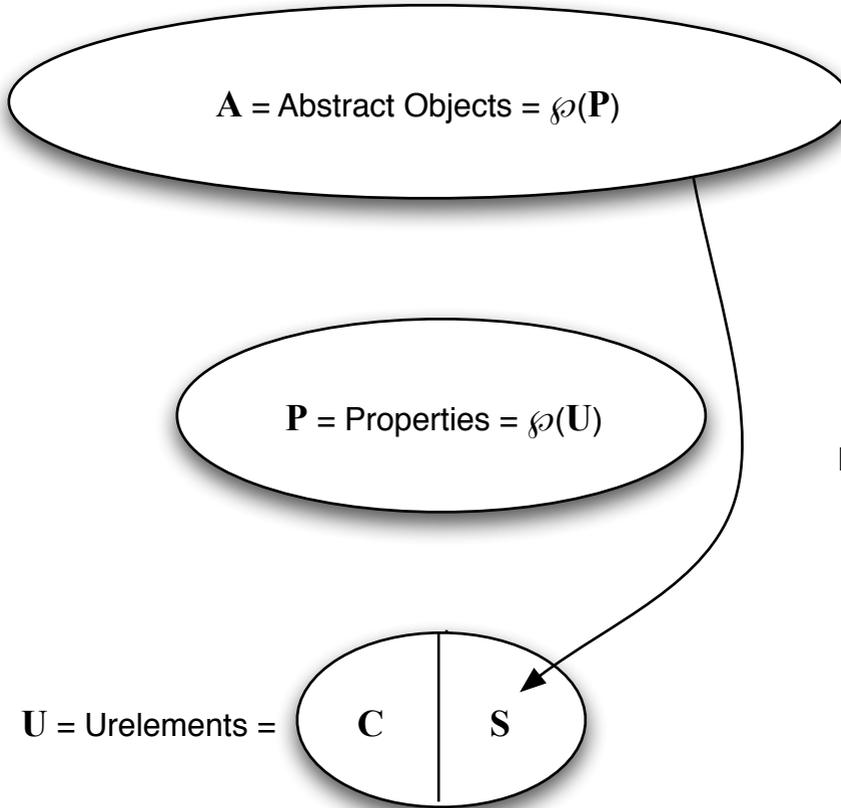


Aczel Model of Object Theory



Define a mapping:

$$\|a\| : \mathbf{A} \rightarrow \mathbf{S}$$

Domain $\mathbf{D} = \mathbf{A} \cup \mathbf{C}$
 Define for $x \in \mathbf{D}$, $\|x\| = \begin{cases} x, & \text{when } x \in \mathbf{C} \\ \|a\|, & \text{when } x \in \mathbf{A} \end{cases}$

Define, for assignment to variables g ,
 $g \models Fx$ iff $\|g(x)\| \in g(F)$
 $g \models xF$ iff $g(F) \in g(x)$

In this model, the following are true:

$$\exists x (A!x \ \& \ \forall F (xF \equiv \varphi))$$

$$\exists F \forall x (Fx \equiv \varphi), \varphi \text{ has no encoding subformulas}$$