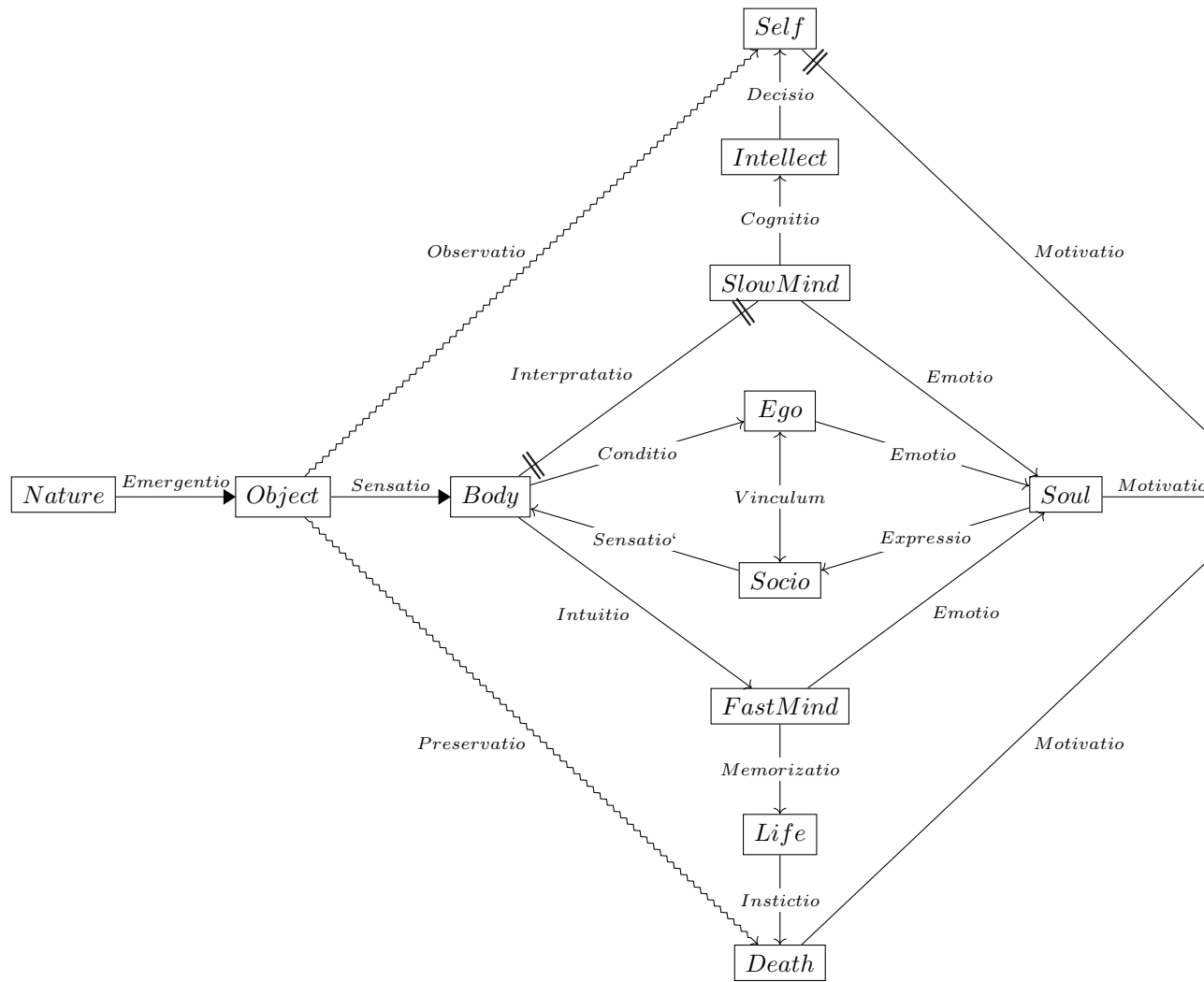


# 1 Notation Versions

| Variable      | Interval      | IEM head | $[restrain_1]:$ | Arrow                      | $: [restrain_1]$ | Arrow end     |
|---------------|---------------|----------|-----------------|----------------------------|------------------|---------------|
| $m$           | $[0, \infty)$ |          | normal          | $>$                        | power-set        | $\rightarrow$ |
| $n$           | $[1, \infty)$ |          | surjective      | $> or \blacktriangleright$ | non-empty        | $\rightarrow$ |
| $1$           | $[1, 1]$      |          | bijective       | $0$                        | functional       | $\rightarrow$ |
| $\varepsilon$ | $[0, 1]$      |          | injective       | $0$                        | partial          | $\rightarrow$ |

| Notation                    | IEM | $[restrain_1]:$ | $: [restrain_1]$ |
|-----------------------------|-----|-----------------|------------------|
| $m : m$                     |     | normal          | power-set        |
| $n : m$                     |     | surjective      | power-set        |
| $1 : m$                     |     | bijective       | power-set        |
| $\varepsilon : m$           |     | injective       | power-set        |
| $m : n$                     |     | normal          | non-empty        |
| $n : n$                     |     | surjective      | non-empty        |
| $1 : n$                     |     | bijective       | non-empty        |
| $\varepsilon : n$           |     | injective       | non-empty        |
| $m : 1$                     |     | normal          | functional       |
| $n : 1$                     |     | surjective      | functional       |
| $1 : 1$                     |     | bijective       | functional       |
| $\varepsilon : 1$           |     | injective       | functional       |
| $m : \varepsilon$           |     | normal          | partial          |
| $n : \varepsilon$           |     | surjective      | partial          |
| $1 : \varepsilon$           |     | bijective       | partial          |
| $\varepsilon : \varepsilon$ |     | injective       | partial          |



$\rightarrow$

$\rightarrow\!\!\rightarrow$

$\hookrightarrow$

$\leftrightarrow$

$\rightarrowtail$

$\leftarrowtail$

$\mathcal{Q}\rightarrow$

$\leftarrow\mathcal{P}$

$\leftarrow\mathcal{P}$  (alternative)

$\leftarrow\mathcal{P}$  (alternative)

$\rightarrow$