Priest (1994) gives even firmer evidence to the similarity between the paradoxes of self-reference by showing that they all fit into what he originally called the *Qualified Russell’s Schema*, now termed the *Inclosure Schema*. The idea behind it goes back to Russell himself (1905) who also considered the paradoxes of self-reference to have a common underlying structure. Given two predicates predicates PP and QQ, and a possibly partial function δδ, the Inclosure Schema consists of the following two conditions:

1. w={x∣P(x)}w={x∣P(x)} exists and Q(w)Q(w) holds;
2. if yy is a subset of ww such that Q(y)Q(y) holds then:
   1. δ(y)∉yδ(y)∉y,
   2. δ(y)∈wδ(y)∈w.

If these conditions are satisfied we have the following contradiction: Since ww is trivially a subset of ww and since Q(w)Q(w) holds by condition 1, we have both δ(w)∉wδ(w)∉w and δ(w)∈wδ(w)∈w, by 2a and 2b, respectively. Thus any triple (P,Q,δ)(P,Q,δ) satisfying the Inclosure Schema will produce a paradox. Priest shows how most of the well-known paradoxes of self-reference fit into the schema. Below we will consider only a few of these paradoxes, starting with Russell’s paradox. In this case we define the triple (P,Q,δ)(P,Q,δ) as follows:

* P(x)P(x) is the predicate “x∉xx∉x”.
* Q(y)Q(y) is the universal predicate true of any object.
* δδ is the identity function.

Then ww in the Inclosure Schema becomes the Russell set and the contradiction obtained from the schema becomes Russell’s paradox.

In the case of Richard’s paradox we define the triple by:

* P(x)P(x) is the predicate “xx is a real definable by a phrase in English.”
* Q(y)Q(y) is the predicate “yy is a denumerable set of reals definable by a phrase in English.”
* δδ is the function that maps any denumerable set yy of reals to the real zz whose nnth decimal place is 1 whenever the nnth decimal of the nnth real in yy is 0; otherwise 0. (Any enumeration of the elements in yy will do.)

Here w={x∣P(x)}w={x∣P(x)} becomes the set of all reals definable by phrases in English. For any denumerable subset yy of w,δ(y)w,δ(y) is a real that by construction will differ from all reals in yy (it differs from the nnth real in yy on the nnth decimal place). Letting yy equal ww we thus get δ(w)∉wδ(w)∉w. However, at the same time δ(w)δ(w) is definable by a phrase in English, so δ(w)∈wδ(w)∈w, and we have a contradiction. This contradiction is Richard’s paradox.

The liar paradox also fits Russell’s schema, albeit in a slightly less direct way:

* P(x)P(x) is the predicate “xx is true.”
* Q(y)Q(y) is the predicate “yy is definable.”
* δ(y)δ(y) is the sentence “this sentence does not belong to the set yy.”

Here w={x∣P(x)}w={x∣P(x)} becomes the set of true sentences, and δ(w)δ(w) becomes a version of the liar sentence: “this sentence does not belong to the set of true sentences”.

From the above it can be concluded that all, or at least most, paradoxes of self-reference share a common underlying structure—independent of whether they are semantic, set-theoretic or epistemic. Priest (1994) argues that they should then also share a common solution. Priest calls this the *principle of uniform solution*: “same kind of paradox, same kind of solution.” Whether the Inclosure Schema can in full generality count as a necessary and sufficient condition for self-referential paradoxicality is however disputable (Slater, 2002; Abad, 2008; Badici, 2008; Zhong, 2012, and others), hence not all authors agree on the principle of uniform solution either.

The [Sorites paradox](https://plato.stanford.edu/entries/sorites-paradox/) is a paradox that on the surface does not involve self-reference at all. However, Priest (2010b, 2013) argues that it still fits the inclosure schema and can hence be seen as a paradox of self-reference, or at least a paradox that should have the same kind of solution as the paradoxes of self-reference. This has led Colyvan (2009), Priest (2010) and Weber (2010b) to all advance a dialetheic approach to solving the Sorites paradox. This approach to the Sorites paradox has been attacked by Beall (2014a, 2014b) and defended by Weber et al. (2014).

self-reference.SEP