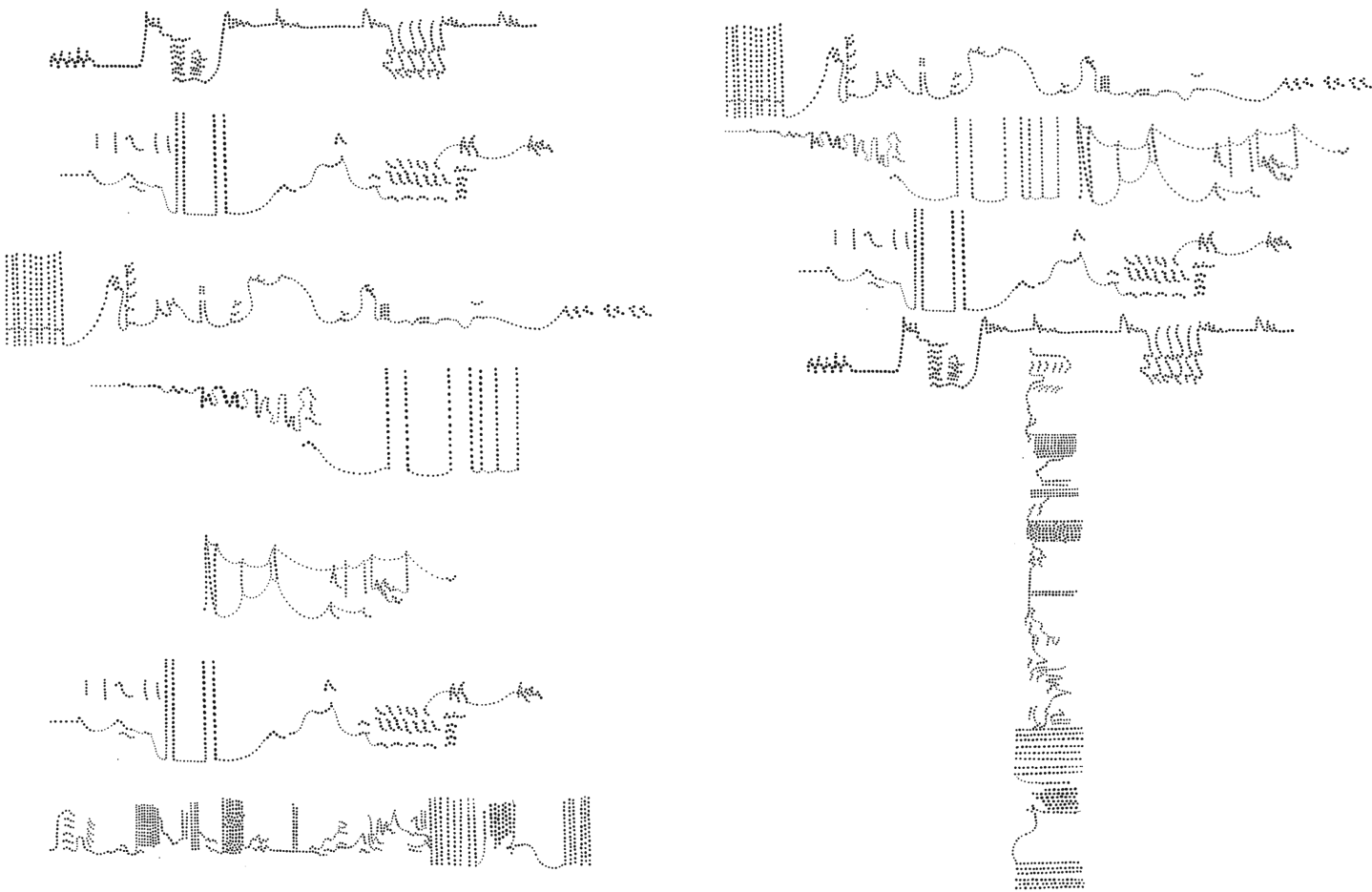

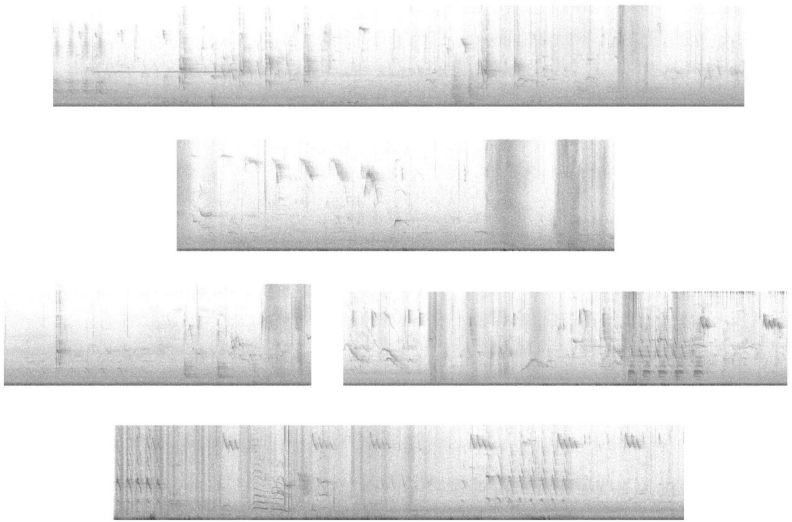

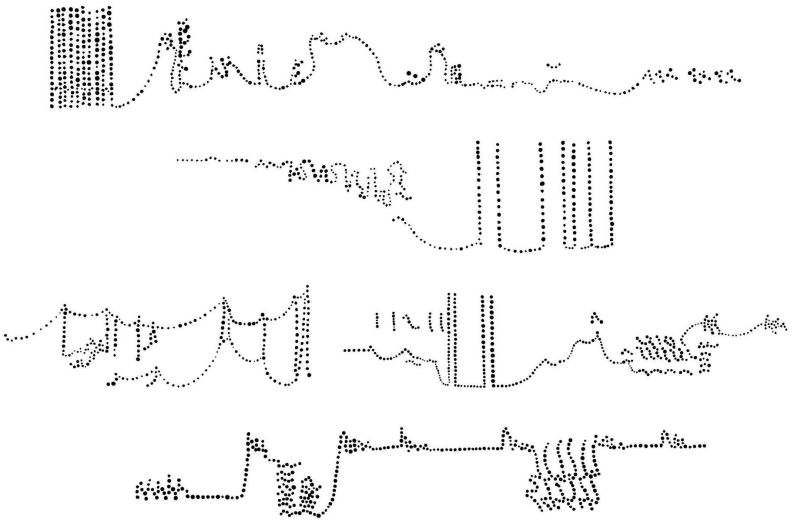

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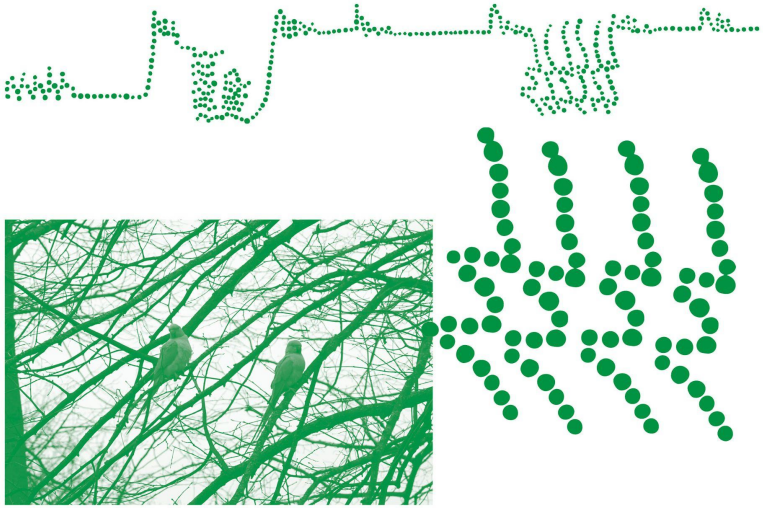


RINGED-NECK PARAKEET

(1)

EUROPEAN STARLING

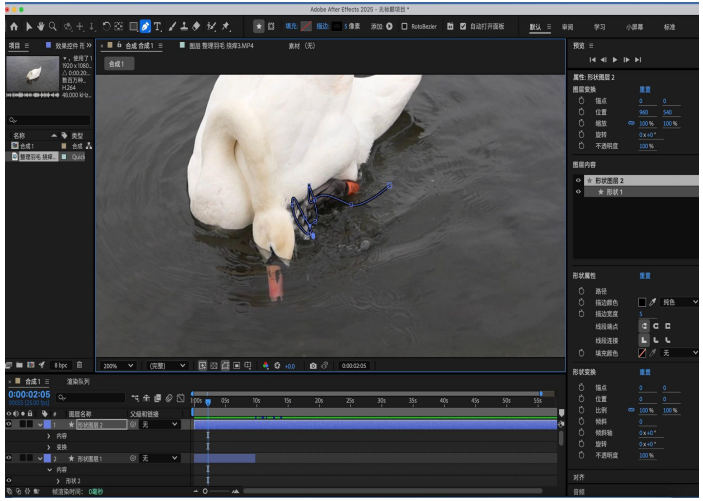
Focusing on Bird Flight Trajectories Specifically Helps Deaf Birdwatchers

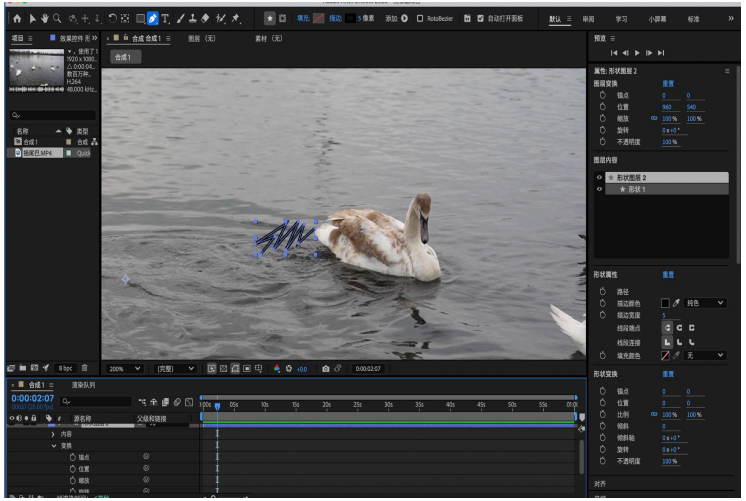
Reason:

1. Highlighting Distinct Flight Patterns for Easier Identification.
2. Flight Trajectories Are Strong Behavioral Indicators
3. Watching flight patterns also allows for an immersive, real-time experience of bird behavior, making the activity more engaging.

Bird Motion Trajectories

1.Wings 2.Head 3.feets 4.tail

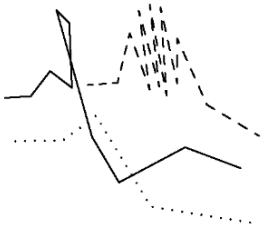




Bird Motion Trajectory Diagram

Head
Wings
Feet

Go ashore

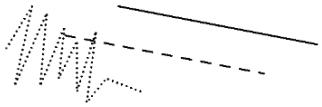


Head
Wings
Feet

Dabble

Head
Wings
Tail

Wag the tail



Head
Wings
Tail

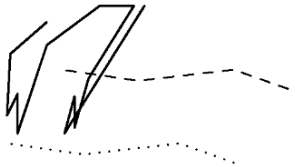
Groom itself

Head
Wings
Feet

Preen its head

Head
Wings
Feet

Peck at the ground

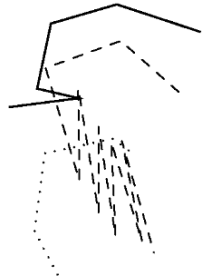


Head
Wings
Tail

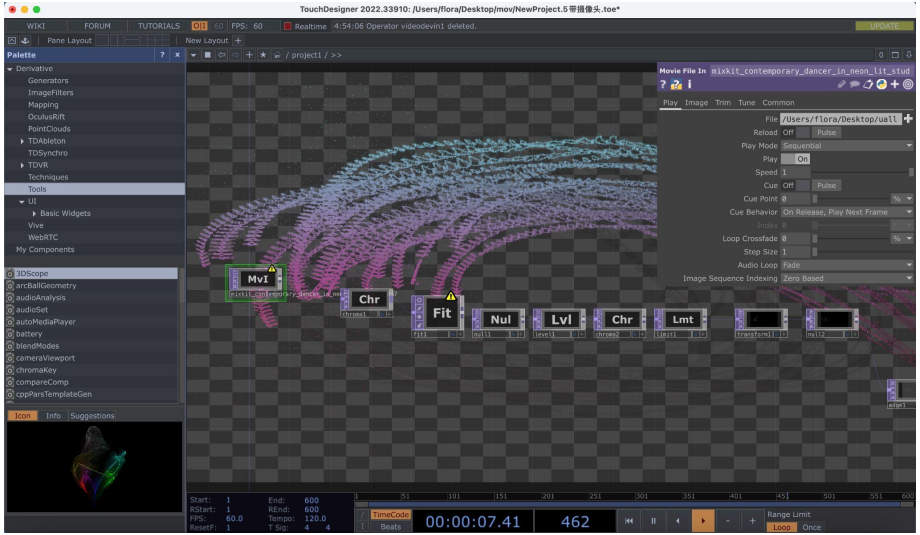
Flap its wings

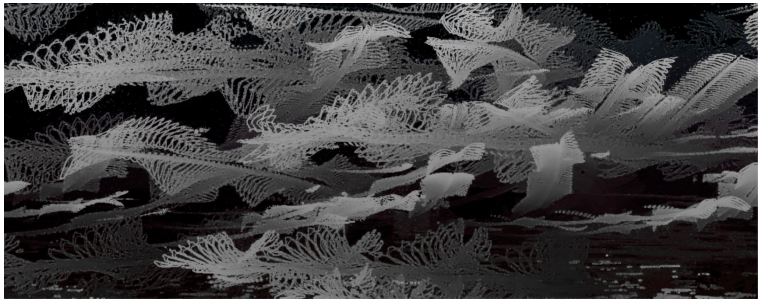
Head
Wings
Tail

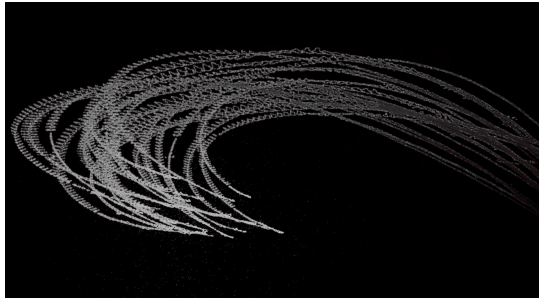
Enter the water



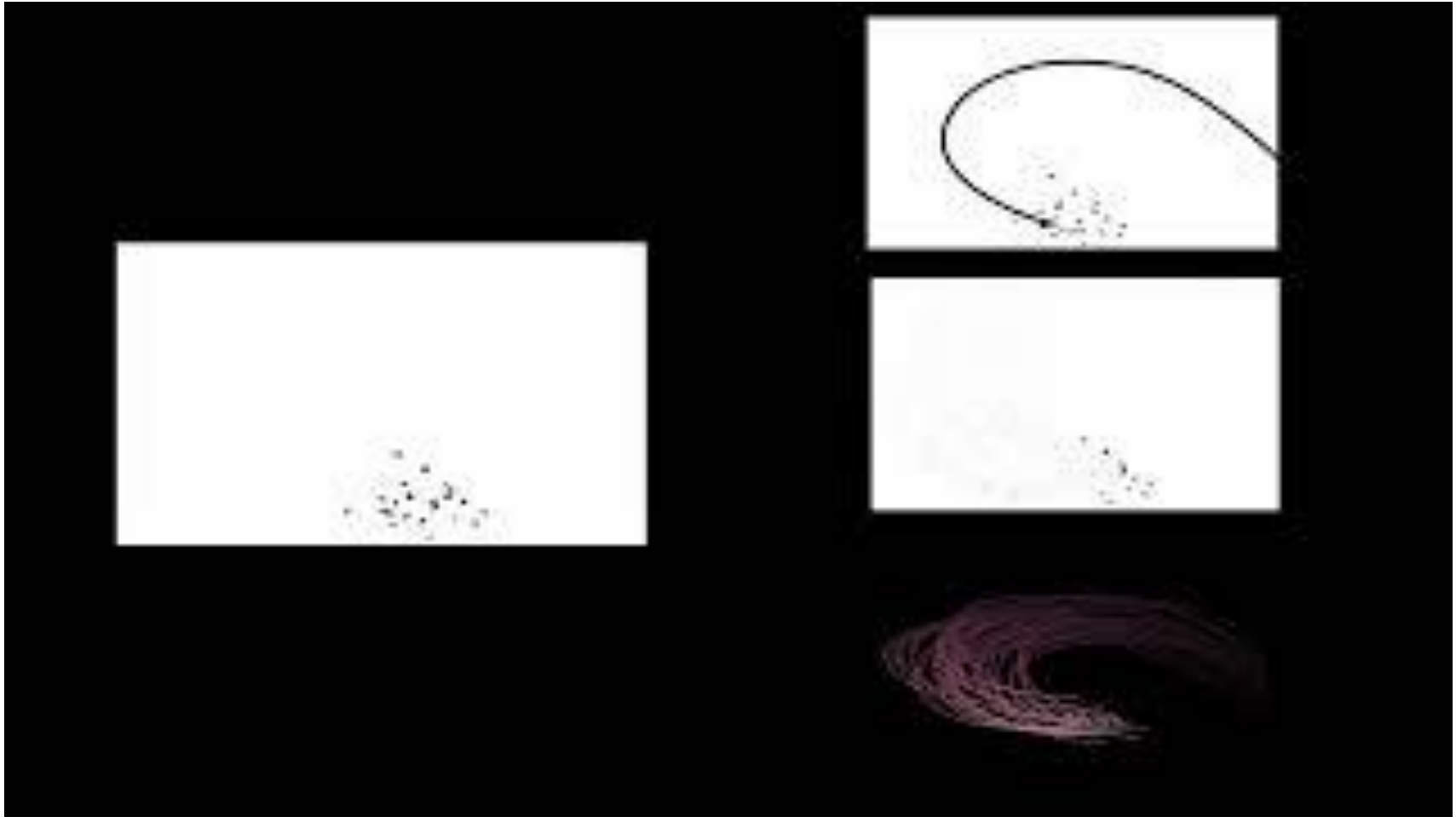
Bird Flight Trajectories



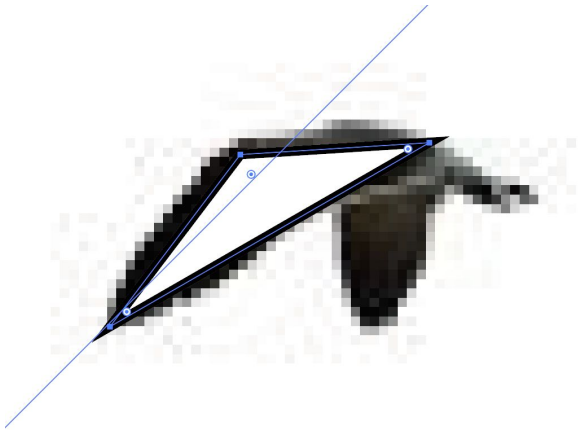


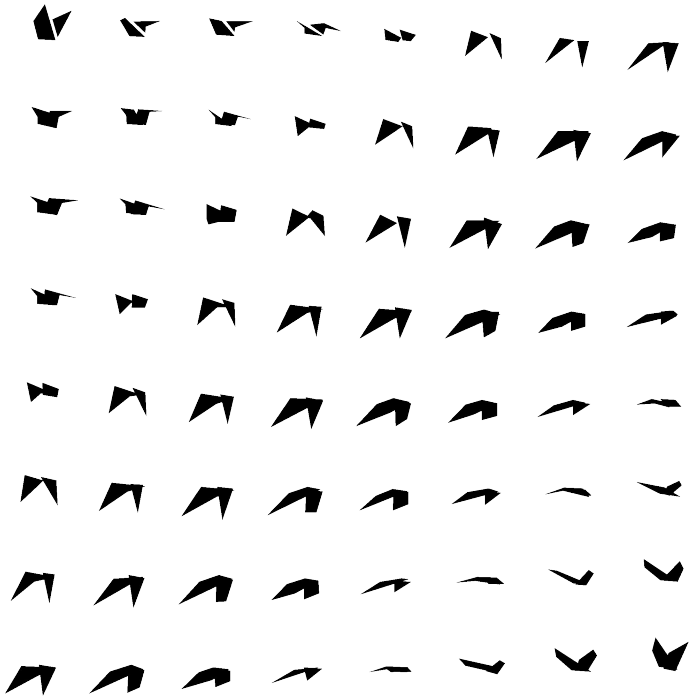


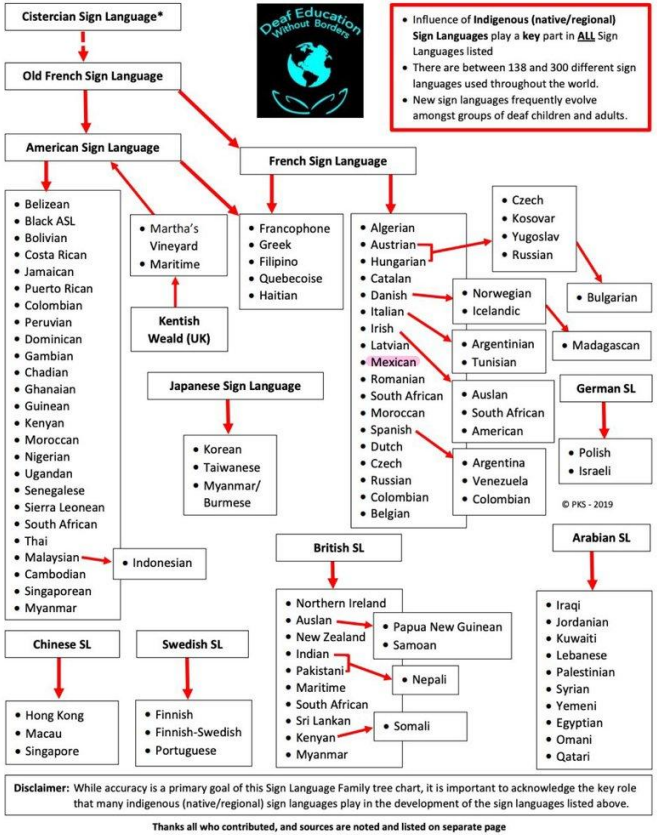
Bird Flight Trajectories



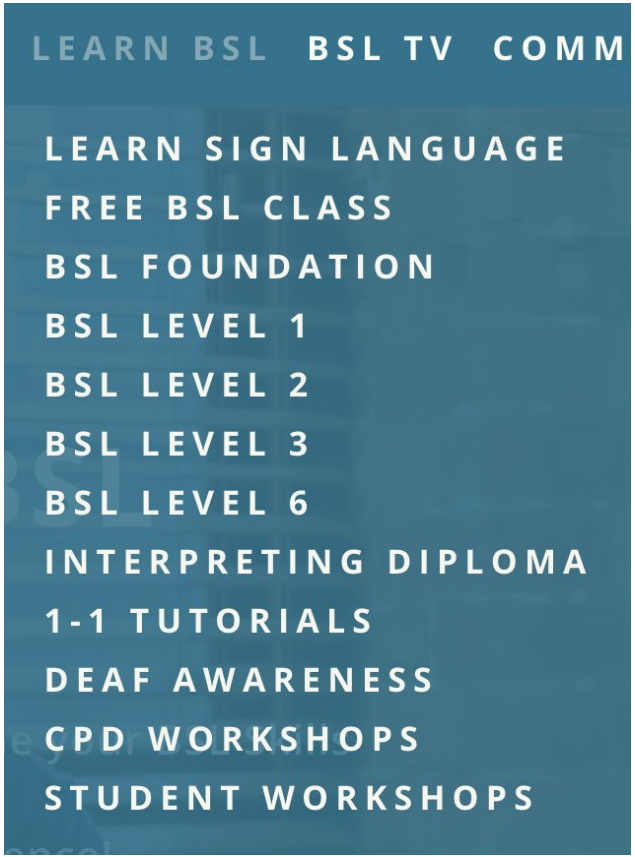
Geometric Abstraction of Bird wings





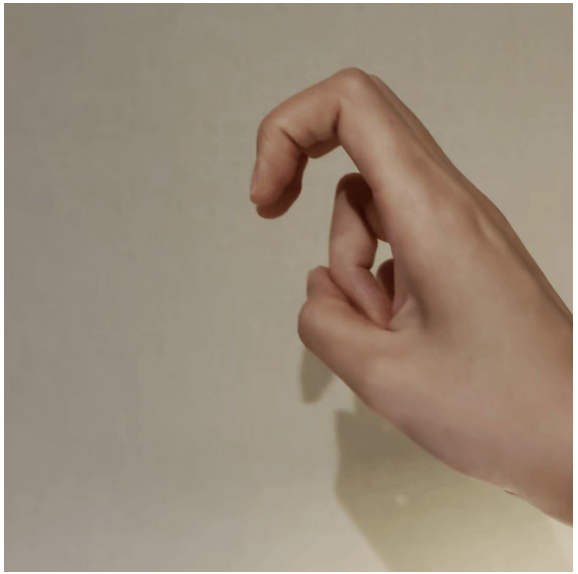


Sign language family tree



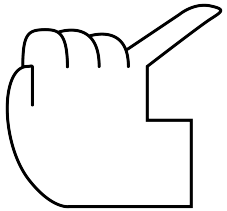
Sign language course level

Connection

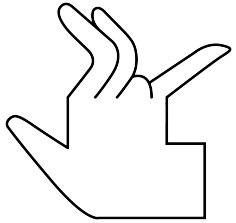


Connection

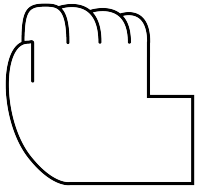
Dive



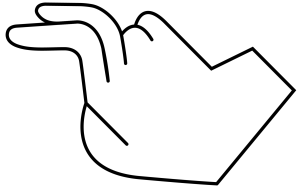
Spread the wings



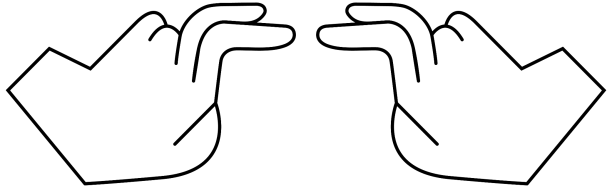
Tidy the feather



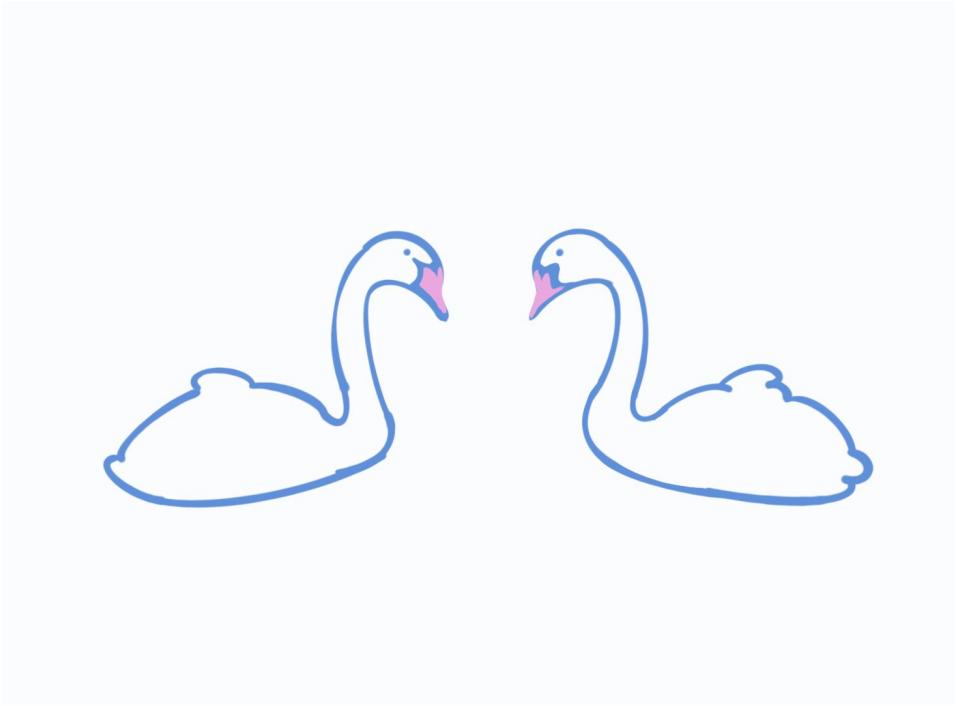
Stand



Fight



Comic Strip



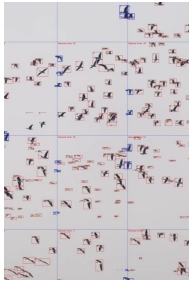
Recap

Finding birds – Mapping active areas

1. Hearing people typically don't conduct any research before bird watching because they can tell where the birds are just by listening to their sounds. As a result, deaf persons require a map guide to help them observe birds.

2.Even though birding is mostly a visual experience, many guides overemphasize song signatures while ignoring bird behavior, feather patterns, and flight patterns.

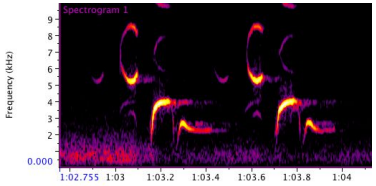
3.Make use of color coding, sign language symbols, and easily comprehensible icons. in order to guarantee effective information delivery.



Part 1
Map

Part 2
Sound Visualization

Experiencing bird songs – Visualizing sound

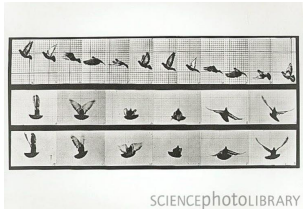


Sound plays a large role in finding birds but also plays a role in the joy of bird watching for many. Whilst data driven spectograms are readily available for deaf people to literally see sound, there is a lack of visualisations that adopt a more poetic and joyful approach to sound visualisation. Therefore we aimed to bring this back through experimentation.

Part 3
Movement

Observing Bird Movements – Visualizing Flight Trajectories

1. Highlighting Distinct Flight Patterns for Easier Identification.
2. Flight Trajectories Are Strong Behavioral Indicators
3. Watching flight patterns also allows for an immersive, real-time experience of bird behavior, making the activity more engaging.



Part 4
Communicating

Communicating – Using sign language for birding

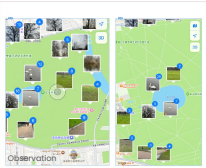
Sign language family tree

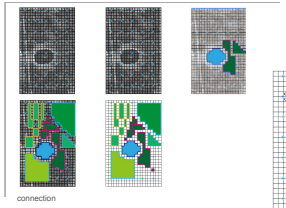
Sign language course level

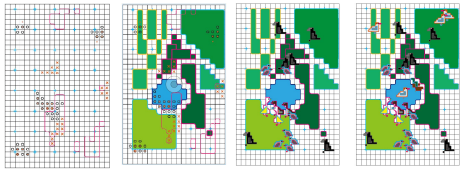
The system of sign language is vast and complex, with many levels of courses required for learning, which means it has a certain entry barrier.

Therefore, We were thinking—could we create a new set of birdwatching communication gestures to help bring together deaf people from different backgrounds, and even hearing people?

Experiments

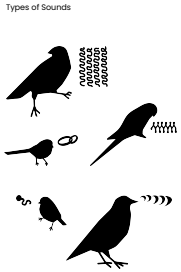


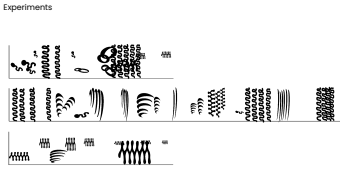


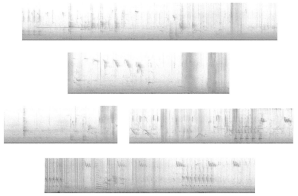


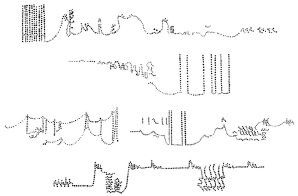
Part 1
Map

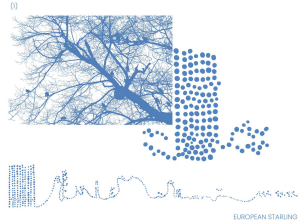
Part 2
Sound Visualization



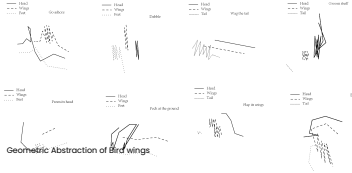


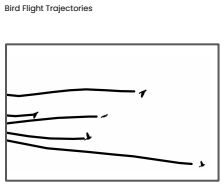


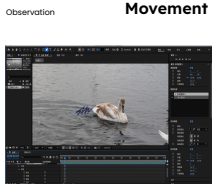


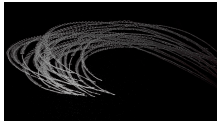


Part 3
Movement

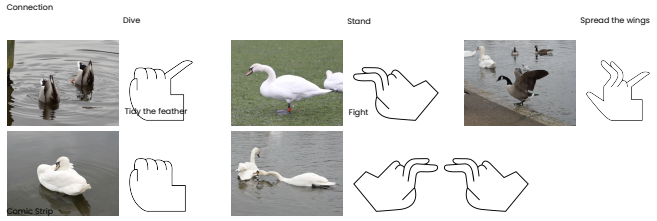


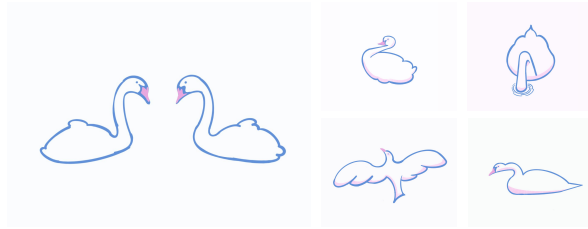




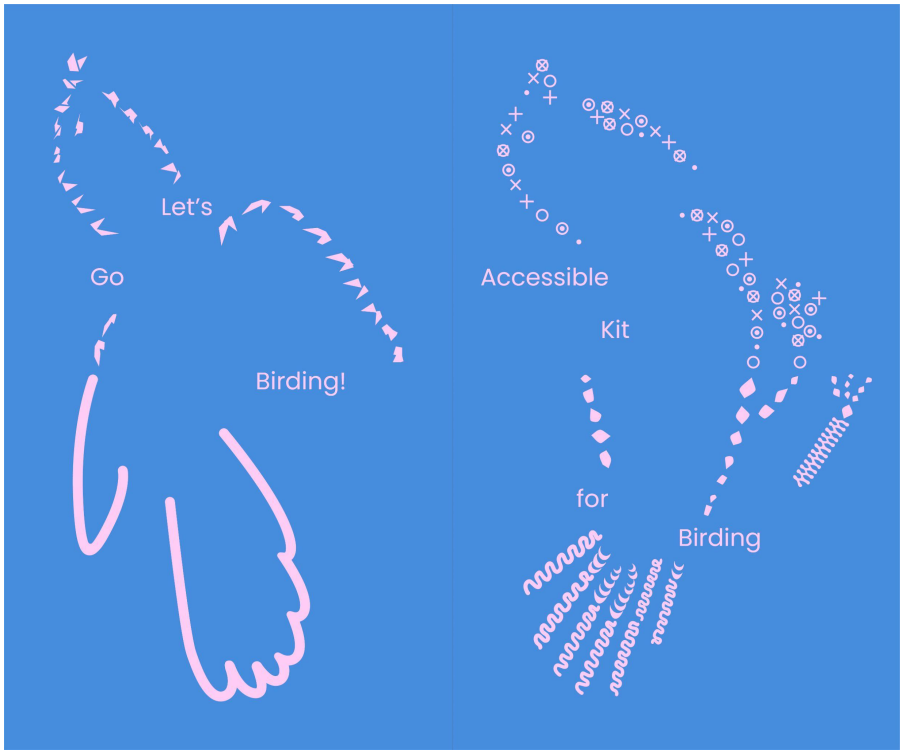


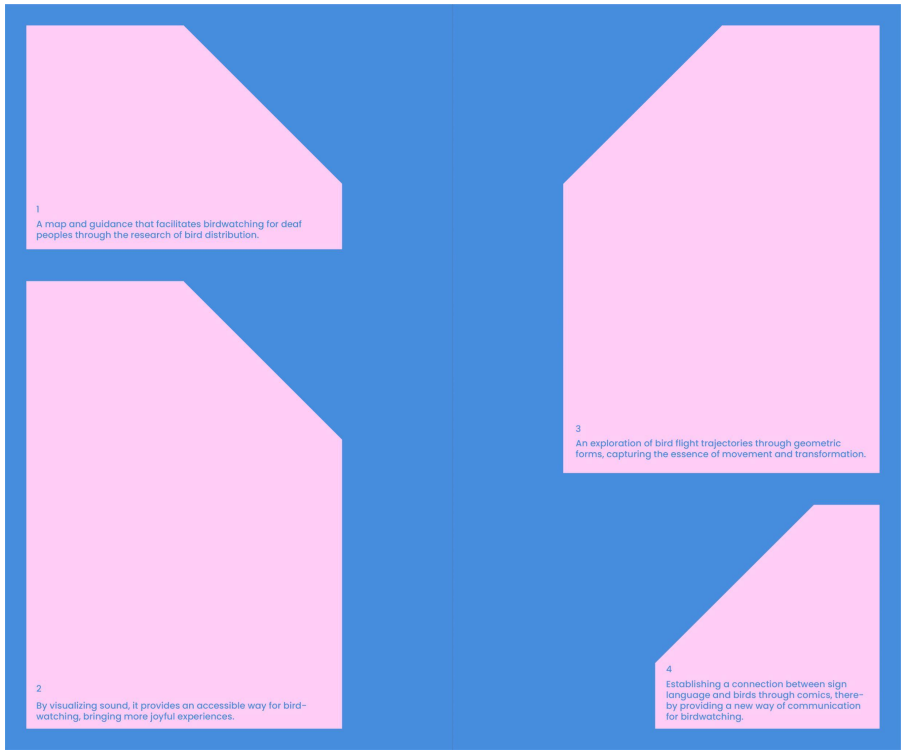
Part 4
Communicating





Kit


Let's
Go
Birding!
Accessible
Kit
for
Birding


1
A map and guidance that facilitates birdwatching for deaf peoples through the research of bird distribution.
2
By visualizing sound, it provides an accessible way for bird-watching, bringing more joyful experiences.
3
An exploration of bird flight trajectories through geometric forms, capturing the essence of movement and transformation.
4
Establishing a connection between sign language and birds through comics, thereby providing a new way of communication for birdwatching.

Pocket 1

A map and guidance that facilitates birdwatching for deaf peoples through the research of bird distribution.

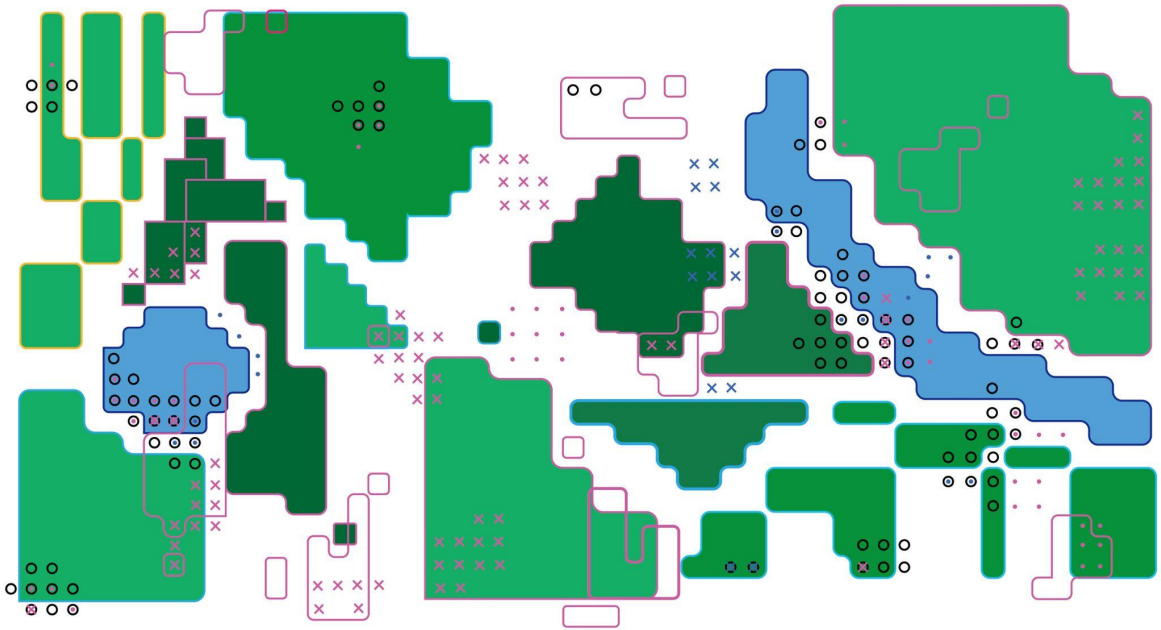
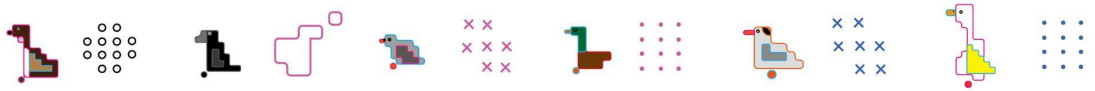
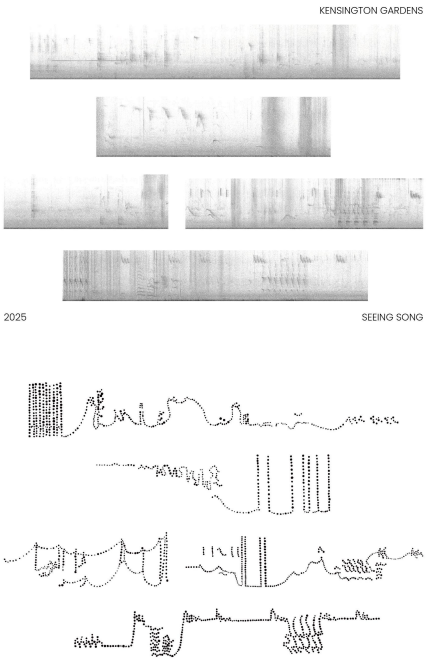


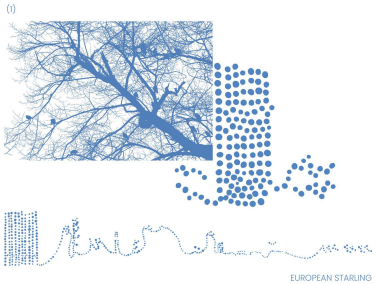
Figure Legends

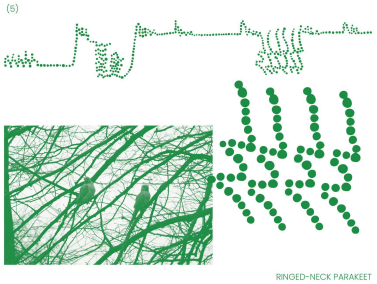


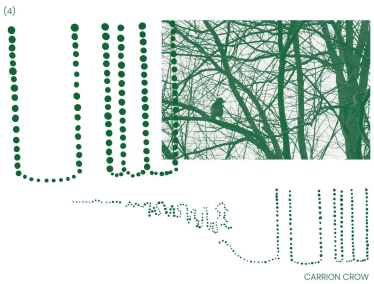
Pocket 2

By visualizing sound in a less data driven way, it provides a more joyful and accessible way of enjoying birdwatching as a joyful experience.







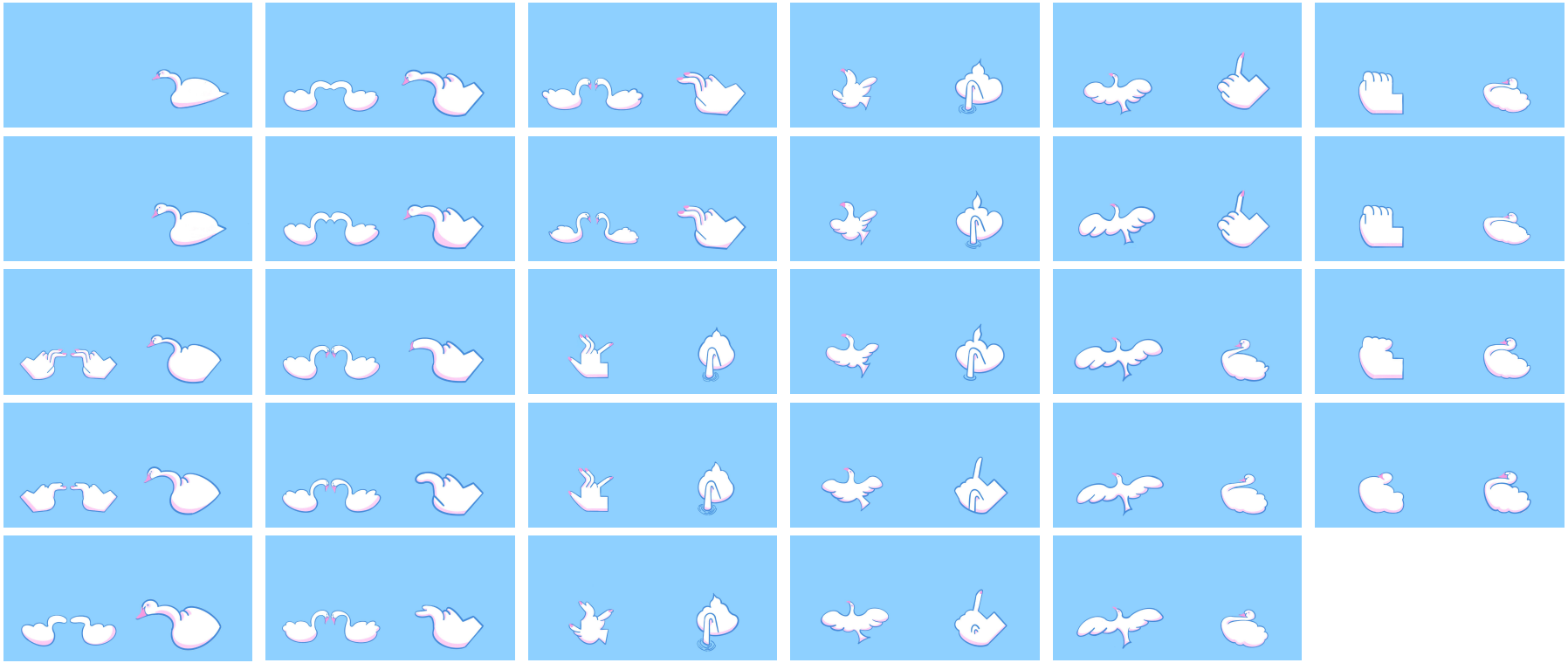


Pocket 3

An exploration of bird flight trajectories through geometric forms, capturing the essence of movement and transformation.

Pocket 4

Establishing a connection between sign language and birds through comics, thereby providing a new way of communication for birdwatching.



Next Steps

Expand Kit Content .(Add more tools to enhance the birdwatching experience for Deaf people)

Conduct field testing with real Deaf birdwatchers to get direct feedback and improve the kit's usability.

Expand of each of parts in kit.

Evaluation

Lack of Real User Testing

We have not yet conducted testing with actual Deaf birdwatchers. Without real user feedback, it's difficult to assess how effectively the kit meets the needs of the Deaf community.

Incomplete Coverage of Bird Behaviors

While flight patterns and certain behaviors are covered, other important bird behaviors are not.