Localizing to-do lists*

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1. Introduction

An imperative like *Sit down!* doesn't appear to be true or false, both due to its surface form and its typical function to issue directives and give permission. According to the influential analysis proposed by Portner (2004, 2007, 2018), building on ideas in Hausser (1980), imperatives denote properties of their addressee:

(1) $[\![\text{Sit down!}]\!]^c = \lambda w_s.\lambda x_e : x$ is the addressee in $c\,.\,x$ sits down in w.

Portner pairs this minimalist semantics with a rich pragmatics. Unlike declaratives, which update the common ground, imperatives update a separate dimension of the conversational context, which Portner dubs the *to-do list* (TDL). The context is represented by a pair $\langle C, T\rangle$, consisting of the context set C and the TDL T.

(2) **Portner's model of global context.** A context $c = \langle C, T\rangle$ is a pair such that...

a. The successful assertion of p in c yields a new context $c' = \langle C', T\rangle$ where $C' = C \cap p$;

b. The successful issuance of a directive $P!$ addressed to α yields a new context $c' = \langle C, T'\rangle$ where T' is identical to T except that $T'(\alpha) = T(\alpha) \cup \{P\}$.

The context set C consists of all the worlds that are compatible with the propositions that are common ground (Stalnaker 1978). A successful assertion p will result in a new context set $C' = C \cap p$, the original context set C updated with p. The TDL T is a function from individuals to sets of properties. For any conversational participant α, $T(\alpha)$ is the set of prop-

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erties α is committed to making true. Given a TDL T, the successful use of an imperative P addressed to α results in a function T' identical to T except that $T'(\alpha) = T(\alpha) \cup \{P\}$.[1]

However, Portner's approach struggles to capture the meaning of certain disjunctions and conjunctions, so-called imperative-and-declarative constructions (IaDs).[2] In particular, there are instances of imperatives embedded in disjunctions and conjunctions where the imperative is not endorsed by the speaker. In (3a), the addressee is given a choice, and in (4a), the addressee is advised not to eat candy.

(3) a. Clean the table or you should help wash the dishes.
b. $\approx$ Clean the table or **if you don't** you should help wash the dishes.

(4) a. Eat candy and you'll regret it.
b. $\approx$ **If you eat candy** you'll regret it.

Since Portner's theory treats imperatives as directives, it struggles to capture the meaning of IaDs which involve non-endorsing imperatives.

In both (3a) and (4a), the modal appears to receive a conditional reading where the antecedent comes in part from the imperative. Assuming a restrictor theory of conditionals, the conditional readings of (3a) and (4a) suggest that the imperative in these sentences contributes to the restriction of the modal domain in the right disjunct/conjunct. In the paper, we develop a theory of local context which captures this restriction phenomenon. Building on Portner's model of global context, we propose that local context is a pair $\langle \kappa, \tau \rangle$ consisting of the local information κ and a local TDL τ. We build on the account of local information given in Schlenker (2009, 2010a,b). Our account rests on two innovations. First, we develop an account of the local TDL τ that generalizes Schlenker's algorithm for local contexts. Second, following Mandelkern (2019, 2024), we argue that modal domains are bounded by $\langle \kappa, \tau \rangle$–they are a subset of the best worlds in κ according to an ordering derived from τ. This domain restriction derives the conditional readings.

The paper is organized as follows. In §2, we argue against a common approach to IaDs. In §3, we lay out our account of local TDLs, and then derive the conditional readings in our core data. In §4, we show that the account explains a recent observation made in Mandelkern (2021).

2. The problem of IaDs

Many authors attempt to explain non-endorsing IaDs as modal subordination or some other anaphoric phenomena (Russell 2007, Kaufmann 2012, Starr 2018). The basic idea is that

[1] In Portner (2007), it's also suggested that an update in the TDL comes with a corresponding update to the common ground, roughly to the effect that the accepted imperative now becomes a commitment of the addressee. We set this point aside for now.

[2] We use "IaD" to cover both disjunctions and conjunctions that embed imperatives and declaratives together. This departs from Kaufmann (2012), who uses "IaD" for conjunctions of this type exclusively ("Imperatives and Declaratives") and "IoD" ("Imperatives or Declaratives") for the disjunctions.

in (5), the modal *will* can be restricted by the salient antecedent worlds where the addressee locks the door. This explains the conditional reading of *will* in (5).

(5) Lock the door and we will go.

However, the modal subordination approach isn't easily extended to disjunctive IaDs. For example, in (3a), we want the modal to be restricted by the worlds where the addressee *doesn't* clean the table. However, it isn't clear that *clean the table* can make salient worlds where the addressee doesn't clean the table, to allow for the modal subordination in question. As (6) shows, the negative imperative *don't park here* is able to make salient worlds where the addressee does park here. In contrast, the positive imperative without negation cannot make available the negative proposition *you don't park here* as an antecedent. There's a natural explanation of this contrast: the antecedent in modal subordination must be a subclause of a preceding sentence. Since a negative imperative is not a subclause of its positive counterpart, a positive imperative does not make available a negative antecedent.

(6) **Context:** You either park here or there.

a. Don't park here! You'll be fined. (von Fintel and Iatridou 2017)
$\Rightarrow$ If you park here, you will be fined.

b. Park there! You'll be fined.
$\not\Rightarrow$ If you don't park there, you will be fined.

Moreover, even if we grant that positive imperatives can make salient their negative counterparts, the modal subordination theory faces a serious overgeneration problem for conjunction data: why is (7a) never interpreted as (7b)?

(7) a. Work out more and you will stay unhealthy.
b. $\not\approx$ Work out more and if you don't, you will stay unhealthy.

It seems difficult to maintain a unified story based on modal subordination for conjunctive and disjunctive IaDs. We think a more promising route towards a unified account is to link the conditional readings in IaDs to local contexts. In a disjunction, the second disjunct is usually interpreted in the context of the negation of the first, as seen in Barbara Partee's famous example:

(8) There is no bathroom in the house, or it is in a funny place.
$\approx$ There is no bathroom in the house, or there is one and it is in a funny place.

This is often put as the right disjunct having a local context that entails the negation of the left disjunct. What makes local context especially useful in this context is that, when there is a modal in the right disjunct, the local context seems to restrict the modal domain, analogous to how conditional antecedents restrict the modal domain of the modal in the consequent (Klinedinst and Rothschild 2012, Mandelkern 2019). If this is right, then the conditional readings observed above can be systematically explained by a theory of local context sensitive to imperatives' contributions. The goal of the rest of the paper is to develop a theory of local context compatible with Portner's semantics for imperatives.

3. Local to-do lists

We propose a way to integrate Portner's TDLs into a theory of local context. We propose that local contexts parallel global contexts and can therefore be modeled as a pair $\langle C, T \rangle$ of context set C and TDL T. So, in addition to an information parameter κ as in Schlenker (2009, 2010a,b), modeled as a set of worlds, the local context also has a *local to-do list* parameter τ. Just like the TDL T, τ assigns to each participant α of the conversation a set of properties $\tau(\alpha)$. With a local context $\langle \kappa, \tau \rangle$, we can use both parameters together to restrict modal domains and account for the desired conditional readings, in the spirit of Klinedinst and Rothschild (2012) and Mandelkern (2019, 2024).

3.1 The account

Following Schlenker, we define the informational part κ of the local context of an expression b occurring in a syntactic environment a_d with a global context set C as follows.

(9) LOCAL INFORMATION. The local information κ of an expression b in syntactic environment a_d relative to C is the strongest expression κ such that:
$a(\kappa \wedge b')d' \Leftrightarrow_C ab'd'$ for all well-formed completions b' and d'.

Note that the algorithm involves generalized conjunction $\wedge$, which requires that κ be of the same type as b. For instance, the local information of a proposition is another proposition that tracks the information preceding it. While for most cases, κ is a proposition, Schlenker's algorithm predicts that the local information of the property in the nuclear scope of a quantifier is another property that tracks information in the global context and the restrictor.

Crucially, local information defined this way is sensitive only to meanings that are saturated (of proposition-type) or will be saturated (e.g. restrictors of quantifiers) by the strings preceding and following the constituent in question. This is because the contextual equivalence relation is assumed to only hold between propositions. It doesn't (and shouldn't) track meanings of imperatives, which are left unsaturated (and unbound).[3] Indeed, we take this insensitivity as a desideratum and will assume it for now (we will say more about how to ensure it in §3.3). We want the TDL component of the local context to track properties issued by imperatives. And, ideally, we want a general algorithm like Schlenker's, which

[3] We assume that if the algorithm fails to apply to an expression b relative to context set C because, for instance, b is a root imperative, then the value of κ is just set to C.

avoids the explanatoriness objection to construction-specific accounts of local information (Heim 1990, Soames 1989).[4]

How can we generalize Schlenker's algorithm so that local context tracks both the local information–the context set incremented by the information introduced by the preceding constituents in the sentence–and the local TDL–the TDL incremented by the commitments introduced by constituents which appear earlier in the sentence. Consider the case of an IaD disjunction ⌜A! or B⌝. Intuitively, for any propositional completion B′ in the position of B–i.e., ⌜A! or B′⌝, we want to conjoin B′ with a property of individuals to track the effects of preceding imperatives. But this is not allowed by Schlenker's algorithm, as he requires that the local context κ of B is of the same type as B to ensure contextual equivalence.[5]

Aron Hirsch (p.c.) suggests the possibility of type-shifting *or* in an IaD-disjunction, so that *or* takes a property P of type $\langle s, et\rangle$ and a proposition p of type $\langle s,t\rangle$ as arguments, and outputs the disjunctive property in (10) of type $\langle s, et\rangle$.

(10) $\lambda w.\lambda x_e : x \text{ is the addressee}_c . P(w)(x) = 1 \vee p(w) = 1$

If we plug (10) into Schlenker's algorithm, generalizing $\Leftrightarrow_C$ so that it holds between properties, we would predict that the local information of the declarative in (10) would be (11).

(11) $\kappa = \lambda w. w \in C \wedge \neg P(w)(x) = 1$

While (11) is close to the desired prediction with x bound by λ, we believe that letting κ track the local contribution of imperatives is undesirable, because it undermines the initial motivation for a Portner-style analysis. In particular, it conflates the characteristic effect of an imperative (updating the TDL) with the characteristic effect of an assertion (updating the context set)–this makes the view incompatible with a view–like Portner's–where different clause-types manipulate different dimensions of the conversational context.[6]

The more serious problem with (10) is the global meaning: (i) we don't want the entire property to update the global TDL if the items on it are understood as the addressee's commitments: in *Don't move or I'll shoot*, the right disjunct (even on the conditionalized reading) doesn't seem to have much to do with the addressee's commitments, as ultimately whether the speaker shoots is not within their control; (ii) we could use the local context in (11) to restrict the modal domain of the propositional disjunct in disjunctive IaDs, but we need to specify the way in which those restricted meanings get passed up. This could

[4]We consider this to be the primary theoretical advantage of our account over dynamic semantic theories like the one proposed by Starr (2018, 2020) and Lasersohn (2024).

[5]Indeed, suppose conjoining a property $\langle s, et\rangle$ and a proposition $\langle s,t\rangle$ is possible in local context computation via type-shifting, we'd expect the result to be of type $\langle s, et\rangle$ so that the individual argument slot remains unsaturated. But then it's not clear how this complex property figures in the contextual equivalence part of the algorithm, as the left hand side of the equivalence involves $\kappa \wedge b'$, a property, while the right hand side involves b', a proposition.

[6]It's possible to hold that whenever the equivalence between properties are involved, we are calculating local TDLs.

either be a matter of entailment or a result of pragmatics. But, as the global meaning (10) is a property, it can't entail a proposition in the obvious way. So the more viable option is to have the entire property to update T and postulate some special form of coordination between T and C, so that the declarative gets added to C. It's not entirely clear to us how to execute this idea, though.

We propose a shift in perspective. We should instead consider *instances* of those properties issued by imperatives by saturating the properties. Importantly, this is done after local information is computed independently, assuming that imperatives will be ignored in that process. The two parameters of local contexts are calculated in an order. After computing local information, we calculate the local to-do list in two steps. First, to determine the local TDL for an addressee α w.r.t an expression b occurring in environment a_d, we saturate the arguments of each imperative indexed to α in the expression that precedes b, i.e. in a, with the addressee α. The saturation step turns indexed properties into propositions, which are suitable input for the Schlenker algorithm. Call the saturated a' the saturated counterpart of a given α. Then, given the saturated expression $a'bd$, we find the conjunction $\bigwedge_{F\in\tau} F(\alpha)$ that contains as many conjuncts as possible such that the equivalence $a'(\kappa \wedge \bigwedge_{F\in\tau} F(\alpha) \wedge b')d' \Leftrightarrow a'b'd'$ holds for all well-formed completions b' and d'.

Definition 1. (Local TDLs). Given a global context set C, for an addressee α, the *local to-do list* τ of a proposition b occurring in a syntactic environment a_d assigns a set of properties $\tau(\alpha)$ to α where $\bigwedge_{F\in\tau(\alpha)} F(\alpha)$ is the strongest proposition such that...

$$a'(\kappa \wedge \bigwedge_{F\in\tau(\alpha)} F(\alpha) \wedge b')d' \Leftrightarrow_C a'b'd'$$

for all well-formed completions b' and d', where a' is the saturated counterpart of a given α if a contains an α-indexed property and equivalent to a otherwise.[7]

Definition 2. (Saturated counterpart). For an addressee α, if $F_1, F_2, \ldots, F_n$ are α-indexed properties, their *saturated counterparts* are $F_1(\alpha), F_2(\alpha), \ldots, F_n(\alpha)$.

Here's the idea at a high level. The saturation step allows us to see what truth-conditional contribution the imperative would make if it were saturated. And the output of local information algorithm over the saturated counterpart will track that (additional) information. Crucially, the new additional information is only about the addressee α, as it is solely due to the imperative items indexed to α being saturated. The properties involved in the new information is just those items on the local TDL for α.

The local to-do list for α will thus pick out a set of properties indexed to α and likewise for any other addressee. For example, suppose that Alice's TDL is currently empty and Bob issues the disjunctive command (12a) to Alice. First, the local information for the right disjunct is just the global context set C.

(12) a. Walk the dog or I'll be angry.
b. $\textbf{walk-dog}(\text{alice}) \vee (C \wedge \bigwedge_{F\in\tau(\text{alice})} F(\text{alice}) \wedge B') \Leftrightarrow_C \textbf{walk-dog}(\text{alice}) \vee B'$

[7] $\bigwedge_{F\in\tau} F(\alpha)$ also needs to have no overlap with κ to not take in properties ascribed to α in κ.

Then, to calculate the local TDL, we find the set of properties $\tau(\text{alice})$ whose conjunction applied to Alice is the smallest proposition satisfying the equivalence (12b) for any well-formed continuation B'.

It's easy to show that $\tau(\text{alice}) = \{\neg\textbf{walk-dog}\}$ is the TDL satisfying this equivalence. If it's true that Alice walks the dog, then, for any continuation whatsoever, the disjunction will be true; so, including $\neg\textbf{walk-dog}(\text{alice})$ in the right disjunct cannot make the disjunction false. On the other hand, if it's false that Alice walks the dog, then (12a) is true only if it's true that the speaker, Bob, is angry, and since $\neg\textbf{walk-dog}(\text{alice})$ is true by assumption, including this proposition in the right disjunct cannot make the entire disjunction false.[8]

Assuming that the imperative disjunct/conjunct doesn't alter the local information for the disjuncts/conjuncts to follow (see §3.3), we derive the following definedness conditions for disjunction and conjunction with left-embedded imperatives:

- $[\![\mathsf{A! \text{ or } B}]\!]^{w,\kappa,\tau}$ is defined $\Leftrightarrow$ $[\![\mathsf{A}]\!]^{w,\kappa,\tau}$ is defined and $[\![\mathsf{B}]\!]^{w,\kappa,\tau+\neg\mathsf{A}}$ is defined
- $[\![\mathsf{A! \text{ and } B}]\!]^{w,\kappa,\tau}$ is defined $\Leftrightarrow$ $[\![\mathsf{A}]\!]^{w,\kappa,\tau}$ is defined and $[\![\mathsf{B}]\!]^{w,\kappa,\tau+\mathsf{A}}$ is defined

For matrix sentences, as a result derived by Schlenker, the initial κ is simply the global context set C; similarly, the initial τ is simply the global TDL T.

3.2 Restricting modals

We assume that *will* is a modal à la Copley (2009) and Cariani and Santorio (2018). For ease of illustration, we assume a simplified version of Copley's semantics which take *will* to be a necessity modal,

(13) $$[\![\text{will}]\!]^{w,f,g} = \lambda p_{\langle i,st\rangle}.\lambda t_i.\forall w' \in \text{DOM}(w,f,g) : \exists t' > t : p(t')(w') = 1.$$

where f is a historical modal base and g is a normality-based ordering source, and the modal domain is the most normal historical worlds.

We further assume that local context constrains its domain in the spirit of Klinedinst and Rothschild (2012) and Mandelkern (2019, 2024). The main innovation is that local TDL also plays a role in the constraint. We state the constraint as LOCALITY.

(14) LOCALITY. $[\![\text{will}]\!]^{w,f,g}$ is defined relative to $\langle\kappa,\tau\rangle$ only if $\text{DOM}(w,f,g) \subseteq \kappa_{<_\tau}$.

where $\kappa_{<_\tau}$ are the worlds in the local information κ that are highest ranked by the ordering induced by the TDL, i.e. those worlds in local information where the items on τ for each participant are all realized.

Definition 3. (Ordering by τ). For a local context $\langle\kappa,\tau\rangle$, $w \in \kappa_{<_\tau}$ iff $w \in \kappa$ and for any participant i, there is no $w' \in \kappa$ such that $w <_{\tau^i} w'$.

[8]We still need to show that this is the smallest such proposition. For the sake of space, we omit this argument here as it's just a general result of Schlenker's algorithm.

Definition 4. (Ordering by participants). For any $w_1, w_2 \in \kappa$ and any participant i, $w_1 <_{\tau^i} w_2$ iff for some $P \in \tau(i)$, $P(w_2)(i) = 1$ and $P(w_1)(i) = 0$, and for all $Q \in \tau(i)$, if $Q(w_1)(i) = 1$, then $Q(w_2)(i) = 1$.

LOCALITY ensures that the most normal historical worlds are all worlds where the properties on the TDL are realized. Therefore, in (4a), the modal's domain is restricted by the local context to worlds where the addressee eats (or will eat) candy before dinner.

The effect of local to-do list on deontic modals like *should* is slightly different, but similar. We follow Portner (2007) in assuming that the ordering source of deontic modals can be derived from the TDL. In particular, we will assume that $<_\tau$ plays the role of the ordering source.

(15) $[\![\text{should}]\!]^{w,f,\tau} = \lambda p_{\langle s,t\rangle}.\forall w' \in \text{DOM}(w, f, <_\tau) : p(w') = 1.$

Hence, in (3a), *should*'s domain consists of the worlds where the addressee realizes the properties indexed to them on the local TDL; that is, the worlds where the addressee doesn't clean the table.

Now we work through some more examples and show how the local to-do list algorithm and LOCALITY together predict the IaD conjunction and disjunction data.

Case #1: conjunctive IaDs. First, consider an unembedded conjunction:

(16) Open the window and you will feel better.

In (16), the *will* in the second conjunct is interpreted relative to a local to-do list updated with the property that the addressee α opens the window. Since *will* is subject to LOCALITY, its domain, $\text{DOM}(w, f, g)$ is a subset of the best worlds compatible with the local information $\kappa_{<_\tau}$ as ranked by the local to-do list τ where **open-window** $\in \tau(\alpha)$–i.e., the worlds in κ where all participants realize their local to-do lists, including α opening the window. Therefore, the domain of the modal *will* is restricted to worlds where α opens the window, generating the desired conditional reading: if the addressee α opens the window, α will feel better.

An advantage of our account over global dynamic pragmatic accounts (Portner 2004, 2007, 2018, Roberts 2023) is that embedded IaD conjunctions are easily explained. For instance, in (17) no item should be added to the global to-do list. But we can derive the intuitive reading of *will* being doubly restricted via local context.

(17) If you visit LA, go to a beach and you'll have a great time.

In (17), the antecedent of the conditional restricts *will* by updating the local information parameter κ (i.e., κ only includes worlds where the addressee visits LA), while the imperative in the consequent restricts *will* by updating the local to-do list (i.e., τ requires that α visit a beach).

Case #2: disjunctive IaDs. We now turn to IaD disjunctions. Consider (18).

(18) Close the window or you will catch a cold.

Importantly, the local to-do list algorithm tells us that in these disjunctions, the definedness of the *will*-disjunct is evaluated relative to a local information κ and a local to-do list τ such that $\neg$**close-window** $\in \tau(\alpha)$ where α is the addressee. By LOCALITY, this is defined only if the modal domain of *will* is a subset of $\kappa_{<_\tau}$–the best worlds in κ by τ's lights. This restricts the domain of *will* to worlds where the addressee doesn't close the window. We, therefore, arrive at the desired conditional reading: if the addressee α doesn't close the window, then α will catch a cold.

3.3 Global meaning of IaDs

So far, we have discussed how the declarative in an IaD gets a conditional interpretation. But what does an IaD mean as a whole? We will mainly consider the possibility where its meaning should be identified with the meaning of the (restricted) modal declarative.

Let's start with disjunctive IaDs. We allow disjunction to take arguments of any type ending in t. Since an imperative is of type $\langle e,t\rangle$, it can be an argument of a disjunction; however, since an imperative denotes an unsaturated property and, accordingly, cannot be true or false, a disjunctive IaD will be true just in case the propositional disjunct is true and the propositional disjunct will have a restricted modal domain and receive a conditional interpretation.

(19) a. $[\![\text{or}]\!]^w = \lambda P_{\langle\sigma,t\rangle}.\lambda Q_{\langle\sigma,t\rangle}.\lambda w.P(w) = 1 \text{ or } Q(w) = 1.$

b. $[\![\text{Close the window!}]\!] = \lambda w.\lambda x : x \text{ is the addressee }_c . x \text{ closes the window in } w.$

c. $[\![\text{Close the window or you will get a cold}]\!]^{w,\kappa,\tau}$
$\Leftrightarrow [\![\text{you will get a cold}]\!]^{w,\kappa,\tau+\alpha\ \neg\textbf{close-window}}$

A nice feature of this is that the imperative disjunct doesn't contribute anything to the local information, because it's truth-conditionally vacuous. If we apply the Schlenker algorithm of local information to the position of the declarative disjunct, relative to a global context set C, the output is just C. This motivates the need for our procedure for calculating local TDL to track the contribution of the imperative disjunct. We would consider the saturated version of the disjunction, to which the application of our Schlenker-inspired algorithm for local TDL would first output $\neg$**close-window**(α) on top of C. This then allows us to abstract over $\neg$**close-window**(α) and add the property $\neg$**close-window** to the local TDL. Taking these parameters from local contexts into account, we have the equivalence in (19c).

However, it's less straightforward to extend this story to conjunctions. Here is one attempt: while *and*'s right conjunct can take only arguments of type $\langle s,t\rangle$, the left conjunct can take an argument of any type $\langle\sigma,t\rangle$ where σ is an arbitrary type.[9]

[9]It is possible to let *and* take two flexible arguments, given examples like *I won't be able to read your paper tonight, but send it to me* (Paolo Santorio p.c.), assuming that *but* is truth-conditionally the same as *and*. In that case, perhaps a presupposition that at least one argument is a proposition is needed.

(20) a. $[\![\text{and}]\!]^w = \lambda P_{\langle \sigma,t\rangle}.\lambda Q_{\langle s,t\rangle}.\begin{cases} P(w) = Q(w) = 1 & \sigma = s \\ Q(w) = 1 & \sigma \neq s \\ \text{undefined} & \text{otherwise} \end{cases}$

b. $[\![\text{Eat candy and you'll regret it}]\!]^{w,\kappa,\tau} = 1$ iff $[\![\text{you'll regret it}]\!]^{\kappa,\tau+\alpha\ \textbf{eats candy}}(w) = 1.$

c. $[\![\text{Eat candy and you'll regret it}]\!]^{w,\kappa,\tau} \Leftrightarrow [\![\text{you'll regret it}]\!]^{w,\kappa,\tau+\alpha\ \textbf{eats candy}}$

Now in (20b), since $[\![\text{Eat candy}]\!]$ is not of type $\langle s,t\rangle$, the conjunction just becomes equivalent to the declarative conjunct, while the local TDL updated by the imperative disjunct. Taking into account the interpretation parameters from the local context $\langle \kappa, \tau\rangle$, the equivalence is as stated in (20c).

Again, a notable feature of this truth-conditional entry for *and* is that the point that the imperative conjunct doesn't contribute to the local information falls out naturally. For the imperative conjunct in an IaD conjunction doesn't enter the truth condition directly. Schlenker's algorithm for local information will then predict that the local information for the propositional conjunct is just the same as the local information of the whole conjunction, which is the global context set. This (again) provides natural motivation for running our local TDL algorithm after local information is calculated, to track the contribution of the imperative. When we move to the saturated version of the conjunction and apply our Schlenker-inspired algorithm to it, we get **eat-candy**(α). Abstracting over this proposition, we add the resulting property **eat-candy** to the local TDL.

Therefore, under this approach, IaDs are truth-conditionally equivalent to their propositional conjunct or disjunct, which has their domain restricted by the local TDL. This ensures a conditional meaning. Why just the conditional meaning? A potential support comes from the endorsing and non-endorsing ambiguity of conjunctive IaDs.

(21) a. Lock the door and we will go. (endorsing IaD)

b. Move a step further and I will shoot. (non-endorsing IaD)

If we assume the interpretations above, the difference between endorsing and non-endorsing IaDs doesn't lie in the basic context update effect: both update the global common ground with a modal claim that has its domain restricted by the imperative conjunct.

Note that conditionals can be used to achieve effects just like imperatives. They can be used to issue promises, threats or warnings, thereby adding certain items to the global TDL, depending on pragmatic factors. For instance, if the consequent is deemed undesirable, the conditional may be interpreted as a warning or threat that hints at actions the addressee should take to avoid it. We think the flexibility of IaDs' global effects fits well with a conditional interpretation: what kind of update they bring to the global TDL could depend on the same pragmatic factors that determine the effects of a conditional.

A worry with the above approach is that it'd seem that expressions of any type can be the part of a conjunction or disjunction with that entry. For there is no restriction in type. We could add such a restriction. But we think independently needed pragmatic considerations like relevance would rule most of those unwanted conjunctions or disjunctions out too. If we postulate a pragmatic rule that requires that each conjunct or each disjunct has to be relevant in the context (Simons 2001), we could regulate uses of conjunctions and disjunctions. Of course, an account of relevance of imperatives under the Portnerian assumption needs to be developed carefully for that purpose.

There are also alternative possibilities as to how to interpret IaDs. For instance, it could be insisted that semantically IaDs cannot compose. Then, special rules of interpretation should be posited. A possibility is to take IaDs as proposing consecutive updates to the global context (cf. van der Auwera 1986). An apparent difficulty concerns non-endorsing IaDs. However, it could be said that non-endorsed, insincere imperatives are not impossible (e.g., *Do whatever you want (and you'll find out)* as uttered by a frustrated parent), and whatever needs to be said about them translates to non-endorsing IaDs.[10]

4. Practical Moore Sentences

We believe that local TDLs can also be used to explain some examples of the so-called "practical Moore sentences" discussed by Mandelkern (2021), like (22).

(22) #Do the dishes, although you might not.

Mandelkern proposes a pragmatic principle according to which, when one directs another to ϕ, they speak as if they believe that the addressee will ϕ. We're skeptical that this pragmatic explanation can explain embedded instances of practical Moore sentences. In the conditional in (23), there is no direction to greet John in every foreseeable situation (compatible with the common ground, at least) and thus Mandelkern's pragmatic rule doesn't apply. In particular, it's not even reasonable to infer that the speaker speaks as if they believe that the addressee will greet John. Instead, it's reasonable to infer that it's believed the addressee might not see John and thus might not greet him. Yet, the *might*-conjunct is still in conflict with the imperative, suggesting that the problem arises locally.

(23) #If you see John, greet him and you might not (greet him).

We just need to assume that *might* can be restricted by both local information and the local TDL, via a principle like LOCALITY. Our proposal is similar in spirit to Mandelkern (2019, 2024) who posits that the admissible domains of modal quantification are "bounded" by the local information κ. Our suggestion is that practical Moore sentences provide evidence for a locality constraint that's even more radical: in addition to being sensitive to the local information κ, *might* is also sensitive to the local TDL τ. In particular, *might* in (23) is defined only if it's a subset of $\kappa_{<_\tau}$, which are all worlds where α sees and also greets John. Since the domain of *might* is constrained to John-greeting worlds, there is no world in the domain of *might* where the addressee does no greet John. Our account of disjunction also predicts the infelicity of the following local practical Moore sentences in disjunction:

[10]If the update of imperatives is allowed to be more flexible and depend on the context, the use of an imperative A! that apparently doesn't cohere with what the speaker or the addressee wants could be allowed to add $\neg$A to the TDL.

(24) #Don't open the door, or you might not.

The modal *might* in the right disjunct is defined only if its domain is a subset of $\kappa_{<_\tau}$ where τ is a local TDL such that **open-door** $\in \tau(\alpha)$. So, since the domain of *might* only contains worlds where the addressee opens the door, the second disjunct is trivially false.

5. Summary and outlook

We've suggested a way to localize the Portnerian model of global context, and provided an algorithm to calculate local TDLs. We suggested that these local TDLs help restrict the modal domain, giving rise to the conditional reading of IaD.

We close by noting a further potentially welcome prediction of our account. Consider presupposition projection behavior in IaD conjunctions and disjunctions containing the additive trigger *too*. Intuitively, neither sentence has a global presupposition.

(25) a. Do your homework and John$_\text{F}$ will do his too!
$\not\Rightarrow$*Someone will do their HW.*
b. Don't leave your plate in the sink, or John$_\text{F}$ will leave his in the sink too.
$\not\Rightarrow$*Someone will leave their plate in the sink.*

We assume in (25) *too* is in *will*'s prejacent and that $\ulcorner x_\text{F}$ P too$\urcorner$ where x is focus-marked presupposes that someone other than x verifies P (see a.o. Heim 1992). Since the above sentences don't trigger any presupposition, the presupposition triggered by *too* must be locally satisfied at some level, and this is exactly what our account predicts. Take (25b) for instance. It's easy to show that the local TDL τ for the *will*-sentence is such that **leave-plate** $\in \tau(\alpha)$. Then, given LOCALITY, the domain of *will* for any w, $\text{DOM}(w, f, g)$, will be restricted to a subset of $\kappa_{<_\tau}$, which is a subset of the worlds where the addressee leaves their plate in the sink. So, the worlds in *will*'s domain are all such that the existential presupposition of *too* is satisfied. This example suggests that our algorithm can naturally extend the satisfaction theory's predictions about presupposition projection to presupposition triggers in imperatives. However, to our knowledge, presupposition projection in imperatives has yet to be extensively explored; so, we leave this possibility for future research.

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