

Relation filtering operations

Graphical notation, followed by the equivalent ascii notation:

$S \triangleleft R$	$S < R$	domain restriction
$S \triangleleft\!\!\triangleleft R$	$S << R$	domain subtraction
$R \triangleright S$	$R > S$	range restriction
$R \triangleright\!\!\triangleright S$	$R >> S$	range subtraction

Examples:

$$\{Jonas\} \triangleleft owns_camera = \{Jonas \mapsto Canon, Jonas \mapsto Sony\}$$

$$\{Mindaugas\} \triangleleft owns_camera = \emptyset$$

$$\{Jonas, Vaiva\} \triangleleft\!\!\triangleleft owns_camera = \{Vaidas \mapsto Nikon, Sandra \mapsto Pentax\}$$

$$\{Mindaugas\} \triangleleft\!\!\triangleleft owns_camera = owns_camera$$

$$owns_camera \triangleright \{Sony\} = \{Vaiva \mapsto Sony, Jonas \mapsto Sony\}$$

$$owns_camera \triangleright\!\!\triangleright \{Sony, Canon, Pentax\} = \{Vaidas \mapsto Nikon\}$$