Imperatives Under Coordination

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Abstract

Imperatives in conjoined sentences have presented a puzzle for theories which associate directive force with all imperatives. For example, in a conjunction like *'Ignore your homework and you'll fail the class'*, the first, imperative conjunct may describe an undesirable action, which is incompatible with normal imperative directive force. Despite this apparent counterexample, this paper presents new empirical evidence of directive force in all conjoined imperatives. Even cases with undesirable imperative actions still direct the addressee to perform a related action (such as not ignoring their homework). Under this new analysis, directive force sometimes applies to the entire Imperative-and-Declarative conjunction, rather than narrowly to the first, imperative clause. Robust diagnostics are deployed to delineate the precise class of conditional Imperative-and-Declarative conjunctions, distinguishing such cases from those whose first clauses do not actually include an imperative. Additional diagnostics separate conjunctions whose imperative force applies narrowly to the first conjunct from those where it applies to the entire conjunction. Finally, the analysis of this construction motivates a simplified theory of imperatives more generally.

1 Introduction

Jespersen (1909, 1924) describes a conditional meaning arising when an imperative clause is conjoined with a declarative clause. For instance, consider his example, taken from *Richard II* (Jespersen 1909, p. 475):

(1) Take honor from me, and my life is done. (Shakespeare 1836, p. 365)

As Jespersen points out, (1) conveys roughly the same meaning as the standard *if*-conditional *If you take honor from me, my life is done.* Notice, however, that without the second clause, the imperative is entirely infelicitous. Thomas Mowbray, the speaker of (1), would not say the simple imperative *Take honor from me!* because he decidedly does not want to lose his honor. Jespersen therefore calls this a form of **pseudo-imperative**. We will instead follow more recent researchers, who call this an **Imperative-and-Declarative** sentence or **IaD** after Schwager/Kaufmann (2006)and Kaufmann (2012).

The imperative clause of an IaD seems to differ in both syntactic and semantic properties from other imperatives, and this construction has therefore inspired much research, including works by Bolinger (1967), Davies (1979, 1986), van der Auwera (1986), Hamblin (1987), Clark (1993), Han (2000), Franke (2005), Schwager/Kaufmann (2006), Russell (2007), Kaufmann (2012), Iatridou (2008), von Fintel & Iatridou (2009), Jayez & Dargnat (2009), and von Fintel & Iatridou (2015). In particular, based on cases like (1), researchers to date have proposed that IaDs either do not contain true imperatives or contain morphological imperatives that are divorced from the usual semantic or pragmatic restrictions on such forms.

Such analyses complicate the theory of imperatives. Standard (non-conjoined) imperatives are said to convey so-called **directive force**; as Searle (1976) puts it, directives are attempts "by the speaker to get the hearer to do something." However, existing analyses of IaDs propose that, just for this one construction, such directive force is suspended, allowing imperatives to describe actions or scenarios other than instructions from the speaker to the hearer. Under such a view, an IaD such as (2a) should be synonymous (semantically and pragmatically) to the corresponding Declarative-and-Declarative (DaD) conjunction (2b):

(2) a. Be rude enough and they'll give you detention.
    b. You're rude enough and they'll give you detention.

And yet, the results of a new judgment study presented below show surprising constraints on IaDs as compared to ostensibly equivalent Declarative-and-Declarative cases. For instance, existing analyses of IaDs essentially equate the use of (3a) with the use of (3b). However, survey participants rated the IaD version (3a) significantly lower than the DaD version (3b) (with a full point difference in average ratings out of a 5-point scale):

(3) *Context:* A mother out to dinner with her husband calls her teenaged son at home. The son was watching television when they left, and she wants to make sure he has stopped. She says:
    a. # Still be watching TV right now and you're grounded.

b. You're still watching TV right now and you're grounded.

This suggests that there is some restriction on the imperative version that does not apply to the declarative one. We propose the simplest theory for what this restriction is: IaDs retain the directive force of imperatives. The addressee cannot control whether he is already watching TV, and therefore there is no suggested course of action implied by sentence (3a) or (3b). This is not a problem for the non-imperative (3b), but assuming the imperative version in (3a) retains a directive-force requirement, this sentence is ruled out as non-directive.

Tellingly, participants did not distinguish the ratings of the following two examples from one another (less than a .1-point difference in average ratings), despite the similarity to the case in (3):

(4) *Context:* A mother is going out to dinner with her husband, leaving their teenaged son at home. The son is watching television as they leave, and the mother wants to make sure he stops soon. She says:

a. Still be watching TV when we get back and you're grounded.

b. You're still watching TV when we get back and you're grounded.

Under our proposal, the IaD in (4a), which only differs from (3a) with respect to the temporal modifiers, is felicitous because the addressee can recover an instruction: roughly, to turn off the TV soon.

Based on this and other data, we argue below that in fact the same meaning and pragmatic force attached to simple imperatives remains entirely intact in all IaDs. Not all IaDs are the same, though. We argue that in certain cases, the imperative force applies narrowly to the first, imperative-marked clause, an approach following Bolinger (1967), Clark (1993), Schwager/Kaufmann (2006), Russell (2007) and Kaufmann (2012). For instance, (5a) is such a case, where the directive force of the imperative *stay* scopes entirely within the first clause. Therefore, (5a) is almost synonymous to (5b), a paraphrase using two sentences:

(5) a. Just stay a little longer, and you'll see why I like this band so much.

b. Just stay a little longer. You'll see why I like this band so much.

In other cases, such as (1), (2a), and (4a), we break from the prior literature to propose that the imperative force applies across both clauses of the conjunction. It is these latter cases that allow first clauses which cannot stand alone as imperatives in the same contexts as the entire conjunction. Zooming out to the entire sentence, though, the normal imperative pragmatics reappears. It is clear, for instance, that (1) conveys a strong request, similar to the simple imperative *Please don't take my honor from me!* It is precisely the lack of an interpretation as an instruction that leads to the infelicity of (3a).

The paper will proceed as follows. Section 2 gives evidence that even Jespersen's conditional imperatives retain directive force. However, several potential examples of IaDs proposed in the literature seem not to convey directive force. Therefore, in section 3, we give clear empirical definitions for two phenomena relevant to IaDs: imperatives and conditional conjunctions. We argue that certain

proposed examples of IaDs are not actually imperatives, according to independently motivated tests. Additionally, certain examples are not conditional. For the remainder of the paper we turn our attention to the cases which are both true imperatives and conditional conjunctions. Section 4 explores their semantics and section 5 discusses their syntax. Section 6 presents our conclusion.

2 Evidence for Directive Force in IaDs

As mentioned above, the standard view of conditional IaDs like (1) is that they do not convey directive force. For instance, Mowbray is not requesting or commanding that honor be taken from him. The evidence for this view is that the imperative first clause of such an IaD may not stand by itself in the same context. As mentioned, Mowbray would not say *Take honor from me!*. Paraphrasing prior literature, let us call this diagnostic of directive force the **Separability Condition**, which we do not adopt in this paper, and call those IaDs that fail to stand alone **inseparable** IaDs[1]:

(6) Separability Condition An IaD only conveys directive force if its imperative clause can stand alone as a felicitous imperative in the same context.

All existing theories of IaDs remove the directive force requirement from inseparable IaDs. Without directive force, though, the imperative clauses are roughly synonymous with second-person declarative clauses. Thus, existing theories of IaDs make the following prediction:

(7) DaD/IaD Synonymy Prediction Every inseparable IaD should be synonymous with its corresponding "Declarative-and-Declarative" Conditional Conjunction and felicitous in all the same contexts.

Any context where a conditional DaD is felicitous but the corresponding IaD is not, constitutes a counterexample to this prediction and therefore a counterexample to the existing theories of IaDs. For instance, (3) above presented one such case.

While we have more to say in section 3 about types of IaDs and criteria for inclusion and exclusion from this category, in the following subsection we present experimental data that substantiates the contrasts between IaDs and DaDs. The experimental results show that IaDs and corresponding DaDs are, in fact, not synonymous when context is held constant. Instead, IaDs are significantly less acceptable than similar DaDs in contexts where an instruction cannot be inferred from the utterance. In other words, whenever a directive interpretation is blocked given the context of utterance, IaDs are less acceptable than DaDs.

2.1 Experiment

This section presents the results of an internet-based acceptability judgment task. The goal of the experiment was to determine the relative acceptability of IaDs

[1]Note that inseparable IaDs are similar to 'Type-II IaDs' as discussed by von Fintel & Iatridou (2009), as well as 'negative' (and possibly at least some 'neutral') imperative conjunctions within Clark (1993)'s typology (which we do not adopt here).

and corresponding DaDs for two types of contexts: i) contexts in which the addressee cannot reasonably interpret the utterance as an instruction of any kind, and ii) contexts in which the addressee can reasonably interpret the utterance as an instruction, even if indirect. The primary question is whether contexts which prohibit directive interpretations degrade the relative acceptability of IaDs as compared to similar DaDs.

2.1.1 Participants

Subjects were recruited online through Amazon's MTurk platform.[2] Availability was restricted to IP addresses originating in Australia, Canada, the United Kingdom, and the United States. In addition, the survey was restricted to those workers who had a 97% approval rating for prior tasks within MTurk. Subjects were asked about native language competency and gave informed consent via the survey prior to answering questions. 73 subjects started the survey and all completed it; 4 subjects were excluded given apparent random responses (discussed below). All subjects were paid for their participation regardless of their responses.

2.1.2 Materials

We created 8 sets of items with like predicates. Each set of items has two contexts, the 'Present' context and the 'Future' context. These contexts rely on the fact that listeners cannot change current conditions, only future ones.[3] For example, this explains why a strictly present imperative such as *#Already be in bed!* sounds much worse than a future-oriented imperative such as *Be in bed by midnight!* The Present context is similarly constructed so that the addressee would be unable to recover even an indirect instruction from the IaD or DaD. The Future context is constructed such that the IaD or DaD could reasonably be interpreted as a kind of (possibly indirect) instruction. Within each context there is an IaD and corresponding DaD. Therefore, there were 8 sets of items, each with 4 sentences, for 32 total sentences, in the following design.

(8) Experimental Design
  a. Present Context (no instruction for the addressee)
    i. Present DaD
    ii. Present IaD
  b. Future Context (possible instruction for the addressee)
    i. Future DaD
    ii. Future IaD

[2]See Sprouse (2011) for independent validation of the MTurk platform for linguistic subject recruitment.

[3]Note that the terms 'present' and 'future,' as they relate to these experimental conditions, do not always map onto morpho-syntactic properties of the IaD, such as the form of the modal in the declarative clause.

As an example, (9) illustrates the design. The context in (7a) sets up a simple conditional statement about the driver's intentions: the driver will leave if the friend isn't already downstairs. No directions for the friend are implied, since they cannot immediately change their location from upstairs to downstairs. This is quite different in the context given in (9b); the driver is directing the friend to be ready on time. For many of the experimental items, adverbial phrases such as "right now" and "when I pull up," often in combination with presuppositional elements such as "still," indicate the temporal interpretation of the sentence. To the extent that prior analyses of IaDs strip imperative semantics and/or pragmatics from the imperative in an IaD, subjects should not detect a difference between IaDs and DaDs with respect to the acceptability of these adverbial phrases as they vary by temporal interpretation; if imperative interpretation does remain intact in IaDs, subjects should reject IaDs with the present-indicating adverbials.

Though not part of the experiment, the difference between the two contexts can be made clear via an explicit follow-up, spelling out the direction. Such an imperative is acceptable in the Future context (*So, be downstairs when I pull up!*) but odd in the Present scenario (*#So, be downstairs right now!*).[4] Note that the verb *be* was chosen for all items, since it is the only English verb with a distinct imperative form. The full set of items appears in Appendix B.

(9) a. Present Context: *Two friends are planning to go to an evening concert. One friend is picking up the other, who is constantly late. The driver calls as she pulls up and doesn't see her friend immediately, saying:*
   i. You're still upstairs right now and I'm leaving without you.
   ii. Still be upstairs right now and I'm leaving without you.

   b. Future Context: *Two friends are planning to go to an evening concert. One friend is going to pick up the other, who is constantly late. The driver calls in the morning to remind her friend to be on time and says:*
   i. You're still upstairs when I pull up tonight and I'll leave without you.
   ii. Still be upstairs when I pull up tonight and I'll leave without you.

From the 8 sets of 4 sentences, we created four sublists, such that each sublist only contains one test item per set (e.g. a subject would see only one sentence from (9)). Each sublist therefore contains 8 test items. Each sublist also includes

[4] A reviewer expresses concern that the futurity of IaD examples differs from that of DaD examples, insofar as the imperative itself is responsible for the future interpretation of the IaD, whereas the futurity of the DaD examples is due to the conditional conjunction structure itself, resulting in an uncontrolled comparison. Pretheoretically, while it may be true that the source of the future interpretation in the different constructions differs, this should not affect the interaction between this future interpretation (regardless of source) and the pragmatic constraints on imperatives, which is the focus of the experiment. Looking ahead to our analysis in Section 4, we argue that, in fact, both the IaD and the DaD involve the same future modal; to the extent that this analysis is on track, the futurity of the two constructions has the same source.

8 filler sentences (with contexts). Qualtrics survey software controlled random presentation of one sublist (8 fillers plus 8 test items) per subject.

Each subject also saw two additional non-test sentences (with context) in fixed order at the beginning and at the end of the survey. Subjects were unaware that these fixed items were not part of the randomized survey. The two non-test sentences at the end were then used to monitor whether subjects were answering the survey questions randomly. (Subjects did not differ greatly in their responses to the two non-test sentences at the beginning.) The two final fixed non-test items, used to monitor the subjects, were the following:

(10) Context: *A high school teacher is handing out a test to a group of nervous students and says:*

a. Don't be too stressed out and keep in mind that this exam is just a small part of your total grade.

(11) Context: *A flight attendant notices that a passenger has not buckled his seat belt prior to take-off and says:*

a. #Don't just buckle your seat belt please and we won't be on our way.

Subjects were asked to consider each context and then rate the utterance acceptability relative to the context. The rating was a 5-point Likert scale, with each point labelled the following: *not at all natural, not very natural, somewhat natural, very natural, completely natural.* The points of the scale were then converted to 1-5 ratings by Qualtrics. Subjects saw only one question per screen, and had to answer each question before continuing.

2.1.3 Results

73 subjects took the survey. Of these, we excluded 4 from the analysis. Subjects were excluded based on their ratings of the final two non-test items, which were presented in fixed order to all subjects. Subjects who rated (11a) as good or better than (10a) were excluded.[5] After excluding these four subjects, 69 subjects remained, resulting in a total of 552 ratings on test items.

Statistical analysis was conducted using linear mixed effects modeling with the lme4 package (Bates et al. 2015) in the R statistical computing environment (R Core Team, 2017). Following Barr et al. (2013), the model was fitted with the maximal random effects structure justified by the data – in this case, the full random effects structure. Model comparison and statistical significance within the models was analyzed using the lmerTest package (Kuznetsova et al. 2015).

The linear effects model used acceptability rating as the dependent variable, with Sentence Type (IaD vs. DaD) and Context (Present vs. Future) as predictors. Figure 1 illustrates the results, where * indicates significance at the .05 level and ** at the .01 level. There was a significant main effect of Context (Present vs. Future) within the IaD Sentence Type, with subjects rating IaDs higher in the

[5]These four were the only subjects to rate (11a) with a three (= *somewhat natural*) or higher. Additionally, they had the four highest standard deviations from the mean when averaged across all of the filler sentences.

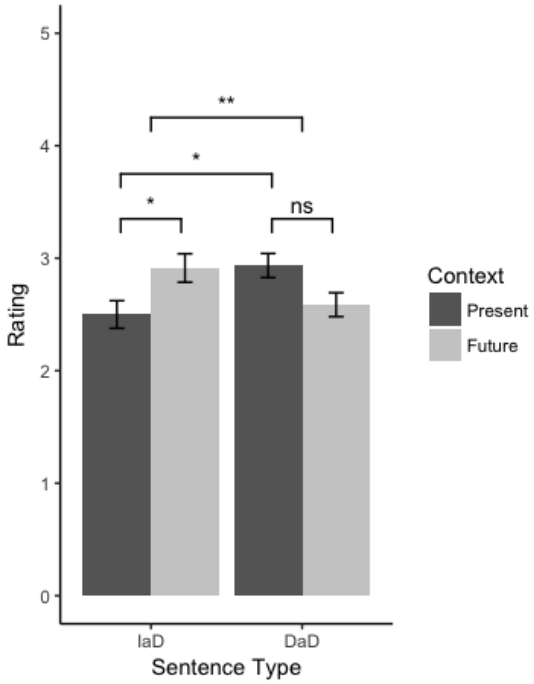


Figure 1: Acceptability for IaDs and DaDs, differentiated by context

Future context as compared to the Present ($\beta = .459$, $t = 3.809$, $p < .05$). There was an additional main effect of Sentence Type within the Present Context, such that within the Present context, subjects rated DaDs higher than IaDs ($\beta = .456$, $t = 2.308$, $p < .05$). Finally, there was a significant interaction between Sentence Type and Context that is visible in Figure 1 ($\beta = -.799$, $t = -3.552$, $p < .01$). The difference between Contexts (Present vs. Future) was not significant for the DaD Sentence Type.

2.2 Conclusions and Extensions

The results of the survey support the hypothesis that directive force, in the form of a pragmatically recoverable instruction, is necessary for IaDs to be fully felicitous. Specifically, IaDs in the Future context, where an instruction is recoverable, were rated significantly better than IaDs in the Present context; in terms of (9), cases like (9b-ii) were rated higher than those like (9a-ii). In addition, and now focusing on only the Present (non-directive) context, DaDs such as (9a-i) were rated significantly higher than their IaD counterparts, such as (9a-ii). From these results, we reject the prediction that every inseparable IaD is synonymous with its corresponding DaD in all of the same contexts.

Viewed another way, the evidence above presents IaDs that are as felicitous as any conditional conjunct in one scenario but infelicitous in another. The difference between these contexts crucially hinges on whether directive force is pragmatically possible: i.e., can the hearer reasonably perform some action based on the IaD. However, the imperative clauses of the IaDs cannot stand alone in either context;

these are inseparable IaDs. Therefore, according to the Separability Condition, they should not convey directive force. These are clear counterexamples, which any theory of IaDs must explain: why does directive force remain even though the imperative clauses in question cannot stand alone in the same context?

Next, notice that the infelicity noted above is not strictly tied to whether the addressee can control the event mentioned in the first clause. Consider an example (12) in which bank robbers discuss the presence of security tape. Even in a context with an existing, already recorded tape, for instance, as long as some direction is implied, both (12a) and (12b) are licensed:

(12) *Context*: After a bank robbery, one criminal thinks he might have been caught on camera. The robbers know that the police will review the tapes as soon as possible, so he asks if he can stick around or if he has to leave right away. His co-conspirators can answer:

  a. You're on even one frame of the surveillance tape, and the police will be after you immediately. So, get out of town today!

  b. Be on even one frame of the surveillance tape, and the police will be after you immediately. So, get out of town today!

This case is therefore quite different from existing inseparable IaD examples in the literature, at least those considered positive (or speaker-endorsed) and negative (non-endorsed). For instance, consider the two IaDs below:

(13) Positive Run even one second faster than your rival, and you'll win the race.

(14) Negative Run even one second slower than your rival, and you'll lose the race.

The literature often categorizes IaDs explicitly based on the action described in the first, imperative clause. For instance, (13) is called a positive IaD, because the speaker wants the addressee the perform the action described in the first clause. Modulo the NPI, the speaker could even use the first clause alone as an imperative in the same context: *Run just one second faster than your rival!* And in (14), the speaker wants the addressee to do the opposite of the action described in this first clause. In the same context, the speaker could say *Don't run even one second slower than your rival!* However, (12b) is neither negative nor positive. The direction implied is not related to the first clause at all; rather, the speaker is suggesting the addressee leave town immediately. This action (leaving town) is not mentioned at all in the IaD itself.

Another interesting class of IaDs, not previously observed, are those whose second clauses (rather than the first clauses) convey the direction the speaker is giving the addressee. For instance, the first, imperative clause of (12b) can quite felicitously be paired with the speaker's suggestion:

(15) Be on even one frame of the surveillance tape, and you should get out of town immediately.

Even though the addressee cannot control whether they appear on the tape already recorded, they can control whether they leave town. This seems to be enough to

license the IaD, although the action implied is in the second, declarative clause rather than the first, imperative clause. Note that this case has an explicit imperative paraphrase, but one using the second clause as the imperative: *Get out of town immediately if you're on even one frame of the tape!* Other examples of this phenomenon are given here:

(16) Anyone see anything suspicious, and you must inform us immediately. (cf. Inform us immediately if you see anything suspicious!)

(17) Know anyone involved in the case, and you are obligated to recuse yourself. (cf. Recuse yourself if you know anyone involved in the case!)

In the remainder of this paper, we will argue for the most parsimonious theory of imperatives: every imperative conveys directive force. We take the evidence presented in this section to suggest that all IaDs, even inseparable IaDs, require some sort of directive force. In contexts where such force is missing or blocked, an IaD is infelicitous, even when the corresponding DaD is allowed in the same context. The direction implied by this directive force can certainly be the action mentioned in the first, imperative clause (or its negation). However, the implied direction can also be mentioned in the second clause, or not mentioned at all in the IaD. As long as some direction is easily recoverable in context, the IaD is felicitous. Otherwise, the IaD sounds odd.

Despite arguably being the expected hypothesis, this view is not standard. This is partly due to examples proposed as IaDs that truly seem to convey no directions whatsoever. (For instance, *Be a minute late back in my day and it was detention for a week.*) However, there is considerable disagreement in the literature about which examples are truly IaDs, and which ones do not actually contain imperatives (based on independent, formal diagnostics). The first half of the next section is therefore devoted to motivating a few key empirical tests for imperatives, applicable to potential IaDs. We will show that many putative IaDs, especially those lacking directive force, fail these tests and therefore are not actually IaDs. The remainder of the section will propose diagnostics for conditional conjunctions. The rest of the paper will focus on the intersection of these categories, namely true IaDs that are also conditional conjunctions.

3 Definitions

Various diagnostics have been proposed to test for and categorize IaDs. The focus of this paper will be on the class of IaDs known as negative (Clark 1993), Type II (Russell 2007, Iatridou 2008, Kaufmann 2012), and non-endorsing (von Fintel & Iatridou 2015); this class of IaDs constitutes a subset of IaDs defined as 'conditions' by Bolinger (1967).

We will define this category as conditional conjunctions (Russell 2007, Keshet 2012) with imperative forms in their first clause and call such cases CC IaDs (Conditional Conjunction IaDs). This section will detail the diagnostics we propose to identify imperatives and conditional conjunctions, independent of IaDs, before applying these tests to define the class of CC IaDs.

3.1 Imperative Diagnostics

We first propose four tests to identify imperatives, based on previous research on the topic. These tests are entirely formal/syntactic in nature, rather than functional/pragmatic. Functional definitions of the imperative (e.g. Hamblin 1987) are problematic, because the functional range of morpho-syntactic imperatives is shared by several non-imperative forms across languages, such as subjunctive, optative, infinitive, and others (von Fintel & Iatridou 2010, Portner 2011, Medeiros 2014, Isac 2015). Taken together, we propose that the diagnostics below correctly delineate the morpho-syntactic class of imperatives, which we consider a subset of directive clauses (Searle 1976).

The four tests independently established here, using only simple, non-conjoined imperatives, will later prove crucial in identifying imperatives in the more complex, conjoined cases, where directive force is sometimes less obvious. Note that given the breadth of the literature on imperatives, we only include selected references for each diagnostic.

Our first three diagnostics specifically reference the grammatical subjects of imperatives, which have been taken to behave in unique ways (Beukema & Coopmans 1989, Zanuttini 2008, a.o.). The first test is for cases with covert subjects:

(18) Agreement with Missing Subjects[6]

- The understood subject of an imperative without an overt subject DP may only agree with second-person pronouns.
- Therefore, any clause whose missing subject agrees with a first- or third-person pronoun is not an imperative.

Consider the data in (19) and (20), as uttered in clearly directive contexts. According to (18), the cases in (19) are consistent with the behavior of imperative clauses, given agreement of a null subject with second-person pronouns. The examples in (20) are ruled out as imperative, though, because the understood subject agrees with a non-second-person pronoun. Both of these sentences sound odd, since they are clearly intended as imperatives but do not conform to the relevant formal constraint. Note that missing subjects are licensed in non-imperative cases, such as (21). In such cases, this understood subject may agree with a first- (or third-) person pronoun.

(19) a. $\emptyset_i$ raise your$_i$ hands!

b. $\emptyset_i$ buy yourself$_i$ an expensive suit.

(20) a. * $\emptyset_i$ raise their$_i$ hands! (* when addressee is being commanded to raise his/her/their own hands)

b. * $\emptyset_i$ buy myself$_i$ an expensive suit!

(21) Buy myself an expensive suit? Never!

[6]This test and the "Second-Person Agreement with Third-Person Subjects" test apply only to those languages, such as English, German, and Spanish, which have only 2^{nd} person imperatives. For examples and cross-linguistic differences between those languages with (morphological) imperatives beyond the 2^{nd} person, see e.g. Aikhenvald 2010 and Medeiros 2015.

The next two diagnostics describe the behavior of overt subjects in imperatives. These include the following diagnostic, which shows that imperatives always allow overt subjects, in isolation or along with a vocative (23a):

(22) Overt Subjects

- An overt subject may always be added to an imperative lacking one, without changing the form of the verb.
- Therefore, no clause that disallows the addition of subject is an imperative.

(23) a. John$_i$, you$_i$ get over here right now.
b. [You (all)]$_i$ raise your$_i$ hands now!

This behavior of imperative clauses contrasts with other sentences with missing subjects, which become ungrammatical when an overt subject is added:

(24) John faced a dilemma:
a. Side with his mother or side with his sister?
b. * He side with his mother or (he) side with his sister?
(cf. Should he side with his mother or side with his sister?)

(25) I finally made my decision last week:
a. Be by myself for a while.
b. * I be by myself for a while. (cf. I should be by myself for a while.)

The next diagnostic for imperatives will not actually be used to rule out any proposed IaD examples. It does, however, play a role in determining the syntactic structure we assume for IaDs (and imperatives in general). Zanuttini (2008) argues for the following diagnostic of English imperatives involving third-person subjects and second-person pronouns:

(26) Second-Person Agreement with Third-Person Subjects

- Imperative clauses with overt third-person subjects allow second person agreement with these subjects.
- Therefore, any clause whose third-person subject agrees with a second-person pronoun is an imperative.

Zanuttini shows that a third person subject can bind a second person pronoun in an imperative clause, but not in otherwise similar clauses with deontic modals (we add a vocative in (27a) to show that *boys* and *girls* are the grammatical subjects).

(27) a. Students: Boys$_i$ raise your$_i$ hands; girls$_j$ wiggle your$_j$ fingers! (Zanuttini 2008)
b. Students: *Boys$_i$ should raise your$_i$ hands; girls$_j$ should wiggle your$_j$ fingers! (Zanuttini 2008)

Zanuttini (2008) applies this diagnostic to third person, non-quantifier subjects of imperatives and also to quantifier subjects (e.g. *Everybody$_i$ raise your$_i$/their$_i$*

hand!). One exception we find, though, is that this unexpected binding is marginally acceptable with certain deontic modals (pace Zanuttini) (e.g. ?*Everybody$_i$ should buckle your$_i$ seatbelts!*). Since we will not be evaluating cases with such modals, though, this should not confound the results presented below.

The final diagnostic for imperatives concerns the presence of clear imperative morphology for languages which have this, and the translation of such forms into English. One wrinkle in this diagnostic concerns the availability of morpho-syntactic forms in certain syntactic contexts, especially under negation. In particular, several languages (e.g. Spanish, Italian) do not allow morpho-syntactic imperatives under sentential negation (Zanuttini 1997), and in such contexts 'suppletive imperatives' (Portner 2011), typically in the subjunctive or infinitive, are used instead. Therefore, while we expect any English imperative in non-negative sentences to be translated with imperative forms, English imperatives under negation may require a suppletive form in translation. For this and other reasons, we will not use this test exclusively to identify IaDs, but only present it to strengthen cases diagnosed via alternative tests.

(28) Verbal Morphology/Translation

- Most imperatives in English will translate as imperatives (or 'suppletive imperatives') in languages with unambiguous imperative forms.
- Such a translation will be taken as evidence for an imperative in the corresponding English sentence.
- Lack of such a translation will be taken a evidence against an imperative in the English sentence.

To illustrate this diagnostic, we consider imperatives in their use to offer permission. As discussed by von Fintel & Iatridou (2010) and von Fintel & Iatridou (2015), imperatives cross-linguistically can be interpreted as permissions. For example, both the Italian morpho-syntactic imperative and Italian suppletive imperative in (29) allow permission readings and can accordingly be translated as English imperatives. While German can use both imperatives and infinitives as commands, the German infinitival directive does not have a permission reading (30a). Therefore, an English imperative that expresses permission (30b) must be translated as a German imperative.

(29) a. Mangia!
eat
'Eat!' (allowed as permission, ≈ 'you may eat')

b. non aprire la porta
not open the door
'Don't open the door.' (allowed as permission, ≈ 'you are allowed to not open the door')

(30) a. Rausgehen! (not allowed as a permission)
out-go.INF
'You must go!' *or* 'Go!' (as a non-permission)

b. (*Can I go out and play?*)
Sure, go!
Na-klar, geh.IMP raus! #Rausgehen

We take the above four diagnostics to identify the morpho-syntactic class of imperatives in English and other languages which have only second person morphological imperatives (e.g. German, Spanish, and many others). Given the grammatical and interpretive properties of imperatives, correctly identifying imperatives in English can sometimes seem trivial when these occur in non-conjoined contexts, as above. In IaDs, however, the directive property of imperatives has been argued to be absent, as discussed above. With these diagnostics in mind, we can now ask whether the first clause in a given IaD is morpho-syntactically imperative.

3.2 Non-imperative Cases

Certain examples proposed as IaDs in prior literature have purportedly imperative clauses which fail the diagnostics proposed above for imperatives. We therefore analyze these cases as not containing imperatives, following Bolinger (1967), who originally discussed several of the example-types in this section. While the focus of our analysis below is on CC IaDs, which contain bona-fide imperatives, we discuss non-IaDs here so that the analysis of actual IaDs does not wrongly extend to potential but ultimately non-IaD examples.

First, as per the Missing Subjects test in (18) above, we take second-person agreement to be definitional for imperatives in English and the other languages discussed in this paper. We therefore analyze any example where a verb without an overt subject seems to license a first- or third-person pronoun to not be an IaD. Thus, we agree with Bolinger (1967) that examples such as (31) do not involve imperatives. (German and Spanish are languages with clear imperative morphology, and we also corroborated these judgments with native speakers consultants of these languages.)

(31) a. Buy myself a few pretty clothes and you act like you'd been robbed. [1SG]
b. Be as good as our word and others will trust us. [1PL]
c. Make oneself a slave to another person and one loses all self respect. [3SG]
d. Give themselves the least advantage and the gang hollers unfair. [3PL]

Second, following the Overt Subjects test in (22) above, we propose that imperatives (and therefore the first clause of an IaD) can always include overt subjects. Consider in this context examples similar to those described by Bolinger in (32), which we argue do not involve imperatives.

(32) a. Get a few gray hairs, and management starts talking retirement.
b. Be half a degree above normal temperature, and they put you to bed.
c. Look a little pale around the gills, and they want to call a priest.

Very similar non-imperative conditional conjunction examples (i.e. ones whose first-conjunct verbs are clearly indicative) convey roughly the same meanings:

(33) a. Anyone gets a few gray hairs, and management starts talking retirement.
b. You're half a degree above normal temperature, and they put you to bed.
c. Someone looks a little pale around the gills, and they want to call a priest.

However, we might wonder whether (32) involve imperatives, since they appear to describe various situations without offering any directive content to the addressee. We find that such non-direction-conveying cases with subjects can never have imperative-marked verbs:[7]

(34) a. *Anyone get a few gray hairs, and management starts talking retirement. (cf. *Anyone get rowdy, and I'll call the police.*)
b. *You be half a degree above normal temperature, and they put you to bed. (cf. *You be home by six, and your dinner will still be warm.*)
c. *Someone look a little pale around the gills, and they want to call a priest. (cf. *Someone look scared, quick, and we'll get some pity.*)

Two notes about these examples. First, given appropriate contexts, they could convey directions/suggestions; and, interestingly, they sound better in such contexts. For instance, (34a) sounds much improved in a context where a veteran actor is giving hair-coloring advice to a group of middle-aged colleagues. Second, notice that 34a and 34c do sound fine with so-called impersonal *you* as subject – e.g., "You get a few gray hairs, and management starts talking retirement". However, since most imperatives in English take the same form as a declarative second-person-singular verb, there is no way to distinguish such a case from an ordinary declarative sentence. It is telling, in our view, that the one verb that does distinguish its imperative and declarative forms (the verb *be*) sounds odd with the addition of *you* as subject, as shown in (34b).

We will not analyze these non-IaD conditional conjunctions here, but only point out, as von Fintel & Iatridou (2015) do, that conditional conjunctions can support even very minimal first conjuncts, such as NPs (Culicover 1972):

(35) One more word, and you're grounded.

From (35) we conclude that a complete VP is sufficiently large (in terms of structure or some other relevant metric) to occur in a conditional conjunction, and that the data in (32), while grammatical, do not involve imperatives.

We turn now to several other cases that have been analyzed as IaDs, but which do not, in fact, involve imperatives. Since instructions always involve future

[7] In this regard, we disagree with Jary & Kissine (2014). For instance, their (35), p. 119, sounds very odd to us in the context given:

i Diseases spread like wildfire here. [#]Someone catch a cold and next week we'll all have it.

actions, imperatives generally do not appear in the past tense. Clark (1993) (and later Han 2000), however, point out that certain potential IaDs reference past times, distinguishing them from imperatives:

(36) Life was hard in those days. Say one word out of turn, and they'd dock you a week's wages. [Clark's (50b)]

Kaufmann (2012, p. 235) notes that cases like (36) are not translatable with imperative morphology in German, though, which calls their imperative status into question. Finally, these past-tense cases cannot take third-person subjects like imperatives do:

(37) Life was hard in those days. Anyone *say/said one word out of turn, and they'd dock you a week's wage.

We therefore do not categorize such past-tense cases as IaDs.

Our final examples of incorrectly proposed IaDs illustrate the Translation Test proposed in (28). Thus, we compare these potential English IaDs to their translation into Spanish and German. Spanish and German both have unambiguous imperative morphology and IaDs exhibiting this morphology.[8] For instance, the following examples (from von Fintel & Iatridou (2010) and Kaufmann (2012), respectively) are grammatical as IaDs in Spanish and German, a fact we confirmed with native speakers of both languages. Specifically, the sentence-initial verb in each example is morphologically imperative:

(38) Come esto y tú estarás muerto en dos horas.
'Eat this and you'll be dead in two hours.'

(39) Geh einen Schritt nach hinten und du fliegst die Treppe runter.
'Take a step backwards and you'll fall down the stairs.'

We presented native speakers who confirmed the above sentences with several examples which could potentially be IaDs in English (from a morphological standpoint), but which do not imply any sort of direction for the addressee. As predicted by the analysis presented here, none of these potential IaDs sound completely felicitous with an imperative verbs in these languages. For example, our consultants much preferred to translate (40a) in the given context using a full conditional (40b) rather than an IaD (40c).[9]

(40) *He's a bearish man with long, flowing hair, [and] a bushy beard...*
a. See him at a club, and you might be tempted to slip out.

[8]Note that some languages place greater restrictions on the use of imperatives as compared to English. Our German consultants, for example, find German imperatives to be much stronger and less polite than English imperatives. For this reason, translation of an English IaD into another language may not always be felicitous.

[9]The text is from the Associate Press and appeared in a number of publications, and can be found here: http://www.chron.com/entertainment/music/article/Rick-Rubin-is-behind-many-of-the-year-s-hottest-1802176.php.

b. Wenn Du den in der Disko triffst, dann wirst du schnell
If you him in the disco encounter.DEC then will you quickly
abhauen wollen.
to retreat want
'If you run into him at the disco, you'll want to run away quickly.'

c. *Triff den in der Disko ...
Encounter.IMP him in the disco ...

As with (32) above, (40a) does not imply a direction to the addressee, but is instead a simple description. The Spanish and German speakers were quite reluctant to translate sentence-initial 'see' from (40a) with an imperative verb in the supplied context. Instead, these speakers greatly preferred using the equivalent of an if-clause. One informant volunteered the opinion that although such sentences might be spoken, they sound like calques of English grammar rather than a purely native sentence like (39) above. (Notice that this example also fails the Overt Subjects test: *Anyone sees/*see him at a club, and they might be tempted to slip out.*)

We also constructed examples and contexts similar to those in Bolinger (1967) and again found that an imperative for the sentence-initial verb was nearly impossible for several speakers, and judged as quite awkward by others, for both German and Spanish. For example, the speakers we consulted could not felicitously translate the sentence-initial verb in (41a) with an imperative, given the supplied context.

(41) *Two young academics from the East Coast are discussing ageism in the private sector on the West Coast. One says to the other, "Silicon Valley is totally biased against anyone older than 35."*

a. Get even a few gray hairs, and they'll get rid of you.

b. Wenn du ein paar graue Haare kriegst, dann schmeien sie Dich
if you a few grey hairs get.DEC, then throw they you
raus.
out.
'If you get a few grey hairs, then they will fire you.'

c. *Krieg.IMP ein paar graue Haare ...

The context in (41a) is crucial, since it is the context that implies that no direction is being given (i.e. the conversation is between two young East-Coast academics, not actual aging Silicon Valley workers); we find that in this context, this example also fails the Overt Subjects test: *Anyone gets/*get a few gray hairs, and they'll get rid of you.* As mentioned above, the same target example could be an IaD in a different context (e.g. a veteran tech worker giving advice to a group of young employees). Again, this suggests that such cases, where no direction from the speaker is implied, are not true IaDs.[10]

[10]This discussion should not be taken to imply that all aphorisms or generalizations are not true IaDs, nor that even non-IaD aphorisms cannot be translated with morphological imperatives in e.g. German. Aphorisms which imply an instruction can readily be formed with an imperative, as in the German translation of (1a), in which a morphological imperative is used (1b) (found

To recap, in this section we have analyzed several types of purported IaD and argued that none actually involve imperatives. This step is crucial because there has been disagreement in the literature on what counts as a bona-fide IaD (beginning with (Bolinger 1967)). In particular, some purported IaDs (e.g. (36)) have complicated the construction's analysis, given that these examples simply characterize a state of affairs, and therefore these resist analysis as imperatives. We argued here that such examples are not, in fact, IaDs, on the basis of formal tests for imperativity. In the next section we turn away from imperatives and focus on the analysis of conditional conjunctions. We argue that many of the unexpected properties that characterize even bona-fide IaDs result from their status as conditional conjunctions.

3.3 Conditional Conjunction Diagnostics

Culicover & Jackendoff (1997) examine the class of conditional conjunctions in detail and provide several formal diagnostics which distinguish these conjunctions from non-conditional conjunctions. We highlight two of these tests here:

(42) NPIs

- Conditional conjunctions, but not other conjunctions, license NPIs in their first clause.
- Therefore, any conjunction that allows an otherwise unlicensed NPI in its first clause is a conditional conjunction.

(43) Backwards Binding

- Conditional conjunctions, but not other conjunctions, license binding from a DP in their second clause to a pronoun in their first clause.
- Therefore, any conjunction that licenses such binding is a conditional conjunction.

Conditional conjunctions allow otherwise unlicensed NPIs. For example, (44a) is most naturally understood as a conditional, and under that interpretation an NPI in the first clause is perfectly natural. In contrast, (44b) does not have a salient interpretation as a conditional, and the NPI remains unlicensed. Grammatical conditional conjunctions can even be formed with non-sentential first conjuncts containing an NPI, as in (45).[11] These first clause NPIs are therefore properly understood as being licensed by the conditional conjunction structure, independently of IaDs (a point also made by von Fintel & Iatridou (2009) and Kaufmann (2012)).

online at https://www.youtube.com/watch?v=Bm8UWmXCMAg (German subtitles begin at 0:58)).

(1) a. Always look on the bright side of life.
b. Schau.IMP immer auf die lustige Seite des Lebens!

[11] Culicover & Jackendoff (1997) call examples such as (45) OM-sentences, since they characteristically begin with the phrase 'one more...'.

(44) a. Kobayashi eats even one more hotdog and he's the new champion!
b. *Kobayashi eats even one more hotdog and he likes catsup too.

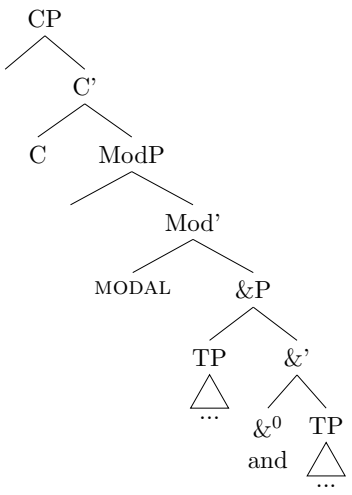
(45) Even one more mistake and you're fired.

Conditional conjunctions also allow backwards binding, in which a second-conjunct nominal binds a first-clause pronoun, whereas this binding pattern is not licensed in other types of conjunctions (46). When a conjunction is understood as a conditional, then the unexpected binding pattern is licensed, but if the conjunction cannot be read as a conditional, then backwards binding fails. As with the NPI pattern, backwards binding is therefore properly understood as a property of conditional conjunctions.

(46) a. You give him$_i$ enough opportunity and [every senator]$_i$, no matter how honest, will succumb to corruption.
b. *We gave him$_i$ enough opportunity and [every senator]$_i$, no matter how honest, succumbed to corruption. [C&J 23a,d]

Following Keshet (2012), we assume that a conditional conjunction conjoins two phrases (either TPs or some higher functional projection) below CP, with a modal (possibly covert) scoping above the conjunction, as in (47). This structure explains certain properties of the construction noted by Keshet (2012) and Culicover & Jackendoff (1997). For example, Keshet points out that the first clause of a conditional conjunction cannot convey new/focussed information, and that the clauses of a conditional conjunction generally cannot have different tenses from one another; we take this to result from sequence-of-tense induced by the higher modal (cf. Abusch 1997). These properties help explain the conditional meaning arising in these conjunctions.

(47)



With diagnostics in place for conditional conjunctions and imperatives, we now focus on imperatives in conjunctions. We argue that IaDs come in two types, such that one type behaves like conditional conjunctions (independent of speaker endorsement or other pragmatic properties), while the other type behaves like standard (and not conditional) conjunctions.

3.4 Types of IaDs

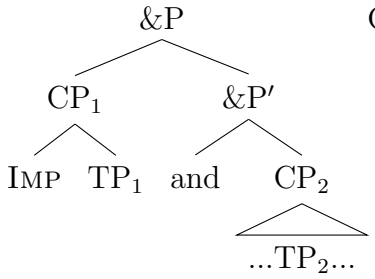
Following Schwager/Kaufmann (2006) and Kaufmann (2012), we take the category IaD to refer to two separate constructions. One class of IaD, the focus of this paper, are structurally conditional conjunctions. For instance, the IaD in (48a) means roughly the same thing as the Declarative-and-Declarative conditional conjunction in (48b), but the IaD in (49a) cannot be so easily converted to a full conditional conjunction as shown by the odd-sounding (49b).[12]

(48) a. Anyone budge an inch and I'll shoot.
b. Anyone budges an inch and I'll shoot.

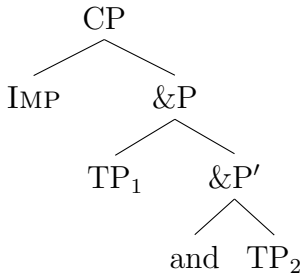
(49) a. Everyone please scooch an inch to the left and I'll start shooting photos.
b. ?? Everyone (please) scooches an inch to the left and I'll start shooting photos.

In our analysis, the class of IaDs that do not pattern with conditional conjunctions are imperative clauses, indistinguishable from simple stand-alone imperatives, which just happen to be conjoined with a declarative clause (resulting in a conditional interpretation, due to pragmatic inferencing, not syntactic structure). Since the entirety of the imperative syntax and semantics of such cases is therefore confined narrowly to the first clause of the IaD, we name them *Speech-act Conjunction IaDs* (or **SC IaDs**). We label those IaDs with the conditional conjunction structure *Conditional Conjunction IaDs* (or **CC IaDs**).[13] We argue that, at its core, the distinction between these two categories is a syntactic one, reflecting the varying scope of an imperative operator we label IMP:

(50) SC IaD:



CC IaD:



The structure for an SC IaD is basically a case of speech-act conjunction (Krifka 2004*b*), involving two full CPs. Following the structure proposed by Keshet (2012) for full conditional conjunctions, the structure for a CC IaD involves only a single full CP, with smaller (non-CP) clauses conjoined below this node. While we focus our semantic and syntactic analysis on the (arguably more interesting) CC IaDs, we briefly turn to diagnostics of SC IaDs before returning to CC IaDs for the remainder of the paper.

[12]Recall from section 2 that not every DaD conditional conjunction can be converted into a IaD, since directive force is necessary to license the imperative verb in both types of IaD; however, all conditional conjunction IaDs should be paraphrasable by a DaD.

[13]Our SC IaDs are similar in many respects to Kaufmann (2012)'s Type 1 IaDs. Our CC IaDs partially map onto Kaufmann's Type 2 IaDs.

3.5 Speech-act Conjunction IaDs

SC IaDs always (uncontroversially) exhibit clear directive force in the first, imperative clause. However, as discussed below, many actual IaD examples are ambiguous between an SC and a CC IaD reading. (Kaufmann (2012) points this out as well). Nevertheless, the different syntactic structures of the IaD types license different features (such as tag questions for SC IaDs and NPIs for CC IaDs).

We begin with the observation already discussed above, namely that any IaD in which the first imperative conjunct cannot stand alone in the same context is unambiguous, and must be a CC IaD. To distinguish the remaining cases, the following diagnostics detail certain features that are allowed in SC IaDs, but that are incompatible with CC IaDs. An important observation from prior literature is that these diagnostic features that are allowed in SC IaDs are also allowed in non-conjoined imperatives, whereas these are disallowed in CC IaDs.

(51) Directive Particles

- The first clause of a CC IaD cannot contain a discourse particle associated with directive force such as "please".
- Therefore, any IaD whose first clause contains such a particle is an SC IaD.

(52) Tag Questions

- The first clause of a CC IaD cannot contain a tag question.
- Therefore, any IaD whose first clause contains a tag question is an SC IaD.

(53) "Do" + Subject

- The first clause of a CC IaD cannot contain the auxiliary "do" before an overt subject.
- Therefore, any conjunction whose first clause contains this configuration is an SC IaD.

With respect to the first diagnostic, SC IaDs but not CC IaDs may contain directive particles associated with directive force within the first conjunct (Culicover & Jackendoff 1997, Kaufmann 2012). In this respect, the first clause of an SC IaD behaves identically to the first clause of a non-conjoined imperative. However, the particles are disallowed when the first conjunct of an IaD cannot stand alone in the same context, i.e. these are disallowed in CC IaDs (54).

(54) a. (Just) come closer (already), and you'll understand.
(cf. (Just) come closer (already)!)

b. Please take out the trash, and it'll smell much better.
(cf. Please take out the trash!)

c. ?? Please ignore your homework, and you'll fail the class.
(cf. ??Please ignore your homework!)

Tag questions behave in the same way as discourse particles. Tag questions are allowed to immediately follow the imperative first clause only in SC IaDs (Bolinger 1967, Culicover & Jackendoff 1997, Kaufmann 2012).

(55) a. Come closer, will you, and you'll understand.
(cf. Come closer, will you?)

b. Take out the trash, won't you, and I'll give you $5.
(cf. Take out the trash, won't you?)

c. ?? Ignore your homework, won't you, and you'll fail the class.
(cf. ??Ignore your homework, won't you?)

The final diagnostic more clearly references syntactic properties of IaDs, and is discussed by Russell (2007) and Kaufmann (2012). This diagnostic involves the position of English periphrastic *do* (either emphatic *do* or supportive *do*) with respect to overt subjects in the imperative first clause. The observation is that periphrastic *do* can appear in a pre-subject position only in SC IaDs (56).

(56) a. Do (both of you) take these pills, and you'll feel better in the morning. (cf. Do (both of you) take these pills!)

b. Don't (everyone) talk at once, and maybe we'll get something done.
(cf. Don't (everyone) talk at once!)

c. ?? Do everyone ignore your homework, and you'll all fail the class.
(cf. ??Do everyone ignore your homework!)

d. ?? Don't everyone complete your homework, and you'll all fail the class.
(cf. ??Don't everyone complete your homework!)

Although SC IaDs are not the focus of this paper, we discuss some of their properties here in order to justify the subclass of IaD, the CC IaD, that we analyze below. With respect to the interpretation of SC IaDs, we follow several prior researchers and support an analysis based on modal subordination (pace von Fintel & Iatridou (2015)), which we defend in Appendix A.

3.6 Conditional Conjunction IaDs

As opposed to the less controversial class of SC IaDs, which is a standard conjunction of two CP clauses, CC IaDs have the structure and properties of conditional conjunctions discussed above. Specifically, this is the conjunction of two TPs under a modal, with the modal and conjunction under the scope of an imperative operator in the single CP that dominates the conjunction. Our hypothesis is that all of the unexpected properties of CC IaDs follow from the properties of conditional conjunctions, as this interacts with the high-scoping imperative operator. At the same time, we argue for a new analysis of the imperative operator, taking Kaufmann (2012) as our point of departure, which can apply to all imperatives.

Previous studies of IaDs tend to classify them based on speaker endorsement, following Clark (1993). Now, it has been known since Bolinger (1967) that the exceptional class of IaD (Bolinger's 'straight conditions,' and Kaufmann's 'Type 2 IaDs') allow otherwise unlicensed NPIs. Holding the NPI diagnostic constant,

it is clear that CC IaDs may fall under any of the descriptive categories, based on speaker endorsement, that are discussed by Clark: positive, negative, or neutral.[14]

(57) a. Positive Make any donation at all, and we will send you this free gift.
b. Negative Make any false move, and I'll shoot.
c. Neutral See anything out of the ordinary, and you must report it immediately to your supervisor.

In other words, speaker endorsement cannot be the fundamental difference between SC IaDs and CC IaDs. While it is true that Clark's 'negative' IaDs must always be CC IaDs, we claim that this fact should be derived from other principles.

Instead, we propose that the difference between SC IaDs and CC IaDs is that only the latter has the structure and properties of a conditional conjunction. In particular, CC IaDs allow the two properties that hold for conditional conjunctions more generally that are discussed above, namely (i) otherwise unlicensed NPIs in the first clause and (ii) backwards binding. With respect to NPIs, CC IaDs allow NPIs where these are disallowed in the stand alone imperative (Bolinger 1967, Iatridou 2008, Kaufmann 2012). Again, the otherwise unlicensed NPI is allowed so long as the structure is a conditional conjunct, regardless of speaker endorsement (58, 59). At the same time, the NPI is not possible in combination with an element that forces an SC IaD analysis, such as a tag question (58b, 59b).

(58) a. Budge an inch and I'll shoot. *(spoken by bank robber)*
b. * Budge an inch, will you, and I'll shoot.

(59) a. Lift a finger to help him, and John will move mountains to return the favor.
b. * Lift a finger to help him, will you, and John will move mountains to return the favor.

As conditional conjunctions, CC IaDs also allow backwards binding (Culicover & Jackendoff 1997, Russell 2007, Kaufmann 2012). As with the NPI diagnostic, backwards binding is possible in a CC IaD regardless of speaker endorsement (60, 61), and is incompatible with elements that force an SC IaD syntactic analysis, such as tag questions and certain discourse particles (60b, 61b).

(60) a. Give him$_i$ enough money / any more than \$1000 and [every senator]$_i$, no matter how honest, will give you access to his files.
b. * Give him$_i$ enough money, will you, and [every senator]$_i$ will give you access to his files. [Russell's 27b]

(61) a. Assign them$_i$/him$_i$/her$_i$ any more than three chapters a night, and [every student]$_i$, no matter how gifted, will get overwhelmed.
b. * Assign them$_i$/him$_i$/her$_i$ three chapters tonight already, please, and [every student]$_i$, no matter how gifted, will get overwhelmed.

[14]Clark (1993) did not, in fact, take these labels to be analytic categories, though they are often presented that way in subsequent literature.

The data above suggest that the analysis of IaDs into two categories, SC IaD and CC IaD, is justified and, at the same time, not reducible to speaker endorsement. For this reason, we argue that the crucial difference between the two types of IaD is their syntactic structure.

Given the conflation of speaker endorsement with the conditional interpretation of IaDs in the prior literature, we stress once again that the syntactic analysis of an IaD (as SC IaD or CC IaD) will depend on context if no disambiguating material is present. For example, (62), spoken by a gunman, will never allow a tag question, since the first clause imperative cannot stand alone in the same context and therefore must be a CC IaD. The same example, with the tag question, is fine when spoken by a cameraman (62).

(62) Come closer, will you, and I'll shoot. [*gunman, ✓photographer]

Finally, any IaD which has a first clause imperative that can stand alone in the same context is potentially ambiguous between an SC IaD and CC IaD structure, as discussed by Kaufmann (2012, p. 230). The reason for this is that while all CC IaDs have a conditional interpretation due to their structure, SC IaDs can generally be interpreted conditionally due to pragmatic inferencing (as discussed in Appendix A). Therefore, an example such as (63a) is ambiguous, even though it can be modified to include a tag question, forcing an SC IaD interpretation (63b), or it can be modified to include an NPI, forcing a CC IaD interpretation (63c). It is impossible, however, to include both a NPI and any of the SC IaD diagnostics, such as tag questions, do-subject word order, and the relevant discourse particles, as shown in (64).

(63) a. Come closer, and you'll understand.
b. Come closer, won't you, and you'll understand.
(cf. Come closer, will you?).
c. Come even one step closer, and you'll understand.
(cf. *Come even one step closer!)

(64) a. *Come even one step closer, won't you, and you'll understand.
b. *Do everyone come even one step closer, and you'll understand.
c. *Just come even one step closer already, and you'll understand.

Based on such ambiguous cases, we propose that there is no grammatical basis to Clark's three categories of positive, negative, and neutral IaDs (as Clark himself suggests), and that IaDs should not be classified with respect to speaker endorsement.[15] With a classification of IaDs and the relevant diagnostics for CC IaDs in place, we now turn to the analysis of CC IaDs.

[15]For completeness, note that some neutral cases are also ambiguous. A paradigm case of neutral IaDs is (ia) (due to Clark), for which we suspect an SC IaD analysis is likely more accessible. This example is readily modified to include a tag question (ib). This is not surprising, because in the right context (e.g. as a type of weak dare), the first clause imperative in (ia) can occur alone (ic). However, like the examples above, a CC IaD interpretation can be forced with the addition of an NPI, as in the slightly modified (but arguably still neutral) (id).

(i) a. Open *The Guardian* and you'll find a misprint on every page.

4 Semantic Analysis

As mentioned above, existing proposals incorrectly predict DaD/IaD Synonymy, argued against in previous sections. Given that IaDs have a more limited distribution than their corresponding DaDs, some restriction must apply to the CC IaD cases that does not apply to the full DaD conditional conjunctions. We pursue the null hypothesis that this restriction is exactly the same as the restriction that holds for standard imperatives. This section thus is an attempt to slightly revise an existing theory of imperatives so that it applies to all cases – stand-alone imperatives and IaDs. As a bonus, the result is arguably simpler than existing proposals, relying on an independent analysis of so-called decision problems.

One intuitive way of explaining our proposal is that every imperative clause expresses a modal proposition and also directs the listener to perform an action inferred from this proposition.[16] Simple imperatives make use of a covert priority modal, and therefore the modal proposition expressed by a stand-alone imperative like *Go outside!* is paraphraseable as *You should go should outside.* The action inferrable from this priority-modal statement is quite clear: the addressee going outside. Conditionals, we argue on independent grounds, license a different covert modal, unavailable to any other type of clause, including simple imperatives. This modal gives a future reading to its complement, and therefore a conditional conjunction IaD such as (1), *Take honor from me and my life is done*, expresses a modal proposition paraphraseable as a future statement: *My life will be done if you take honor from me.* The inferred action of this proposition may vary from context to context, but the most salient inference is that the listener is being directed not to take the speaker's honor from him.

4.1 Decision Problems

The connection between the modal proposition expressed by an imperative and the action thereby implied can be made more explicit via the notion of a **decision problem** – i.e., a choice between various possible courses of action. In fact, Kaufmann (2012) already analyzes imperatives as answers to a salient decision problem. Two such decision problems are sketched below for illustration: (65) for how to get to Harlem and (66) for when to get home to make curfew. When these decision problems are salient, the imperatives in (67) are felicitous, directing listeners to take an action from their corresponding decision problem:

(65) a. Decision Problem: How do I get to Harlem?

b. You don't believe me that editorial standards have fallen? Open *The Guardian*, will you, and you'll find a misprint on every page.

c. Next time you're at a news stand, do me a favor: Open *The Guardian*. I guarantee you'll find a misprint on every page.

d. You don't believe me that editorial standards have fallen? Open even one page of *The Guardian*, and you're sure to find a misprint.

[16] We are grateful to an anonymous reviewer for suggesting this explanation of our proposal.

b. Actions/Answers: you walk, you drive, you take the bus, you take the A Train, you drive halfway then take the A Train, you walk halfway then take the bus, etc.

(66) a. Decision Problem: When do I get home to make curfew?

b. Actions/Answers: you're home by 11:00, you're home by midnight, you're home by 1:00, etc.

(67) a. Take the A Train!

b. Be home by midnight!

In Kaufmann's proposal, the complement of the imperative modal (e.g., *You're home by midnight* in *You should be home by midnight*) must answer the salient decision problem. She addresses what counts as such an answer in a footnote,[17] following an analysis of Groenendijk & Stokhof (1984) for questions. She distinguishes two types of answers: a **complete** answer singles out one of the alternative actions provided by the decision problem above all others while a **partial** answer rules out some such alternatives but leaves more than one still viable.

Normally, such answerhood conditions (to questions) are defined in terms of strict (logical) entailment. However, Roberts (2012) proposes a slightly more liberal definition: "contextual entailment." For instance, Roberts suggests that an answer of *John is allergic to clams* contextually entails a partial answer to the question *What kinds of seafood will John eat?* since it can be assumed in most contexts that John won't eat a food he is allergic to. Similarly, *John is allergic to seafood* contextually entails a complete answer to the question, namely that he will eat no seafood. From here on we will call answers under a strict entailment definition **direct** and those that only count as answers under a contextual entailment definition **indirect**.

Our proposal, in a nutshell, is to adopt Kaufmann's analysis of imperatives, but allow indirect answers to decision problems. For instance, (68a) is a direct partial answer to the question in (68). It is only partial because it does not say exactly how to get to Harlem, but it counts as an answer since it rules out one or more possible ways to get there. Next, (68b) is an indirect partial answer; along with a contextual assumption that the addressee wants to arrive before dark, it rules out taking the A Train. Similarly, (68c) counts as an indirect partial answer to the decision problem corresponding to (68). Again, these two conditional statements rule out any answer to the decision problem involving taking the A Train. Thus, our proposal is that the imperative in (68c) is felicitous for the same reasons as the direct statement of this partial answer, namely (68b).

(68) How do I get to Harlem?

a. Don't take the A train!

[17] "The notion of what counts as an answer to a decision problem should be treated parallel to what counts as an answer to an information question, cf. Groenendijk & Stokhof (1984); Ginzburg (1995*a*,*b*). Obviously, imperatives are felicitous if they constitute complete semantic answers to the decision problem... But imperatives can also constitute partial answers, as long as it is compatible with the common ground that the addressee obtains further evidence to actually resolve the decision problem." (fn 37, p. 160)

b. If you take the A train, you won't be there until after dark.

c. Take the A train and you won't be there until after dark.

Some small additional changes to Kaufmann's system are required to allow indirect answers. Once these are implemented, though, the new system will allow CC IaDs, even those with anomalous first clauses, without over-generating stand-alone imperatives.

4.2 Kaufmann's proposal

Kaufmann proposes a single operator (which, for consistency, we will continue to refer to as IMP) encoding the directive force and the modal nature of imperatives. Simplifying for our current purposes, Kaufmann suggests the following constraints for her version of the IMP operator when it takes an ordering source g and a prejacent proposition p.[18] The constraints are implemented as presuppositions triggered by the IMP operator (see Kaufmann for a more formal definition):[19]

(69) $[\![\text{IMP } g\ p]\!]^w = 1$, when defined, iff every best world w' as ordered by $g(w)$ is such that $p(w') = 1$. $[\![\text{IMP } g\ p]\!]^w$ is defined when the following presuppositions are met:

a. Non-past constraint The time at which p takes place must not be entirely in the past. (Kaufmann 2012, Section 3.2.2)

b. Authority condition The speaker must be in a privileged position with respect to the truth of $[\![\text{IMP } g\ p]\!]^w$, either as an authority figure or as a knowledgeable expert. (Kaufmann 2012, Section 4.2.2)

c. Epistemic uncertainty constraint It is unknown whether $p(w)$ is true or false before the imperative is uttered. (Kaufmann 2012, Section 4.2.3)

d. Ordering source restriction The imperative must address a salient decision problem D, and the speaker and addressee must consider g to be the relevant ordering source for resolving D.[20] (Kaufmann 2012, Section 4.2.3).

These presuppositions, especially the authority condition, derive the directive force of imperatives: the degree to which an addressee is obligated to perform the action implied corresponds to the authority of the speaker. Together with Kaufmann's syntactic constraints (such as a requirement for second-person features), they also explain the unique constraints on imperative clauses. For instance, (69a) explains the infelicity of (70a) below, where the propositional complement to the modal IMP

[18] See Kratzer (1991) for a definition of ordering sources. For simplicity, we will ignore modal bases entirely in this discussion.

[19] An anonymous reviewer points out that the speaker of an imperative must also be committed to it for its pragmatic effect to go through. We concentrate here on the addressee.

[20] This is a simplification. Kaufmann's original ordering source restriction is disjunctive, also allowing ordering sources based solely on speaker preferences, to account for non-decision-related imperatives such as *Enjoy your meal!* Such cases must be analyzed as (degenerate or stylized) decision problems in our system.

takes place entirely in the past. The authority condition explains why (70b) and (70c) sound odd. The epistemic uncertainty constraint rules out (70d). Finally, Kaufmann's ordering source restriction explains the infelicity of examples like (70e) (since the imperative does not answer the salient decision question) and (70f) (since the speaker does not agree that g is the relevant ordering source for the decision):

(70) a. # Be at home yesterday!
b. # I don't know how to get to Harlem, but take the A train!
c. # Go to your room, Dad! [Spoken by a two-year-old]
d. # I know you won't go, but go to the party tonight!
e. # To get to Harlem, simply brush your teeth!
f. # You shouldn't go to the party tonight, but go to the party tonight!

4.3 Replicating Kaufmann with Decision Problems

Taking a step back, some of Kaufmann's constraints seem to overlap with reasonable constraints on decision problems. For instance, one does not make decisions about past actions (non-past constraint) or deliberate about choices that have already been made (epistemic uncertainty). Perhaps her constraints on imperatives could be simplified by assuming more explicit constraints on decision problems. Let us turn, then to the definition of a decision problem.

van Rooy (2003) defines a decision problem as a triple comprising a probability distribution, a utility function, and a set of actions. We will ignore the probability distribution here, leaving a pair $\langle A, U\rangle$ where A is a set of actions and U is a utility function. Following Kaufmann, let us assume that each action in A is a proposition involving the addressee of the imperative. The utility function $U(a, w)$ returns a real number (higher for more desirable outcomes) given an action a and a world w. Using U, the actions in A can be ordered in each world w, and the a that maximizes $U(a, w)$ is the best decision in w. Under this definition, a direct answer to the decision problem would be one that improves knowledge of the real world until it is clear that one action dominates the others. A partial answer would at least make it clear that certain actions are not the best and hence can be eliminated from consideration.

Notice that each decision problem $\langle A, U\rangle$ determines a class of ordering sources, call it $\mathrm{OS}_{\langle A,U\rangle}$, as follows:

(71) $g \in \mathrm{OS}_{\langle A,U\rangle}$ in w iff the action $a{\in}A$ that maximizes $U(a, w)$ contains all the best worlds according to $g(w)$.

Such ordering sources will necessarily be prioritizing and, as long as the speaker and hearer agree on the decision problem itself, they will also agree on the ordering source. In concert with a realistic modal base, such an ordering source will suggest a best course of action to take in the real world.

With these in place, we can rewrite Kaufmann's definitions as follows:

(72) $[\![\textsc{Imp}\ g\ p]\!]^w = 1$, when defined, iff every best world w' as ordered by $g(w)$ is such that $p(w') = 1$. $[\![\textsc{Imp}\ g\ p]\!]^w$ is defined when the following presuppositions are met:

a. Decision constraint The imperative must (directly) answer a salient decision problem D, agreed upon by speaker and hearer.

b. Authority condition The speaker must be in a privileged position with respect to resolving D, either as an authority figure or as a knowledgeable expert.

(73) Constraints on any decision problem $\langle A, U\rangle$ in world w:

a. Non-past constraint The time at which each $a{\in}A$ takes place must not be entirely in the past.

b. Epistemic uncertainty constraint It must be unknown whether $a(w)$ is true or false for each $a{\in}A$.

This formulation is meant to reproduce Kaufmann's proposal precisely. Notice, though, that the new Decision constraint does not directly constrain the ordering source of the modal Imp. Instead, the nature of the modal is constrained by the fact that the imperative must answer a salient decision problem.

For instance, given a decision problem $D{=}\langle A, U\rangle$ where A is the set of answers to the question *How do I get to Harlem?*, the imperative *Take the A Train!* should provide a (direct) complete answer to D. Let us step through how this works. First, since the proposition p here is equivalent to *You take the A Train*, it directly states one of the actions in A. The whole imperative then asserts that all best worlds according to g are those where the addressee takes the A Train. Next, the Decision constraint requires that this (modal) statement answer the decision problem D. Recall that answering a decision problem involves learning enough about the utility function U in w to reveal which action in A is best. Now, if g is a member of OS_D, the modal statement will assert that p is the best action according to U in the real world. Thus, the Decision constraint indirectly constrains the ordering source g to be a member of OS_D in order that the whole statement will bear on U and answer the decision problem.

Similarly, *Don't take the A Train!* is a (direct) partial answer, since it asserts that none of the highest-utility worlds are those where you take the A Train. In this case, p is equivalent to *You don't take the A Train*, which is not a member of A, but is incompatible with at least one member of A. By revealing the reduced utility of these member propositions, the decision problem is partially answered.

Kaufmann's definitions do not accommodate the type of indirect answers required to handle CC IaDs, though, since Kaufmann directly encodes the priority modal meaning into Imp and the ordering source g. CC IaDs, like all conditionals, are modal statements, but not necessarily priority modal statements. Thus, Kaufmann's proposal must be amended slightly beyond the simple reformulation just proposed.

4.4 Adapting Indirect Answers

We propose two changes to Kaufmann's system (as reformulated in the previous subsection). First, we separate the directive force of Imp from its modal nature by assuming that Imp is purely presuppositional, but selects for a modalized complement (call it ModP).[21] Second, we relax Kaufmann's assumption of a direct answer to the decision problem, allowing contextual entailment to provide an indirect answer as in Roberts (2012). Preliminary to these changes, though, is an analysis of how the covert modals necessary in the proposal are licensed.

4.4.1 Licensing modals

An important part of the proposal involves recognizing independent constraints on covert modals. Like most unspoken material, covert modals must be licensed somehow, or else they would not be learnable by a new speaker of the language. In other words, speakers and listeners cannot assume covert modals just anywhere. This licensing constraint explains why the simple sentences in (74) do not have the modal readings indicated (Keshet 2012, von Fintel & Iatridou 2015):[22]

(74) a. You're quiet. $\neq$ { You should be quiet. / You will be quiet.

b. You're grounded. $\neq$ { You should be grounded. / You will be grounded.

c. Kobayashi's the new champion. $\neq$ { Kobayashi should be the new champion. / Kobayashi will be the new champion.

Following authors such as Kaufmann, we propose that imperatives license a covert priority modal. Thus, while a non-imperative clause like (74a) does not have a reading paraphraseable as *You should be quiet*, the corresponding imperative *Be quiet!* does have such a reading, since it licenses a priority modal. Imperatives alone do not license any other kind of modal, such as a simple future modal, explaining why *Be quiet!* does not simply predict that there is a future time when you're quiet.

Conditionals in general, and conditional conjunctions in particular, license more modal flavors than plain, non-conditional statements. For a detailed analysis of the types of covert modals allowed in conditional conjunctions, see Keshet (2012).[23] For our purposes, we will concentrate on the salient future modal reading of conditional conjunctions. For instance, *if*-conditionals, allow silent dynamic future modals, easily noticed in so-called **one-case** conditionals (Kadmon 1987):

(75) a. If you come home late tonight, you're grounded.
≈ You will be grounded under certain circumstances.

[21] See Oikonomou (2016) for a slightly different proposal along these same lines.

[22] One minor exception is so-called **scheduled** interpretations, like *The train leaves at 7pm.*

[23] For instance, conditional conjunctions disallow epistemic readings: e.g., *The lights are on, and somebody's home* does not have a conditional reading.

b. If Kobayashi eats one more hotdog, he's the new champion.
≈ Kobayashi will be the new champion under certain circumstances.

Conditional conjunctions, including CC IaDs, allow the same future readings, presumably via the same modal flavor licensed in *if*-conditionals:

(76) a. You come home late tonight, and you're grounded.
b. Come home late tonight and you're grounded.
c. Kobayashi eats one more hard-boiled egg, and he's the new champion.
d. Eat one more hard-boiled egg and you're the new champion.

So, both types of conditionals license future-modal flavors not available to non-conditional constructions.[24] And, finally, while simple stand-alone imperatives only allow priority modals, CC IaDs, as both imperatives and conditionals, can include either type of modal.[25]

4.5 Indirect Answers

The resulting system is as follows (with conditions on decision problems as above):

(77) Licensing Constraint All covert modals must be licensed. Licensing conditions include (among others):
a. Imperatives license a covert priority modal.
b. Conditionals license a covert future modal.

(78) $[\![\textsc{Imp ModP}]\!]^w = [\![\textsc{ModP}]\!]^w$, when defined. $[\![\textsc{Imp ModP}]\!]^w$ is defined when the following presuppositions are met:
a. Decision constraint The imperative clause [Imp ModP] must (directly or indirectly) answer a salient decision problem D, agreed upon by speaker and hearer.
b. Authority condition The speaker must be in a privileged position with respect to resolving D, either as an authority figure or as a knowledgeable expert.

For instance, consider once more the Harlem decision problem mentioned in (65) above (call it D). The stand-alone imperative in (79a) provides a direct (complete)

[24] Incidentally, any case above may combine with a generic interpretation, which we thus take to be a separate item and not simply a flavor that modals may acquire:

(i) a. Non-conditional sentences: Mary walks to work.
b. *If*-conditionals: If you (ever) come home late in our house, you're grounded.
c. Conditional Conjunctions: (You) come home late in our house, and you're grounded.

[25] Most of the examples above use standard conditional modals, but cases with straight priority modals work, as well:

(i) Pick up on any funny business, and you're outta there like a bat outta hell.
≈ If you pick up on any funny business, be/get outta there like a bat outta hell.
≈ If you pick up on any funny business, you should get outta there like a bat outta hell.

answer to D. The covert modal shown ($\text{MOD}_{priority}$) is licensed by the imperative; it takes an ordering source g. In order for the clause to satisfy the Decision constraint in (78a), the imperative clause must (as a whole) give an answer to the decision problem. As explained above, this will only happen if g is a member of OS_D and thus the modal statement asserts that the prejacent (equivalent to the proposition *You take the A Train*) is the best action in D.

In CC IaDs, though, another option is opened up for the MOD below IMP: the future modal (labelled MOD_{future} here) allowed in conditional statements. Since IMP presupposes that its prejacent answers a salient decision problem, the only way that a future interpretation of IMP could answer such a QUD would be indirectly. This is allowed, though, as long as some direct answer is (contextually) entailed. Consider, for instance, the CC IaD in (79b). The entire clause denotes a conditional statement equivalent to *If you take the A Train, you'll be there after dark*. As explained above, this constitutes an indirect partial answer to D when taken together with the assumption that the addressee wants to arrive before dark. Thus the Decision constraint (as revised here) is satisfied and the imperative is felicitous. Although IMP would license a priority modal below it, it is also satisfied to have another type of modal, as long as its presuppositions are satisfied.

(79) a. IMP [$\text{MOD}_{priority}$ g] Take the A Train!
b. IMP MOD_{future} [Take the A Train, and you'll be there after dark.]

4.6 Stand-alone Imperatives Revisited

One immediate question that this proposal raises is why can't simple imperatives also be indirect? For instance, if (80a) is a felicitous indirect answer to the following question suggesting a decision problem, why isn't the potentially synonymous (80b) felicitous?

(80) What should I wear tonight?
a. You'll be cold in just a t-shirt.
b. * Be cold in just a t-shirt.

The answer lies in the licensing restrictions on silent modals proposed above. As per the Licensing Constraint in (77) above, covert future modals are forbidden in most cases. Only when properly licensed, e.g. in a conditional statement, can such modals appear. Since (80b) is not conditional, the only covert modal available is $\text{MOD}_{priority}$, licensed by IMP. Thus, (80b) is out under an interpretation that relies on a future modal. The only licensed modal flavor is as a priority modal. However, the proposition thus expressed, *You should/ought to be cold in just t-shirt*, does not properly address the decision problem implied by the question. As predicted, though, other priority modals, even those that only indirectly answer the decision problem, are allowable:

(81) What should I wear tonight?
a. Don't worry about looks!
b. Just be comfortable!

Determining exactly which responses contextually entail answers to a given decision problem is a terribly difficult task, which we mostly leave to future work. For instance, the imperative in (82a) is not a felicitous answer to the question in (82), which reasonably corresponds to a decision problem:

(82) Should I study for the SAT?
  a. * Well, go to college!
  b. ?? Well, you should go to college.

Our impression is that the underlying modal proposition, shown in (82b), is not specific enough to contextually entail an answer to the decision problem, since plenty of people have gone to college without studying for the SAT. To our ears, explicitly saying (82b) is odd for roughly the same reason. Similar statements that more closely imply an answer to the statement sound proportionately better:[26]

(83) Should I study for the SAT?
  a. At least take a practice test!
  b. Make sure you will do OK, one way or another!
  c. Just go out and have fun! SAT scores are overrated.

Finally, all non-conditional imperatives (which necessarily involve priority modals) seem to be restricted to use the ordering source derived from the decision problem, rather than another ordering source.[27][28] This restriction even applies to indirect simple imperatives, such as (81) and (83). For instance, the imperative in (84a) is not a felicitous answer to the question in (84):

(84) Should I go home? I really don't want to follow my parents' stupid rules.
  a. * Well, be home by midnight...!
  b. Well, you SHOULD be home by midnight...

This time, though, the corresponding modal declarative, in (84b) is felicitous, especially with the intonation indicated. Here, though, the modal statement is simply providing information about the rules established by a third-party authority, rather than seeking to answer the salient decision problem. This switch to the third-party ordering source does not seem available to the covert priority modal of the imperative. We will not explore here whether this is an explicit restriction on imperatives or a constraint on the salience of ordering sources more generally.

[26] Thanks to an anonymous reviewer for this example, and the observation that (82b) sounds better than (82a). This improved felicity may be due to less strict licensing conditions on explicit modals like *should*, which can be used (for instance) to change the topic of conversation.

[27] The facts leading to this observation were produced by the same anonymous reviewer.

[28] Note that this requires the (not unreasonable) assumption that the same contextual factors discussed above be considered in the calculation of a priority modal meaning. For instance, *You should be comfortable* is acceptable in the context of (81) because the being-comfortable worlds narrow down the choices of clothing.

5 Syntactic Analysis

In the above section, we argued that imperatives involve (at least) two separate elements, MOD and IMP. In this section we develop a syntactic analysis in which these two components are represented in the syntax of imperatives. Incorporating these two elements into a conditional conjunction analysis of CC IaDs gives a principled account for several morpho-syntactic properties of this construction. Finally, we show that our proposal correctly allows imperative clauses in the CC construction to occur as the first conjunct along with a declarative (IaDs, our focus thus far), as the first conjunct along with an additional imperative (IaI), and as the second conjunct following a declarative (DaI).

5.1 Components of Imperative Syntax

This section is concerned with the syntactic representation of three components necessary for our analysis: IMP, MOD, and interpretable 2^{nd} person features. Note, however, that we attempt to offer the simplest syntactic structure possible for the analysis of CC IaDs, and therefore we are not making a strong stand on whether our proposed categories should be further decomposed (see e.g. Isac (2015)) or whether additional syntactic components are justified in light of imperative data not discussed here.

With respect to IMP, we assume that this element is related to the imperative (or, alternatively, directive) speech act, and we place this element in C^0. The analysis of IMP in C^0 essentially follows Kaufmann (2012) and antecedent research such as Rivero & Terzi (1995) and Han (2000). We differ from Kaufmann (2012) primarily in the semantic definition of IMP, discussed above, which removes modal force from IMP.

Next, we propose a separate projection ModP, which hosts MOD in its head, Mod^0. As discussed above, the modal in this projection must be a prioritizing modal for stand-alone or SC IaDs, but may also contain other types of modals just in case these are licensed by the conditional conjunction structure. Analyses of imperatives which specifically incorporate a modal projection have been proposed by Den Dikken (1992), Poletto & Zanuttini (2003) and Isac (2015), while others incorporate a modal into the left-periphery (Han 2000, Kaufmann 2012) or a lower projection such as TP (Medeiros 2013).

Independent evidence for a modal projection that is syntactically lower than CP is offered by Isac (2015), who compares imperatives to other modals (such as 'true deontics' (Hacquard 2006)) which are anchored to the relevant speech act (speaker or addressee, not necessarily the subject). Medeiros (2014, 2015) also argues for a separation between the directive speech act and the morpho-syntactic realization of imperatives, based on certain languages that allow morphological imperatives in non-directive contexts. For example, Medeiros argues that languages with morphologically rich imperative paradigms, such as Ancient Greek, allow imperatives in relative and clausal complement clauses, where they can be embedded as part of a larger declarative or interrogative sentence. This research suggests that imperatives may have separate, syntactically represented components which

are relevant for their interpretation, including a speech act component (our IMP, in C^0), and a syntactically separate modal component (our MOD, in Mod^0).

We also adopt aspects of imperative syntax – specifically, the mechanisms for morpho-syntactic subject agreement – proposed in Zanuttini (2008) and Zanuttini et al. (2012). The crucial observation in Zanuttini (2008) is that many of the unique morpho-syntactic and interpretive properties of imperatives are reducible to properties of the syntactic subjects of imperative clauses. To account for these properties, Zanuttini (2008) proposes an *interpretable* 2nd person feature in the left periphery of imperative clauses, which undergoes agreement with the subject of all imperatives clauses with morphologically imperative verbs.[29]

Zanuttini's analysis accounts for several observations in English imperative morpho-syntax, understood within a Minimalist syntactic framework. The first, observed frequently in prior literature as well, is that T^0 is unable to independently agree with imperative subjects in English. Adapting Zanuttini (2008)'s analysis, agreement between the interpretable 2nd person feature in C^0 and the imperative subject occurs because the subject of the imperative has an unvalued case feature, meaning it is an active goal, in the sense of Chomsky (2001). Assuming the analysis of agreement presented in Pesetsky & Torrego (2007), such that a head with an interpretable feature can act as a probe for agreement, the interpretable 2nd person feature agrees with the subject (T^0 being defective). As a result of agreement, the 2nd person feature is mapped onto the functional projection which selects the subject (either NP or QP), where agreement results in feature sharing (Pesetsky & Torrego (2007), Kratzer (2009)). Following Chomsky (2000) and Chomsky (2001), person agreement between C^0 and the imperative subject results in case valuation.[30]

Subject agreement with interpretable 2nd person features licenses null subjects

[29]See also Bennis (2006), who also proposes an interpretable 2nd person feature in the CP domain, and Jensen (2003) who proposed such a feature in the TP domain.

[30]We follow Zanuttini (2008) in assuming that the interpretable 2nd person feature agrees with the subject DP directly. We do not follow the analysis presented in Zanuttini et al. (2012), in which the interpretable 2nd person feature agrees with the subject of the imperative only after imperative T^0 (which is assumed to bear case and number features, but no person feature) moves to the left periphery, adjoining to the relevant left-peripheral head that bears the interpretable 2nd person feature. Under this model, T^0 (after adjunction to the left-peripheral head) always c-commands the imperative subject. This is problematic, because imperatives allow both 'inverted' (essentially subject-aux inversion) and 'non-inverted' word order, as discussed in Davies (1986) and more recently by Potsdam (2007), from which we present the following examples.

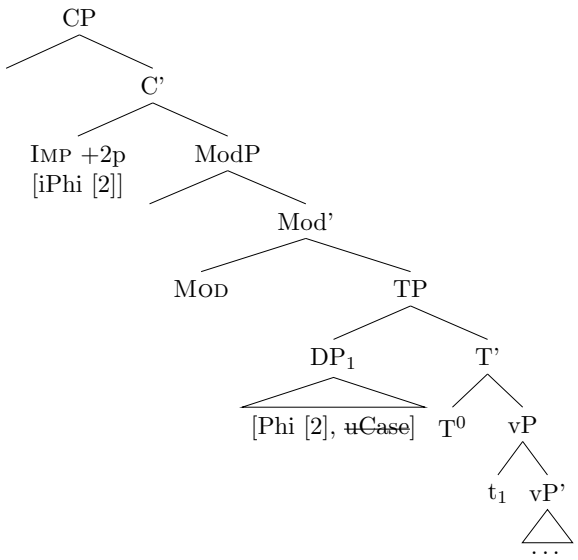
i. *do(n't)*+SUBJECT
   a. Don't you forget!
   b. Don't anyone misbehave while we're gone!
   c. Do at least some of you give it a try!
   d. Do someone help him quickly!

ii. SUBJECT+*do(n't)*
   a. Everybody don't talk at once!
   b. You don't be late!
   c. Someone do answer the phone!
   d. Those with children do bring them along! (Potsdam 2007)

in imperative clauses and causes inherent 3^{rd} person subjects (such as quantifier subjects) to have 2^{nd} person properties (see section 3.1 for relevant examples). We differ from Zanutttini primarily by representing the interpretable 2^{nd} person features in C^0, as part of IMP, whereas Zanuttini (2008) and Zanuttini et al. (2012) represent this feature in the head of a specialized 'Jussive' phrase.

With IMP, MOD, and 2^{nd} person features in place, (85) represents a syntactic analysis for a non-conjoined imperative with a null subject. Because T^0 in imperatives is unable to undergo Agree with the subject (Zanuttini 2008), the subject raises to Spec,TP only to satisfy the EPP (Medeiros 2015), where it agrees with the interpretable 2^{nd} person features in C^0.

(85)



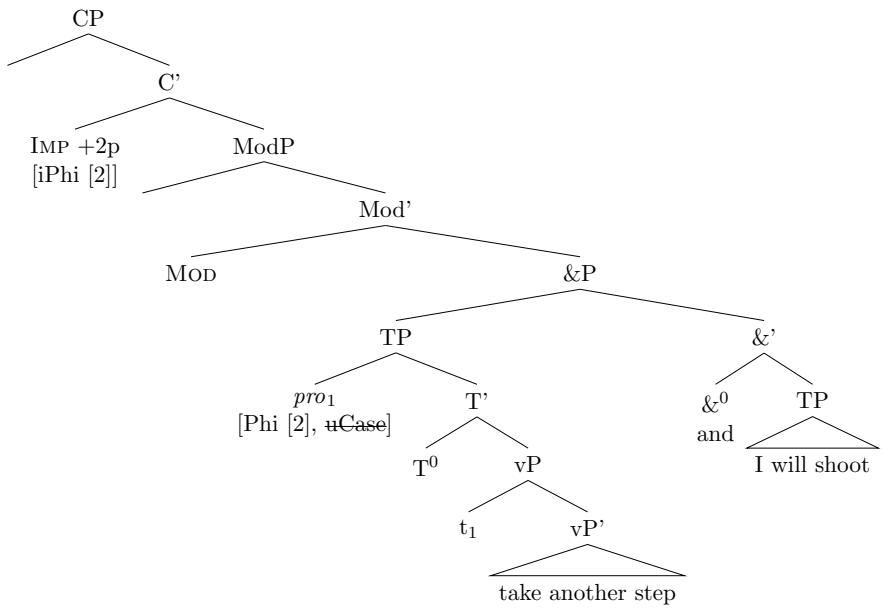
5.2 The Syntax of CC IaDs

We require one additional element for the syntax of CC IaDs: the analysis of conditional conjunctions proposed in Keshet (2012). As discussed above, this involves the conjunction of two functional projections (e.g. TP) in the c-command domain of a modal. The entire conjunction and the modal is dominated by a single CP. For the present analysis, IMP is in C, and IMP selects for a ModP complement. The two clauses of an IaD are then represented by two conjoined TPs. With these elements in place, we can now analyze the syntax of CC IaDs. We propose that a CC IaD such as (86) involves the structure shown in (87).

(86) Take another step, and I'll shoot.

If T^0 obligatorily c-commands the imperative subject, as Zanuttini et al. (2012) proposes, it is unclear how non-inverted imperatives can have the word order they do, with the subject preceding the auxiliary.

(87)



To the extent that (87) represents the analysis of conditional conjunctions in general, several of the morpho-syntactic properties of CC IaDs are explained. In particular, the ability for the first clause to include otherwise unlicensed NPIs and to allow backwards binding follow from the analysis (see 3.3 for examples). Such binding is allowed in precisely the same ways as in (other) conditional conjunctions, since CC IaDs simply are conditional conjunctions.

For completeness, the category of IaD which we call SC IaD (Speech-act Conjunction IaDs) involve conjunction at the CP level, such that both IMP (including the relevant 2^{nd} person features) and MOD are contained in the first conjunct. Given that both IMP and MOD are completely contained within the first conjunct CP, the structure (88b) correctly accounts for the expected morpho-syntactic behavior of imperatives in this construction. In particular, the syntactic behavior of the first clause of an SC IaD patterns with non-conjoined imperatives with respect to disallowing otherwise unlicensed NPIs, the distribution of directive particles, and the position of periphrastic *do* (see section 3.5 for discussion).

(88) a. Study hard and you'll pass the class.

b. [$_{\&P}$ [$_{CP}$ study hard] [$_{\&'}$ [$_{\&}$ and] [$_{CP}$ you'll pass the class]]]

The contrast between the structures (87) and (88b) additionally solves a puzzle with respect to the status of periphrastic *do* in IaDs. For example, Russell (2007) uses periphrastic *do* as a way to split IaDs into 'true' imperative cases (our SC IaDs, roughly) versus his bare-VP cases (our CC IaDs, roughly). Periphrastic *do* in this context can refer to either the *do* which occurs obligatorily as do-support under negation, or the form that appears optionally for emphasis or contrast. Focusing on the empirical distribution of periphrastic *do*, we claim that CC IaDs allow emphatic (89) and supportive *do* (90), contra Russell (2007) and Scontras & Gibson (2011), based on evidence such as the following.[31]

[31]While Scontras & Gibson (2011) presents experimental evidence for their position, they do not include any examples of the type SUBJECT-do-IMP in their test items.

(89) *Don't move — this is a robbery! In particular, don't touch your phones!*
  a. Anybody do touch a phone, and I'll start shooting.
  b. * Do anybody touch a phone, and I'll start shooting.

(90) *[In the context of rowing] If we lose this heat we'll be eliminated...*
  a. Anybody don't pull your weight, and we're screwed.
  b. * Don't anybody pull your weight, and we're screwed.

At the same time, SC IaDs allow periphrastic *do* in either position.

(91) a. Everyone do submit your homework, won't you, and no one will fail.
  b. Do everyone submit your homework, won't you, and no one will fail.

(92) *I know it's hard, but I value honestly about all else...*
  a. Everybody don't cheat, and you'll all be fine.
  b. Don't anybody cheat, and you'll all be fine.

While Russell takes evidence parallel to (89b) to show that that bare VPs (not imperatives) are involved in CC IaDs, we argue that imperatives are involved, and that the relevant restriction on periphrastic *do* follows from a restriction on T-C movement. Adopting the terminology of Chomsky (1975), the *do*+IMPERATIVE word order is an instance of subject-aux inversion, such that subject-aux inversion is disallowed only in CC IaDs. This contrast is then explained by the structural analyses proposed above. In (87), imperative T^0 is contained within a conjunct that does not include C^0, and T-C movement cannot apply due to the Coordinate Structure Constraint. In contrast, imperative T^0 and its locally c-commanding C^0 are contained within the same conjunct in the SC IaD configuration (88b), and T-C movement is permitted.

5.3 Alternative Configurations

Beyond licensing properties which are independently observed in conditional conjunctions (such as NPIs), (87) makes some additional predictions regarding the morpho-syntactic properties of the two TPs conjoined under IMP. Recall that, according to Zanuttini (2008), the interpretable 2^{nd} person feature in the left periphery effectively licenses imperatives in a language such as English, where imperative T^0 is defective and unable to value case. Under this analysis, which we adopt here, the first clause of an IaD can be an imperative insofar as IMP (with the associated 2^{nd} person feature) c-commands the first conjunct, where it can agree with the first-clause imperative subject. The second clause of an IaD has declarative T^0, which directly agrees with the second-clause subject.

However, note that the first-clause and the second-clause subjects do not c-command each other. Under standard assumptions about minimality within Minimalism, this means that IMP should be able to agree with both subjects equally in a structure such as (87). This predicts that Imperative-and-Imperative (IaI) examples are possible as conditional conjunctions, and we find that this prediction is borne out. The following IaIs have the distinctive properties such as first clause NPIs and backwards binding associated with CC IaDs:

(93) a. Be even a little bit late and be fired.
b. Cheat them$_i$ and lose [every student]$_1$'s trust.

Further, given the absence of c-command between the subjects of the two conjuncts in (87), we predict that Declarative-and-Imperative constructions should also be possible. In this case, the first-clause (declarative) subject agrees with its local T^0, entirely within its conjunct, and the second-clause imperative subject agrees with the 2^{nd} person features in the manner described above. Although we find DaIs to be subject to more stringent felicity conditions than IaDs, DaIs are indeed possible. The examples in (94) both start with declarative clauses, in the first (94a) and third (94b) person, respectively, while the second clause has an imperative, which licenses the quantifier binding of a second person pronoun within the second clause. Because these are CC IaDs, both examples can have NPIs in the first (non-imperative) conjunct, licensed by the conditional conjunction structure.

(94) a. *I'm going to go through this proof now:* I make even one mistake, and somebody$_1$ raise your$_1$ hand immediately.
b. (Even) one more bus passes without stopping, and (somebody$_1$) call your$_1$ mother to pick us up.

As discussed in this section, the conditional conjunction structure that we propose for CC IaDs explains several observations made in the prior literature regarding conditional IaDs, specifically with respect to NPIs and backwards binding, insofar as the conditional conjunction structure licenses NPIs and backwards binding, independently of imperatives. Periphrastic *do* was also discussed in terms of its distribution in CC versus SC IaDs. Further, the conditional conjunction analysis, combined with our analysis of subject case valuation in imperatives, correctly predicts the existence of IaIs and DaIs.

6 Conclusion

This paper makes one simple claim: all imperatives have directive force. In service of this claim, we have carefully distinguished true imperatives from examples only claimed to be IaDs in prior literature via concrete empirical tests. Of the remaining examples, Speech-act Conditional IaDs, where a true full imperative clause conjoins with a declarative, uncontroversially exhibit directive force. Only Conditional Conjunction IaDs (again distinguished via concrete empirical tests) appear to violate the directive-force requirement on imperatives.

Under prior analyses of IaDs, the first, imperative conjuncts of CC IaDs differ from simple, non-conjoined imperatives, usually by virtue of lacking imperative semantics and/or pragmatics. We presented new empirical evidence that CC IaDs as a whole retain directive force, even if their imperative clauses viewed narrowly do not. Other unexpected morpho-syntactic properties of CC IaDs are explained by the fact that they are, syntactically, conditional conjunctions.

From this perspective, IaDs can inform the theory of imperatives more generally. In particular, we argue that imperatives involve a syntactically represented

operator, the position of which determines the scopal properties of an IaD (i.e. CC versus SC IaDs). This operator encodes the interpretive restrictions that constrain CC IaDs but not non-imperative conditional conjunctions. Further, our analysis implies that imperatives involve modals, as the properties of modality interact with both the conditional conjunction structure of CC IaDs and the pragmatic inferencing which yields the conditional interpretation of SC IaDs (see Appendix A). Finally, we argue that most, if not all, CC IaDs are best understood as similar to indirect answers to questions. The analysis of indirect imperatives motivates a pragmatics for imperatives understood within a larger theory of decision problems. We find that the proposed pragmatics in fact simplifies the theory, since the empirical domain of imperatives is expanded to fully include IaDs and imperative semantics can be simplified via reference to independent constraints on decision problems.

Appendix A: Modal Subordination in IaDs

In this appendix, we defend an analysis of Speech-act Conjunction IaDs as the conjunction of an imperative speech act followed by a declarative one (see Han 2000, Krifka 2004*a*, Kaufmann 2012). Any conditional flavor in these cases comes from so-called modal subordination (Roberts 1989), a process allowing salient material to restrict the domain of a modal. For instance, compare Roberts's example in (95a) to the similar case in (95b):

(95) a. A wolf might get in. It would eat Fred first.
b. Don't you let that wolf near you, and it won't be able to eat you.

In (95a), the modal *would* in the second sentence is restricted to situations where a wolf gets in. It asserts that in such situations, the wolf would eat Fred first. This makes the second sentence roughly synonymous to an *if*-conditional such as *If a wolf gets in, it would eat Fred first.* Similarly, the modal *won't* in the second clause of (95b) is restricted to situations where the addressee doesn't let the wolf anywhere near them. It asserts that in such situations, the wolf won't be able to eat the addressee. Therefore, this second clause is roughly synonymous to the *if*-conditional *If you don't let that wolf near you, it won't be able to eat you.*

A modal subordination analysis has been criticized by Iatridou (2008) and von Fintel & Iatridou (2009, 2015) as a way to capture their category of **endorsing** IaDs. Their main complaint is that such IaDs do not pattern with non-imperative modal-subordination cases in two key areas: conjunction and polarity shifts. A closer analysis suggests, however, that their complaints result from the use of speaker endorsement to delineate the class of examples relevant to the modal subordination analysis. We claim in this paper that the only grammatically relevant distinction in classes of IaDs is whether they are Speech-act Conjunction IaDs, with Imp scoping low within the first CP, or Conditional Conjunction IaDs, with Imp scoping high, above the conjunction. The examples considered by von Fintel and Iatridou (although ambiguous) are most easily understood as CC IaDs and therefore are not best captured via a modal subordination account. Once true SC IaD cases are substituted, examples similar to von Fintel and Iatridou's actually serve as a strong argument for the modal subordination proposal, since they pattern so closely to non-imperative modal-subordination cases.[32]

First, von Fintel and Iatridou consider the IaD in (96), which is not easily paraphrased as the conjunction of two modal expressions, as shown in (97):

(96) Invest in this company, and you'll get rich.[von Fintel & Iatridou's (40)]

(97) a. ??You must/have to/should invest in this company, and you'll get rich.
b. ??I want you to invest in this company, and you'll get rich.

If imperatives are similar in meaning to modals such as those used in (97), von Fintel and Iatridou reason, such paraphrases would be expected to be acceptable. The cases in (97) therefore argue against a modal subordination analysis of (96).

[32]A similar argument appears in Starr (2011).

Is (96) most easily heard as an SC IaD, though? It is certainly easily understood as a CC IaD, since it allows the addition of NPIs and minimizers characteristic of conditionals (98). Furthermore, the applications of our Tag Questions and "Do" + Subject tests also pattern with conditional conjunctions:

(98) Invest enough / any more than $1000 / even a small sum in this company, and you'll get rich.

(99) ?Invest in this company, won't you, and you'll get rich.

(100) ?Do someone/anyone/everyone invest in this company, and you'll get rich.

For whatever reason, this sentence is easiest to understand as a CC IaD. Material such as the discourse-active words *already* and *just* can disambiguate this sentence in favor of an SC IaD interpretation (101a), but these same disambiguators improve the modal paraphrases as well (101b):

(101) a. Just invest in this company already, won't you, and you will become rich beyond your wildest dreams.

b. You should just invest in this company already, and you will become rich beyond your wildest dreams.

In contrast to von Fintel & Iatridou's example, cases that are quite straightforwardly understood as SC IaDs sound fine with modal paraphrases:

(102) a. Take out the trash, (please,) and then you can watch TV.

b. You have to take out the trash, and then you can watch TV.

(103) a. (Just) get a good night's sleep tonight, and you'll feel better tomorrow.

b. You should get a good night's sleep tonight, and you'll feel better tomorrow.

(104) a. Turn in at least ten pages by Friday, but it won't be graded on content.

b. You must turn in at least ten pages by Friday, but it won't be graded on content.

In each case above, the second clause is understand conditionally, presumably via the modal subordination mechanism.

The second worry von Fintel & Iatridou (2015) raise is that while non-imperative modal subordination licenses polarity shift in its second clause, IaDs do not:

(105) You shouldn't park there. You'll be towed (if you **do** park there).

(106) #Don't park there, and you'll be towed.

However, this argument doesn't hold up, since non-imperative modal subordination conjunctions *also* fail to license polarity shift:

(107) #You shouldn't park there, and you'll be towed.

Although non-imperative modal subordination cases like (105) allow polarity shift, once the two sentences are conjoined, this shift is not allowed, independently of any imperative marking in the first clause.[33]

[33]This may be related to the fact that such polarity cases sound very natural as conjoined by *or*: *You shouldn't park there or you'll be towed.*

Appendix B: Test Items

(1) a. Present Context: *An exasperated parent is searching the cluttered attic for a mischievous child and shouts:*
   i. You're hiding from me again and you're in big trouble.
   ii. Be hiding from me again and you're in big trouble.

b. Future Context *An exasperated parent wants a mischievous child to stop hiding before some visitors arrive. She exclaims:*
   i. You're hiding from me when grandma arrives and you'll be in big trouble.
   ii. Be hiding from me when grandma arrives and you'll be in big trouble.

(2) a. Present Context: *A mother out to dinner with her husband calls her teenaged son at home. The son was watching television when they left, and she wants to make sure he has stopped. She says:*
   i. You're still watching TV right now and you're grounded.
   ii. Still be watching TV right now and you're grounded.

b. Future Context *A mother is going out to dinner with her husband, leaving their teenaged son at home. The son is watching television as they leave, and the mother wants to make sure he stops soon. She says:*
   i. You're still watching TV when we get back and you're grounded.
   ii. Still be watching TV when we get back and you're grounded.

(3) a. Present Context: *A man applying to work undercover for the CIA takes a lie-detector test. After he gives a slightly evasive answer, the interviewer says:*
   i. You're lying even a little right now and the machine is picking it up.
   ii. Be lying even a little bit right now and the machine is picking it up.

b. Future Context *A man is applying to work undercover for the CIA, and the recruiter warns that there will be a lie-detector test the next day, saying:*
   i. You're lying even a little while the polygraph is running tomorrow and the machine will pick it up.
   ii. Be lying even a little while the polygraph is running tomorrow and the machine will pick it up.

(4) a. Present Context: *A sixth-grade teacher has her back turned to the class when she hears a loud noise. Without turning around, she warns them:*
   i. You're horsing around right now and you've earned yourself detention.

ii. Be horsing around right now and you've earned yourself detention.

b. Future Context *A sixth-grade teacher wants her class to stop being rowdy whenever the principal visits. She warns them before the next visit:*

i. You're horsing around when the principal gets here and you'll have earned yourself detention.

ii. Be horsing around when the principal gets here and you'll have earned yourself detention.

(5) a. Present Context: *Parents of fourth-graders got a letter about a disciplinary incident and a separate list naming the kids involved. Before reading the list, a parent at home says to her child:*

i. You're one of the troublemakers and I guarantee you won't like the consequences.

ii. Be one of the troublemakers and I guarantee you won't like the consequences.

b. Future Context *At the end of the month, parents of fourth-graders will get a letter about bad behavior, including the names of all misbehaving kids. At the beginning of the month, a parent says to her child:*

i. You're one of the troublemakers this month and I guarantee you won't like the consequences.

ii. Be one of the troublemakers this month and I guarantee you won't like the consequences.

(6) a. Present Context: *A father hears a loud noise from the other room, where his kids are supposed to be studying quietly. He says:*

i. You're playing video games in there and I promise you'll regret it.

ii. Be playing video games in there and I promise you'll regret it.

b. Future Context *A father leaving work calls his kids at home and hears a loud noise in the background. He tells them to stop what they're doing and start studying quietly, saying:*

i. You're playing video games when I get home and I promise you'll regret it.

ii. Be playing video games when I get home and I promise you'll regret it.

(7) a. Present Context: *Two friends are planning to go to an evening concert. One friend is picking up the other, who is constantly late. The driver calls as she pulls up and doesn't see her friend immediately, saying:*

i. You're still upstairs right now and I'm leaving without you.

ii. Still be upstairs right now and I'm leaving without you.

b. Future Context *Two friends are planning to go to an evening concert. One friend is going to pick up the other, who is constantly late. The driver calls in the morning to remind her friend to be on time and says:*

   i. You're still upstairs when I pull up tonight and I'll leave without you.

   ii. Still be upstairs when I pull up tonight and I'll leave without you.

(8) a. Present Context: *A criminal is meeting an old friend for coffee. He's worried that the friend is wearing a listening device for the police, and he says:*

   i. You're wearing a wire right now and I swear I'll kill you.

   ii. Be wearing a wire right now and I swear I'll kill you.

b. Future Context *A criminal is making plans to meet an old friend for coffee later in the week. He's worried that the friend might wear a listening device for the police, so he tells him:*

   i. You're wearing a wire when we meet and I swear I'll kill you.

   ii. Be wearing a wire when we meet and I swear I'll kill you.

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