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## A Neo-Peircean Framework for Experimental Semiotics

In experimental semiotics, how signs are characterised is a primary concern. Some new terminology is surfacing to deal with the nuanced nature of iconicity (e.g. absolute and relative iconicity, Monaghan et al., 2014). However, existing Peircean terminology that provides a more nuanced framework is currently underrepresented in the literature.

Much of the experimental semiotics literature (see Galantucci and Garrod, 2010, for a review) focusses on the relationship between sign and object (symbol, index and icon), taking the focus away from communication (Short, 2007). We reintroduce two types of Peircean sign, *sinsigns*, (single instances of a sign tied to a context of use), and *legisigns* (conventions) (Peirce, 1955). Sinsigns may be tied to legisigns as *replicas*, or be one off signs. These terms can further be combined with the notions of symbol, index and icon.

Garrod et al. (2007) argued that icons evolve into symbols via interaction. In their pictionary task, participants started by producing iconic sinsigns, but in Peircean terms, signs retained iconicity after interaction but became legisigns. The establishment of legisigns may initially have no effect on the production of iconic sinsigns. However, as a legisign becomes increasingly significant, a sinsign might lose iconicity, without its iconicity necessarily disappearing entirely.

In Little et al. (2016), participants used a continuous signalling space (pitch) to describe a continuous meaning space (size). The paper argued that mappings between continuous spaces were iconic strategies (e.g. participants making high-pitched signals for small referents). However, in Peircean terms, size-pitch mappings could occur for different reasons. It could be because small things typically make high noises (making the sign an iconic sinsign), or it could be an iconic legisign, established by convention via the aforementioned relationship, or it could be an symbolic legisign if there is no reason for high noises to be related to small referents.

In experimental semiotics, there is also a trend to measure iconicity by getting naive participants to pair signs with their intended meanings (Garrod et al., 2007; Perlman et al., 2015). However, methods such as these can only separate iconic sinsigns from other types of sign.

With this contribution, we aim to argue that Peirce established an underused nuanced framework that we can use to understand new results in experimental semiotics. Using a neo-Peircean framework, we will review the examples above, as well as others from the current literature.

## References

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