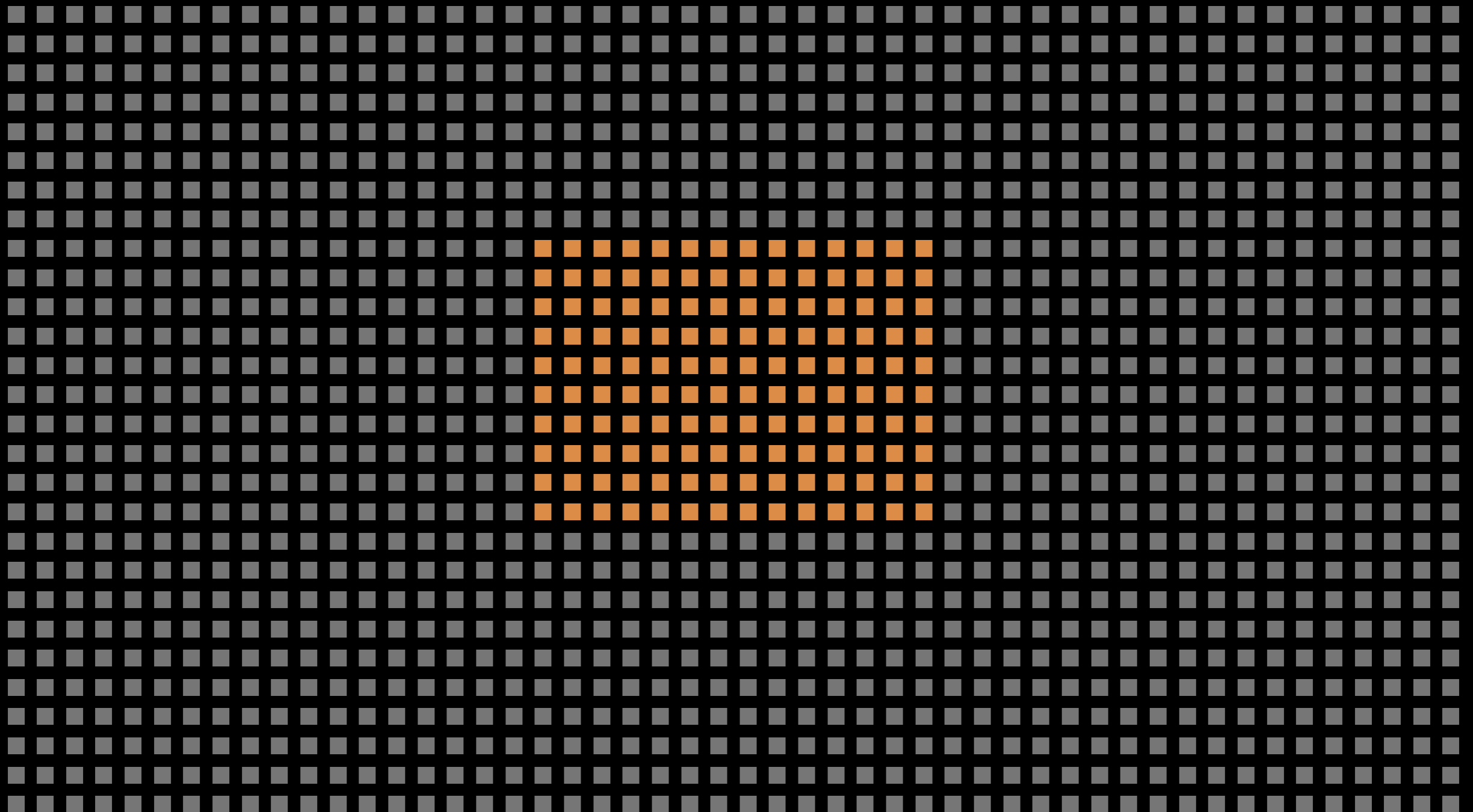
TYPANNOT'S METHODOLOGY

1. literature analysis
2. graphematic formula
3. designing generics characters
4. designing glyphs composed
5. modularity
6. generativity

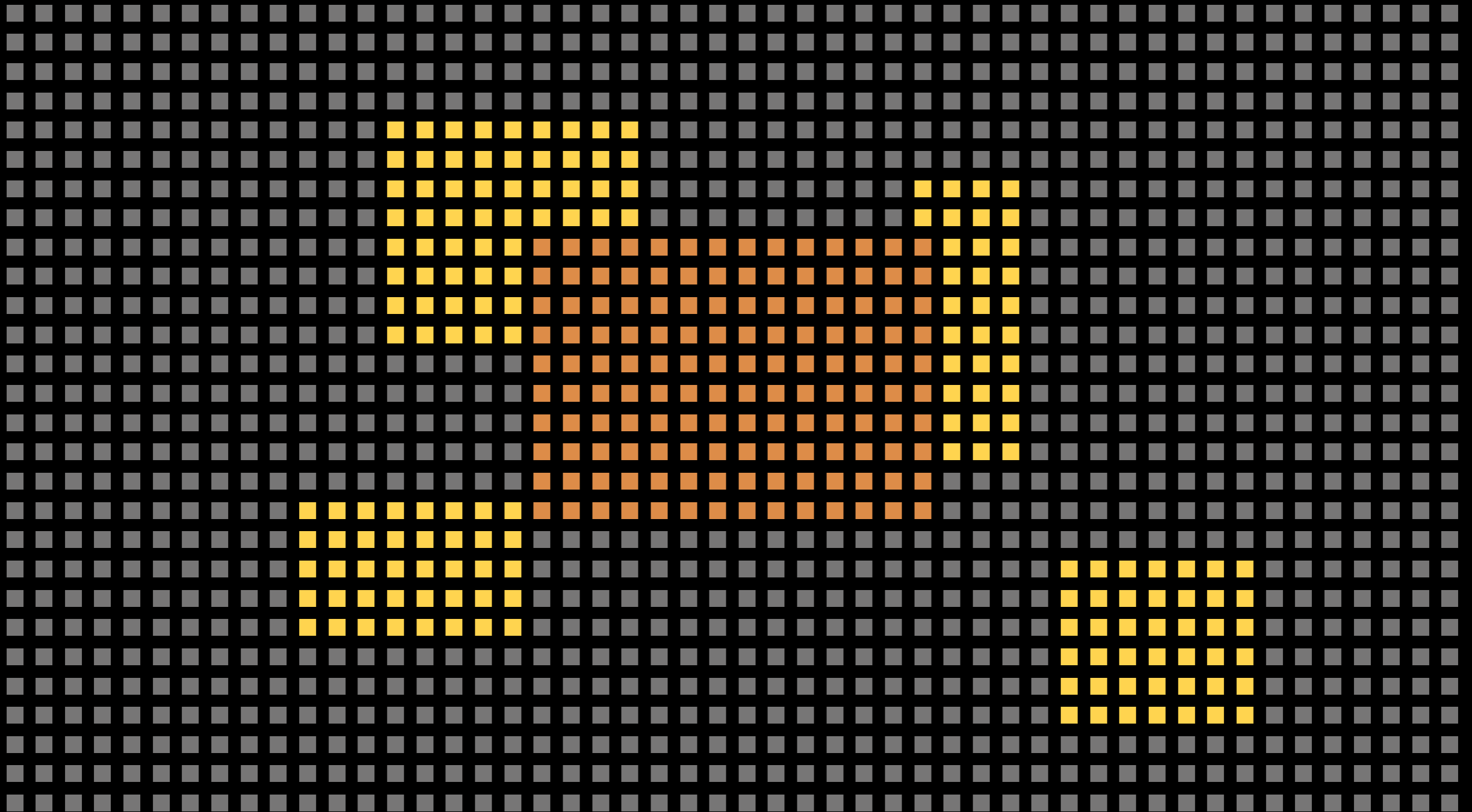


2916000

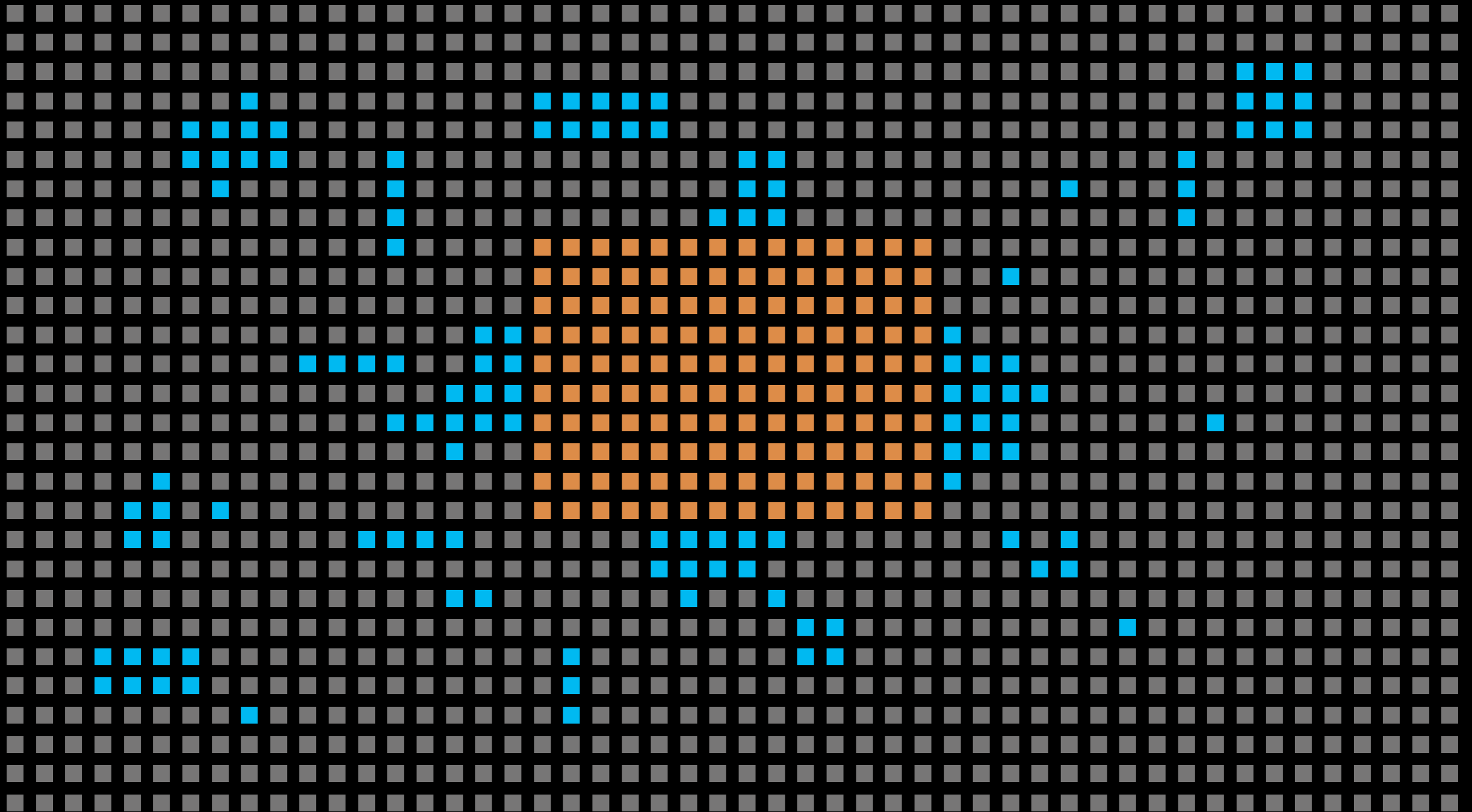
Basic Set



Extended Set

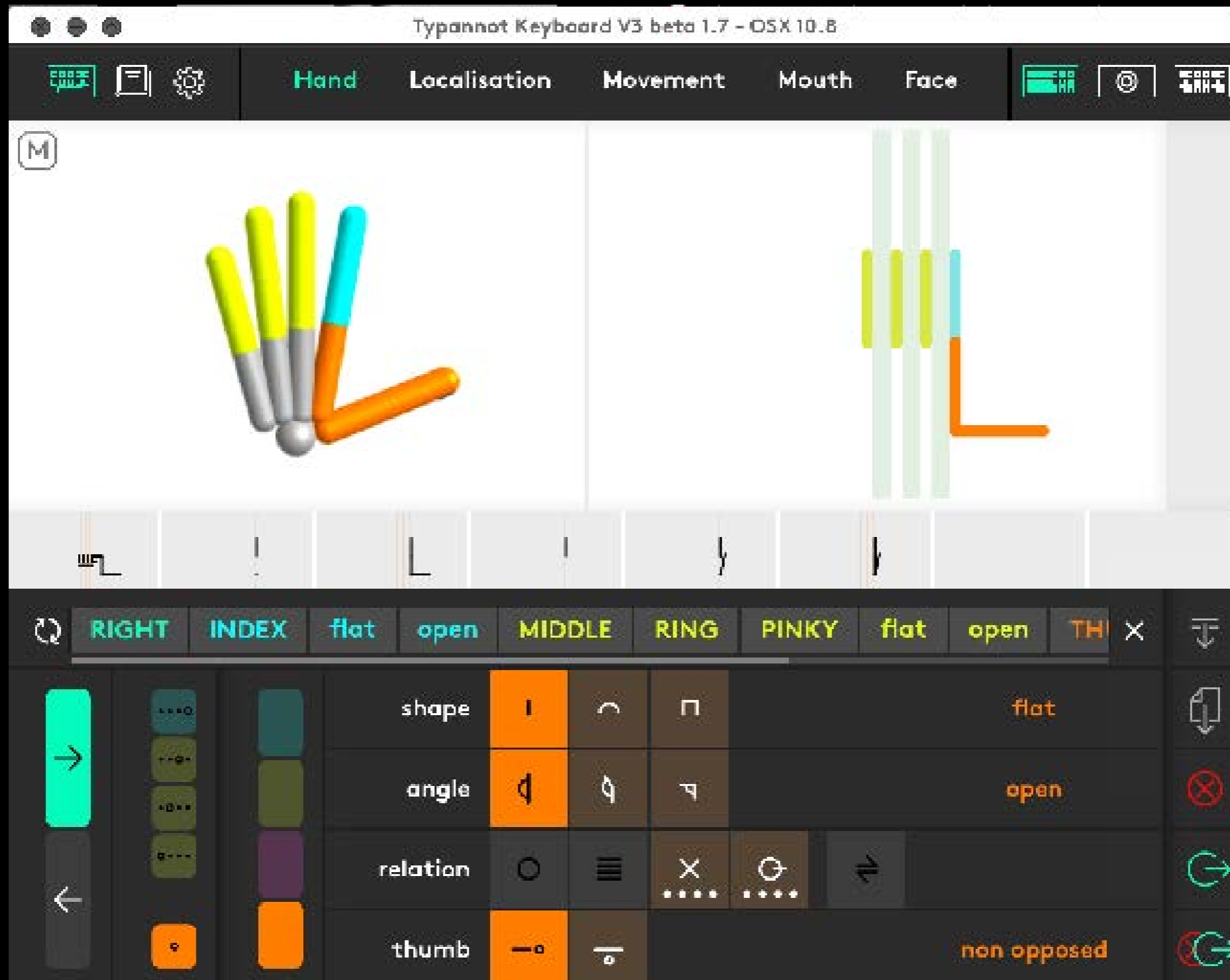


Extended Set



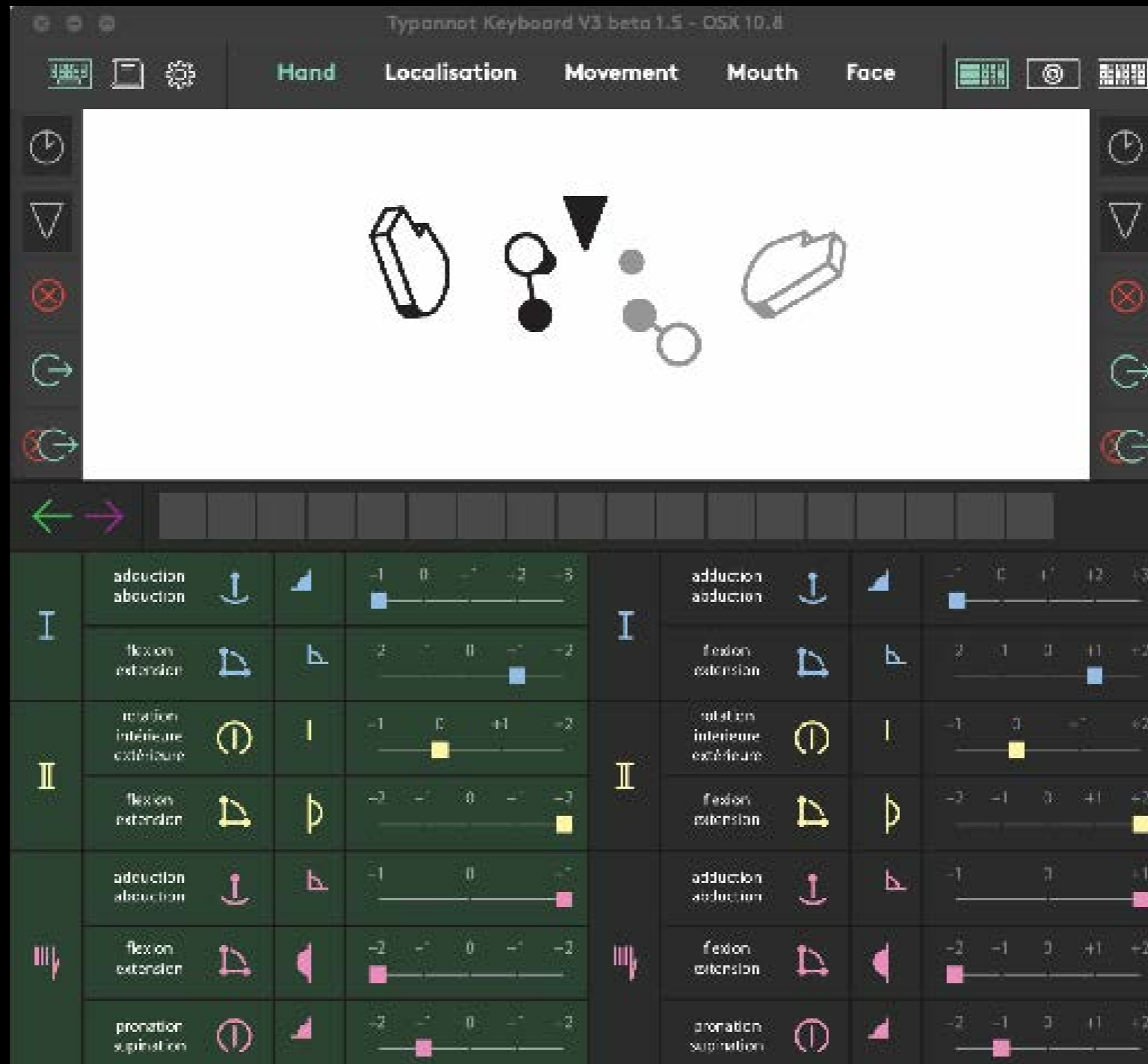
TOOLS

Digital Keyboard



FURTHER

Digital Keyboard





THANK YOU

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