

1. Backhanded Sentences

- (1) If [that's art]_p, then [my pet dinosaur can fly]_q.
 - (2) If [that's art]_p, then [I'm the Queen of England]_q.
 - (3) Either [that's art]_p, or [my pet dinosaur can fly]_q.
 - (4) Either [that's art]_p, or [I'm the Queen of England]_q.
- (5) Their *asserted* content is irrelevant—what matters is what they *imply*.
- (6) They need not be literally believed by the speaker or interlocutor.
 - (?) "I've changed my mind—that is art! So I'm the Queen of England, then."
 - (7) They can't be denied by means of their asserted content.
 - (?) "No, that's not true! If that's art, then you're the King of France, not the Queen of England!"

How does the implication work? How does it arise from the logical structure of these sentences?

2. Structural Features

- (8) Logically complex: consist of two proposition-denoting clauses [*p* and *q*]
- (9) Can be conditional (1-2) or disjunctive (3-4)
- (10) Imply something about *p*, the first clause:
 - (1-2): "That's *not* art."
 - (1) If [that's art]_p, then [my pet dinosaur can fly]_q.
 - (2) If [that's art]_p, then [I'm the Queen of England]_q.
 - (3-4): "That *is* art."
 - (3) Either [that's art]_p, or [my pet dinosaur can fly]_q.
 - (4) Either [that's art]_p, or [I'm the Queen of England]_q.
- (11) Somehow engender this implication by the presence of *q*, the second clause.

3. Properties that need accounting for

- (12) *q* conveys a proposition that is not true in the actual world.
 - (1, 3): Presupposition failure: *my pet dinosaur* doesn't exist.
 - (1) If [that's art]_p, then [my pet dinosaur can fly]_q.
 - (3) Either [that's art]_p, or [my pet dinosaur can fly]_q.
 - (2, 4): Empirical falsehood: I'm not the Queen of England.
 - (2) If [that's art]_p, then [I'm the Queen of England]_q.
 - (4) Either [that's art]_p, or [I'm the Queen of England]_q.
- (13) Call the common trait that unites these two types of clauses *outlandishness*—"obviously" not true in the actual world. Absent this, the implication falters.
 - (14) If [that's art]_p, then [my pet canary can fly]_q. [where I own a canary]

(15) Make the falsity not “obvious” enough, and it falters as well.

(16) If [that's art]_p, then [I'm wearing a light gray shirt]_q. [where I'm wearing a dark gray shirt]

(17) Whatever outlandishness is, it cannot consist in falsity alone.

(18) Although (2) and (19) have roughly the same meaning, it is implied in the case of (2) and explicitly stated in the case of (19). Yet the effect of the implied content in (2) is stronger than the stated content of (19)—backhanded sentences are *hyperbolic*.

(2) If [that's art]_p, then [I'm the Queen of England]_q.

(19) That's not art.

(20) q must be something speaker and interlocutor have agreed to be outlandish.

4. Questions to Answer

(21) Why is a complex logical structure required?

(22) Why does the inference differ between conditional and disjunctive?

(23) Why the weird existential presuppositions?

(24) Why do existential presupposition violations and falsities both work as “outlandish?”

(25) Why are backhanded sentences more emphatic?

(26) Why is falsity not enough for the implication to work?

5. A Gricean Approach

(27) Derive the meaning of the sentences with respect to a single world of evaluation, using only the logical properties of the sentences and Gricean maxims. For example, (2) can be treated as a material conditional of the form $p \rightarrow q$.

(2) If [that's art]_p, then [I'm the Queen of England]_q.

(28) $p \rightarrow q$

(i) $p \rightarrow q$ is true. [Maxim of Quality; the speaker tells the truth]

(ii) q is false. [as agreed by speaker and interlocutor (20)]

(iii) if p is true, then $p \rightarrow q$ is false. [from (ii) and the properties of material conditional]

(iv) p is false. [from (i), (iii)].

(29) Pragmatic-logical reasoning similar to Modus Tollens: the consequent is absurd, so reject the antecedent.

(30) A similar story can be told of disjunctive cases, with a sort of Disjunctive Syllogism: one disjunct is absurd, so the other must be true.

(31) But how does this account for:

(1) and (3), the presence presupposition failures?

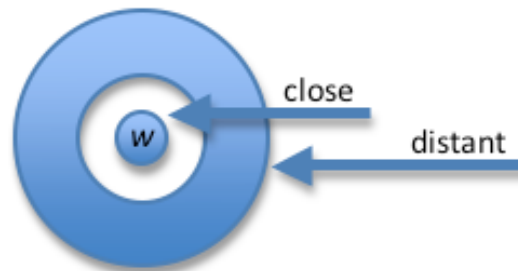
(15), the fact that a non-“obvious” falsity fails?

(18), the *emphasis* of backhanded sentences?

6. Distant Worlds

(32) Allow comparison of worlds of evaluation according to how similar or dissimilar they are to some world w (the actual world, etc.)¹

(33) Characterize increasing dissimilarity as a matter of *distance*. This is not a matter of measurement, but a rough divide between “close” and “distant” worlds.



(34) Backhanded sentences thus pertain not to any single world of evaluation, but to spheres of possibility.

(35) *A proposition is outlandish in the actual world iff the closest world of evaluation in which it is true is distant from the actual world.*

7. The Asserted Content of Backhanded Sentences

(36) Treat conditional and disjunctive backhanded sentences as quantifications over worlds of evaluation.²

¹ This is a crude appropriation of Lewis' (1973: 13-16) formal characterization of the “system of spheres” approach to nesting worlds based on their relative similarity. Lewis makes use of far more than a simple two-way distinction between worlds.

² This is a brute treatment of conditionals and disjunctions as quantifications over worlds that doesn't include any provision that worlds close to the actual world be selected (to avoid problems with strengthening the antecedent), as in Lewis (1973), nor that there is a covert epistemic necessity, as in Kratzer (1986). All the worlds are subsumed totally indiscriminately, because for the purposes of this account, the problems that these qualifications intend to avoid are irrelevant, since all that is important is picking out distant worlds of evaluation.

(37) *Conditional*

For all worlds of evaluation w : if p is true in w , then q is true in w .

$\forall w[p(w) \rightarrow q(w)]$

"Any world of evaluation in which p is true is one in which q is true."

(38) *Disjunctive*

For all worlds of evaluation w : either p is true in w , or q is true in w .

$\forall w[p(w) \vee q(w)]^3$

"Any world of evaluation is one in which either p is true or q is true."

8. Deriving the Implied Meaning

(39) $\forall w[p(w) \rightarrow q(w)]$

- (i) The closest world of evaluation to the actual world in which q is true is distant from the actual world. [definition of outlandishness (35); it is agreed that the sentence is outlandish (20)]
- (ii) Any world in which p is true is one in which q is true. [literal content of the conditional sentence (37)]
- (iii) The closest world of evaluation to the actual world in which p is true is one in which q is true. [from (ii)]
- (iv) Therefore, the closest world of evaluation to the actual world in which p is true is distant from the actual world [from (i) and (iii)] [p is outlandish]

(40) The same derivation can be carried out for disjunctive sentences, but with the antecedent flipped, since $[\forall w[p(w) \vee q(w)]] \leftrightarrow [\forall w[\neg p(w) \rightarrow q(w)]]$.

(41) $\forall w[p(w) \vee q(w)], \forall w[\neg p(w) \rightarrow q(w)]$

- (i) The closest world of evaluation to the actual world in which q is true is distant from the actual world. [definition of outlandishness (35); it is agreed that the sentence is outlandish (20)]
- (ii) Any world in which $\neg p$ is true is one in which q is true. [literal content of the disjunctive sentence (38)]
- (iii) The closest world of evaluation to the actual world in which $\neg p$ is true is one in which q is true. [from (ii)]
- (iv) Therefore, the closest world of evaluation to the actual world in which $\neg p$ is true is distant from the actual world [from (i) and (iii)] [$\neg p$ is outlandish]

³ Inclusive disjunction is assumed, but the reasoning in §8 where it is put to use follows equally with an exclusive interpretation.

9. So What?

(21) Why is a complex logical structure required?

The two clauses work in tandem in the inferential derivation based on the logical rendering of the sentences

(22) Why does the inference differ between conditional and disjunctive?

Straightforwardly traceable to the logical properties of conditionals and disjunctions (flipped antecedent)

(23) Why the weird existential presuppositions?

p and q evaluated with respect to a variable world of evaluation, not the actual world; the distant worlds of q can satisfy these presuppositions, and the violations in the actual world can signal the move into distant territory

(24) Why do existential presupposition violations and falsities both work as “outlandish?”

Both are instances of a proposition only being true in worlds of evaluation distant from the actual world

(25) Why are backhanded sentences more emphatic?

The result of the inferential process is not just that p is either true or false, but that either it or its opposite is outlandish in the actual world, and so not only removes these from the actual world but does this with emphasis, by placing them at a distance: not only is p true or false, but one must move to a distant world in order to make it not so.

(26) Why is falsity not enough for the implication to work?

This does not result in p or $\neg p$ being implied to be outlandish, but merely false: the backhanded sentence becomes a roundabout, awkward way of making a bare assertion, as in (16).

(16) If [that's art] _{p} , then [I'm wearing a light gray shirt] _{q} . [where I'm wearing a dark gray shirt]

(42) The existence of backhanded sentences gives us reason to believe that worlds are not just flatly organized, but can be compared based on how close they are to one another, and speakers exploit this fact.

10. Further Issues

(43) Conjunctive sentences?

(44) (Yeah,) That's art—and I'm the Queen of England.

(45) Comparatives?

(46) He looks as much like Rob Lowe as a beagle does.⁴

(47) Contradictions?

(48) If that's art, then two plus two is five.

⁴ This issue and example are thanks to Andrew Kehler.

(49) Reversals of disjunctive sentences?

(50) ?Either my pet dinosaur can fly, or that's art.

References

Kratzer, Angelika (1986). "Conditionals." In von Stechow and Wunderlich (1991), 651-656.
Lewis, David (1973). *Counterfactuals*. Harvard University Press: Cambridge, MA.