Projection 2

This project investigates how individuality shifts from the hand to the system in the process of writing.
Through a series of visual experiments, I examine how the expressive capacity of gestures becomes reduced, and how personality is redistributed across different layers of digital input.

Abstract

Part1

This project mainly explores the transformation of personality expression methods in the interaction between hands and writing tools. In traditional writing, it is mainly through the physical movements of the hand - including gestures, movement trajectories, force and stroke forms - that an individual's personality and emotions are directly expressed. Tools like the identity control pen are used to directly express oneself. However, in digital writing, the role of the hand has changed: the information carried by the gesture itself has been largely blurred and reduced, and its expressive power has been weakened. Instead, it triggers the system, which outputs standardized results.

By visually contrasting handwritten and keyboard input, research can be advanced on how the information volume and clarity carried by gestures gradually decrease. Although personality is still reflected in the rhythm and pauses of typing, this information is no longer sufficient to fully express individual characteristics. On the contrary, personality is redistributed across multiple levels, including key selection, editing behavior, system processing, and ultimately screen output.

In the early stage of the project, by visualizing the changes in gestures between traditional writing and digital writing, such as the area of contact with objects and traces, it was found that the information contained in the gestures was ambiguous. Then, by dissecting the typing process (such as rhythm, key selection, system processing and output) in layers, it was demonstrated how personality can be transferred from the body to the system and re-manifested in a systematic way. Ultimately, it is gathered in the form of publications, allowing the audience to have a clearer perception of the development and discoveries of the entire research.

This research is oriented towards the design field, especially designers engaged in interface and digital communication, and is also relevant to all users who use digital writing systems on a daily basis. The project aims to make this subtle yet significant change visible, thereby rethinking the way individuality is expressed and understood in the contemporary context.

Audience

Who is this question relevant to (whether from inside or outside the field of graphic communication design)?

Media

How have you engaged with it through studio practice (methods, media, etc.)?

Audience

Who is this question relevant to (whether from inside or outside the field of graphic communication design)?

Minireader

Part2.1

“The keyboard reshapes how individuality is expressed.”

Societies have always been shaped more by the nature of the media by which men communicate than by the content of the communication. The alphabet, for instance, is a technology that is absorbed by the very young child in a completely unconscious manner, by osmosis so to speak. Words and the meaning of words predispose the child to think and act automatically in certain ways. The alphabet and print technology fostered and encouraged a fragmenting process, a process of specialism and of detachment. Electric technology fosters and encourages unification and involvement. It is impossible to understand social and cultural changes without a knowledge of the workings of media.

Marshall McLuhan
The Medium is the Massage (1967)

‘ Shaped more by the nature of the media ’

‘ Than by the content ’

“This change is total — it affects how we act, perceive, and express.”

All media work us over completely. They are so pervasive in their personal, political, economic, aesthetic, psychological, moral, ethical, and social consequences that **they leave no part of us untouched, unaffected, unaltered.** The medium is the massage. **Any understanding of social and cultural change is impossible without a knowledge of the way media work as environments.**

‘ All media work us over completely.

They leave no part of us untouched, unaffected, unaltered.

Any understanding of social and cultural change is impossible without a knowledge of the way media work as environments. ’

Part2.2

“In handwriting, meaning emerges through the movement of the hand.”

Making is not a matter of imposing preconceived form on raw material, but of intervening in the world’s becoming and of joining forces with the materials.

Tim Ingold
Making (2013)

‘ Making is not a matter of imposing preconceived form on raw material…

To make is to think through doing.’

“Thinking and making are inseparable in the movement of the hand.”

“To make is to think through doing.”

Minireader

Part2.3

Vilém Flusser
Does Writing Have a Future? (1987)

“Writing begins as a gesture. In handwriting, writing itself is a gesture, where individuality is directly embedded in the movement of the hand..”

All writing is “right”: it is a gesture of setting up and orderingwritten signs. |And written signs are, directly or indirectly, signs for ideas. |So writing is a gesture that aligns and arranges ideas. |Anyone who writes must first have thought. |And written signs are the quotation marks of right thinking. |On first encounter, a hidden motive appears behind writing: one writes to set one’s ideas on the right path.

“As writing becomes a process of ordering signs, it shifts towards a mechanical operation.”

For there is something mechanical about the ordering, the rows, and machines do this better than people do. One can leave writing, this ordering of signs, to machines. I do not mean the sort of machines we already know, for they still require a human being who, by pressing keys arranged on a keyboard, orders textual signs into lines according to rules. I mean grammar machines, artificial intelligences that take care ofthis order on their own.

“In typing, the hand no longer produces meaning directly, but triggers the system by pressing keys.”

I do not mean the sortof **machines** we already know, for they still **require a human being who, by pressing keys arranged on a keyboard, orders textual signs into lines according to rules.**

‘ All writing is ‘right’: it is a gesture of setting up and ordering written signs.

There is something mechanical about the ordering, the rows, and machines do this better than people do.

Machines require a human being who, by pressing keys arranged on a keyboard, orders textual signs into lines according to rules. ’

Minireader

Part2.4

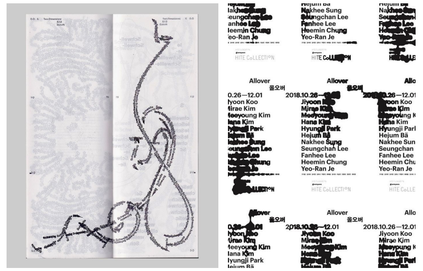
The mini reader is structured as a progression from the hand to the system.

Across the three sections, the layout gradually shifts:

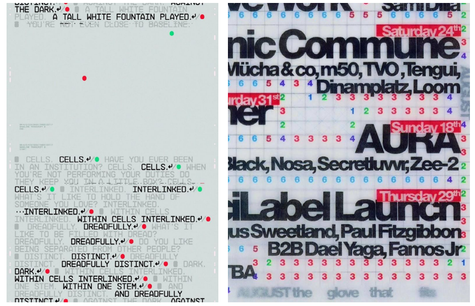
from fluid → structured
from continuous → fragmented
from expressive → controlled

This mirrors my project, where individuality moves from the body into the system.

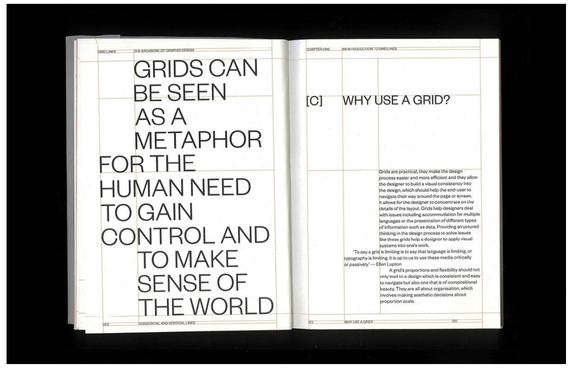
The layout is more fluid and less rigid
Text flows more continuously
Alignment is slightly unstable



Strong contrast in hierarchy
Key phrases are extracted and enlarged
Text begins to break into fragments



Highly structured grid
Strict alignment
Modular text blocks
Repetition and uniformity



Experiments

Part1

Handwriting vs. Digitalwriting (gesture comparison)

I recorded both handwriting and typing from the same individual, focusing on three aspects:

- gesture form
- contact between hand and tool
- trace produced by writing

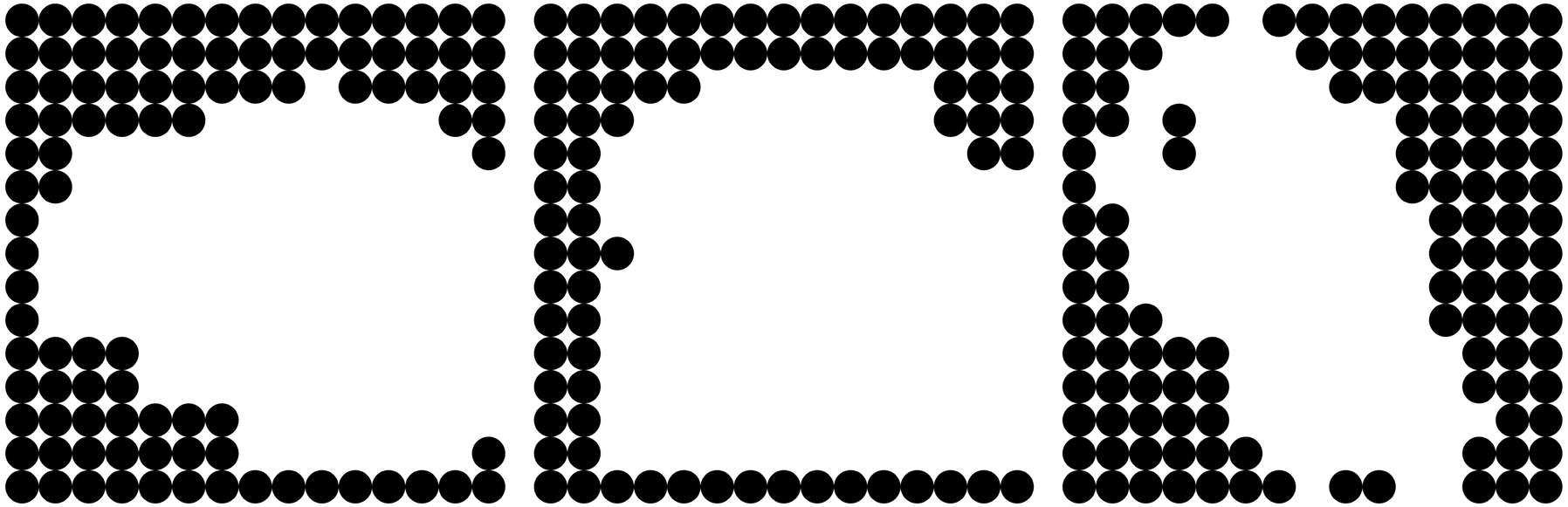
These three elements represent how meaning is traditionally carried by the hand: through movement, interaction, and trace.

gesture form

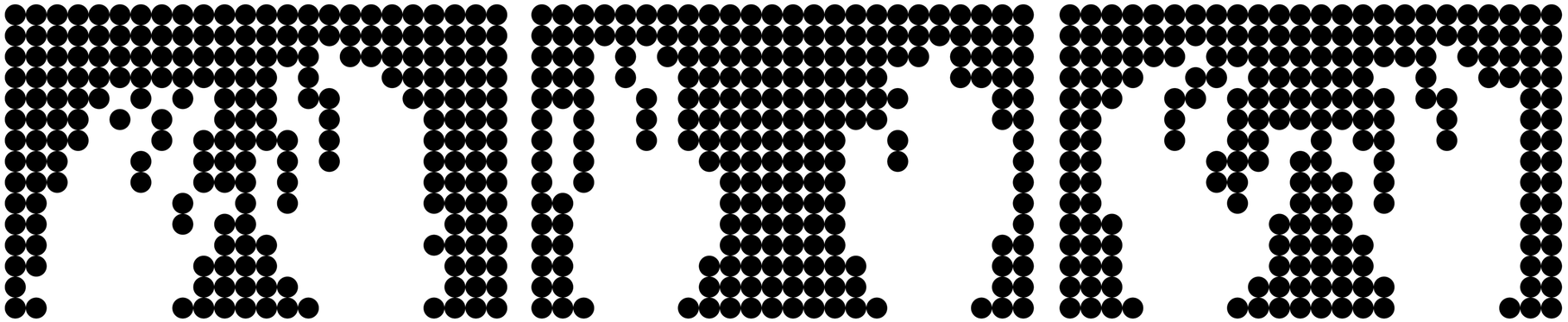
Gesture form represents the most direct visual expression of the hand.
It shows how movement itself carries individuality.

Finding:
Handwriting gestures vary significantly between individuals
Typing gestures become repetitive and standardised
Differences between individuals become less visible

Handwriting



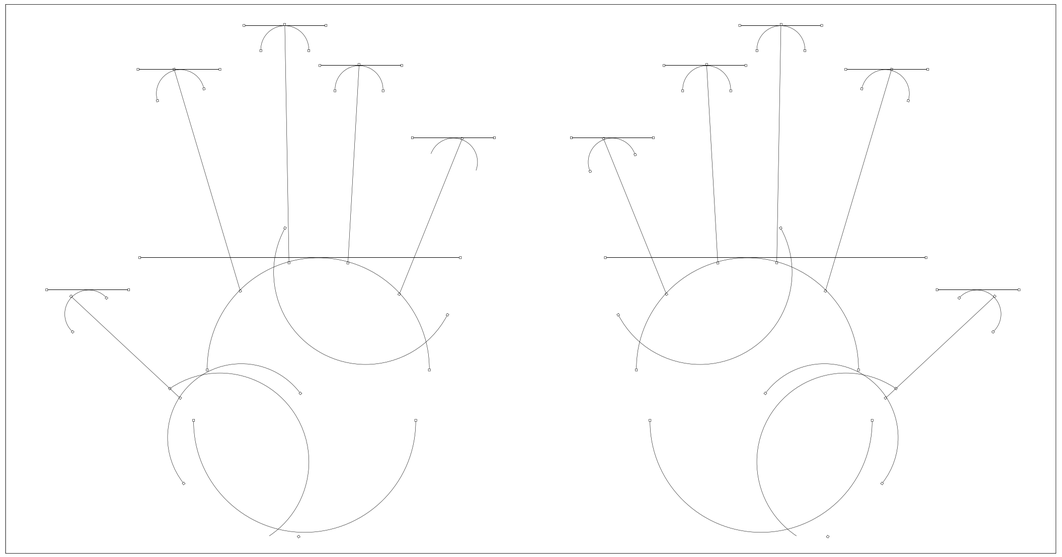
Digitalwriting



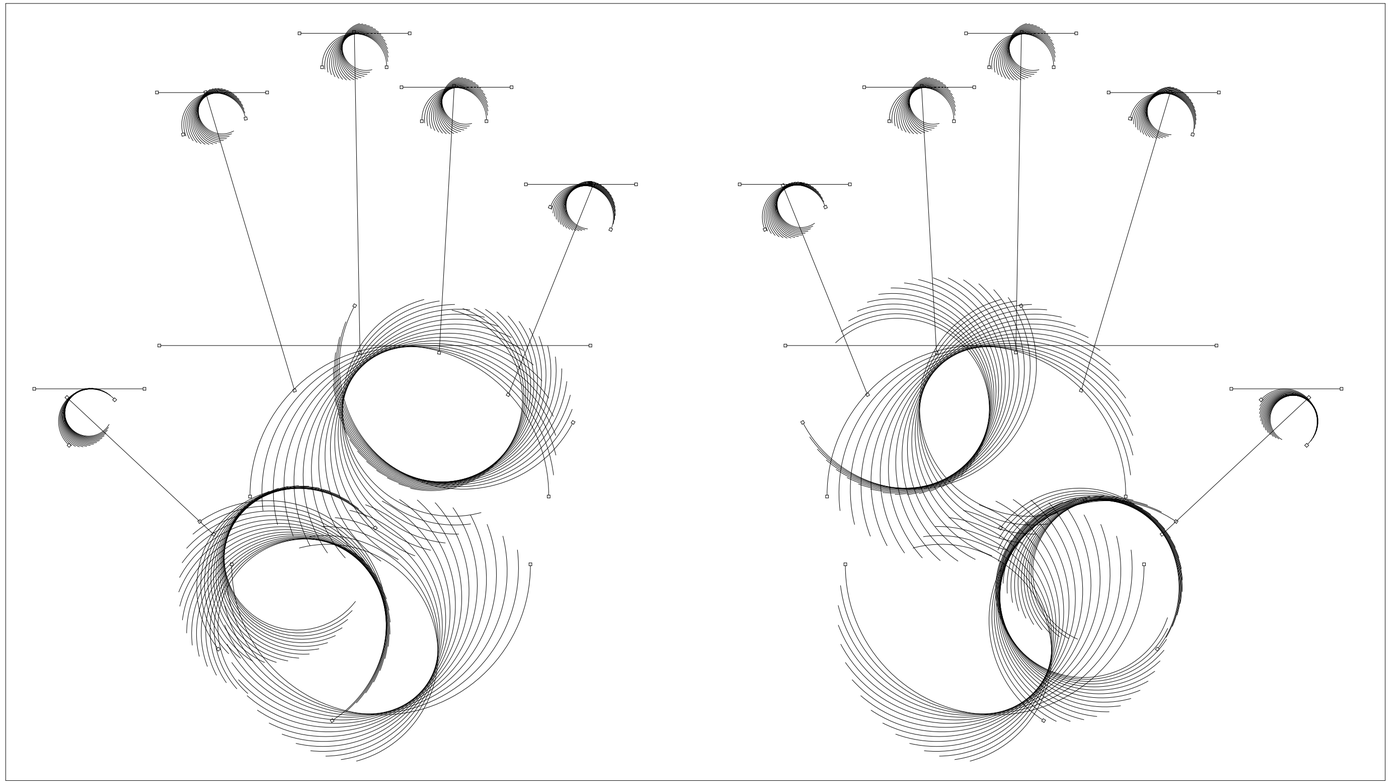
contact between hand and tool

The contact area reflects how the hand engages with the tool, revealing the degree of control and variation in interaction.

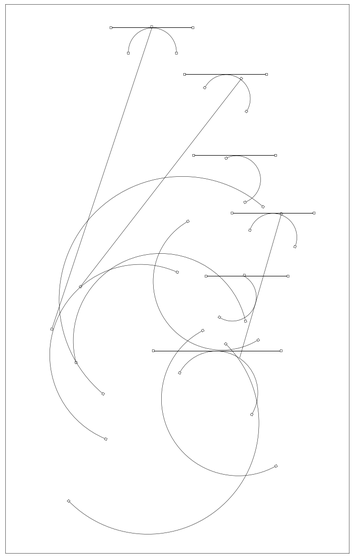
Gesture is visualised as continuous movement trajectories, revealing flow, variation, and rhythm.



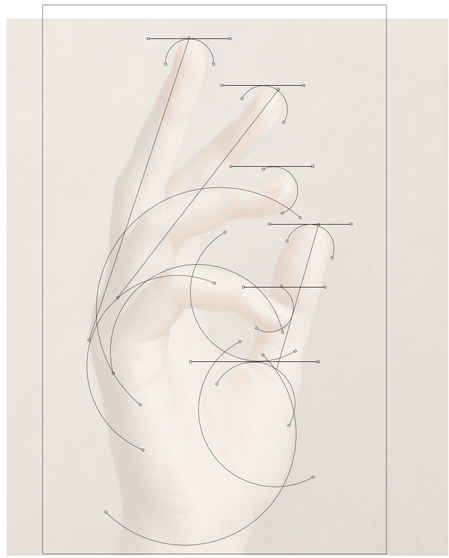
Front Left

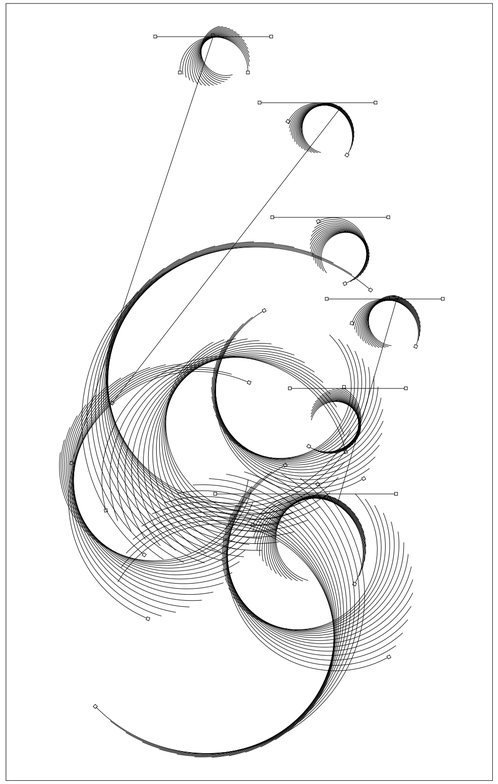


Front Right



Side Right

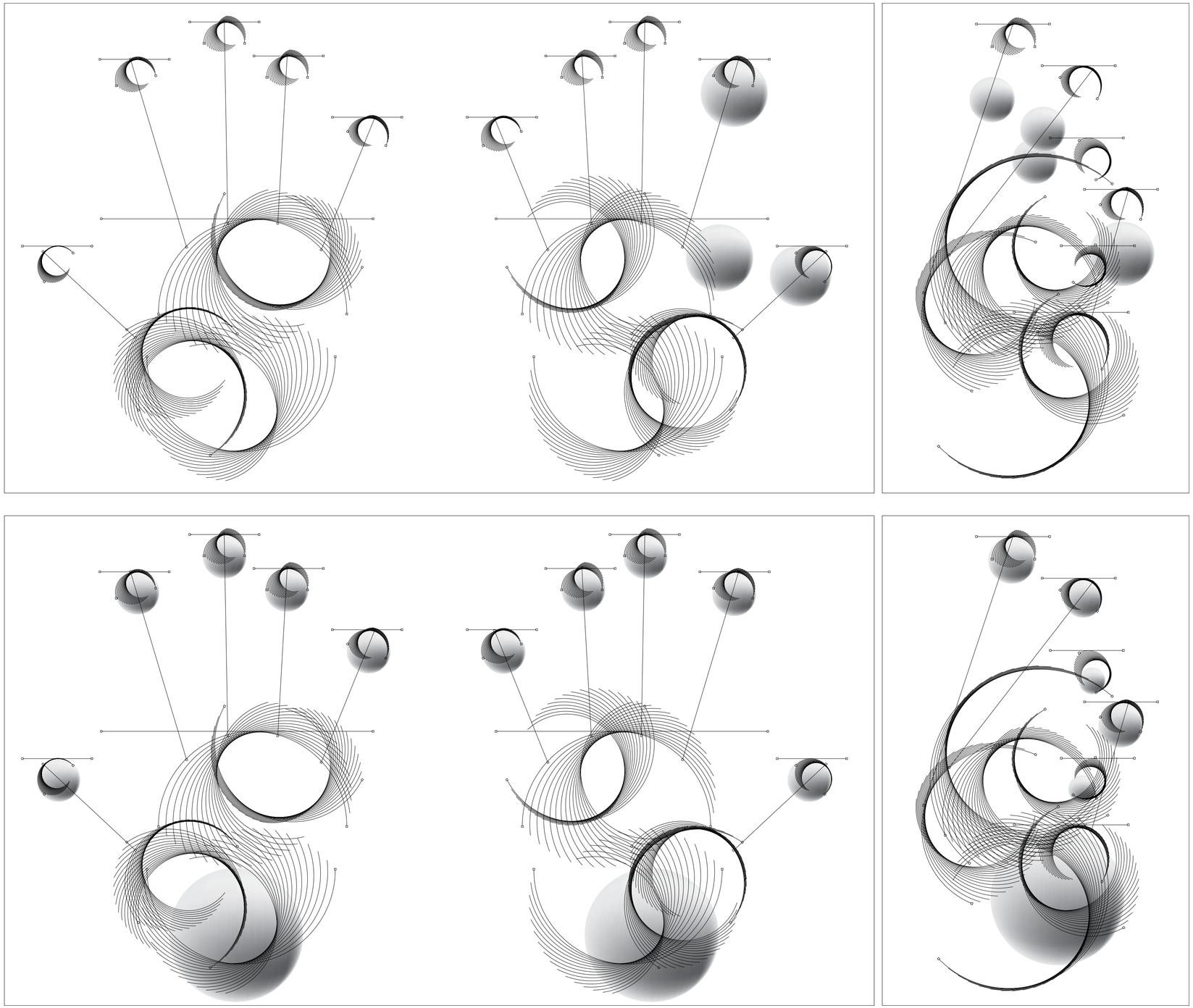




contact between hand and tool

In handwriting, contact is flexible and varied

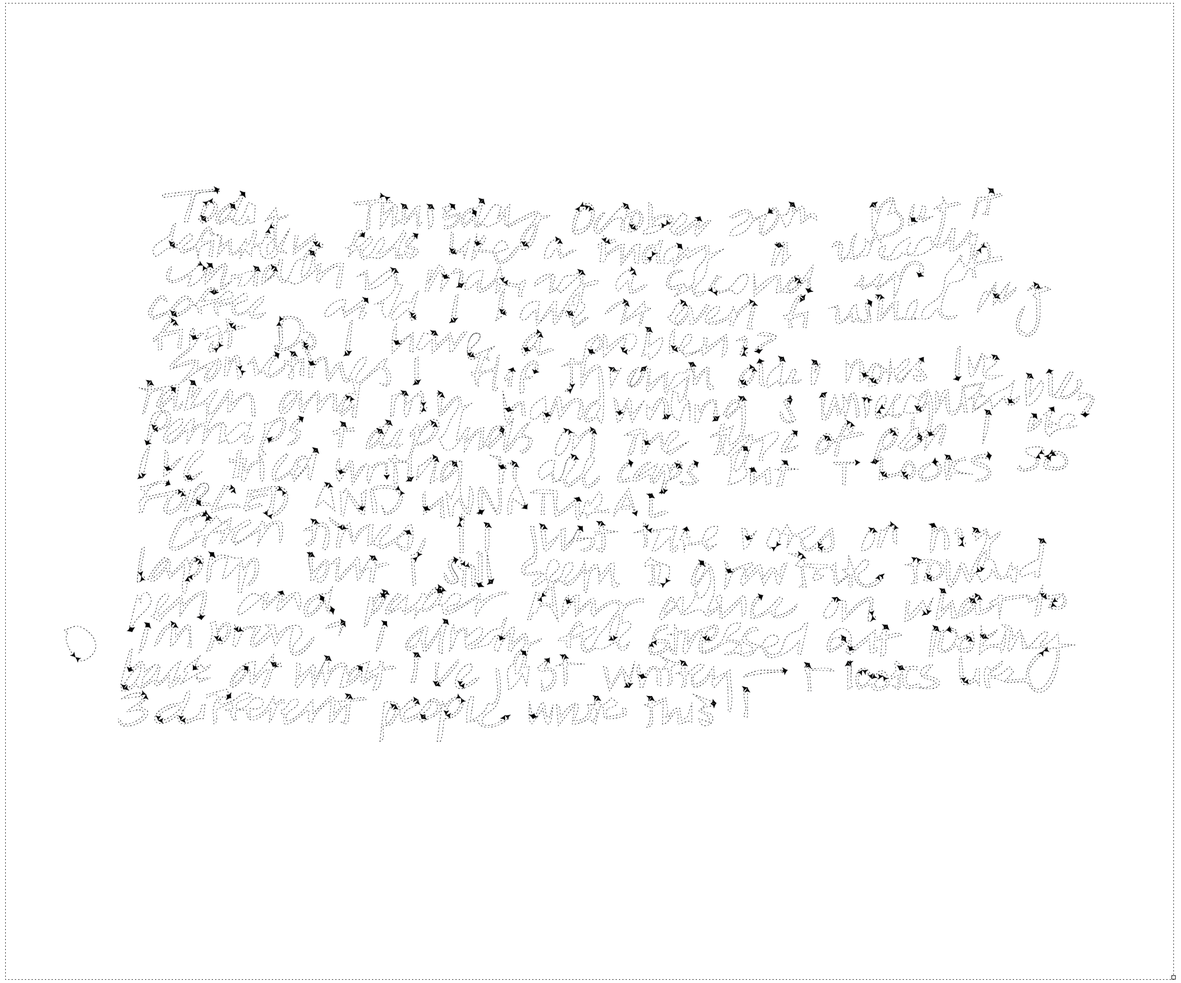
In typing, contact is minimal and fixed Interaction becomes more restricted

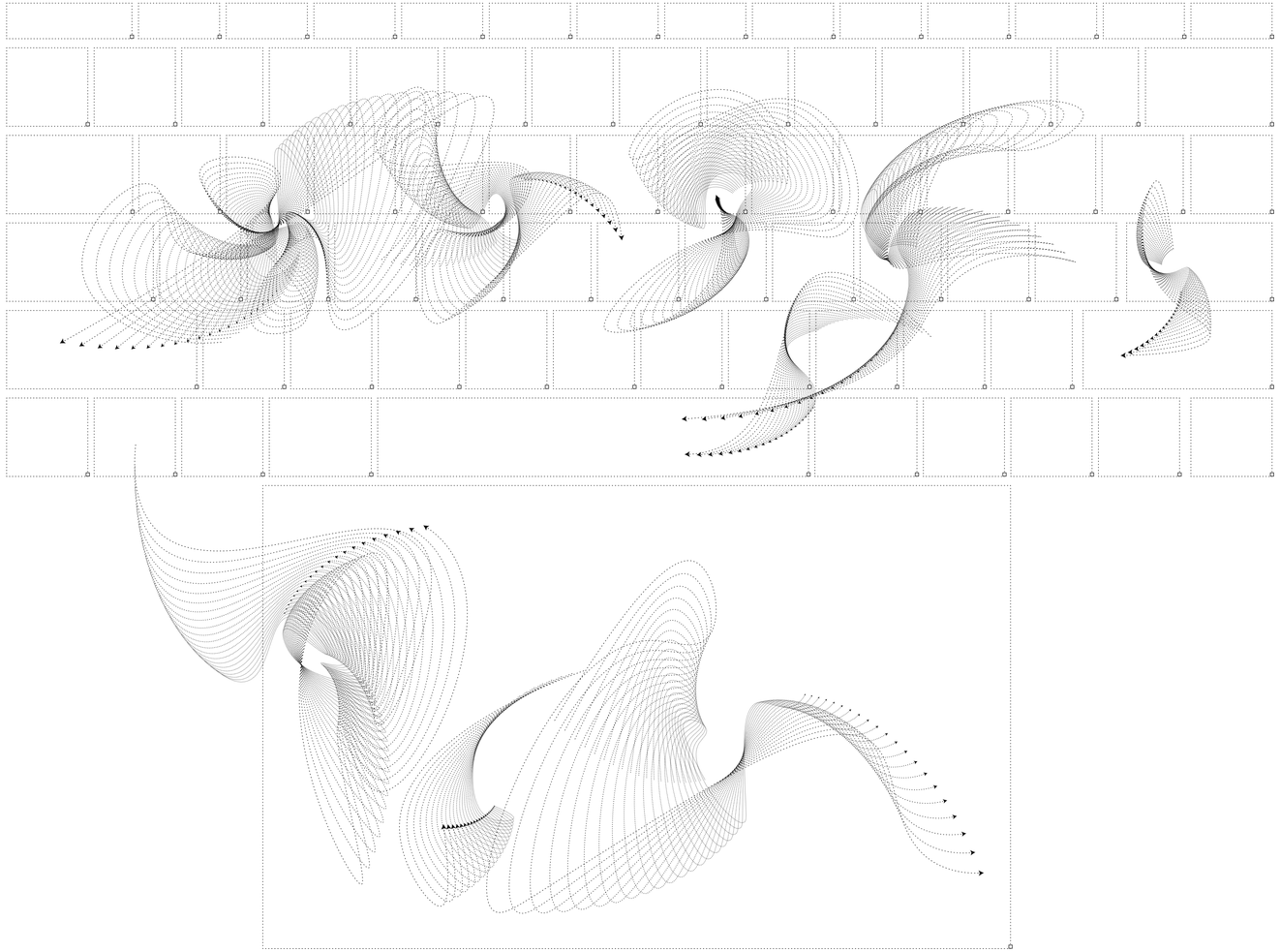


trace produced by writing

In handwriting, the traces directly reflect the movement of the hand, allowing personality to be observed. Therefore, through experiments, an attempt is made to observe whether the action leaves readable information.

Handwriting leaves unique and distinctive marks that can be clearly seen directly
The standardization and consistency of keyboard output have led to the disconnection between gestures and traces, blurring individuality





Findings

In handwriting, gestures vary significantly and directly produce expressive traces

In typing, gestures become repetitive and standardised

The connection between gesture and meaning becomes weaker

Gesture alone is no longer sufficient to understand individuality.

Experiments

Part2

Temporal layer

Since gesture alone becomes less informative in typing, I further investigate rhythm and pauses as residual traces of individuality.

The top layer represents the final output on the screen.
The middle layer visualises the temporal structure of typing.
The bottom layer represents the physical gestures of typing.

Individuality is no longer visible in a single gesture, but distributed across time, action, and system output.