Constructor	Syntax	Semantics
negation	`(not C)`	$\Delta^I \setminus C^I$
conjunction	`(and C D)`	$C^I \cap D^I$
disjunction	`(or C D)`	$C^I \cup D^I$
existential restriction	`(some r C)`	$\{x \in \Delta^I \vert \exists y : (x,y) \in r^I \wedge y \in C^I\}$
value restriction	`(all r C)`	$\{x \in \Delta^I \vert \forall y : (x,y) \in r^I \rightarrow y \in C^I\}$
individual assertion	`(instance a C)`	$\{a\} \in C^I$
role assertion	`(related a b r)`	$(a^I, b^I) \in r^I$