Assoc Semantics (cross multiplicity)

Model (M1)

Shopping Cart — Selection — Product

Cross features (if any)

```
assoc Selection {
    end linkedCart: ShoppingCart[0..1];
    end linkedProduct: Product[1..*];}
```

Participant features

Things Being Modeled (M0)

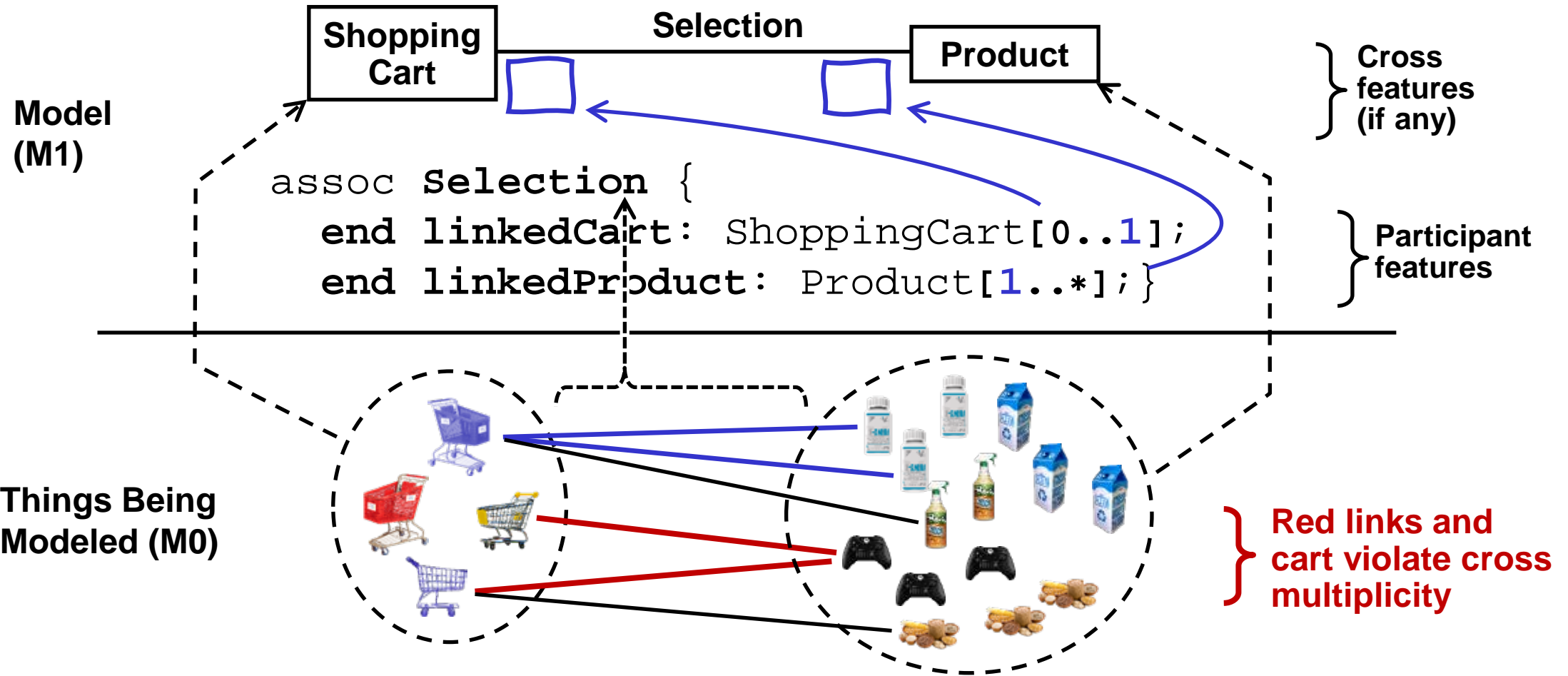Red links and cart violate cross multiplicity

§ **Every cart and product must satisfy cross multiplicity.**
  – **via Selection links.**

SST Assoc Semantics (cross multiplicity)

§ **Informal** text currently.

§ **Applies only to instances of association (links),**
- – **rather than instances of the associated classifiers.**

[7.4.5] if an association end has a multiplicity specified other than 1..1, then this is interpreted as follows: *For each association end, the multiplicity, ordering and uniqueness constraints specified for that end apply to each set of instance of the association that have the same (single) values for each of the other ends.* For a binary association, this corresponds to the multiplicity resulting from "navigating" across the association given a value at one end of the association to the other end of the association.

[8.4.4.5.1] If an associationEnd has a declared multiplicity other than 1..1, then this shall be interpreted as follows: For an Association with N associationEnds, consider the i-th associationEnd e_i. *The multiplicity, ordering and uniqueness constraints specified for e_i apply to each set of instances of the Association that have the same (singleton) values for each of the N-1 associationEnds other than e_i.*

SST Assoc Semantics (cross multiplicity)

Model (M1)

Shopping Cart

Selection

Product

Cross features (if any)

```
assoc Selection {
    end linkedCart: ShoppingCart[0..1];
    end linkedProduct: Product[1..*];}
```

Participant features

Things Being Modeled (M0)

Misses this violation

Catches this violation

Semantics only applies to association instances