

Williamson's "Converse Relations"

Preview: Williamson argues that relations are identical to their converses. He provides (two?) indeterminacy arguments to this effect. He then points out some of the consequences of taking relations to be identical to their converses: 1. All relations are symmetric, and 2. We need to be careful about how to think about conjunctive relations.

1 Preliminaries

A *relational expression* is a string of words '— stabs ...' with gaps whose replacement by names yields an indicative sentence.

"If a and b are names and '— R ...' is a relational expression, 'aRb' is true if and only if what a denotes has what R stands for to what b denotes. A corollary in non-linguistic terms follows. 'Brutus stabs Caesar' is true if and only if what 'Brutus' denotes has what '— stabs ...' stands for to what 'Caesar' denotes. Since 'Brutus' denotes Brutus, '— stabs ...' stands for the stabbing relation and 'Caesar' denotes Caesar, what 'Brutus' denotes has what '— stabs ...' stands for to what 'Caesar' denotes if and only if Brutus has the stabbing relation to Caesar.

"Relations, as they have been introduced, are needed to explain how relational expressions contribute to the truth conditions of relational sentences in which they appear. "

According to Williamson, relations are non-linguistic, which means "they are not confined to a single mode of expression." He also claims that each relation has a converse.

2 Argument 1: Every relation is identical to its converse

Suppose for reductio that the relation R (stabs) is distinct from its converse R'

- P1. R is expressed by 'X' in language L ($Xab = a \text{ stabs } b$)
- P2. We can imagine a language L' with the same relation R picked out by 'X' but which puts 'a' and 'b' in reverse order. In L'. ($Xab = b \text{ stabs } a$)
- P3. We can imagine another language L'', exactly like L except 'X' stands for R*. Here Xab will mean what Xba does in L (or at least they are "tightly equivalent").
- P4. L' and L'' are different languages.
- P5. L' and L'' are indistinguishable.
- P6. It is indeterminate whether one is speaking L' or L''.
- P7. If it is indeterminate whether one is speaking L' or L'', then it is indeterminate which language we are speaking in everyday life.
- P8. It is indeterminate which language we are speaking in everyday life.
- P9. It is not indeterminate which language we are speaking in everyday life.
- C. $R = R^*$ (i.e. every relation is identical to its converse)

P5. In what sense are L' and L'' indistinguishable? Williamson says: "they differ only in respect of X, which is used only in contexts where it is followed by its terms, making a whole that functions in L' just as in L''. Nor can causal affiliations distinguish X in L' and in L'', for a causal link to a relation runs equally to its converse: of whatever Brutus's stabbing Caesar is cause or effect, so is Caesar's being stabbed by Brutus."

3 Argument 2: Every relation is identical to its converse

This version appeals to the Principle of Sufficient Reason.

Suppose R and its converse R^* are distinct.

- P1. Suppose ‘ R ’ denotes a logical complex C .
- P2. Suppose ‘ R^* ’ denotes a logical complex D .
- P3. If ‘ R^* ’ is associated with D it could just as easily be associated with C (and likewise for ‘ R ’).
- P4. There must be a sufficient reason for ‘ R ’ to denote C instead of D and a sufficient reason for ‘ R^* ’ to denote D instead of C .
- C. ‘ R ’ and ‘ R^* ’ cannot determinately denote either C or D .

“The price of distinguishing converses is that no expression can stand determinately for either of them. We would never know what we were talking about, even if we knew that what we were saying was true. In contrast, if converses are identical no such indeterminacy can arise.”

4 Consequences of taking every relation to be identical to its converse

4.1 Every relation is symmetric

Argument:

- P1. $Rxy \equiv H(R, x, y)$
- P2. $R'xy \equiv H(R^*, x, y)$
- P3. $R = R^*$
- P4. $H(R, x, y) \equiv H(R^*, x, y)$
- P5. $Rxy \equiv R^*xy$
- P6. $Rxy \equiv Ryx$

4.2 We cannot think of a conjunctive relation as straightforwardly defined in terms of its conjunct relations.

Take the relation ‘stabbing and killing’ which Williamson denotes as:

$rxs(Rxy \ \& \ Sxy)$

which Williamson writes as $rxs(Rxy \ \& \ Sxy)^1$

- P1. $rxs(Rxy \ \& \ Sxy) = rxsRxy * rxsSxy^2$
- P2. $xy(Rxy \ \& \ Syx) = rxsRxy * rxsSyx$
- P3. $rxs Sxy = rxs Syx$
- P4. $rxs(Rxy \ \& \ Syx) = rxsRxy * rxsSxy$

¹Why this rxs business? It is supposed to resolve a harmful ambiguity (p.11))

²where $*$ is understood to pick out any function

- C. $\text{rxy}(\text{Rxy} \ \& \ \text{Sxy}) = \text{rxy}(\text{Rxy} \ \& \ \text{Syx})$

The conclusion says that the relation ‘stabs and kills’ is identical to the relation ‘stabs and is killed by’
 “But $\text{rxy}(\text{Rxy} \ \& \ \text{Syx})$ is not the converse of $\text{rxy}(\text{Rxy} \ \& \ \text{Sxy})$ ($\text{rxy}(\text{Ryx} \ \& \ \text{Syx})$ is).”

Question: Let’s talk about Williamson’s bag example.