On the Dependent Character of Licensing

Vincent Homer (ENS, IJN)

Introduction. NPIs are sensitive to the effect of certain expressions (quantifiers, conjunction, *because*-clauses) intervening at LF between them and a potential licenser (1) (Linebarger 1980; we call the offending expressions 'Linebarger interveners'). It has not been noticed that *some* creates an intervention effect too: the narrow scope interpretation of *someone* is impossible in (2d) (unlike in the grammatical (2c)). We propose that the source of the ungrammaticality of (2d) lies in a clash between the opposite demands of the PPI *someone* and the NPI *anything*.

Domains. There are three main circumstances in which a PPI, e.g. *some,* can be interpreted in the scope of negation. (i.) The negation is in a superordinate clause (3b); (ii.) the negation is a clausemate of the PPI but the PPI is also in the scope of another downward-entailing (DE) expression (3c) (the PPI is rescued in Szabolcsi's 2004 terms); (iii.) the negation is a clausemate of the PPI but there is a Linebarger intervener between the PPI and negation, cf. (3d) (where the PPI is said to be shielded) vs. (3e). Taken together, these three facts suggest that a PPI π^+ is only licensed in a given sentence *S* if there is a constituent A of *S* which is not DE w.r.t. the position of π^+ (the monotonicity of constituents is defined in (4)). Symmetrically, an NPI π^- is only licensed in a given sentence *S* if there is a constituent A of *S* which is DE w.r.t. the position of π^-. We call 'domain of a PI' a constituent on which the licensing of the PI is checked: a PPI needs to find a non-DE domain. In view of the unavailability of the narrow scope of *some* under a clausemate negation, we stipulate that only constituents at least as large as NegP (or PolP if one assumes that negation sits in the specifier of Pol) are *eligible* domains of a PPI. In (3b) any eligible constituent of the embedded clause is upward-entailing (UE) w.r.t. *someone* and satisfies the requirement (in (3a) no eligible constituent does); in (3f), the DE expression *at most five* sits in Spec,TP, therefore outside of PolP, and the PPI is licensed on PolP (in (3g) the negative quantifier is the spell-out of negation and of an existential quantifier, and as such it creates a DE environment in the smallest eligible domain of the PPI, namely PolP); in the rescuing case, (3c), the composition of 2 DE expressions yields a UE environment for the PPI in TP; given the perfect overlap between the Linebarger interveners and the class of PPI shielders, we propose to adapt Chierchia's 2004 original proposal for NPIs to PPIs, and argue that in the shielding case (3d) the universal quantifier being a strong scalar term triggers an indirect scalar implicature in the scope of negation: this SI is factored into the meaning that is relevant for licensing and makes the environment of the PPI non-monotonic (hence not DE).

Dependency and cyclicity. What (2d) reveals is that the acceptability of a PI π in a constituent A is dependent on the acceptability of all other PIs in A (*dependency* of PI licensing (5)). In (2d) all the eligible DE domains of *anything* are the matrix PolP and superconstituents thereof: they all contain a PPI in a DE position, i.e. an anti-licensed PPI, in violation of (5). On the other hand, all the non-DE eligible domains of *someone* are in the embedded clause: they all contain an NPI in a UE position, i.e. an anti-licensed NPI. In the grammatical (2e), the embedded PolP is an eligible UE domain of the PPI and it contains no other PIs. *Something* is thus licensed on PolP. The matrix PolP is a DE domain of the NPI; it contains a PPI which is licensed *within* it, therefore the condition (5) is met for the licensing of *anyone.* These facts bring to light the essential *cyclicity* of licensing: in (2e) the NPI and the PPI are licensed in different cycles, while licensing has to be checked on the same cycles in the ungrammatical (2d). The hypothesis about the dependency and the cyclicity of the licensing of Polarity Items is corroborated by the ungrammaticality of the configuration schematized in (6a) and illustrated in (6d): all the non-DE domains of the PPI *somewhere* are DE domains for the PPI *someone* and vice versa. The only reading of the sentence is one in which the subject PPI has reconstructed under negation (this meaning is not felicitous in the conversation). The reconstruction of a

subject PPI is however impossible if there is an NPI under negation (7d): all the DE domains of the NPI contain an anti-licensed PPI and all the non-DE eligible domains of the PPI contain an anti-licensed NPI. The same point can be made with the PPI *would rather* (8b). Lastly, we correctly predict that a PPI is anti-licensed if an NPI co-occurs in its smallest eligible domain, i.e. PolP (9): condition (5) cannot be met (the PIs cannot be licensed on separate cycles) whether the NPI c-commands the PPI at LF or the other way around (this is a double object construction where the respective scope of the objects is frozen). This latter fact confirms that the intervention observed here is not syntactic (*someone* in (2d) doesn't interrupt a syntactic relation between the NPI an its licenser) but semantic. It also shows, together with (2d), that *some* is anti-licensed by mere downward-entailingness (contrary to the consensus in the field).

Conclusion. The intervention effects that we put forward reveal the existence of domains of PIs and the dependent character of PI licensing.

(1) *I'm not sure that everyone stole anything.

(2) a. *$[_{\text{CP}}$ E$_{DE}$ $\dots[_{\text{CP}}\dots\pi^{+}\dots\pi^{-}\dots]]$ (E_{DE} is the notation for a DE expression)
b. $[_{\text{CP}}$ E$_{DE}$ $\dots[_{\text{CP}}\dots\pi^{-}\dots[_{\text{PolP}}\dots\pi^{+}\dots]]]$
c. I'm not sure that someone stole a camera. ✓ NEG>SOME
d. *I'm not sure that someone stole anything. *NEG>SOME
e. I'm not sure that anyone stole something. ✓NEG>SOME

(3) When Fred speaks French…
a. …Jean-Paul doesn't understand something. *NEG>SOME
b. …it is impossible that Jean-Paul understands something. ✓NEG>SOME
c. …at most five people don't understand something. ✓NEG>SOME
d. …not everyone understands something. ✓NEG>SOME
e. …not a single person understands something. *NEG>SOME
f. …at most five people understand something. ✓AT_MOST_5>SOME
g. …no one understands something. *NEG>SOME

(4) A constituent A is DE (non-DE) w.r.t. the position of α ($[\![\alpha]\!]\in D_\sigma$) iff the function $\lambda x.[\![\ A[\alpha/\nu_\sigma]\ ]\!]^{g[\nu_\sigma\to x]}$ is DE (non-DE resp.). [Gajewski 2005]

(5) **Licensing of Polarity Items:** A PI π is licensed in sentence *S* only if it is contained in at least one eligible constituent A of *S* which has the monotonicity properties required by π w.r.t. the position of π and all other PIs in A are licensed within A.

(6) a. *$[_{\text{CP}}$ E$_{DE}$ $\dots[_{\text{CP}}$ π_k^{+} $\dots[_{\text{PolP}}$ E$_{DE}$ $\dots\pi_l^{+}\dots]]]$
b. —A: Everyone is hiding.
c. —B: That's exactly true, it's impossible that someone isn't hiding.✓SOME>NEG
d. —B': #That's exactly true, it's impossible that someone isn't hiding somewhere.
*IMPOSSIBLE>SOMEONE>NEG>SOMEWHERE

(7) a. *$[_{\text{CP}}$ E$_{DE}$ $\dots[_{\text{CP}}\dots[_{\text{PolP}}$ E$_{DE}$ $\dots\pi^{+}\dots\pi^{-}\dots]]]$
b. —A: Someone is eating.
c. —B: That's exactly true, it's impossible that someone isn't eating.✓NEG>SOME
d. —B': #That's exactly true, it's impossible that someone isn't eating anything.
*IMPOSSIBLE>NEG>SOMEONE>ANYTHING

(8) a. *He wouldn't rather be in Montpelier. [Baker 1970, ex. 46a]
b. There isn't anyone here who wouldn't rather do something/*anything downtown.

(9) a. At most five people sold anyone something. *AT_MOST_5>SOME
b. At most five people sold someone anything. *AT_MOST_5>SOME

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