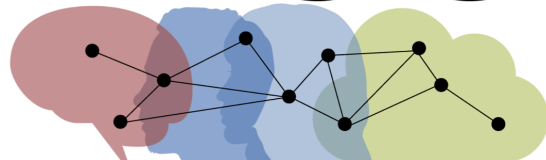TORINO
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Extending contextual blindness

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1   Introduction

According to a "modular view" (Spector, 2014, p. 166), scalar implicatures are generated within grammar, independently from considerations concerning relevance and informativeness, potentially derived from the conceptual/pragmatic system. In current generative linguistics, the computational system, which consists of syntax (a structure building component) and semantics (an interpretative and inferential component), delivers interpreted logical forms whose import is then enriched through pragmatic reasoning. A crucial assumption of this approach is that the computational (syntactic and semantic) procedures of grammar have no access to the inner working of the conceptual/pragmatic system, the same as pragmatic reasoning is blind to the inner working of the computational system. The main evidence in favor of the modular vision is that a scalar implicature can be generated even in case the result of generation contradicts contextual knowledge. Since, as it can be demonstrated, scalar implicatures are endowed with a mechanism to avoid contradictions, the fact that a scalar implicature can contradict contextual knowledge is proof that the mechanism is contextually blind, and it is activated within the computational system. In this contribution, we present a response to a recent criticism put forward by

Schlenker (2012), and we propose to extend contextual blindness to other inferential procedures.

2. Contextual blindness and quantifiers

2.1 An argument against contextual blindness with positive quantifiers

In a modular reconstruction, *Some Swedes come from a cold country* sounds marginal because it generates the scalar implicature that the universal alternative *All Swedes come from a cold country* does not hold. This interpretation contradicts the piece of contextual knowledge according to which all Swedes come from the same country. Contextual contradictions are expected to produce marginality effects. The important observation is that, in order to generate the mismatching inference, the mechanism must have access only to the logical properties of the sentences. Schlenker has criticized this conclusion. He has noted that modular theorist have only two theoretical possibilities to explain the mismatching inference. First, the mechanism negates alternatives because they are logically independent from the base sentence. But, he observes, in this case we should also expect the negation of an existential alternative with a universal base sentence, which is however clearly not attested. Second, the mechanism negates alternatives based on an asymmetric entailment logical pattern. However, based on standard quantificational treatment, Schlenker notes that universal sentences do not entail existential sentences logically, given the possibility of an empty restrictor. Since this existential import does not seem to be established via semantic presupposition, Schlenker concludes that contextual access is needed to derive the desired pattern of asymmetric entailment.

2.2 In defense of contextual blindness with positive quantifiers

Schlenker's conclusion has been criticized in Pistoia-Reda (to appear). The crucial evidence is the oddness asymmetry between the two reference failure sentences *Some Swedish matadors come from a cold country* and *Some Swedish matadors know Latin*. The marginality of the first sentence is unexpected assuming the empirical pattern discussed in Lappin & Reinhart (1988). In particular, speakers tend to assign a classical truth value to reference failure existentials, in conformity with standard quantificational treatment. Note that the scalar implicature of the second existential does not generate conflicts. Thus, it is concluded that also in this case the observed

oddness originates in the contradiction with the information that all Swedes come from the same country, independent of their professional occupation. In conclusion, a mismatching scalar implicature can be generated when the restrictor of the universal alternative is contextually known to be empty, and context is not needed for the generation of the mismatching inference. Current research investigates whether the entailment pattern is obtained logically, possibly assuming non classical quantificational treatments.

3. Contextual blindness and ordered alternatives

3.1 An argument against contextual blindness with ordered alternatives

Schlenker has also discussed cases of scalar implicatures involving ordered alternatives, obtained from partially ordered sets like □junior high school degree, high school degree, college degree□ (Hirschberg, 1985). He correctly observes that *Mary has a high school degree* generates the inference that Mary does not have a college degree but not the inference that Mary does not have a junior high school degree. However, Schlenker discusses, if we adhere to the contextual blindness assumption, we cannot explain how the the mechanism obtains the information that having a high school degree presupposes having a junior high school degree. This information can only be derived from world knowledge concerning the American educational system. Thus, predicting the incorrect inference would seem to be inevitable if we assume contextual blindness.

3.2 A defense of contextual blindness with ordered alternatives

However, Magri (to appear) shows that ordered alternatives à la Hirschberg seem to be dependent on specific lexical choices. He notes that *Mary took Intermediate Calculus* sounds marginal when it is contextual knowledge that Introductory Calculus is a requirement for Intermediate Calculus, the same as Intermediate Calculus is a requirement for Advanced Calculus. But in the same context *Mary got to Intermediate Calculus* is acceptable. Magri explains the oddness asymmetry by assuming that the first sentence also generates the inference that Mary did not take Introductory Calculus, which contradicts contextual knowledge. No such inference can be observed in the case of the second sentence. Magri's idea is that the ordered alternatives à la Hirschberg are *induced* by specific lexical choices. According to an interpretation of the current version of his proposal, such lexical choices have the potential of activating a degree structure which is

implicit in the ordered sets, thus providing the necessary ordering without accessing contextual knowledge.

4. Extending contextual blindness to exclusives

4.1 A potential contradiction with exact orders

I would like to submit that assuming an implicit degree structure of ordered sets could help explaining the behavior of exclusive operators, like *only*, when interacting with exact orders (Horn, 1989). According to a standard account, *only* generates the presupposition that the prejacent sentence is true conjoined with the assertion that suitably derived alternatives do not hold. For instance, *Mary met only Paul* presupposes that Mary met Paul and asserts that Mary did not meet anyone else beyond Paul. Now, when *only* interacts with exact orders like □sergeant, lieutenant, colonel□ in a negative environment, the standard account would seem to incorrectly predict a contradiction. *Mary is not only a lieutenant* presupposes that Mary is a lieutenant and asserts that Mary is something more than a simple lieutenant, presumably a colonel. But, according to our world knowledge concerning armed forces, no one can be, at the same time, a lieutenant and a colonel.

4.2 Discourse analysis and a blindness-based account

A possible solution to this complication involves abandoning the standard account by assuming that *only* induces a different presupposition than the pure prejacent when interacting with exact orders. According to a pragmatic proposal (Beaver & Clark, 2008), *only* is part of a discourse strategy of "letting the hearer down gently" which is carried out by combining a lower bound presupposition with an upper bound assertion. In our example above, *only* generates the presupposition that Mary is at least a lieutenant (the expectation is that Mary could not be less than a lieutenant) and asserts that she is more than a lieutenant. However, if we can independently assume that exact orders may be associated with an implicit degree structure, we can conjecture that this degree structure is made explicit in interactions with exclusive particles, whose standard meaning ought to be logically determined. The activation of the degree structure amounts to the insertion of a silent *at least* operator, and can be described as a "repair mechanism", in the words of Pistoia-Reda (2013), or as a "coercion rule", in the words of Chierchia (2013). Assuming this procedure is sufficient to salvage the

standard account of *only*: when the degree structure is activated, the lower bound proposition just is the prejacent proposition.

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