Definition (Semigroup right action (preliminary version)). A semigroup **right** action of a semigroup **S** onto a set **A** is a map

Ract:
$$\mathbf{A} \times \mathbf{S} \to \mathbf{A}$$

such that, for all $a \in A$, $\operatorname{Ract}(\operatorname{Ract}(a, x), y) = \operatorname{Ract}(a, x \circ_S y).$