

Comments on
"Sufficiency with
modals and imperatives"
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SMCS with "only"

To get good cheese, you only have to go to the North End.

Prejacent Puzzle

$\Rightarrow \Box NE$

Sufficiency & Means

$\Rightarrow \Diamond NE \wedge \rightarrow \Box (NYC \vee Norm)$

$\Rightarrow NE \rightarrow \text{good cheese}$

Scalarity/Minimality

$\Rightarrow NE$ is the least effortful action
that leads to getting good cheese

Splitting

vF & 10s, 07, A0 & H21

Split LF:

$\square [OP_2] \square [OP_1]$ you go to the NE]]]

$\square (\text{NE} \vee \underline{\text{NYC}} \vee \text{Norm})$

$\wedge \square (\underline{\text{NYC}} \vee \text{Norm})$

$\Rightarrow \square \text{NE}$
sufficiency

$\rightsquigarrow \text{NE} \rightarrow \text{good cheese}$
means

$\not\Rightarrow \square \text{NE}$
no prejacent

\Rightarrow scalarity / minimality
(inference of OP_2 , possibly)

Overgeneration issues?

cf. vF & 1 OS, CZ

Non-split LF: $\boxed{\text{OP}_2 \left[\boxed{\text{OP}_1 \left[\Box \text{you go to the NE} \right]} \right]}$

$$\begin{aligned} &\Box \text{NE} \vee \Box \text{NYC} \vee \Box \text{Norm} \\ &\wedge \neg(\Box \text{NYC} \vee \Box \text{Norm}) \end{aligned}$$

$\Rightarrow \underline{\Box \text{NE} \wedge \neg \Box \text{NYC} \wedge \neg \Box \text{Norm}}$

very limited / impossible (?)
non-split parses w/
goal-oriented modality

* Reimbursement Ex.
has other flavor?

limited/impossible(?)
Split parses w/
other modalities

According to the law, you only have to report the crime.

$\Rightarrow \Box \text{report}$ # merely $\Rightarrow \Diamond \text{report}$

Gali is only planning to go to the NE_F during her visit.

$\Rightarrow \Box \text{NE}$ # merely $\Rightarrow \Diamond \text{NE}$

the error

rediagnosing the prejacent problem

Cendovard & Francez argue we evaluate the modals in the premise and the conclusion wrt different ordering sources (equivocation fallacy).

Premise

... only have to ...
f,g

$$\exists \lambda w. \text{effort}_w^f(\text{getting } g_c) \leq d \mid d \subseteq g(w)$$



effort minimization
features in the ordering
source of the premise only

Conclusion

... have to ...
f,g*

$$\exists \lambda w. \text{effort}_w^*(\text{getting } g_c) \leq d \mid d \cap g^*(w) = \emptyset$$

towards a theory of the error

"only" triggers
a scalar inference

note that in these contexts
the prejacent of "only"
contextually entails the
negation of the alternatives...

→ this cues/triggers
effort minimization

(vs. more flexibility
in imperatives)

absent "only",
effort minimization
is not easily accessible

operative only
with goal-oriented
modality

"Only" and exceptives

h72, vF93, vF&I 05,07

strong inferences

Only the NE has good cheese.
No place except the NE has good cheese.

} \Rightarrow the NE has
good cheese

other than
but

According to the law, you are not required
to do anything except report the crime.

\Rightarrow you are required to report the crime

SMCS with exceptions

vF 8 | 05, 07

weak inferences

To get good cheese, you do not have to
go to any place other than the NE.
except
but

$\not\Rightarrow \Box \text{NE}$

$\Rightarrow \Diamond \text{NE} \wedge \neg \Box (\text{Nyc} \vee \text{Norm})$

Updating splitting

qaj 08, cr22, cf. vF 93, qaj 13, l16, cr18

you went nowhere except to the North End.

LF: $\left[\max_{\text{place except NE}} \right] [\lambda D \text{ you went to } noD]$

$\max_{\mathcal{P}(E)}(D)(\Delta)$ presupposes $\forall D' \in \mathcal{P}(E): D' \notin D \rightarrow \neg \Delta(D')$
asserts $\Delta(D)$

$\max_{\mathcal{P}(E)}(\{\text{NYC, Norm}\})(\lambda D. \neg (\exists x \in D : \text{you go to } x))$

pres: $(\text{NYC} \vee \text{NE} \vee \text{Norm}) \wedge (\text{NE} \vee \text{Norm}) \wedge (\text{NE} \vee \text{NYC}) \wedge \text{NE}$

asr: $\neg(\text{NYC} \vee \text{Norm})$

obvious extension to "only" (cr22)

Updating splitting

LF: [max place except NE] $\lambda D[\neg(\square[\text{you go to a } D])]]]$

$\max_{P(E)} (\{\text{NYC, Norm}\})(\lambda D. \neg \square(\exists x \in D : \text{you go to } x))$

pres: $\square(\text{NYC} \vee \text{Norm} \vee \text{NE}) \wedge \square(\text{NE} \vee \text{NYC}) \wedge \square(\text{NE} \vee \text{Norm}) \wedge \square \text{NE}$

asr: $\neg \square(\text{NYC} \vee \text{Norm})$

contextually entails
due to effort minimization

a weakening backdoor

$$\text{Max}_{\mathcal{P}(E)}(D)(\Delta) \rightsquigarrow \text{Max}_C(D)(\Delta)$$

\downarrow \downarrow
ranges over $\mathcal{P}(E)$ ranges over $C \subseteq \mathcal{P}(E)$

Pruning of domains/alternatives (partial & sketchy):

- ① only if this leads to N-weakening (cf. ccf'15)
f1'15
- ② (only) if this is necessary for assertability (cf. St 7°)
(+ no symmetry breaking, etc.)

deriving weaker inferences

$\text{Max}_c(\{\text{NYC}, \text{Norm}\})(\lambda D. \neg \Box (\exists x \in D : \text{you go to } x))$

pres: $\Box(\text{NYC} \vee \text{Norm} \vee \text{NE}) \wedge \neg \Box(\text{NE} \vee \text{NYC}) \wedge \Box(\text{NE} \vee \text{Norm}) \wedge \Box \text{NE}$

ast: $\neg \Box(\text{NYC} \vee \text{Norm})$

$\Rightarrow \Diamond \text{NE}$
sufficiency

$\rightsquigarrow \text{NE} \rightarrow \text{good cheese}$
means

$\not\Rightarrow \Box \text{NE}$
no prejacent

but scalarity/minimality
is not derived. While one
could write it into Max perhaps,
one really shouldn't...

but note
Kai's comment:
"Jay is nothing
but a poor
student."

weaker inferences more broadly

recall that pruning is licensed if it is required for assertability. this is the case in smc examples since the prejacent entails the negation of the alternatives.

Prediction:

According to the law,

you are only required to do exactly one thing when witnessing a crime.

imperatives and their force

h&r12, oik16, cf. p10, c&12, vF&1 17

you've asked me to paint
those tables, but I'm tired and
don't feel like doing something
really useful.



" \diamond " > only ("acquiescence")
(or $\exists_m \square_m > \text{only}$, or...) (cf. klos_{rm og})

Only paint the round_F table.

only > " \diamond "
(or $\square > \text{only}$)

Oh, I feel like doing something
really useful today. I think
I'll paint the tables over there.

Only paint the round_F table.

Sms with imperatives

suggestive paraphrase & exclusive distribution

to get good cheese, just go to the North End
#only

to get good cheese, you can just go to the NE
#only

expectation: if "↑" construal is impossible, so is the smc reading

Partial references

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