Restricted Iconicity: Examining the Impact of One-Sided Iconicity on Communication

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Background

- The term iconicity in linguistics refers to the phenomenon where **communicative signs resemble, or are motivated by, their meaning** (Dingemanse et al., 2020). Onomatopoeia in English, and the figure below, are examples of iconicity.

Figure 1—When tasked with communicating this image (right) using a color, participants overwhelmingly chose pink (Roberts and Clark, 2020). The sign (the color pink) is iconic because it resembles its meaning (the flamingo).

- Iconicity appears at the very beginning of communication systems, providing a **common ground between speakers** and aiding the **comprehension of new signs** (Perlman et al., 2015).
- Experiments have found evidence that iconicity can **aid pairs** in establishing new communication systems and **aid individuals** in recognizing and learning new signs (Perlman et al., 2015).
- However, there has been scarce attention in the academic literature devoted to **iconicity restricted to the Sender**: do the benefits of iconicity hold even if the iconicity is not apparent to the Receiver?

Research Question

To what extent does iconicity aid communicative success when only available to the sender?

Proposed Experiment

- Based on **communication game involving color** (Roberts and Clark, 2020).
- Two participants are involved: one participant **(the Sender)** attempts to communicate a randomly chosen black and white fruit or vegetable **(the Referents)** using a trackpad for the other participant **(the Receiver)** to guess. Both what the Sender chooses and what the Receiver sees varies by condition.
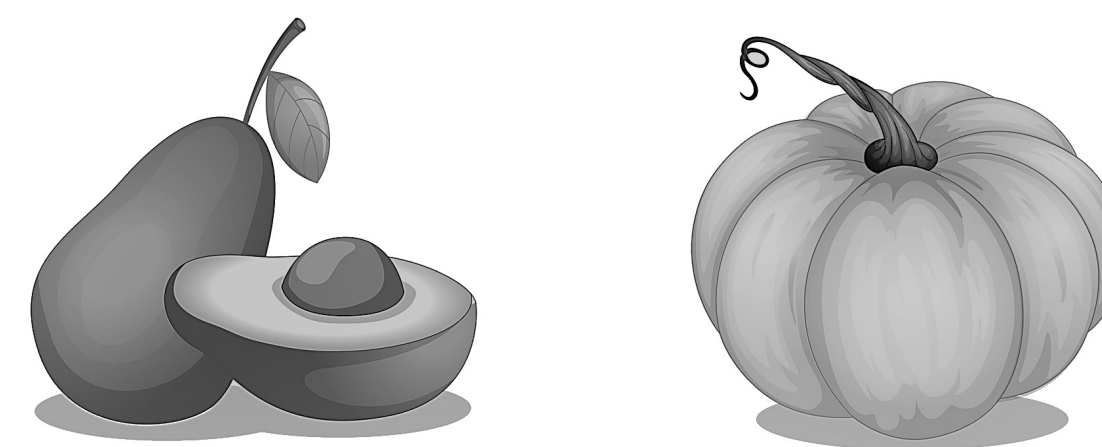

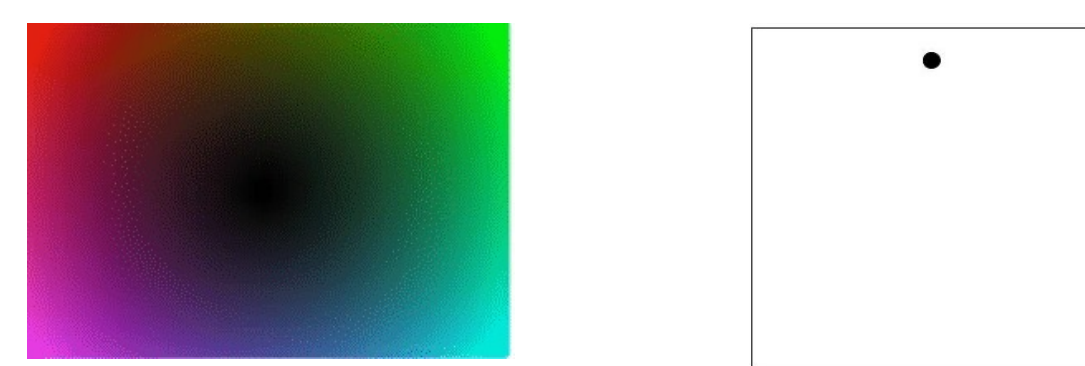*Figure 2—Example referents (above)*

Figure 3—Color spectrum used (above left). Sample dot position (above right).

Proposed Experiment cont.

- **Three conditions**: varying the media with which the Sender and Receiver communicate:

Conditions:	Sender Selects:	Receiver Sees:
1. High-iconicity	color	color
2. Low-iconicity	cursor position	corresponding dot position
3. One-sided iconicity	color	corresponding dot position

Figure 4—Chart of potential conditions in trial (above)

- In the one-sided iconicity condition, the Sender is **unaware** that their color selection is transformed and sent as a dot position

References

Dingemanse, M., Perlman, M., & Perniss, P. (2020). Construals of iconicity: experimental approaches to form–meaning resemblances in language. *Language and Cognition, 12*(1), 1-14.

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Roberts, G. and Clark, R. (2020) Dispersion, communication, and alignment: An experimental study of the emergence of structure in combinatorial phonology. Journal of Language Evolution 5(2): 121–139.