On the pragmatic status of locally accommodated presuppositions *

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Abstract

In this paper, we investigate the nature of local accommodation by testing whether certain constraints on global accommodation generalize to local accommodation as well. We rely on a diagnostic first proposed by Orin Percus (1998) and Irene Heim (2015), which uses redundancy to probe for the pragmatic asymmetry between presupposed and asserted content in the global case. We provide novel data that show that even in the case of local accommodation, redundancy is sensitive to the difference between the two types of content. We argue that our data pose a problem for the A-operator theory of local accommodation, while being compatible with dynamic approaches (Heim, 1982) and a more recent domain restriction approach (von Fintel, 2004; Chatain and Schlenker, 2023).

1 Introduction

It is a common assumption in the semantics and pragmatics literature that the information conveyed by sentences comes in (at least) two "flavors": presuppositional and assertive. One characterizing property that sets presuppositions apart from asserted content is that inferences due to presuppositions survive when they are embedded in certain environments, for example under negation and in the antecedent of conditionals. Consider the inferences in (1). When the sentences in (1) are embedded in the antecedent of a conditional, as in (2), the inferences in (i) (Inference 1) survive while the inferences in (ii) (Inference 2) do not. This is taken as an indication that the inferences in (i) are presuppositions, while those in (ii) are simply part of the asserted meaning.[1]

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[1]Different accounts conceptualize the relation between presupposition and assertion in different ways. Two prominent views are the *two-dimensional* view (Karttunen and Peters, 1979), which assumes that presupposition and assertion are two independent components of meaning, specified lexically, and the *trivalent* view, which takes propositions to be (possibly) partial functions from worlds to truth-values, such that the presupposition specifies the domain over which the function is defined, and the assertion determines the truth value that the proposition yields for each world in that domain. Note that the two-dimensional view is strictly more expressive than the triva-

(1) a. Mary adopted all three of her kids.
   (i) **Inference 1:** Mary has (exactly) three kids.
   (ii) **Inference 2:** Mary adopted all of her kids.
   b. It was Mary who stole my book
   (i) **Inference 1:** Someone stole my book.
   (ii) **Inference 2:** Mary stole my book.

(2) a. If Mary adopted all three of her kids, she can participate in the experiment.
   ✓ Inference 1 ✗ Inference 2
   b. If it was Mary who stole my book, it is probably in her office.
   ✓ Inference 1 ✗ Inference 2

While presuppositions generally project from certain environments, such as the antecedents of conditionals given in (2), there are cases where presuppositions do not project as expected. For example, consider (3-a):[2] here the same conditional as (2-a), can be used without resulting in the inference that Mary has three kids. What seems to block projection in (3-a) is that the first sentence (that the speaker doesn't know if Mary has three kids) clashes with the projected presuppositional inference (that Mary has three kids). Similarly, in (3-b), the presupposition that someone stole the speaker's book does not project from the antecedent, unlike in the basic case in (2-b).

(3) a. **Context:** We are conducting a psychology experiment, and looking for parents who meet the following two criteria: (i) they have exactly three kids, all of whom are adopted and (ii) they work in medicine. Someone, who knows that Mary works in medicine, says:
   I don't know if Mary has three kids, but if she adopted all three of her kids, she can participate in the experiment.
   b. **Context:** My book disappeared, and I'm trying to figure out what happened.
   I don't know if my book was stolen, but if it was Mary who stole my book, it is probably in her office.

The mechanism responsible for the lack of projection in the examples in (3) is usually referred to as *local accommodation* (Heim, 1982). While remaining agnostic, at this point, about the nature of this mechanism, we take the following two properties to characterize cases of local accommodation: (i) local accommodation prevents the presupposition from projecting and (ii) the truth-conditions of '...$[_X\ p_r\ ]$..' where the presupposition r is locally accommodated in the environment X are equivalent to those of '...$[_X\ r$ and $p\ ]$...', the result of replacing p_r with the conjunction of the presupposition and the assertion.

Existing theories of local accommodation proposed in the literature can be roughly divided into two classes: (i) dynamic theories, which maintain that the presupposition in those cases

lent one – a trivalent meaning may be mapped onto multiple two-dimensional meanings. To keep our ontological assumptions as minimal as possible, we will stick in this paper to the trivalent view, but our argument can be expressed in the two-dimensional view as well. Given this assumption, we will use the term *assertion* here to refer to the truth conditions of a proposition relative to contexts in which the presupposition is already satisfied.

[2]The availability of local accommodation is known to be sensitive to contextual parameters. Since the examples here will serve as baselines for more complicated cases, we supplement them here with detailed contexts, where the parse with local accommodation is natural in the discourse.

still has to be satisfied in the local context, even though it doesn't project; (ii) operator theories, which hypothesize a semantic operator that collapses presupposition and assertion. These two classes of theories make different predictions with respect to the status of presuppositions when they are locally accommodated. On the operator approach, presuppositions are simply part of the asserted meaning when locally accommodated. On the other hand, dynamic theories maintain that presuppositions retain their distinct status even when locally accommodated.

In order to answer whether there is some asymmetry between presuppositions and assertions even when presuppositions are locally accommodated, we must first identify what sets presuppositions apart from asserted content, besides projection properties which by definition do not survive local accommodation. The satisfaction/admittance view (Stalnaker 1974, Kartunen 1974) argues that the difference stems from the different roles of the two types of meaning in discourse. Under this view, utterances are always interpreted with respect to a *common ground* – the set of propositions accepted as true by all discourse participants – and its corresponding *context set*. They are defined formally in (4)-(5).

The definitive property of presuppositions according to this view is that they impose conditions on the context set, such that a sentence can only be uttered if its presupposition is entailed by the context set (a principle first proposed by Stalnaker (1974), and termed *Stalnaker's Bridge* by von Fintel 2008). Asserted content, on the other hand, is used for modifying the context set – if successful, i.e. accepted by discourse participants, an assertion is added to the common ground, narrowing the set of possible worlds that are compatible with it.

(4) **Common ground:** A proposition p is in the common ground iff it is commonly believed among discourse participants that every participant accepts p as true.

(5) **Context set:** The set of all possible worlds compatible with every proposition in the common ground.

(6) **Stalnaker's Bridge:** A sentence can be felicitously uttered only if its presupposition is entailed by the context set. (Stalnaker, 1974)

An immediate prediction of this approach is that a sentence could not be felicitously uttered in a context where its presupposition is not entailed by the context set. At first glance, this prediction seems incorrect. Consider (7) for example. Here, the presupposition that Mary has a car is not met in the common ground, but nevertheless Mary's response is judged felicitous.

(7) **Context:** John and Mary, high school friends who lost touch for many years, run into each other on the street (John doesn't know if Mary has a car.)

a. John: Why are you looking upset? Did something happen?
b. Mary: My car got stolen.

In order to explain cases like (7), proponents of the satisfaction theory assume that there is a process of *Global Accommodation*, by which a cooperative addressee may reconsider what they assumes to be the common ground and accommodate a new one, which does satisfy the bridge principle. In (7), therefore, John has to accommodate a common ground that entails that Mary has a car before evaluating the sentence with respect to it.

The availability of global accommodation raises the question of whether we can ever detect a difference between the pragmatic status of presuppositions and assertions. In particular,

how can we distinguish between accommodating a new common ground in order to satisfy a presupposition and updating the common ground by accepting an assertion?[3] One way to go about answering this question makes use of the constraints on asserted content. If assertions are evaluated with respect to the accommodated common ground, then constraints on context update have to be evaluated after accommodation. This becomes crucial in cases where accommodation of some component of the meaning of a sentence bleeds assertability – the felicity of the utterance is predicted to be dependent on the status of that component as presupposition or assertion. These cases may therefore be used as an effective diagnostic for the pragmatic status of a meaning component.

In this paper, we present a constraint on presupposition accommodation, building on lecture notes by Orin Percus (1998) and Irene Heim (2015), that relies on this asymmetry between presupposition accommodation and update by assertion. We provide novel data showing that this constraint holds for local accommodation, in addition to global accommodation. This provides evidence for a theory of local accommodation which maintains this asymmetry and against theories where presuppositions become part of the asserted meaning, such as the A-operator theory (Beaver and Krahmer, 2001). While the dynamic approach straightforwardly predicts that presuppositions retain a distinct status when locally accommodated, we argue that certain non-dynamic theories can also predict the asymmetry, including theories that treat local accommodation as domain restriction (von Fintel 2004, Chatain and Schlenker 2023).

The rest of the paper is structured as follows. In section 2, we present evidence for our constraint and show how it follows from the satisfaction theory. In section 3, we argue that this asymmetry between presupposition and assertion is maintained when presuppositions are locally accommodated. In section 4, we discuss the consequences of our novel data for different theories of local accommodation, arguing against the A-operator theory, where the presupposition becomes part of the asserted meaning. We conclude in section 5.

2 A constraint on global accommodation

A proposition cannot be felicitously asserted if it is entailed by the context set. This pragmatic principle, which we will refer to as *non-redudancy*, was first proposed by Stalnaker (1978). It is shown in (8), and demonstrated by the example in (9).

(8) **Non-redundancy** (Stalnaker, 1978):
A proposition p can't be asserted relative to a context set C if $\forall w \in C : p(w) = 1 \vee \forall w \in C : p(w) = 0$

(9) # I knew that Mary has a Labrador, but today I learned something interesting: Mary has a dog.

The *non-redundancy* principle is responsible for the infelicity of (9) in the following way: the first sentence (*I knew that Mary has a Labrador*) presupposes that Mary has a Labrador, and so it forces the reader to accommodate a common ground which entails it; the proposition that corresponds to the second sentence (*Mary has a dog*) is entailed by the proposition that Mary has a Labrador, which the first sentence made sure is in the common ground; therefore,

[3] See Aravind et al. (2022) and the last section of von Fintel (2008) for a more detailed discussion of this puzzle.

the proposition corresponding to the second sentence is true in every world in the context set, violating (8).

A note on methodology is due. We will use this example template as a general paradigm for testing non-redundancy violations. Given sentences A and B, the utterance *I knew that A, but today I learned something interesting: B* violates non-redundancy if and only if A contextually entails B. This paradigm aims to elicit the same intuitions that are traditionally elicited by explicitly supplying the intended common ground separately from the target sentence. An example like (9) would look like (10) if put in the traditional format.

(10) **Context:** It is common ground that Mary bought a Labrador.
Mary has a dog.

We chose a method of forcing the desired common ground over a method of explicitly stating it as a background because we think that the former is better for filtering out the effect of a phenomenon we might call *redundancy-related accommodation*. When facing with an utterance that is redundant relative to what the we take to be the common ground of the discourse, we tend to update our beliefs about the common ground to save the utterance from being redundant. The motivation for this kind of accommodation is similar to that of presupposition accommodation, i.e. principles of cooperativeness, but instead of filtering worlds out of the context set, this process involves adding worlds. How it is exactly done is beyond the scope of this paper, but what is important to our purpose is to notice that this kind of accommodation is possible. Even when given an explicit context like in (10), the infelicity of the target sentence seems to be somewhat shaky, and prone to be changed by the mental gymnastics we perform as cooperative speakers. The example is (9) does not suffer from this weakness – whatever changes we make in our assumptions about the context of the utterance, the fact remains that without assuming that the common ground entails that Mary bought has a Labrador, we will just get a Stalnaker-bridge violation.

Next, we will examine cases in which the target sentence (*sentence A*) has a presupposition of its own. A basic question that these cases raise is which component of the sentence's meaning is subject to the non-redundancy constraint. Two natural possibilities are (i) the entire information contributed by sentence, or (ii) only the assertive component. If the presupposition of the sentence is entailed by the context set as it is, the two options are indistinguishable. But if the presupposition needs to be accommodated, the first is strictly weaker than the second (it predicts fewer redundancy violations). While different answers might be possible under different ways of conceptualizing presuppositions and redundancy, the satisfaction view as it is presented here is only compatible with the second option. Under this view, accommodation is not changing the common ground straightforwardly, but reassessing what it was in the first place, and so the common ground against which non-redundancy is checked must be the common ground after all accommodation took place. This principle is given in (11).

(11) **Post-Accommodation Informativity (PAI):** A sentence S_p (presupposing p) can be uttered felicitously only if S_p is not redundant w.r.t the common ground after presupposition accommodation.

This principle is a mere consequence of the Stalnakerian view of presuppositions, and it does not reflect any novel observation. Nevertheless, we argue that it provides us with a powerful

tool of detecting presuppositions. To see this, consider examples like in (12). In both (12-a) and (12-b), the target sentences convey the same information, ignoring the difference between presupposition and assertion: that Mary has exactly three kids, and that she adopted all of them.

(12) **Context**: The addressee doesn't know anything about Mary.

a. # I knew that all of Mary's kids are adopted but today I learned something interesting: all three of Mary's kids are adopted.
b. I knew that all of Mary's kids are adopted but today I learned something interesting: Mary has three adopted kids.
c. Today I discovered something interesting: all three of Mary's kids are adopted.

What explains the infelicity of (12-a) is that the informative part – that Mary has three kids – is presupposed there, while the redundant part – that Mary adopted them – is asserted. According to PAI, the redundancy of a sentence is always checked after accommodating its presupposition, which in the case of (12-a) means that although the presupposition might contain new information, it is not enough to save the sentence from redundancy violation. At the stage at which it is checked, this information is already integrated into the common ground. The example in (12-c) shows that accommodation of new information given in the presupposition is indeed possible – the problem only begins when that is the only new information the sentence conveys.

This observation that the presupposition cannot be the only thing that is contributing new information has been argued for with similar data in lecture notes by Orin Percus (1998) and Irene Heim (2015). Our contribution in this section is to lay out the logic of this principle in a way which will make clear predictions regarding how PAI might manifest itself with local accommodation. We therefore argued that this observation follows from independently motivated constraints on assertions, coupled with the satisfaction view of presuppositions.

Another example that delivers the same point is given in (13). Since the first sentence in (13-a) makes it common ground that *if someone stole my book, then Mary stole it*, the second sentence becomes redundant after presupposition accommodation. Again, (13-b) is equivalent to (13-a) after collapsing presupposition and assertion but includes the new information as part of the assertion. Finally, (13-c) shows that this presupposition in general can be accommodated.

(13) Context: My book disappeared and I've been looking to see what happened to it.

a. #I knew that only Mary had access to my book, but today I learned something interesting: it was Mary who stole it.
b. I knew that only Mary had access to my book, but today I learned something interesting: she stole it.
c. Today I learned something interesting: it was Mary who stole my book.

3 Constraints on local accommodation

In this section, we use the diagnostic developed in the previous section to test whether locally accommodated presuppositions retain a different status from assertions. As stated in section 1, we take local accommodation to be the mechanism behind cases like (3), repeated below as (14), which have the following two properties: (i) local accommodation prevents the presup-

position from projecting and (ii) the truth-conditions of '...[$_X$ p_r]..' where the presupposition r is locally accommodated in the environment X are equivalent to those of '...[$_X$ r and p]...', the result of replacing p_r with the conjunction of the presupposition and the assertion. Before applying PAI to cases of local accommodation, we will briefly discuss some of the main accounts proposed in the literature and present their predictions.

(14) a. **Context:** We are conducting a psychology experiment, and looking for parents who meet the following two criteria: (i) they have exactly three kids, all of whom are adopted and (ii) they work in medicine. Someone, who knows that Mary works in medicine, says:
I don't know if Mary has three kids, but if she adopted all three of her kids, she can participate in the experiment.

b. **Context:** My book disappeared, and I'm trying to figure out what happened.
I don't know if my book was stolen, but if it was Mary who stole my book, it is probably in her office.

3.1 Local accommodation on the dynamic approach

The original conception of local accommodation is given in Heim (1982). Heim argues that the meaning of a sentence is its context change potential, and that the meaning of complex sentences such as conditionals is a function of the context change potentials of their parts. More precisely, Heim assumes that propositions denote a set of world-assignment pairs, and keeps the standard definition of updating the context as intersecting it with a proposition. For example, the context change potential of a conditional sentence is given in (17). Given a context c, the result of applying the update in (17) is a context which includes all of the worlds and assignments in c except for the ones where $[\![\phi]\!]$ is true and $[\![\psi]\!]$ is false.

Notice that the formula in (17) involves several local updates (+) of the context. Heim argues that presupposition satisfaction is evaluated at each of these update steps. Given the formula in (17), this predicts that the presupposition of $[\![\phi]\!]$ has to be satisfied in the context c, since in both of its instantiations + ϕ is applying to c. We end up predicting that a conditional can only be uttered felicitously if the (global) context entails the presupposition of its antecedent. On the other hand, the presupposition of $[\![\psi]\!]$ has to be satisfied in the context c $\cap$ $[\![\phi]\!]$, which results in the whole sentence presupposing that c $\cap$ $[\![\phi]\!]$ entails $[\![\psi]\!]$'s presupposition. Both of these results are desired (indeed, they are the reason to choose (17) as the semantics of conditionals).[4]

(15) **Result of update:**
The result of applying the update $+\phi$ to a context c is the context c $\cap$ $[\![\phi]\!]$.

(16) **Dynamic presupposition satisfaction:** An update c + ϕ_p is only defined if c $\subseteq$ p.

(17) Conditional CCP: c + 'If ϕ, ψ' = c \((c+ϕ)\(c+ϕ+ψ))

Under this view, global accommodation, like in the Stalnakerian view, involves changing the global context c. On the other hand, local accommodation involves changing certain instantiations of c to prevent presupposition failure, without changing the global context. For example,

[4]For notational purposes, we assume that the characteristic function of a trivalent proposition is the set of worlds in which it is true.

suppose that we want to locally accommodate the presupposition p of the antecedent ϕ. We can then change the instantiations of c to which + ϕ applies to another local context c' which entails p. This is shown in (18).[5]

(18) Conditional CCP with local accommodation: c + 'If ϕ_p, ψ' = c \((c'+ϕ_p)\(c'+ϕ_p+ψ)), where c' ⊆ c ∩ p.

3.2 Local accommodation on the operator approach

Another way to conceptualize local accommodation is as the result of an operator that collapses presupposition and assertion (Beaver and Krahmer, 2001). The lexical entry for this operator, traditionally called the $A-$operator, is given in (19). A applies to a (possibly trivalent) proposition and returns false if that proposition is either false or undefined, therefore collapsing presupposition failure and falsity. Inserting A in the antecedent of a conditional in (20), for example, allows the sentence to be true if it is the case that if Mary has three kids and adopted all of them, then she can participate in the experiment. The presupposition therefore does not project from the antecedent in (20).

(19) $[\![\text{A}]\!](\text{p}) = \begin{cases} 1 \text{ iff } p = 1 \\ 0 \text{ iff } p = \# \vee p = 0 \end{cases}$ Bochvar (1938)

(20) a. [[If [A[Mary adopted all three of her kids]]] [she can participate in the experiment]]
b. $[\![\text{A}]\!]([\![\text{Mary adopted all three of her kids}]\!])$=1 iff Mary has two kids and adopted all of them
c. $[\![$(20-a)$]\!]$=1 iff (If Mary has three kids and adopted all of them, then she can participate in the experiment)

We will argue that the two approaches differ in their predictions with respect to redundancy effects. Under the dynamic view of local accommodation, we expect to see cases where local accommodation gives rise to redundancy in the same way global accommodation does. We therefore expect to be able to detect an asymmetry between presupposition and assertion, even when the presupposition is accommodated locally. On the other hand, we argue that on the $A-$operator view, the fact that presupposition and assertion are collapsed completely obscures this asymmetry. This view therefore predicts no redundancy effects when local accommodation takes place. To see why this is the case, we first need to spell out our assumptions about redundancy effects in subconstituents.

3.3 Local and incremental redundancy

In this paper, we focus on two environments for testing local PAI effects – the antecedent of a conditional, and a relative clause in the restrictor of a universal quantifier. For both of these environments, there seems to be a robust generalization that they cannot be filled by a proposition

[5]Note that as von Fintel (2008) observes, this conception of local accommodation poses a problem for the idea that context change potentials are computed compositionally. For the purposes of this paper, we set this issue aside and simply focus on the predictions of this dynamic conception of local accommodation with respect to our cases.

which is entailed by the common ground. A more formal characterization of this generalization is given in (21) (notice that in the case of a relative clause in the restrictor, the generalization only applies if it is entailed by c for any individual in the extension of the head NP). It is evidenced by the examples in (22)-(23).[6]

(21) a. A sentence of the form 'if S, R' is infelicitous relative to a context set c if $c \subseteq [\![S]\!]$.
b. A sentence of the form 'every P that R, Q' is infelicitous relative to a context set c if for every $x \in [\![P]\!]$ it holds that $c \subseteq [\![R]\!](x)$.

(22) **Context:** Mary and Jane have just finished watching the football world cup final, in which France won. Mary says to Jane:
If France won, there will be celebrations in Paris tonight.

(23) # Every resident of Paris who lives in France will celebrate tonight.

One way to explain these data is to assume a generalized non-redundancy principle that rules out LFs where a certain subconstituent can be replaced with a tautology without changing the global truth-conditions.[7] For example, in (22), the antecedent *France won* is common ground and therefore contextually equivalent to the tautology. As a result, replacing the antecedent with the tautology does not change the truth-conditions. Similarly, in (23), since every resident of Paris lives in France, replacing the relative clause *who lives in France* with the tautology does not affect the truth-conditions. Note that Stalnaker's non-redundancy principle can be thought of as a special case of this generalized non-redundancy principle, where the relevant constituent is the entire sentence. This principle can be formalized as shown in (24).

(24) **Generalized Global Redundancy:**
a. A propositional phrase ψ in a sentence ϕ is globally redundant given a context c if $[\![\phi(\psi)]\!]$ is contextually equivalent to $[\![\phi(\top)]\!]$, where $[\![\top]\!] = \lambda w.\ 1$.
b. ϕ cannot be used felicitously if any phrase ψ in ϕ is globally redundant
(adapted from Mayr and Romoli, 2016)

Although this provides a simple account for the infelicity in (22) and (23), global redundancy seems to make some incorrect predictions when we look beyond these cases, as argued by Schlenker (2006), among others. To see this in one of the environments we're consider, consider the context in (25). In this context, (25-a) is equivalent to the alternative with the tautology in (25-b): since the communist attendees who didn't win a VIP ticket had to sit in the regular seats, if every communist who did win a VIP ticket sat in the regular seats (25-a), this entails that all of the communist attendees sat in the regular seats (25-b). (25-b) logically entails (25-a), so we can conclude that (25-a) and (25-b) are contextually equivalent. Global redundancy therefore

[6] In certain specialized context, it is felicitous to assert a conditional even when the antecedent seems to be common ground (i). We will set these exceptions aside for the purposes of this paper.

(i) a. Q: Is Bill here?
b. A: Paul is here, and if Paul is here, Bill is here too.

[7] Note the we use replacement with the tautology rather than deletion (e.g. Mayr and Romoli, 2016) when defining redundancy. That is because in certain cases, like the antecedent of the conditional, it is not clear to us whether the result of deleting the relevant subconstituent is grammatical. While there might be a way to get around this issue, we use the tautology here for simplicity.

incorrectly predicts that (25-a) is infelicitous in this context. We take (25) to show that global redundancy needs to be revised.

(25) **Context:** A band is having a concert, and randomly selects 10% of the ticket holders to receive a VIP ticket, which allows the holder to choose between sitting in the regular seats and sitting in the VIP area. The rest of the ticket holders must sit in the regular seats. Someone says: Here's an interesting stat...

a. Every communist attendee who won a VIP ticket sat in the regular seats.
b. Every communist attendee (who $\top$) sat in the regular seats.

The dynamic view is able to account for the infelicity in (22) and (23) without appealing to generalized global redundancy. In particular, the facts can be captured by positing that like presupposition satisfaction, non-redundancy applies at each update of the context. This follows naturally from the assumption that updating the context with a propositional subconstituent of a sentence and updating it with a full sentence are essentially the same process. The constraint can be stated as in (26), generalizing Stalnakerian non-redundancy to local contexts.

To see how (26) predicts the redundancy generalizations given in (21), we have to consider the context-change potentials for conditionals and the universal quantifier. Starting, with the conditional, the CCP is repeated below. Now, given that (27) involves a step where the context c is updated with antecedent p, (26) correctly predicts the generalization in (21-a) that the antecedent can't be redundant with respect to the common ground.

(26) **Dynamic non-redundancy:**
An update c + ϕ cannot be done felicitously if c $\subseteq [\![\phi]\!]$.

(27) Conditional CCP: c + 'If ϕ, ψ' = c \((c+ϕ)\(c+ϕ+ψ))

Turning to the restrictor of a universal quantifier, defining the context-change potential is more involved. The context-change potential for *every* from Heim is given in (28). Crucially, the CCP in (28) involves an update where c is updated with $\phi(x_i)$, which denotes an assignment-dependent proposition. It follows from the dynamic non-redundancy constraint in (26) that to avoid redundancy, there must be a pair <g,w> that is in c but not in $[\![\phi(x_i)]\!]$. Given certain assumptions made by Heim about the assignment functions in c, we can conclude that $\phi(x_i)$ is redundant relative to c if and only if for any individual a, the set of worlds in c (c's projection onto its world-dimension) is a subset of the set of worlds in $[\![\phi(a)]\!]$ ($[\![\phi(a)]\!]$'s projection onto its world-dimension).[8] In other words, a proposition that contains free variables is redundant if and only if every possible replacement of the free variables with individuals in the domain yields a proposition which is redundant.

The case of a relative clause in the restrictor of a universal quantifier is similar to the basic restrictor case. Its CCP is given in (30). The difference between the cases is that the relative

[8] Heim assumes the following constraint on assignment functions in c (slightly adapted from Heim 1982). She does that for independent reasons, but as it turns out, it is necessary for proving the first direction in the biconditional statement above.

(i) For any free variable x_i and two assignment functions g and g' that differ at most in their application to i, and for any world w: <g,w> $\in$ c iff <g',w> $\in$ c.

clause is added to its local context only after the preceding material in the restrictor has been added. That means that $\eta(x_i)$ yields a redundancy violation if and only if for every individual a, the set of worlds in c+$\phi(a)$ is a subset of the set of worlds in $\eta(a)$. Going back to the example in (23), the relative clause *who lives in France* is redundant since every person who is a resident of Paris (namely satisfies $[\![\phi]\!]$) also lives in France (namely satisfies $[\![\eta]\!]$).

(28) *every* CCP: c + 'Every x_i, $\phi(x_i)$, $\psi(x_i)$'=
$\{\langle g, w\rangle \in c : \forall y : \langle g^{i/y}, w\rangle \in c + \phi(x_i) \rightarrow \langle g^{i/y}, w\rangle \in c + \phi(x_i) + \psi(x_i)\}$

(29) $[\![\phi(x_i)]\!] = \{\langle g, w\rangle : [\![\phi]\!](g(i))(w) = 1\}$

(30) Relative clause in the restrictor CCP: c + 'Every x_i, $\phi(x_i)$ that $\eta(x_i)$, $\psi(x_i)$' =
$\{\langle g, w\rangle \in c : \forall y : \langle g^{i/y}, w\rangle \in c + \phi(x_i) + \eta(x_i) \rightarrow \langle g^{i/y}, w\rangle \in c + \phi(x_i) + \eta(x_i) + \psi(x_i)\}$

The account above relies on the dynamic assumption that updating a sentence and a propositional subconstituent of it is done by the same mechanism. In frameworks which do not share this assumption, it is still possible to account for the same data, by positing an incremental version of the redundancy principle in (24) (e.g. Schlenker, 2008). An incremental version of the redundancy principle is given in (31). Under this definition, *who won a VIP ticket* is incrementally redundant only if replacing the restrictor in (25-a) with the restrictor in (25-b) yields an equivalent sentence, regardless of what is in the scope of *every*. It is clear that the context in (25) does not make *who won a VIP ticket* incrementally redundant, since for example *Every communist attendee who won a VIP ticket was happy* is not equivalent to *Every communist attendee was happy* in this context. On the other hand, *who lives in France* in (23) is incrementally redundant, since regardless what the scope Q is, *every resident of Paris Q* is equivalent to *every resident of Paris who lives in France Q*.

(31) **Incremental Redundancy:**

a. A propositional phrase ψ in a sentence ϕ is incrementally redundant if it is globally redundant for any ϕ', where ϕ' is a possible continuation of ϕ at point ψ.

b. ϕ' is a possible continuation of ϕ at point ψ if it is identical to ϕ in structure and number of constituents, but the constituents pronounced after ψ are possibly different.

c. ϕ cannot be used felicitously if any phrase ψ in ϕ is incrementally redundant.

(adapted from Mayr and Romoli 2016)

We therefore see that in both dynamic and non-dynamic approaches, there has to be redundancy constraints that target sub-constituents of a sentence. Different views of local accommodation make different predictions regarding how these constraints interact with accommodation.

Under the dynamic view, we saw that local accommodation involves changing the local context. It is therefore natural to conclude that, just like with global non-redundancy, dynamic non-redundancy, which requires that no proposition is redundant with respect to its local context, is evaluated with respect to the modified local context after local accommodation applies. The same PAI effects we see with global accommodation should therefore surface with local accommodation as well.

On the other hand, the $A-$operator view predicts no interaction between local accommo-

dation and incremental redundancy. Since the $A-$operator simply takes a propositional phrase ϕ_p as an argument and collapses its presupposition with its assertion, the presupposition and the assertion are not separable when evaluating redundancy. This will become clear once we examine concrete examples in the next subsections.

3.4 PAI in the antecedent of a conditional

In order to test the different predictions of the dynamic view vs. operator view of local accommodation, we begin by considering local accommodation in the antecedent of conditionals. Under the dynamic view, the CCP for a conditional antecedent is given in (32), repeated from (18). Here, c' is the accommodated local context which entails the presupposition p of the antecedent. Given that dynamic non-redundancy applies to the local context of the antecedent, we expect it to apply to the accommodated context c'. Since c' has to be a subset of c∩p, it follows that whenever c∩p is a subset of $[\![\phi_p]\!]$, c' is necessarily a subset of $[\![\phi_p]\!]$ as well. Dynamic redundancy therefore predicts that the antecedent is redundant when the context, updated with the presupposition of the antecedent, entails the antecedent, as shown in (33). This is a result of applying redundancy after accommodation and is therefore analogous to the global PAI effects discussed in section 2.

(32) Conditional CCP with local accommodation: c + 'If ϕ_p, ψ' = c \((c'+ϕ_p) \(c'+ϕ_p+ψ)), where c' ⊆ c ∩ p.

(33) **PAI in conditional antecedent:** A conditional 'If ϕ_p, ψ' where p is locally accommodated in ϕ_p is infelicitous given a context set c if $c \cap p \subseteq [\![\phi_p]\!]$.

On the other hand, the A-operator view predicts that a locally accommodated antecedent is incrementally redundant only if the result of collapsing presupposition and assertion (A($[\![\phi_p]\!]$)) is incrementally redundant, namely only if $c \subseteq [\![\phi_p]\!]$. In particular, the two ways in which an antecedent with locally-accommodated presupposition can cause an incremental redundancy violation is if the whole antecedent is redundant (34-a) or the constituent in the scope of A is (34-b). Since A(⊤) is equivalent to ⊤, ϕ_p is incrementally redundant iff A(ϕ_p) is incrementally redundant and (34-a) and (34-b) are collapsed. We therefore get incremental redundancy only if A(ϕ_p) is incrementally redundant, which only holds here if $[\![A(\phi_p)]\!]$ is contextually equivalent to the tautology.

(34) Given a sentence 'If A($[\![\phi_p]\!]$), ψ.',
   a. ϕ_p is incrementally redundant iff 'If A($[\![\phi_p]\!]$)...' is contextually equivalent to 'If A(⊤)...' for any continuation.
   b. A(ϕ_p) is incrementally redundant iff 'If A($[\![\phi_p]\!]$)...' is contextually equivalent to 'If ⊤ ...' for any continuation.

We can now test whether PAI in fact applies locally in this environment, as predicted by the dynamic approach. To do this, we have to first construct a baseline example where local accommodation applies in the antecedent. Consider first the example in (35) where the trigger is *all three*. The presupposition of the antecedent here is that Mary has three kids. As discussed in the introduction, in order to ensure that the presupposition is locally accommodated, we

construct examples where projection of the presupposition would create a clash with preceding material. Here the first part of the sentence in (35) asserts that the speaker doesn't know if Mary has two kids. If the presupposition that Mary has three kids were to project, this would clash with the first part of the sentence. We can therefore conclude that to the extent that (35) is felicitous, the presupposition has to be locally accommodated in the antecedent.

(35) **Context:** A psychology experiment is looking for parents who meet the following two criteria: (i) they have three kids, all of whom are adopted and (ii) they work in medicine. Someone, who knows that Mary works in medicine, says:
I don't know if Mary has three kids, but if she adopted all three of her kids, she can participate in the experiment.

If (33) is correct, we therefore expect that (35) will be infelicitous in a common ground which, coupled with the presupposition in (36-a), entails the antecedent that Mary adopted all three of her kids (36-b). For example, given a common ground which entails that Mary adopted all of her kids (36-c), we expect that (35) will result in a PAI violation. This result is illustrated in (36-d).

(36) a. p = λw. Mary has three kids in w
b. $[\![\psi_p]\!]$= λw : Mary has three kids in w. Mary adopted all of her kids in w
c. r = λw. Mary adopted all of her kids in w
d. Given that r$\cap$p $\subseteq$ $[\![\psi_p]\!]$, it follows that if c$\subseteq$r, then c$\cap$p $\subseteq$ $[\![\psi_p]\!]$, violating PAI.

Consider the example in (37-a) which only differs from (35) in that the proposition *that Mary adopted all of her kids* (36-c) is added to the common ground. As predicted by the local version of PAI in (33), (37-a) is infelicitous. Again, this is because when the presupposition that Mary has three kids is added to the common ground, which entails that Mary adopted all of her kids, the result entails that Mary adopted all three of her kids. Note that (37-a) is predicted to be infelicitous only because presupposition accommodation in the antecedent makes the antecedent redundant. Consider the counterpart in (37-b) which conveys the same information as (37-a) but asserts that Mary has three kids instead of presupposing it. As expected, (37-b) is felicitous, since the assertive component in the antecedent adds new information (that Mary has three kids).

(37) **Context:** A psychology experiment is looking for parents who meet the following two criteria: (i) they have exactly three kids, all of whom are adopted and (ii) they work in medicine.
Someone, who knows that Mary works in medicine, says:
a. #I know that Mary adopted all of her kids. I don't know if she has three kids, but if she adopted all three of her kids, she can participate in the experiment.
b. I know that Mary adopted all of her kids. I don't know if she has three adopted kids, she can participate in the experiment.

We therefore conclude that, as expected by the dynamic approach, local accommodation gives rise to PAI effects in a parallel way to what we have seen with global accommodation in section 2. In what follows, we provide an additional example showing that PAI applies for the

antecedent of conditionals.

Consider the example in (38), with cleft as our trigger. First, we have the baseline example with local accommodation in (38-a). Here, the presupposition that my book was stolen has to be locally accommodated in the antecedent for the sentence to be felicitous. In (38-b), the first sentence adds to the common ground that if someone stole my book, it was Mary. Now, after updating this common ground with the presupposition that someone stole my book, the antecedent becomes redundant. We therefore expect a PAI violation here, following (33), and in fact (38-b) is infelicitous. Again, we can show that it is the presence of a presupposition which has to be locally accommodated that makes (38-b) infelicitous. In (38-c), the antecedent conveys the same information as that of (38-b) but without having a presupposition. Since (38-c) is felicitous, we can conclude that PAI has to be responsible for the infelicity of (38-b).

(38) Context: My book disappeared and I've been looking to see what happened to it.

a. I don't know if my book was stolen, but if it was Mary who stole it, it is probably in her office.

b. #I know that only Mary had access to my book. I don't know if my book was stolen, but if it was Mary who stole it, it is probably in her office.

c. I know that only Mary had access to my book. I don't know if my book was stolen, but if Mary stole it, it is probably in her office.

3.5 PAI in the restrictor of a universal

We move on to the second environment we examine in this section: the restrictor of a universal quantifier. Our goal, as in the previous section, is to present cases in which projection is blocked, and test what are the conditions under which local accommodation is possible. We will show that presuppositions triggered in a relative clause inside the restrictor of a universal quantifier, like the ones triggered in the antecedent of a conditional, are subject to local PAI effects.

The standard CCP for sentences of this form is repeated in (39). As we concluded in section 3.1, that means that R(x_i) violates dynamic redundancy if and only if for any individual a, c∩P(a) ⊆ R(a). Given that the presupposition $p(x_i)$ is locally accommodated, we expect local PAI effects to arise whenever for any individual, strengthening c to entail $p(a)$ makes R(a) redundant. This is given more formally in (40).

(39) Relative clause in the restrictor CCP: c + 'Every x_i, $\phi(x_i)$ that $\eta(x_i)$, $\psi(x_i)$' =
$\{\langle g, w\rangle \in c : \forall y : \langle g^{i/y}, w\rangle \in c + \phi(x_i) + \eta(x_i) \rightarrow \langle g^{i/y}, w\rangle \in c + \phi(x_i) + \eta(x_i) + \psi(x_i)\}$

(40) **PAI in RC inside the restictor of a universal:** Given a sentence of the form 'Every x_i, $\phi(x_i)$ that $\eta_p(x_i)$, $\psi(x_i)$' where $p(x_i)$ is locally accommodated in $\eta_p(x_i)$, $\eta_p(x_i)$ is redundant if for any individual a, c∩$[\![\phi(a)]\!]$∩ p(a) ⊆ $[\![\eta_p(a)]\!]$.

Just like the case of conditional antecedents above, the A-operator view predicts incremental redundancy only if A($\eta_p(x_i)$) is incrementally redundany, namely if for any individual a, c∩ $[\![\phi(a)]\!] \subseteq [\![\eta_p(a)]\!]$.

One issue that needs to be resolved before presenting the data is how to block global accommodation in this environment. Our assumption in the case of an antecedent was that presup-

positions project unfiltered, and become presuppositions of the entire sentence. We cannot straightforwardly make the same assumption in the case of a relative clause in the restrictor, simply because it contains a free variable that needs to be resolved. We will assume that the projection is universal, i.e. the presupposition of the relative clause has to be satisfied in the context set for any individual in the restrictor. This is given more formally in (41). Notice that this assumption is a direct consequence of Heim's CCP for universal quantifiers given above. That means that global accommodation will be blocked in any context which entails that at least one individual in the restrictor does not satisfy the RC's presupposition.

(41) 'Every x_i, $\phi(x_i)$ that $\eta_p(x_i)$, $\psi(x_i)$' is only defined if $\forall x \in [\![\phi]\!] : p(x) = 1$.

With this in mind, consider baseline examples like (42). The RC *who adopted all three of their kids* presupposes that the individual denoted by the free variable has exactly three kids. Given our assumption about the projection from this environment, we can conclude that without local accommodation, the sentence should presuppose that every resident of the town has exactly three kids. This presupposition contradicts the information given in the first sentence, and should therefore lead to infelicity if it projects. To the extent that the sentence is acceptable, it therefore must be due to local accommodation in the relative clause.[9] The truth conditions we intuitively get seem to support this claim – the sentence in (42) conveys that every resident who has three kids and adopted them all sent them to school 1.

(42) **Context:** There are two schools in town - school 1 and school 2. We're wondering which families send their children to which school. Someone says:
I knew that not every resident has three kids, but today I learned something interesting. Every resident who adopted all three of their kids sent them to school 1.

We are now in a position to construct an example to test local PAI effects. Consider the variations of the previous example in (43). The sentence in (43-a) is the target sentence here. Notice that it is identical to the sentence in (42), the only difference being the preceding utterance, which makes sure the context set entails here that every resident in town adopted all of their kids. Given (40), we can see that this setup indeed predicts local PAI effects in the dynamic view: whenever a resident of the town has exactly three kids, it contextually follows that they adopted all of their kids. The fact that (43-a) is indeed infelicitous is evidence that PAI is detectable in this environment as well.

As in previous cases, to make sure that it really is about PAI and not some other factor in the truth conditions of the target sentence, we should provide a felicitous example which has the same truth conditions after collapsing presupposition and assertion. This is given in (43-b). Assuming that *x has three adopted kids* asserts that x has three kids and they are all adopted, it follows that the only difference between (43-a) and (43-b) is that the latter presupposes that x has exactly three kids, while the former asserts it. The fact that (43-b) is felicitous indicates that PAI is indeed the reason for the infelicity of (43-a).

(43) **Context:** There are two schools in town - school 1 and school 2. We're wondering which families send their children to which school.

[9] We ignore the possibility of intermediate local accommodation (A-operator which takes scope over the entire restrictor), since it is equivalent for our purposes to local accommodation.

a. # I knew that not every resident has three kids and that every resident of this town adopted all of their kids, but today I learned that every resident who adopted all three of their kids sent them to school 1.
b. I knew that not every resident has three kids and that every resident of this town adopted all of their kids, but today I learned that every resident who has three adopted kids sent them to school 1.

Another example of the same effect is provided in (44) below. The relative clause *whose book it was Mary who stole* presupposes that the individual denoted by the variable in subject position had their book stolen, and asserts that Mary stole it. Without local accommodation, the example in (44-a) is then predicted to presuppose that every student had their book stolen by Mary, which clashes the preceding utterance. From the fact that the sentence is felicitous we can conclude that local accommodation is generally possible here. This changes when we add the assumption that for each student, only Mary could have stolen their book, as in (44-b). The infelicity of this example is predicted by (40), since the context entails that for every student whose book was stolen, it was stolen by Mary. And once again, we can make sure that the effect really stems from the presuppositional status of this inference by presenting a sentence which is equivalent after collapsing presupposition and assertion, but does not presuppose anything. This is given in (44-c), which is indeed felicitous.

(44) Context: Every student has a single Semantics book, and some of the students' semantics books got stolen.
a. I knew that some students didn't get their book stolen, but today I learned that every student whose book it was Mary who stole found their book in Mary's office.
b. #I knew that only Mary had access to the students' books. I knew that some students didn't get their book stolen, but today I learned that every student whose book it was Mary who stole found their book in Mary's office.
c. I knew that only Mary had access to the students' books. I knew that some students didn't get their book stolen, but today I learned that every student whose book Mary stole found their book in Mary's office.

3.6 Interim conclusion

We have shown, using redundancy constraints that target the antecedent of a conditional and the restrictor of a universal quantifier, that the same PAI effects we saw with global accommodation in section 2 can be observed with local accommodation. In particular, we get infelicity when the antecedent of a conditional or a relative clause in the restrictor of a universal are redundant after accommodating the presupposition locally, even when the presupposition itself is not redundant. This pattern is exactly what the dynamic view of local accommodation predicts, since local accommodation involves changing a local context, in a parallel way to how global accommodation involves changing the global context.

The $A-$operator view, on the other hand, fails to account for the data. The problem with this view is that under the assumption of incremental redundancy, redundancy is effectively checked after the A-operator collapses presupposition and assertion. We therefore incorrectly predict that there should be no PAI effects, namely that we only get redundancy when the in-

formation conveyed by the combination of presupposition and assertion is redundant.

4 Discussion

In this section, we discuss what it would take for a theory of local accommodation to predict the local PAI data in section 3, given an appropriate theory of redundancy. Under the dynamic approach, the PAI data is predicted since local accommodation results in a step where redundancy of the subconstituent with the presupposition is checked with respect to a local context which necessarily entails its presupposition. That is because in the dynamic view, local accommodation involves first changing the local context such that it entails the presupposition and then evaluating redundancy. In what follows, we show that under the incremental redundancy approach, the same PAI effects can be predicted if local accommodation ensured that at the stage where incremental redundancy of the relevant constituent is checked, its presupposition is necessarily incrementally redundant. We then discuss different static theories of local accommodation that meet this desideratum.

To see more clearly what it would take for a static theory of local accommodation to predict our local PAI data, consider again our conditional example, repeated in (45). Here, even though the antecedents in (45-a) and (45-b) are contextually equivalent after collapsing presupposition and assertion, (45-a) is infelicitous, while (45-b) is felicitous. In the dynamic approach, since the local context, coupled with the presupposition, entails the antecedent, (45-a) is predicted to be infelicitous. More generally, the local PAI generalization that is predicted in the dynamic framework is given in (46), which says that a phrase violates PAI if it is redundant relative to its local context enriched with its presupposition.

(45) **Context:** A psychology experiment is looking for parents who meet the following two criteria: (i) they have exactly three kids, all of whom are adopted and (ii) they work in medicine.
Someone, who knows that Mary works in medicine, says:
   a. #I know that Mary adopted all of her kids. I don't know if she has three kids, but if she adopted all three of her kids, she can participate in the experiment.
   b. I know that Mary adopted all of her kids. I don't know if she has three kids, but if she has three adopted kids, she can participate in the experiment.

(46) **Dynamic local-PAI:** A sentence ϕ is infelicitous if it has a propositional subconstituent ψ_p such that $c_{\psi_p} \cap p \subseteq [\![\psi_p]\!]$, where c_{ψ_p} is the local context of ψ_p.

Under the static approach with incremental redundancy, the generalization in (46) can be restated as shown in (47). What (47) amounts to saying is that when checking whether a subconstituent with a locally accommodated presupposition violates PAI, what has to be checked is whether that sub-constituent is incrementally equivalent to its presupposition. It is similar to the definition of incremental redundancy, only the violation stems from equivalence of the phrase to its presupposition rather than the tautology. This similarly explains the difference between (45-a) and (45-b). In (45-a), since we know that *Mary adopted all of her kids*, the antecedent is contextually equivalent to the presupposition that *Mary has exactly three kids*, thus violating (47). On the other hand, in (45-b) where there is no presupposition accommodation,

no infelicity is predicted, since the antecedent in (45-b) is clearly not incrementally equivalent to the tautology.

(47) a. **Static local-PAI:** A sentence ϕ is infelicitous if it has a propositional subconstituent ψ_p whose presupposition p is locally accommodated, such that ψ_p is incrementally equivalent to $prs(\psi_p)$, where $[\![prs(\psi_p)]\!] = p$.

b. Incremental equivalence: Given a sentence ϕ containing a propositional subconstituent ψ, and given η_1, η_2 two propositional phrases, η_1 is incrementally equivalent to η_2 in ϕ at point ψ, if for any ϕ', where ϕ' is a possible continuation of ϕ at point ψ, it holds that $[\![\phi'[\eta_1/\psi]]\!]$ is contextually equivalent to $[\![\phi'[\eta_2/\psi]]\!]$.

c. For any ϕ, ψ, η, we define $\phi[\eta/\psi]$ as the result of replacing every instance of ψ in ϕ with η.

In the Appendix, we show that the static and dynamic local PAI generalizations in (46) and (47) are in fact equivalent, under the assumption that dynamic and incremental redundancy in general make the same predictions (48). We therefore take the generalization in (47) as a desideratum for static theories of local accommodation.

(48) **Assumption of equivalence**: Given a phrase ψ in a sentence ϕ, ψ is redundant under the dynamic view iff it is incrementally redundant under the static view.

Notice that any theory of local accommodation which derives that the locally-accommodated presupposition is itself incrementally redundant at the relevant point (where the redundancy of the constituent where the presupposition is triggered is checked) predicts the local-PAI effect. This is because if a subconstituent ψ_p whose presupposition is locally accommodated is incrementally equivalent to its presupposition and that presupposition is incrementally redundant (i.e. incrementally equivalent to the tautology), then ψ_p is also incrementally redundant. We will now discuss different theories that meet this desideratum.

The first alternative theory we consider is one where local accommodation involves syntactically conjoining a clause that denotes the presupposition to the left of the subconstituent with that presupposition. This would predict that when redundancy of the relevant subconstituent is checked, the presupposition is necessarily incrementally redundant, thus predicting our local PAI effects.

To illustrate how this would work, consider again the example in (49-a), which we argued involves a local PAI violation. Under this syntactic conjunction approach to local accommodation, the LF for (49-a) should be identical to that of (49-b) which involves overtly conjoining the presupposition. Now, (49-b) is predicted to be infelicitous by our incremental redundancy principle. In particular, the second conjunct in the antecedent is incrementally redundant. This is because regardless of the continuation, 'If Mary has three kids..' is contextually equivalent to 'if Mary has three kids and adopted all of them...' given that we know all of Mary's kids are adopted. This toy theory therefore predicts the PAI effect here: incremental redundancy of the subconsituent with the presupposition is checked in a position where the presupposition itself is rendered incrementally redundant.

(49) a. #I know that Mary adopted all of her kids. I don't know if she has three kids, but if she adopted all three of her kids, she can participate in the experiment.

b. #I know that Mary adopted all of her kids. I don't know if she has three kids, but if she has three kids and adopted all of them, she can participate in the experiment.

Another, possibly more plausible, theory of local accommodation that also predicts the Static local-PAI generalization in (47) involves treating what we have been calling local accommodation as valuation of a domain restriction variable. This type of view was first suggested in von Fintel (2004) to account for cases like (50-a). Assuming that the presupposition in the scope in (50-a) projects universally, (50-a) should presuppose that *every man* has a wife. Instead, (50-a) does not seem to impose any conditions on the common ground and is instead interpreted as equivalent to (50-b).

(50) a. Every man loves his wife.
b. Every man who has a wife loves her.

von Fintel (2004) argues that the reason (50-a) is interpreted as in (50-b) is due to domain restriction. In particular, with global accommodation, we saw that the hearer can accommodate a new common ground to avoid a Stalanker's Bridge violation. Here, the hearer instead accommodates a domain for *every* which guarantees that the presupposition is satisfied. Particularly, we can assume that *every* takes a domain variable as its first argument as shown in (51), and then asserts that every individual in the domain for which the restrictor is true is such that the scope is also true (51-b).[10] Now, if the speaker accommodates a domain which only includes individuals who have wives (51-c), the presupposition in the scope will be trivially satisfied. Domain restriction therefore effectively cancels the presupposition without the need for an independent mechanism for local accommodation.

(51) a. Every$_D$ man loves his wife.
b. $[\![\text{every}]\!] = \lambda D_{\langle e,t\rangle}.\lambda f_{\langle e,t\rangle}.\lambda g_{\langle e,t\rangle}.\forall x[(D(x) \wedge f(x)) \rightarrow g(x)]$
c. D=λx. x has a wife

Chatain and Schlenker (2023) try to generalize this and cash out all cases of local accommodation as domain restriction. A full overview of their account is beyond the scope of this paper, but in what follows we show by focusing again on the antecedent of conditionals and the restrictors of universal quantifiers how treating local accommodation as domain restriction predicts the local PAI data presented in section 3. Suppose that like *every*, *if* takes a domain variable (of type $\langle s, t\rangle$) as its first argument. Our examples are then repeated in (52). Consider (52-a) first: here, if the domain included only individuals who satisfy the presupposition of the relative clause (i.e. who have three kids), the presupposition would be rendered incrementally redundant and the PAI effect would be predicted. Similarly, in (52-b), if the domain only included worlds which satisfy the presupposition of the antecedent (i.e. where Mary has three kids), again the presupposition would be redundant. We therefore see that in both cases, apparent local accommodation can be accounted for as accommodation of a new value for the domain restriction variable D.

(52) a. Every$_{D_{\langle e,t\rangle}}$ resident who adopted all three of their kids can participate in the experi-

[10]The choice of how to implement the mechanism of domain restriction is not important to us here. See von Fintel 1994 for a detailed discussion.

ment.

b. If$_{D_{\langle s,t\rangle}}$ Mary adopted all three of her kids, she can participate in the experiment.

(53) a. Every LA: D= $\lambda x.x$ has three kids

b. If LA: D= λw. Mary has three kids in w w

To see more clearly why domain restriction here makes the presupposition incrementally redundant, consider the case of *every* in (52-a). Here, replacing the relative clause with its presupposition yields (54-a). Now, given the domain in (53-a) which only includes residents who have three kids, it is clear that (54-a) is equivalent to (54-b), the result of replacing the relative clause with the tautology, for any continuation Q. We therefore see that the domain restriction theory predicts that when local accommodation takes place, the presupposition is always rendered incrementally redundant. As shown above, this is enough to predict our local PAI generalization (47).

(54) a. Every$_D$ resident who has three kids.

b. Every$_D$ resident Q.

5 Conclusion

Our goal in this paper is to narrow down the space of theories one should consider when analyzing presupposition accommodation, and local accommodation in particular. We do so by presenting novel data which, we argue, exemplify the following generalization: at the point where the redundancy of a (sub)constituent is evaluated, its presupposition is always redundant. While in the global case, this follows directly from the satisfaction view, and specifically from what has been termed Stalnaker's Bridge, it is not obvious how to derive it in the local case.

We argue that the dynamic approach to local accommodation derives our generalization naturally, since it treats global and local accommodation as inherently the same process of modifying a context to avoid presupposition failure. If one considers that approach plausible to begin with, our argument may be viewed as further evidence for it. However, the dynamic approach faces major conceptual challenges, most notably the one pointed out by von Fintel (2008), which seem to us significant counterweight to the attractiveness of the unified picture it offers. We therefore take it to be an important endeavour to understand the consequences of our generalization for non-dynamic approaches to local accommodation.

Our first conclusion regarding these "static" approaches is that the most prominent one in recent years – the A-operator theory – cannot capture our data without added stipulations. We show that this failure stems from the fact that in this theory, the redundancy of a phrase is evaluated at a point where its presupposition is indistinguishable from its assertion. The only way we see of maintaining this view, then, is to encode the distinction between these two components of meaning into the definition of redundancy itself. Whether this is a plausible move is left for the reader to judge.

In the final section of this paper, we point at another static theoretical approach that seems to us more promising in accounting for our data – one which was first suggested by von Fintel (2004), and recently reintroduced by Chatain and Schlenker (2023). This approach analyzes local accommodation as a special case of domain restriction. We show that at least in our cases,

it delivers the desired result, namely it renders a locally-accommodated presupposition redundant at the stage where the redundancy of the constituent in which it is triggered is evaluated.

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Appendix

Claim: An utterance violates dynamic local PAI (46) iff it violates static local PAI (47).

Proof: Suppose ψ_p, a propositional subconstituent in a sentence ϕ, violates dynamic local-PAI. Then, $c_{\psi_p} \cap p \subseteq [\![\psi_p]\!]$. For ease of presentation, we will treat ϕ as a function on propositional phrases s.t. $\phi(\eta)$ is interpreted as "the result of replacing ψ with η in ϕ". That means that ψ_p is redundant in $\phi(prs(\psi_p)$ and $\psi_p)$. From (48) it follows that ψ_p is incrementally redundant in $\phi(prs(\psi_p)$ and $\psi_p)$, namely for any ϕ' continuation of ϕ at point ψ_p, $[\![\phi(prs(\psi_p)$ and $\psi_p)]\!]$ is contextually equivalent to $[\![\phi(prs(\psi_p)$ and $\psi_p)]\!]$. Notice that $[\![\pi$ and $\psi_p]\!]$ is logically equivalent to $[\![\psi_p]\!]$, and that $[\![\pi$ and $\top]\!]$ is logically equivalent to $[\![\pi]\!]$. We get that for any ϕ' continuation of ϕ at point ψ_p, $[\![\phi]\!]$ is contextually equivalent to $[\![\phi(\psi_p)]\!]$. It follows from the definition in (47-b) that ψ_p is incrementally equivalent to $prs(\psi_p)$ in ϕ at point ψ_p.

In the other direction, suppose a sentence ϕ contains a subcontituent ψ_p such that $A(\psi_p)$ is incrementally equivalent to π for any π such that $[\![\pi]\!] = p$. Let there be such π. Since $[\![A(\psi_p)]\!]$ is logically equivalent to $[\![\pi$ and $A(\psi_p)]\!]$ and $[\![\pi]\!]$ is logically equivalent to $[\![\pi$ and $\top]\!]$, it follows that $[\pi$ and $A(\psi_p)]$ is incrementally equivalent to $[\pi$ and $\top]$ in $\phi[\pi/\psi_p]$. That means that for any ϕ' continuation of ϕ at point $A(\psi_p)$, $[\![\phi'[(\pi$ and $A(\psi_p))\ /\ A(\psi_p)]]\!]$ is contextually equivalent to $[\![\phi'[(\pi$ and $\top)\ /\ A(\psi_p)]]\!]$. Therefore, $A\psi_p$ is incrementally redundant in $\phi'[(\pi$ and $A(\psi_p))\ /\ A(\psi_p)]$. From

(48) is follows that $A\psi_p$ is dynamically redundant in $\phi'[(\pi \text{ and } A(\psi_p)) \,/\, A(\psi_p)]$. Notice that the local context of $A(\psi_p)$ in $\phi'[(\pi \text{ and } A(\psi_p)) \,/\, A(\psi_p)]$ is the local context of $A(\psi_p)$ in ϕ, enriched with p. We therefore get $c_{\psi_p} + p \subseteq [\![A(\psi_p)]\!]$.