The $\boxed{\text{Haskell Functor}}$ picture

$fmap :: (a \to b) \to fa \to fb$
with $f :: * \to *$ (ex: Maybe, $[]$, ...)

Category Hask

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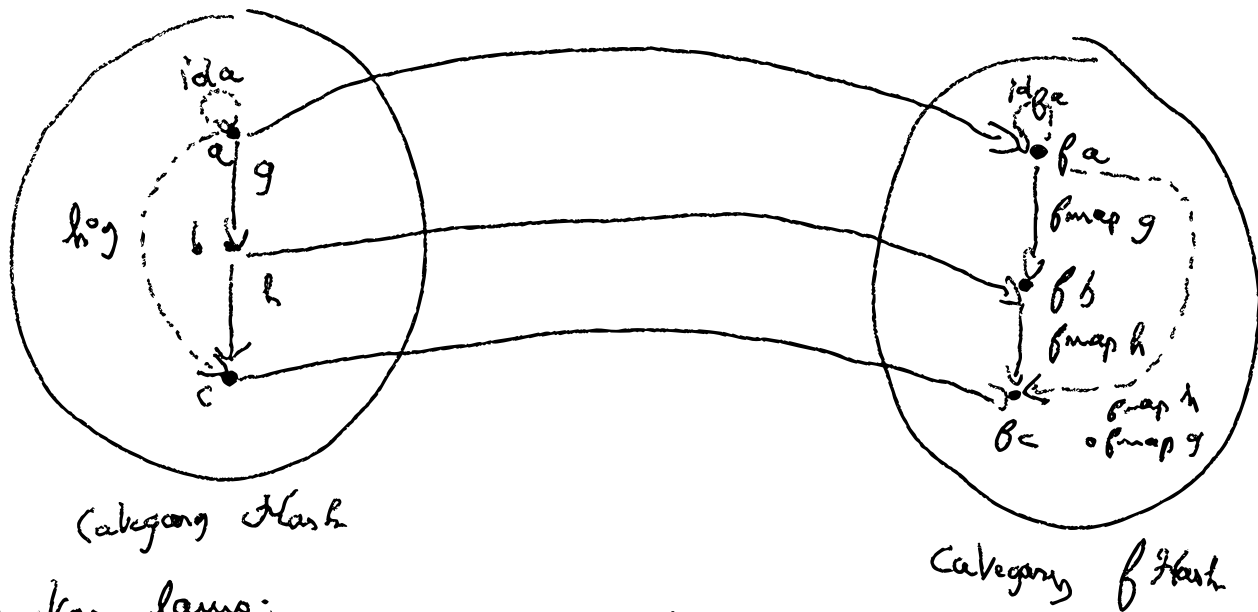
Functor laws:
 identity : $fmap\ g \cdot id_a = id_{fa} \cdot fmap\ g$
 associativity : $fmap\ h \cdot g = fmap\ h \cdot fmap\ g$