

On the Logic of Reasons For

Dean McHugh

Institute of Logic, Language and Computation
University of Amsterdam

11th Indian Conference on Logic and its Applications (ICLA)
Indian Statistical Institute, Kolkata
5 February 2025



INSTITUTE FOR LOGIC,
LANGUAGE AND COMPUTATION



UNIVERSITY
OF AMSTERDAM

- (1) ChatGPT being trained on far-right websites caused it to output racist stereotypes.
- (2) Elisabeth Dekker was discriminated against because she was fired because she was pregnant.
- (3) The earthquake is the reason why the bridge collapsed.

Example from Maria Alvarez (2010, p. 36):

- (4) A reason Alice gives money to charity is that she's generous.

- (5) A reason for Alice to give money to charity is that she's generous.

Example from Maria Alvarez (2010, p. 36):

Explanatory reason / reason why:

- (4) A reason Alice gives money to charity is that she's generous.

Motivating reason / reason for:

- (5) A reason for Alice to give money to charity is that she's generous.

Example from Maria Alvarez (2010, p. 36):

Explanatory reason / reason why:

- (4) A reason Alice gives money to charity is that she's generous.

AWPL talk

Motivating reason / reason for:

- (5) A reason for Alice to give money to charity is that she's generous.

ICLA talk

Dancy (2004), Skorupski (2010), Parfit (2011), and Scanlon (2014)

Any attempt to explain what it is to be a reason for something seems to me to lead back to the same idea: a consideration that counts in favor of it. “Counts in favor how?” one might ask. “By providing a reason for it” seems to be the only answer.

(Scanlon 1998, p. 17)

Parfit (2011, p. 33): *S ought to A* means that *S*'s reasons to *A* are stronger than *S*'s reasons to not do *A*.

Reducing reasons-for to reasons-why

A reason for S to A is a reason why S ought to A .
(Toulmin 1950, Finlay 2001, Broome 2013)

(6) The lineup of speakers is a reason for me to submit to ICLA.

analysed as:

(7) The lineup of speakers is a reason why I should submit to ICLA.

Factivity of reasons why

R is a reason why $P \Rightarrow P$

- (8) The earthquake is a reason why the bridge collapsed.
 \Rightarrow The bridge collapsed

Factivity is assumed by Lawler (1971), Schroeder (2007), Broome (2013), Skow (2016), Dancy (2004), Finlay (2014), Grice (2001), and Hawthorne and Magidor (2018)

Nebel (2019, p. 462) rejects factivity

Examples found by Nebel (2019)

- (9)
- a. [T]here exist good reasons why consent should be granted and good reasons why consent should be withheld [...].
 - b. There are many reasons why a free offer will work and reasons why it won't.
 - c. This article presents four reasons why [Argentina] can [beat Uruguay], and four reasons why they can't.
 - d. [C]an a lightsaber cut through Superman? We [...] came up with reasons why it could and reasons why it couldn't.

Assuming factivity, (9c) implies:

- (10) Argentina both can and cannot beat Uruguay.

Nebel's problem for factivity

(9c) sounds consistent while (10) does not.

The problem

There is a reason to A and a reason not to A .

Consistent

Analysis of reasons why:

\Rightarrow There is a reason why one should A and a reason why one should not A .

Factivity:

\Rightarrow One should and should not A .

Nebel claims: Inconsistent

Nebel (2019)

“[T]here can be reasons why we ought to P and reasons why we ought not to P ... when and because the relevant ideal is multidimensional.”

McConnell-Ginet (1973), Kamp (1975), Sassoon (2013), and D'Ambrosio and Hedden (2024)

Good, bad, healthy, sick, athletic, similar, democratic, rational, ...

- (11)
- a. “It is good and bad news, say intellectuals on India becoming world’s most populous country.” *The Free Press Journal*
 - b. “I have a Schrödinger’s cat joke, it is good and bad at the same time.”
 - c. “Ozone is both beneficial and harmful to us.” [Source]
 - d. “Life in the city is both interesting and boring.” [Source]

Multidimensionality

McConnell-Ginet (1973), Kamp (1975), Sassoon (2013), and D'Ambrosio and Hedden (2024)

Good, bad, healthy, sick, athletic, similar, democratic, rational, ...

- (11) a. “It is good and bad news, say intellectuals on India becoming world’s most populous country.” *The Free Press Journal*
- b. “I have a Schrödinger’s cat joke, it is good and bad at the same time.”
- c. “Ozone is both beneficial and harmful to us.” [Source]
- d. “Life in the city is both interesting and boring.” [Source]

Multidimensional adjectives admit exceptions (Sassoon 2013)

- (12) a. Healthy, except for a slight cold
- b. Not sick, except for high cholesterol

Multidimensionality is not unique to explanations

Multidimensionality

	Articles of Confederation	This was a good idea because...	This was a bad idea because...
Army	Congress has no power to raise an army. It must rely on individual states for soldiers		
Taxation	Congress must rely on states for tax revenue to pay for its expenses.		
President	The president has no executive power. He only presides over meetings of Congress.		
Representation	Each state has one vote (population does not matter)		
Passing laws	New laws must be approved by 9 of the 13 states.		
Authority	States, not the Congress, would retain ultimate authority		

D'Ambrosio and Hedden's (2024) model:

- For each multidimensional adjective there is a range of orders, one for each dimension
- There is an aggregation function that takes the range of orderings and outputs a single overall order

What is the source of multidimensionality?

Option 1: Predicates

R is a reason why P and R' is a reason why $\neg P$ cannot both be true

R is a reason why P_D and R' is a reason why $\neg P_{D'}$ can both be true

where P_D means that P is true with respect to dimension D

What is the source of multidimensionality?

Option 1: Predicates

R is a reason why P and R' is a reason why $\neg P$ cannot both be true

R is a reason why P_D and R' is a reason why $\neg P_{D'}$ can both be true

where P_D means that P is true with respect to dimension D

Option 2: Reasons

R is a reason why P and R' is a reason why $\neg P$ can both be true.

Option 1 is compatible with factivity, but option 2 is not.

Factivity + Option 1 (Multidimensional predicates)

R is a reason why P_D and R' is a reason why $\neg P_{D'}$ \Rightarrow P_D and $\neg P_{D'}$
Consistent

Factivity + Option 2 (Multidimensional reasons)

R is a reason why P and R' is a reason why $\neg P$ \Rightarrow P and $\neg P$
Inconsistent

Evidence for option 1: Conflicting *shoulds*

Predicates exhibit multidimensionality independently of reasons.

Evidence for option 1: Conflicting *shoulds*

Predicates exhibit multidimensionality independently of reasons.

- (13) “What is interesting about places like Vespasiano Correa is that they both should and should not exist in Brazil.” [Source]
- (14) “Kamala Harris Both Should and Should Not Be Trusted By Progressives.” [Source]
- (15) I don’t want to hijack the OP, but my question relates to the OP’s question, so I both should and should not post it here. [Source]

Evidence for option 1: Removing multidimensionality

Aggregators: *overall, in sum, in total, more F than not F, ...*

- (16)
- a. The monsoon is beneficial and harmful
 - b. #The monsoon is overall beneficial and overall harmful
- *Overall* forces aggregation
 - Aggregation is not contributed by explanatory terms themselves (such as *because* and *reason*)

Evidence for option 1: Removing multidimensionality

When we remove multidimensionality, the reason claims become unacceptable.

- (17) a. The monsoon is beneficial because it lowers the heat, and harmful because it leads to floods
- b. #The monsoon is overall beneficial because it lowers the heat, and overall harmful because it leads to floods

A puzzle

If predicates are the source of multidimensionality, why isn't it available whenever there are such predicates?

- (18) #Alice likes the film because it's good, but Bob hates the film because it's bad.
- (19) The film is good because of the actors, but bad because of the plot.

A puzzle

If predicates are the source of multidimensionality, why isn't it available whenever there are such predicates?

- (18) #Alice likes the film because it's good, but Bob hates the film because it's bad.
- (19) The film is good because of the actors, but bad because of the plot.
- (20) #Charlie's mom is happy because he should clean the dishes, but Charlie is happy because he shouldn't.
- (21) Charlie should clean the dishes because he mom told him to, but he shouldn't because he is sick.

If explanations themselves contribute multidimensionality, why does it only seem to apply on one side?

If explanations themselves contribute multidimensionality, why does it only seem to apply on one side?

Answer:

- We can opt for a dimensional reading or the aggregated reading
- The dimensional reading requires a dimension to interpret the sentence
- Reasons make the dimension salient, favouring the dimensional reading (e.g. good in terms of the acting)
- But effects do not, favouring the aggregated reading

If explanations themselves contribute multidimensionality, why does it only seem to apply on one side?

Answer:

- We can opt for a dimensional reading or the aggregated reading
- The dimensional reading requires a dimension to interpret the sentence
- Reasons make the dimension salient, favouring the dimensional reading (e.g. good in terms of the acting)
- But effects do not, favouring the aggregated reading

- (22) One reason Alice likes the film is that it is good, a reason why Bob hates it is that it is bad. Does not provide dimensions
- (23) One reason the film good is the acting, a reason why it is bad is the plot. Provides dimensions

Analysing *reasons for* as reasons why one should leads to an apparent problem.








Factivity of *reasons why* implies conflicting *shoulds*

We have seen that conflicting *shoulds* are compatible with multidimensionality







Predicates, not reason claims, are the source of multidimensionality

Thank you!








References I

-  Alvarez, Maria (2010). *Kinds of reasons: An essay in the philosophy of action*. Oxford University Press.
-  Broome, John (2013). *Rationality through reasoning*. John Wiley & Sons.
-  D'Ambrosio, Justin and Brian Hedden (2024). Multidimensional adjectives. *Australasian Journal of Philosophy* 102.2, pp. 253–277.
-  Dancy, Jonathan (2004). *Ethics without principles*. Clarendon Press.
-  Finlay, Stephen (2001). What does value matter? The interest-relational theory of the semantics and metaphysics of value. PhD thesis. University of Illinois at Urbana-Champaign.
-  — (2014). *Confusion of tongues: A theory of normative language*. Oxford University Press.
-  Grice, H Paul (2001). *Aspects of reason*. Oxford University Press.

References II

-  Hawthorne, John and Ofra Magidor (2018). Reflections on the Ideology of Reasons. *The Oxford handbook of reasons and normativity*. Ed. by Daniel Star, pp. 113–140.
-  Kamp, Hans (1975). Two theories about adjectives. *Formal Semantics of Natural Language*. Ed. by E L Keenan. Cambridge University Press.
-  Lawler, John M. (1971). Any Questions? *Papers from The Seventh Regional Meeting of the Chicago Linguistic Society*, pp. 163–73.
-  McConnell-Ginet, Sally (1973). Comparative constructions in English: a syntactic and semantic analysis. PhD thesis. University of Rochester.
-  Nebel, Jacob M (2019). Normative reasons as reasons why we ought. *Mind* 128.510, pp. 459–484.
-  Parfit, Derek (2011). *On what matters*. Oxford University Press.

References III

-  Sassoon, Galit W (2013). A typology of multidimensional adjectives. *Journal of semantics* 30.3, pp. 335–380.
-  Scanlon, Thomas M (1998). *What we owe to each other*. Harvard University Press.
-  Scanlon, Thomas Michael (2014). *Being Realistic About Reasons*. Oxford University Press.
-  Schroeder, Mark (2007). *Slaves of the Passions*. Oxford University Press.
-  Skorupski, John (2010). *The domain of reasons*. Oxford University Press.
-  Skow, Bradford (2016). *Reasons why*. Oxford University Press.
-  Toulmin, Stephen Edelston (1950). *An examination of the place of reason in ethics*. Cambridge University Press.