

CONJECTURE 796. $\text{Compl } f = f \setminus^* (\Omega^{\text{Src } f} \times^{\text{RLD}} \top^{\mathfrak{F}(\text{Dst } f)})$ for every reloid f .

By analogy with similar properties of functors described above:

PROPOSITION 797. For composable reloids f and g it holds

- 1°. $\text{Compl}(g \circ f) \supseteq (\text{Compl } g) \circ (\text{Compl } f)$
- 2°. $\text{CoCompl}(g \circ f) \supseteq (\text{CoCompl } g) \circ (\text{CoCompl } f)$.

PROOF.

- 1°. $(\text{Compl } g) \circ (\text{Compl } f) \sqsubseteq \text{Compl}((\text{Compl } g) \circ (\text{Compl } f)) \sqsubseteq \text{Compl}(g \circ f)$.
- 2°. By duality.

□

CONJECTURE 798. For composable reloids f and g it holds

- 1°. $\text{Compl}(g \circ f) = (\text{Compl } g) \circ f$ if f is a co-complete reloid;
- 2°. $\text{CoCompl}(f \circ g) = f \circ \text{CoCompl } g$ if f is a complete reloid;
- 3°. $\text{CoCompl}((\text{Compl } g) \circ f) = \text{Compl}(g \circ (\text{CoCompl } f)) = (\text{Compl } g) \circ (\text{CoCompl } f)$;
- 4°. $\text{Compl}(g \circ (\text{Compl } f)) = \text{Compl}(g \circ f)$;
- 5°. $\text{CoCompl}((\text{CoCompl } g) \circ f) = \text{CoCompl}(g \circ f)$.