

Transitivity:	$X \delta Y \delta Z \rightarrow X \delta Z$	$\delta \circ \delta \subseteq \delta$
Symmetry:	$Y \delta X \rightarrow X \delta Y$	$\delta^{-1} = \delta$
Reflexivity:	$X \delta Y \rightarrow X \delta X \wedge Y \delta Y$	$\delta \cup \delta^{-1} \subseteq (\iota \cap \delta) \circ \mathbf{1}$
Strictness:	$\neg X < X$	$< \cap \iota = \emptyset$
Antisymmetry:	$X \leq Y \leq X \rightarrow X = Y$	$\leq \cap \leq^{-1} \subseteq \iota$
Trichotomy:	$X < Y \vee X = Y \vee Y < X$	$< \cup \iota \cup <^{-1} = \mathbf{1}$
Acyclicity:	$\neg X_0 \in X_1 \in \dots \in X_n \in X_0$	$\in \circ \dots \circ \in \cap \iota = \emptyset$
Density:	$X \leq Y \wedge X \neq Y \rightarrow (\exists v)(X \leq v \leq Y \wedge X \neq v \neq Y)$	$\leq \setminus \iota \subseteq (\leq \setminus \iota) \circ (\leq \setminus \iota)$
Lack of endpoints:	$(\exists v, w)(v \leq X \leq w \wedge v \neq X \neq w)$	$\iota \subseteq (\leq \setminus \iota) \circ \mathbf{1} \circ (\leq \setminus \iota)^{-1}$
Galois' correspondence:	$(\forall x, y) \left((\exists z(xfz \wedge zfy) \rightarrow x=y) \wedge (xfy \rightarrow x \neq y) \wedge (yfx \rightarrow \exists v xfv) \right)$	$f \circ f \subseteq \iota \wedge f \cap \iota = \emptyset \wedge f^{-1} \subseteq f \circ \mathbf{1}$
Monotonicity:	$X \leq Y f Z \wedge X f V \rightarrow V \leq Z$	$\leq \circ f \cap f \circ \not\subseteq = \emptyset$
Bisimulation:	$(Y \beta X \rightarrow X \beta Y) \wedge (V \gamma X \beta Y \rightarrow (\exists w)(w \gamma Y \wedge V \beta w))$	$\mathbf{1} \circ (\beta \setminus \beta^{-1}) \cup (\gamma \circ \beta \setminus \beta \circ \gamma) = \emptyset$
Graph isomorphism:	$((X f Y \wedge X f Z) \vee (Y f X \wedge Z f X) \rightarrow Y = Z)$ $\wedge ((\exists v) X f v \leftrightarrow (\exists w)(X r w \vee w r X)) \wedge ((\exists v) v f Y \leftrightarrow (\exists w)(Y s w \vee w s Y))$ $\wedge (X r Z \leftrightarrow (\exists v, w)(X f v s w \wedge Z f w))$	$f^{-1} \circ f \cup f \circ f^{-1} \subseteq \iota \wedge f \circ \mathbf{1} = (r \cup r^{-1}) \circ \mathbf{1} \wedge \mathbf{1} \circ f = \mathbf{1} \circ (s \cup s^{-1}) \wedge r = f \circ s \circ f^{-1}$

Figure 1: Rosetta stone relating first-order predicate language with map language

Fragment of an ancient papyrus scroll with hieroglyphs and Greek text.

The fragment is a dark, irregularly shaped piece of papyrus, likely a fragment from an ancient scroll. It is covered in text, which is divided into two main sections. The upper section consists of several lines of hieroglyphs, arranged in a regular, horizontal pattern. The lower section consists of a single, dense block of Greek text, written in a cursive hand. The text is arranged in approximately 25 lines, with some lines being longer than others. The overall appearance is that of an ancient document, possibly a fragment of a larger work.

The hieroglyphs are arranged in approximately 10 horizontal lines. The Greek text is arranged in approximately 25 horizontal lines. The text is written in a cursive hand, characteristic of ancient Greek papyrus scrolls. The fragment is dark in color, likely due to the age and the material it is made of.