

# **Chinese Whispers**

semiotically mediating between idea and program

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# How to make our ideas clear?

Charles S. Peirce

**beauty**

**computability**

**aesthetics**

**algorithmics**

**vagueness**

**precision**

learning is a process from vague idea to precise description.

learning needs metaphor.

vague ideas  
precise descriptions  
metaphors

**sign**

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**sign function**

presentation  
re-presentation  
interpretation

## **human-centricness**

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programming as a semiotic activity

technical issues of programming hidden in a visual metaphor

## algorithmic sign

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read by processor: **precise determination of meaning**

read by human: **vague interpretation of meaning**

we deliberately use an alienating, childish metaphor  
a visualization that is obviously metaphorical.

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we offer the metaphor  
not to explain, but to be used for a while, then thrown away.

## **learning**

makes metaphor superfluous

transforms metaphorical into technical terms



## **end user programming as a sign process**

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syntactic precision (processor): instruments

pragmatic interpretation (human): media