

# OctoPocus

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# Overview

- 1 Introduction to the original paper
- 2 Own implementation
- 3 Live demo

# Original Paper: Core Ideas

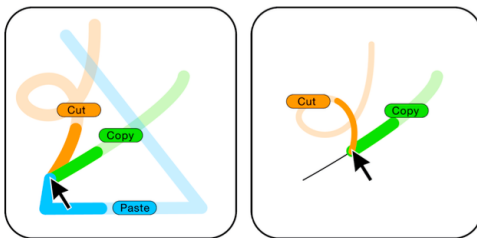


Figure: Left: Feedforward, Right: Feedforward and Feedback

- User can execute gestures dynamically in different directions

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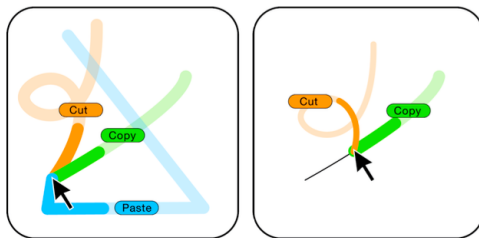


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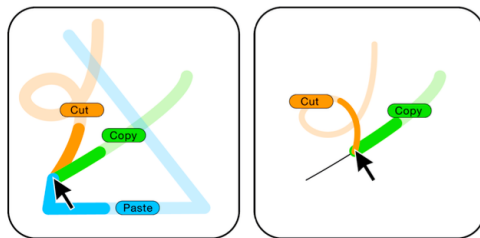


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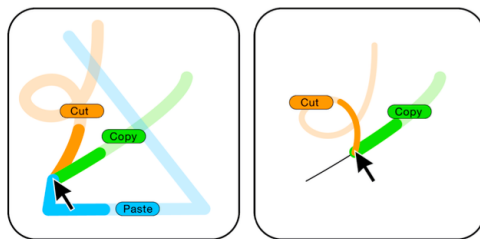


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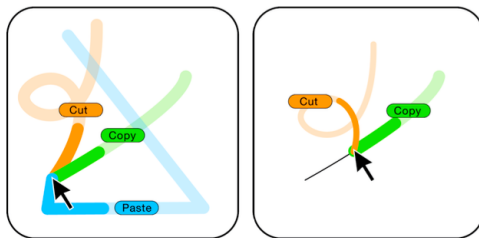


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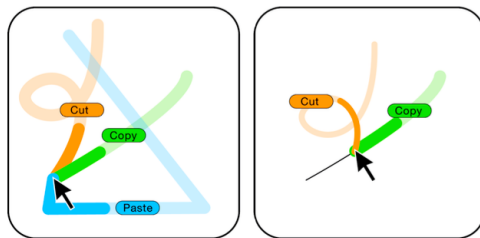
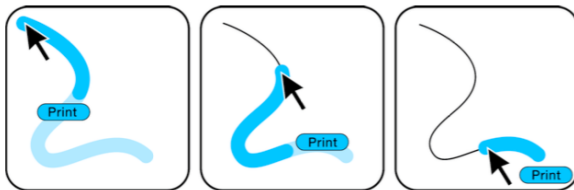


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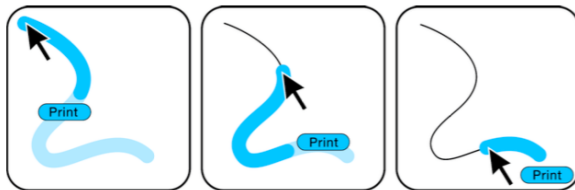


# Feedforward mechanism



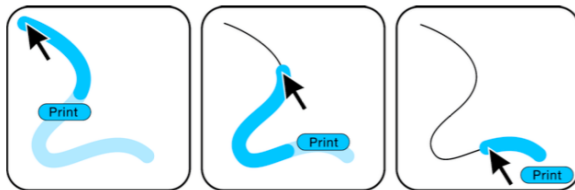
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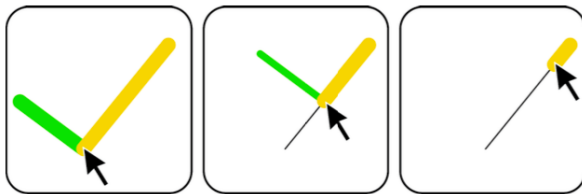
- Gives the user an impression of the gesture's shape and the related command
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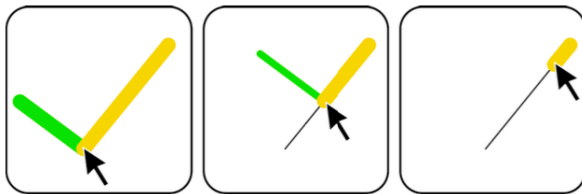
- Gives the user an impression of the gesture's shape and the related command
- Each template gesture has a prefix starting at the cursor and marking a small part of the whole gesture in a deep color, the rest has the same but translucent color
- The associated command is shown at the end of the prefix

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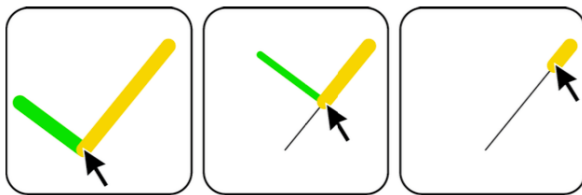
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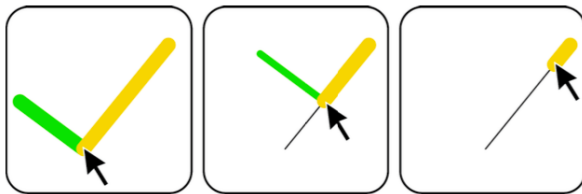
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- The consumable error rate is also mapped onto the thickness of the gesture

# Novice or Expert?

Novice version:

- All paths are displayed by doing a long click



# Novice or Expert?

Novice version:

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Expert version:

- No paths are displayed

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- Novice and Expert mode

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⇒ Occlusion problems when paths are spread into all directions
- One path is provided for the user to create his own gesture paths, replacing it with the old ones

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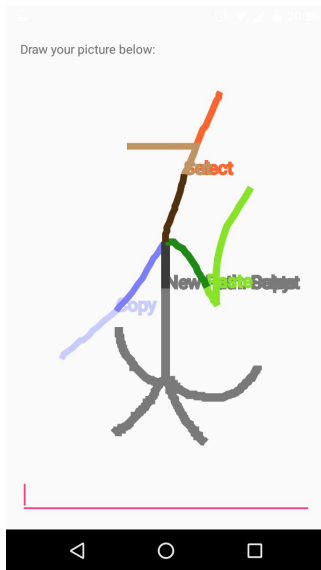
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- Finding the right thresholds:
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  - Solution: Doing error calculation only in the area close to the finger
- Occlusion:
  - All paths point into different directions by default
  - Solution: Default paths can be modified by the “New Path “function, e.g. if the user is right-handed, he can draw all paths from the lower right to the left, upperleft and top direction



# Live Demo





Olivier Bau & Wendy E. Mackay (2008)

Title of the publication

*OctoPocus: A Dynamic Guide for Learning Gesture-Based Command Sets*