Conjoined Imperatives and Declaratives

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Overview This paper argues for a Divided Theory of conjoined imperatives and declaratives (IaDs): some can be explained in terms of dynamic conjunction and modal subordination, and others in terms of a special use of *and* like 'left-subordinating *and*' ($_{LS}$*and*). Divided Theories have been criticized by von Fintel & Iatridou [2] who argue that modal subordination is not possible across the relevant conjunctions. New data is presented showing that it is, and what produces this variability: discourse relations (Lascarides & Asher [6]). Further data are presented as problems for analyses like von Fintel & Iatridou [2] that treat all IaDs as involving $_{LS}$*and* or 'conditional conjunction'. It is shown that a Divided Theory can be adopted even by a non-propositional semantics for imperatives, provided that it uses the resources of dynamic semantics to compositionally mix directive and representational meaning.

Data Three kinds of IaDs have been discussed in the literature, exemplified by (1a)-(3a).

(1) a. Make tortillas and I'll make chile. (endorsed-IaD)
b. { #So / #But } don't make tortillas

(2) a. Screw up the tortillas and I'll rub a chile in your eye. (not endorsed-IaD)
b. { So / #But } don't screw up the tortillas

(3) a. Make tortillas and you'll need flour. (not endorsed-IaD)
b. { #So / But } don't make tortillas, it'll make a mess.

It has been noted that the imperative conjunct contributes directive force in (1a) but not in (2a) or (3a), and that the second conjunct of (2a) describes an undesirable state of affairs. Yet no one has articulated these intuitions in terms of the contrasts with *But* and *So* presented in (1b)-(3b). The fact that the imperative in (1a) is directive is clear since one can neither elaborate (*so*) nor contrast (*but*) (1a) with the contrary imperative in (1b). The fact that the imperative in (2a) is not directive is clear from the fact that one can elaborate (1a) with the contrary imperative in (1b). But this lack of directive force appears to arise in a specific way. The undesirable state of affairs brought about by following the imperative in (1a) invites the inference that the contrary directive should be followed — hence *so* in (2b) and the unavailability of *but*. The lack of directive force is clear in (3a), but does not appear to arise in the same way. It does not seem to be *blocked*, but to *never arise*.

It is attractive to analyze e-IaDs like (1a) and n-IaDs like (2a) as conjunctions of imperatives and declaratives where the modal *will* is modally subordinated to worlds where the imperative has been followed, as in *You should make tortillas and I'll make chile*. The speaker only committs to making chile *if* the addressee makes tortillas. For n-IaDs like (2b), one can appeal to a different conditional use of *and* which neutralizes the force of the first conjunct: $_{LS}$*and*, explored by Cullicover & Jackendoff [1] and Klinedinst & Rothschild [5], the scope-based analysis of modals and conjunction called *conditional conjunction* by Keshet [4] or the discourse relation analysis of Lascarides & Asher [6]. But von Fintel & Iatridou [2] argue that this appealing analysis cannot work and endorse one that treats all IaDs in terms of $_{LS}$*and* or conditional conjunction, and all imperatives as non-directive. They argue against a modal subordination analysis of e-IaDs like (1a) and n-IaDs like (2a) in part by highlighting the contrast in (4).

(4) a. Invest in this company and you will become rich.
b. # You must invest in this company and you will become rich.

However, this is plausibly explained by the fact that conjunction generally prohibits the right conjunct from explaining the left conjunct:

(5) a. Gabe is not allowed in the tent. He will get it dirty.
b. # Gabe is not allowed in the tent and he will get it dirty.

When one eliminates this feature from examples like (4), the contrast disappears:

(6) a. Contact your superior and she will explain your mission.
b. You must contact your superior and she will explain your mission.

von Fintel & Iatridou [2] also highlight the puzzling contrast of successful modal subordination in (7a) but not (7c).

(7) a. Don't park there! You'll be towed.
b. = If you don't park there, you'll be towed.
c. ≠ Don't park there and you'll be towed.

However, (7a) involves complement anaphora which is known to be incompatible with conjunction.

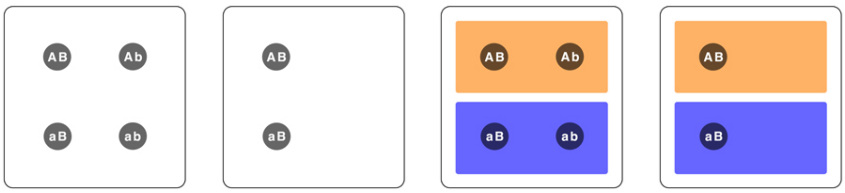
(8) a. Few congressmen admire Kennedy. They think he's incompetent.
b. # Few congressmen admire Kennedy and they think he's incompetent.

While von Fintel & Iatridou [2] make additional arguments, the full paper shows that similar replies are available. Further, their hypothesis that all conjunctions of imperatives and declaratives involve $_{LS}$*and* or conditional conjunction cannot capture examples like (9), where the first conjunct does not function as a conditional antecedent and the second has directive force.

(9) I love you and don't (you) forget it.

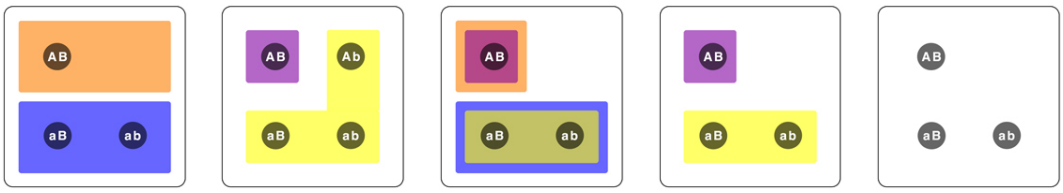
Treating IaDs uniformly makes the contrasts in (1b)-(3b) particularly difficult to explain.

Analysis The data discussed are compatible with a modal analysis like Kaufmann [3]. But they are prima facie difficult to capture on a non-propositional analysis like Portner [7] where imperatives and declaratives have distinct semantic types. Following Starr [8], I take imperatives to have a dynamic meaning: !A introduces a preference for A-worlds over ¬A-worlds. Preferences are modeled as sets of pairs of propositions: $R = \{\langle p_1, p_2\rangle, \ldots, \langle p_n, p_m\rangle\}$. The context set is reconstructed by unioning all of the ranked alternatives: $c_R = \bigcup(\mathrm{dom}\, R \cup \mathrm{ran}\, R)$. So !A changes R to $\{\langle p_1, p_2\rangle, \ldots, \langle p_n, p_m\rangle, \langle c_R \cap [\![\mathsf{A}]\!], c_R - [\![\mathsf{A}]\!]\rangle\}$, while the declarative ▷A will eliminate ¬A-worlds from each proposition ranked in R. In this update semantics $[\phi]$ is the meaning of ϕ, applying to R to yield R': $R[\phi] = R'$. Graphically, declaratives eliminate worlds and imperatives rank alternatives:[1] Conjunction is treated as sequential update, $R[\phi \wedge \psi] = (R[\phi])[\psi]$, which allows imperatives and



R_0 $R_0[\triangleright\mathsf{B}]$ $R_0[!\mathsf{A}]$ $R_0[!\mathsf{A} \wedge \triangleright\mathsf{B}]$

declaratives to fluidly combine. This interpretation of conjunctions fits for (9), but to capture (1a) and (2a), one has to model the anaphoric relationship between the conjuncts. The full paper explores different ways of arriving at this, but they all work by having ▷B operate only within the preferred A-alternative. (2a) operates against a background dispreference for A ∧ B-worlds, as in



$R_0[!\mathsf{A}^w \wedge \triangleright\mathsf{B}_w]$ R_1 $R_1[!\mathsf{A}^w \wedge \triangleright\mathsf{B}_w]$ R_2 $R_0[!\mathsf{A} \wedge_{LS} \triangleright\mathsf{B}]$

R_1. This leads to a conflict of preferences, pragmatically resolved to a state like R_2. (3a) is treated by making *and* have a conditional meaning, which uses the preference introduced in the first conjunct only to conditionalize on the preferred (A) alternative, and let the second conjunct operate there. In the full paper, disjunctions and conditional imperatives are added to the system, and shown to explain related phenomena.

[1] Worlds as dots, where capital letter indicates truth and lowercase falsity; preferences as complimentary colors; warm color as favored alternative.

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