Binary relations

Marc Coiffier

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```
'utils require import
```

- Required module: utils

Given two types A and B, a binary relation between A and B can be described as a function that, when given two witnesses a and b produces a *Set0* which is inhabited iff a and b are related.

```
'Relation Type ? ? def ! !
```

```
Type 'A -> Relation ( A A ) 'r ->
  'reflexive A 'a -> r ( a a ) ? def
  'symmetric A 'x -> A 'y -> r ( x y ) 'rxy -> r ( y x ) ? ? ? def
  'transitive A 'x -> A 'y -> A 'z -> r ( x y ) 'rxy -> r ( y z ) 'ryz -> r ( x z ) ? ? ? ?
! !
```