Free Choice effects and exclusive disjunction

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1 Introduction

The *free choice effect* is the effect whereby a permission sentence like

(1) You may take an apple or a pear.

carries a felt entailment to permission to take each of an apple and a pear (?). Schematically:

(FC)
$$May(p \text{ or } q) \Rightarrow May(p) \& May(q)$$

This entailment is *prima facie* surprising. I mark the felt entailment with an arrow (\Rightarrow) to stay as neutral as possible on what sorts of factors—semantic, pragmatic, or a combination of both—explain the relevant empirical phenomenon.

While a free choice sentence like (1) carries a felt entailment to the addressee's being able to choose between (permissibly) taking an apple and (permissibly) taking a pear, it emphatically does *not* communicate that the hearer may take *both* an apple and a pear, and perhaps even entails that the conjunction is *forbidden*. The general form of this latter intuition is sometimes called 'exclusivity':

$$(\text{Exclusivity}) \qquad \qquad \text{May}(p \text{ or } q) \Rightarrow \neg \operatorname{May}(p \& q)$$

I will call the weaker form of the same intuition, a mere non-entailment, 'joint neutrality':

(Joint Neutrality)
$$May(p \text{ or } q) \Rightarrow May(p \& q)$$

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Joint Neutrality is very strongly associated with free choice sentences: see, for example, ?, pg. 1 and ?, who calls it 'a consensus in the literature' (pg. 272, footnote 2). Indeed, theorists like ? have proposed theories on which the mechanism which rules out May(p & q) plays an essential role—via Neo-Gricean mechanisms—in explaining (FC) itself.

My purpose here is to use experimental data to gain a greater understanding of the free choice effect where there are more than two disjuncts under the relevant modal operator. Call this the '*n*-disjunct' (or '*n*-ary') case. There are open questions about how (Exclusivity), (Joint Neutrality), and (FC) generalise in such cases, which have not been subject to previous empirical study.