

On the role of the perfect in *would*-conditionals*

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1. Introduction

In this paper I investigate the interpretation of aspectual morphology in the antecedent clauses of conditionals headed by *would*. I am interested in examples that appear to be about the future. An illustration is provided in (1):

- (1) She made her first soufflé last Tuesday. If she had made her first soufflé next Tuesday, she would have had help from her mother in law.

As (1) shows, examples with perfect morphology allow for what is intuitively felt to be a true ‘counterfactual’ interpretation. Such examples contrast with simple perfective cases, which remain somehow ‘anchored’ to what happens in the actual world:

- (2) # She made her first soufflé last Tuesday. If she made her first soufflé next Tuesday, she would have help from her mother in law.

The contrast between examples like (1) and (2) has led some researchers (notably David Lewis) to conclude that a unified account of the semantics of *would* is not possible. Less pessimistically, in *Section 3* I will present an analysis of the role of aspectual morphology which allows for a unified account of (1) and (2), deriving the differences from the semantics of aspect. My strategy will be to argue that the difference between (1) and (2) should be characterized in terms of a distinction between quantificational aspect (the perfect in (1)) and referential aspect (a default perfective in (2)). The difference in aspect results in a difference in the antecedent clause propositions, and is responsible for the difference in the interpretation of the conditionals as a whole.

The role of tense and aspect morphology in (counterfactual) conditionals has been subject of much interest in recent literature (a.o. Iatridou 2000, Condoravdi 2002, Ogihara 2000, Ippolito 2003). Iatridou (2000) has argued that, in *would*-conditionals with past perfect morphology in the antecedent, we find two layers of past tense. One past tense is responsible for shifting us away from the evaluation world and the other is responsible for shifting us away from the evaluation time (towards the past).¹ This is illustrated in (3), where Iatridou claims one past tense is responsible for shifting the interpretation of the

* The proposal presented here is based on Arregui (2004). I am grateful to Angelika Kratzer, Philip Bricker and Barbara Partee for comments and feedback. Remaining mistakes are my own.

¹ Iatridou discusses data from various languages, concentrating on Modern Greek.

antecedent towards the past, and the other past tense is responsible for shifting the evaluation of the antecedent away from the actual world:

- (3) (*He didn't take the syrup*). If he had taken the syrup, he would have gotten better. (after Iatridou (2000))

There is much cross-linguistic evidence indicating that past morphology has a role to play in counterfactual conditionals (see Palmer 2002) and Iatridou's proposal is appealing in that it envisions cross-linguistic implications. However, Iatridou's account is challenged by examples like (1), in which as we have seen, there appear to be two layers of past tense and a typical counterfactual interpretation, but the time of the antecedent clause seems to be set in the future. This is unexpected if the role of one of the two instantiations of past morphology in the antecedent clause is to locate the antecedent in the past.

An alternative account of the role of past in examples like (1) has been proposed by Ogihara (2000). Ogihara follows the intuition that we usually understand examples like (1) as setting up a contrast between what will hypothetically happen in the future and something that has actually happened in the past. Ogihara proposes an analysis of examples like (1) according to which the perfect locates in the past a 'contrasting proposition', and a silent *instead* operator is responsible for ensuring that we only consider antecedent worlds in which the contrasting proposition is false. In *Section 2* I will examine Ogihara's proposal and the role of contrast. My conclusion will be that Ogihara's characterization of the semantic contribution of the perfect does not make the right empirical predictions, and that contrast does not play the role he advocates.

2. Putting contrast in the picture: Ogihara (2000)²

Ogihara's contrast-based proposal will be presented in a fairly informal manner. I will begin by discussing the intuitive motivations behind his analysis (*Section 2.1*). I will then present some details about how the analysis works (*Section 2.2*) and finally I will discuss its implications and predictions (*Section 2.3*).

2.1 Preliminaries

The intuitions behind Ogihara's analysis are to be found in Dretske's discussion of the Clyde-and-Bertha examples (Dretske 1972):

- (3) a. If Clyde hadn't MARRIED_F Bertha, he would not have been eligible for the inheritance.
 b. If Clyde hadn't married BERTHA_F, he would not have been eligible for the inheritance.

Dretske considers the two sentences against the background of the story below:

² I have not been able to incorporate in my discussion the proposal in Ogihara (2006).

- (4) “Clyde, who finds intolerable any sustained involvement with a woman, and thus leads his life of a dedicated bachelor, learns that he stands to inherit a great deal of money at the age of thirty if he is married. He shops around and finds Bertha, an equally dedicated archeologist who spends eleven months out of every year directing excavations in southeastern Turkey. Justifiably expecting that marriage to this woman will leave his life as little disturbed (in the relevant aspects) as any marriage could, he proposes. Bertha accepts and they are married.”

Given the story in (4), (3a) is usually judged true (*it was crucial that he marry*) whereas (3b) is usually judged false (*Bertha was not particularly important*).

Ogihara takes Dretske’s examples as the starting point in his investigation of the role of focus in the antecedent of counterfactuals. He uses the contrast intuitions arising in Dretske’s examples ('marriage' vs. 'other relations', 'Bertha' vs. 'other women') to explain the interaction between future oriented modifiers and (contrasting) past oriented perfects. Ogihara’s own examples are given in (5) (the examples in (5) have the key properties of (1)):

- (5) a. If John had given flowers to Mary TOMORROW_F, she would have been pleased.
 b. If we had gone out for a walk TOMORROW_F, we would have had a good time.

Ogihara asks us to consider the utterance of (5a) in the following context: John, who is Mary's boyfriend, wanted to give Mary flowers for her birthday. Mary's birthday is tomorrow, but John mistakenly thought it was yesterday. So he gave her flowers yesterday. Mary was not very pleased with the flowers.

In this context, the utterance of (5a) makes us consider what would have happened if John had given Mary flowers tomorrow instead of yesterday. We understand (5a) as asserting that if the flower-giving event had had a different temporal location than the one it actually had (i.e. tomorrow instead of yesterday), Mary would have been pleased.

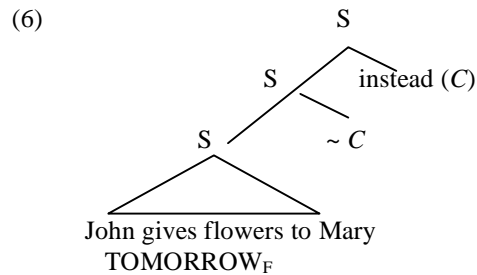
We turn now to (5b). Ogihara proposes we consider the utterance of (5b) in the following context: it was only possible for us to go on a single walk (within some contextually relevant period of time) and it had to be either today or tomorrow. We went out for a walk today, but it rained and we had a miserable time. The weather forecast predicts that tomorrow will be a lovely day.

In this context, the utterance of (5b) tells us that if we had gone for a walk tomorrow instead of today, we would have had a good time. Again, the antecedent contrasts the time of the hypothetical walk (tomorrow) with the past time of the actual walk (today). The conditional tells us that if the time had been different, we would have had a good time.

2.2 The proposal

The key ingredients of Ogihara's analysis of examples like (1) and (5) are: (i) a Rooth-style approach to the generation of focus-based alternatives (Rooth 1992), (ii) a characterization of the perfect as a past tense that sets the temporal location of a contextually provided 'contrasting proposition', (iii) the presence of a silent *instead* operator in the antecedent clause, and (iv) a Kratzer-style analysis of the modal (Kratzer 1981). These aspects are discussed below, taking (5a) as an illustration.

Following Rooth (1992), Ogihara assumes that focus marking in the antecedent clause in (5a) comes together with a focus operator \sim and a variable C that is introduced as a sister node to the antecedent clause. A silent adverbial *instead* combines with C . The syntactic representation of the antecedent clause in (5a) will be as in (6) (Ogihara 2000, (11)):



In (6) the C variable denotes a set made up of the proposition corresponding to the antecedent clause and the presupposed contrasting proposition supplied by context: $C = \{\text{that John gives flower to Mary tomorrow, that John gave flowers to Mary yesterday}\}$.

The translation for *instead* is as follows (Ogihara 2000, (23)):

$$(7) \quad \lambda f_{\langle i, \langle s, t \rangle, t \rangle} [\lambda p_{\langle i, \langle s, t \rangle} [\wedge [\exists t_1 [{}^v p(t_1)]] \& \forall q_{\langle i, \langle s, t \rangle} [[f(q) \& q \neq p] \rightarrow \neg \exists t_2 [{}^v q(t_2)]]]]]$$

Where p and q range over sets of temporally indeterminate propositions, ${}^v \phi$ (ϕ is of type t) is of type $\langle s, t \rangle$ (a proposition) and ${}^v p$ (p is of type $\langle s, t \rangle$) is of type t .

Instead is a function that takes two arguments: in (5a), these are C and the proposition *that John gives flowers to Mary tomorrow*. The output in (5a) is a proposition that is true in a world iff John gives flowers to Mary tomorrow and he didn't give flowers to Mary at any other time (that is, within the set in C , the only proposition that is true is the proposition *that John gives flowers to Mary tomorrow*). This will be the antecedent clause proposition in (5a) (*that John gives flowers to Mary tomorrow instead of at other times*).

Adopting a Kratzer-style analysis for counterfactual conditionals (Kratzer 1981), Ogihara proposes the following truth conditions for examples like (1) and (5) (Ogihara (2000), (18)):

- (8) “The truth conditions for a sentence of the form “If DP1 PAST PERF3 VP1, DP2 would PERF3 VP2” are given in the following way. Let q be the denotation of “DP1 VP1” (tenseless), and r the denotation of “DP2 VP2” (tenseless), where q and r are elements of $D_{\langle i, \langle s, t \rangle \rangle}$. The entire conditional is true iff (i) the semantic object $p \in D_{\langle i, \langle s, t \rangle \rangle}$ that is provided by the context and is contrasted with q is such that $p(g_c(3))(w_c) = 1$ and for all maximal sets X in $A_{w_c}(\{w \mid \text{there is an interval } i \text{ such that } q(i)(w) = 1\})$, $p(g_c(3)) \notin X$, and (ii) the proposition $\{w \mid \text{there is an interval } i \text{ such that } r(i)(w) = 1\}$ follows from every maximal set in $A_{w_c}(\{w \mid \text{there is an interval } i \text{ such that } q(i)(w) = 1\})$.”

g_c = the value assignment provided in the context c (e.g., $g_c(3)$ = the time interval that the index 3 denotes);

for any world w and proposition p , $A_{w_c}(p)$ = the set of all consistent subsets of $f(w) \cup p$, where f is a function from w to the set of propositions that are the case in w .

Put more informally, a *would*-counterfactual with past perfect morphology is true in a world iff (i) the contextually provided contrasting proposition is true at the past time corresponding to the perfect (PERF₃ in the schema above), and (ii) the consequent is true in those worlds that are consistent with what is the case in the actual world except for the fact that the antecedent proposition is true and the contrasting proposition is false.

Considering (8) in relation to (5a), the prediction is that (5a) presupposes that the context of utterance makes salient some proposition that contrasts with [John gives flowers to Mary TOMORROW_F]. This condition is satisfied in the context provided by (5a) because we have just found out that John gave flowers to Mary yesterday. The conditional asserts that the contrasting proposition is true in the actual world at some contextually salient past time (this is due to the presence of *have*). The conditional also asserts that all the relevant worlds in which the antecedent clause proposition is true are worlds in which the consequent clause proposition is true. This means that if (5a) is true, all the relevant worlds in which John gives flowers to Mary tomorrow and John did not give flowers to Mary yesterday are also worlds in which Mary is happy.

2.3 Discussion

The proposal in Ogihara (2000) has been criticized by Ippolito (2003), who notes that at times there is no contrasting true past proposition corresponding to the antecedent.³ Ippolito presents examples like the following:

³ But see Ogihara (2006) for a reply.

- (9) Imagine the following scenario. Charlie died a month ago, before ever going to New York, and both Lucy and Sally know it. Lucy and Sally are talking about him and Lucy says that she believes that if Charlie had gone to New York today, he would have met his friends. Sally disagrees, and utters (12):

(12) No. If Charlie had gone to New York TOMORROW_F, he would have met his friends.
(Ippolito 2003)

Ippolito's point is that there is no proposition of the form *that Charlie went to New York in the past* true in the actual world. Ogihara's claim that the perfect locates a contrasting proposition in the past in the actual world does not seem right.

In fact, there are examples that indicate that it is not really necessary to have overt contrasting elements at all. Consider the following story, inspired by Dudman (1984):

- (10) Suppose that Grannie has passed away. She won't go to the rally tomorrow. But she was very energetic and lively, and we know that:

If Grannie had gone to the rally, she would have been arrested.

We find the same pattern we observed in (1)/ (5) and (9), but the notion of contrast doesn't seem to play a role (in a straightforward manner).

The second part of Ogihara's (2000) proposal, the idea that there is a silent *instead* in the antecedent clause, is also problematic. To see this, let us go back to Dretske's Clyde and Bertha examples. Consider (3b):

- (3b) If Clyde hadn't married BERTHA_F, he would not have been eligible for the inheritance.

How would Ogihara's analysis of (5) (spelled out in (8)) fare with (3b)? What is the contextually-provided proposition contrasting with the antecedent clause that is true in the actual world? It doesn't seem as if the contrasting proposition could be the simple (non-negated one) *that Clyde married X*, for Xs other than Bertha (contextually salient). This would require that Clyde had married somebody other than Bertha at some past time in the actual world. But this prediction is mistaken, since we could utter (3b) if Clyde did marry Bertha in the actual world without committing ourselves to him having married both Bertha and somebody else.

It seems more reasonable to think that the relevant contrasting proposition in (3b) is the negated one *that Clyde didn't marry X*, for Xs other than Bertha. However, once we consider the effects of the silent *instead*, things become tricky. The silent *instead* claims that of all the salient propositions of the form *that Clyde didn't marry X*, the only one true in the worlds being quantified over

is *that Clyde didn't marry Bertha*. If there are several salient individuals he did not marry (plausible enough), this would lead us to conclude that in the worlds quantified over, he didn't marry Bertha, but he married a lot of other people (which doesn't match our intuitions about the meaning of (3b)).

It seems artificial to try to circumvent this last problem by saying that context will provide at most one contrasting proposition of the form *that Clyde didn't marry X* (= e.g. *Henrietta*). It doesn't seem reasonable to limit the C-set in this way as a matter of principle. Moreover, it also seems empirically incorrect to say that a felicitous utterance of (3b) can only take place in a context in which such a proposition is salient.

The conclusion from this section is that both the idea that (F-marked) contrast is crucial in conditionals like (1)/ (5), and the idea that there is a silent *instead* in the antecedent clause are problematic.

3. An aspect-based account

In this section I present an aspect-based account of the contrast between (1) and (2). I will begin with some preliminary assumptions (*Section 3.1*) and then discuss the role of aspectual heads (*Section 3.2*). Finally (following Kratzer 1998), I will propose a semantics for perfective and perfect aspect that will derive the differences between (1) and (2) (*Section 3.3*). The proposal in this section is based on Arregui (2004).

3.1 Preliminaries

My analysis will be based on a Lewis-Stalnaker semantics for conditionals (an *LS-analysis*). In an LS-analysis, a conditional of the form *if α , would β* , with antecedent proposition α and consequent proposition β , is true in a world w iff the most similar worlds to w in which α is true are also worlds in which β is true. According to this view, *would* quantifies over possible worlds, and similarity with the evaluation world is responsible for identifying the quantificational domain.⁴

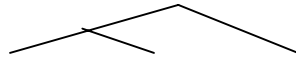
My interest here is mainly focused on the effects of aspect on the domain of *would*. I will not discuss issues pertaining to the interpretation of tense (I discuss tense in Arregui (2004)), nor will I provide a sophisticated account of the role of the modal in shifting the reference time of the embedded clauses. For the sake of concreteness, I will assume that in *would*-conditionals, the modal combines with properties of times and shifts the reference time to a non-past time (the idea that the modal is responsible for shifting reference times has been explored, a.o., in Enç 1996, for a discussion of the role of lexical aspect in shifting reference times see a.o. Iatridou 2000). A lexical entry for *would* is spelled out in (11):

⁴ There are important differences between the analysis proposed by Lewis and Stalnaker, which I will set aside here (a.o. I adopt the Limit Assumption and allow for ties in similarity).

- (11) Where t_i is a contextually salient non-past time and P and Q are properties of times,
 $[[\textit{would}]](P_{\langle i, \langle s, t \rangle \rangle})(Q_{\langle i, \langle s, t \rangle \rangle})(w) = 1$ iff the most similar worlds to w in which $P(t_i)$ is true are also worlds in which $Q(t_i)$ is true.

According to (11), *would* combines with two properties of times P and Q and results in a proposition that is true in a world if the most similar worlds in which the 'antecedent proposition' obtained by applying P to a salient non-past time is true are also worlds in which the 'consequent proposition' obtained by applying Q to the non-past time is true.

I will make the simplifying assumption that *would*-conditionals set up tripartite structures as in (12):



- (12) $[[\textit{would} \quad \textit{if-clause}] \quad \textit{consequent-clause}]$

The proposition corresponding to the *if*-clause helps to restrict the domain of quantification of the modal, and the proposition corresponding to the consequent serves as the nuclear scope. My strategy will be to explain the contrast between (1) and (2) by arguing that a perfect in the antecedent clause results in a different antecedent proposition than the one obtained with a perfective. The difference in antecedent propositions results in different domains of quantification for the modal, and in different interpretations for the conditionals.

3.2 Aspectual heads: from properties of events to properties of times

I will adopt, and adapt, a proposal for the semantics of aspectual heads found in Kratzer (1998) (inspired by Klein 1994). According to Kratzer (1998), aspectual heads map properties of events to properties of times. They project in syntax between the VP and TP layers:

- (13)
-

I have adopted a referential approach to tense, according to which tenses are treated as variables (pronouns) that denote temporal intervals, and I allow for abstraction over free variables (see Partee 1973, Heim 1994, Kratzer 1998 a.o.;

also Arregui 2004). As a result, TPs can denote properties of times and provide suitable arguments for a modal.

Following Arregui (2004), in this paper I explore the possibility that event variables refer to events characterized as world-bound individuals (in Lewis's sense): an event is part of one world, and at most part of one world. Event pronouns are variables ranging over such events. Deictic event pronouns (free variables) are interpreted as referring to events in the actual world.

Even though events are world-bound, it is still possible to 'identify' events across world. As is the case with other Lewisian individuals, cross-world identification takes place via counterpart relations. The claim that an event could have been part of another world is understood as the claim that a particular actual world event has a counterpart in another world. According to Lewis, counterpart relations are fluid and heavily context dependent. However, Lewis does mention the possibility that particular expressions could favor certain types of counterpart relations (he was interested in the case of proper names), and here I will suggest that event pronouns are rather strict: when setting up counterparts of events: event pronouns favor counterpart relations in which the spatio-temporal properties of the events 'match' (event counterparts match in terms of temporal location, participants, etc.). This does not mean that events could not have modalized spatiotemporal properties (after all, an event could have happened at a different time, place, etc.). It simply means that the counterpart relations relevant for the interpretation of event pronouns pick out events matching in spatiotemporal properties.

As we will see in the next section, the idea that free event pronouns refer to actual world events, together with the idea that events are identified across worlds by matching their spatiotemporal properties, will help us understand how perfective aspect 'anchors' antecedent clauses to the actual world (as we saw in (2)), whereas perfect aspect does not (allowing for a typical counterfactual interpretation, as we saw in (1)).

3.3 Perfects vs. perfectives

I will adopt the semantics for perfect aspect proposed in Kratzer (1998). According to Kratzer, the perfect maps properties of events to properties of times true of times that follow the events. In a sense, Kratzer's proposal can be characterized as a 'resultant state' account of the perfect (see also Parsons 1990), where the resultant-state of an event having happened is the state of the event having culminated (see McCoard 1978 for a description of the many facets of the interpretation of the perfect, which go beyond issues pertaining to the resultant state). Here is Kratzer's proposal:

$$(14) \quad [[\textit{perfect}]] (P) = \lambda t \lambda w \exists e [P(e)(w) \ \& \ \tau(e) < t]$$

Given (14), the modal in structures like (6) combines with the property of times that is the output of the perfect, and shifts the temporal location towards

the future. Given the semantics for *would* proposed in (11), the proposition corresponding to the antecedent clause in (1) would be (15):

- (15) for some non-past time t_i
 $\lambda w \exists e$ [she-makes-her-first-soufflé (e)(w) & next-Tuesday (e)(w)
 & $\tau(e) < t_i$]

With this antecedent proposition, the modal in (2) quantifies over the most similar worlds w to the actual world in which there is some event of her making her first soufflé that takes place next Tuesday. These will be worlds in which she hasn't already made a soufflé. As a result, we quantify over worlds in which the making of the first soufflé takes place at an alternative time, and it is made next Tuesday instead of last Tuesday. The antecedent clause proposition in (15) allows us to make a real counterfactual hypothesis: it gives us access to worlds that differ from the actual world with respect to the event of her making the first soufflé.

What happens in the absence of perfect morphology? Bennett and Partee (1978) present arguments in favor of the view that default aspect in English is perfective, and I will adopt that view here (their terminology is different, but the point is basically that). Bennett and Partee's argumentation is based on aspectual restrictions on the English present tense. In English, only stative (completely homogeneous) eventualities receive a standard 'ongoing' interpretation in the present tense. Non-stative eventualities get habitual, generic or quantificational-type readings. According to Bennett and Partee, this is because only states are divisible into tiny parts that are 'small enough' to fit into the instantaneous speech time that corresponds to the present and still be a stative eventuality of the relevant kind. To illustrate: if I live in Ottawa, there is a tiny eventuality of me living in Ottawa that happens within the speech time. And I can say *I live in Ottawa* to report just that. But if I build a house, the tiny eventuality that fits into the speech time is not an eventuality of me building a house. Thus, I cannot say *I build a house* to convey an ongoing-house-building interpretation. Bennett and Partee's arguments favor of the view that in the default case the time of the eventuality must fit into the relevant reference time, and since this is the relation established by perfective aspect, I will assume that in the absence of overt aspectual markings, properties of events are mapped to properties of times by a default perfective aspectual head.

(The absence of aspectual restrictions on the past tense, of course, is not a problem, given that in the case of past we may be dealing with temporal intervals that are much larger than the instantaneous speech-time, and thus much better able to accommodate large eventualities and receive a standard interpretation.)

What is the interpretation of perfective aspect? We have observed in *Section 1* that perfective aspect 'anchors' the antecedent clause to events in the actual world (ex. 2). I claim that this is because perfective aspect makes direct reference to events in the actual world. It is the referential nature of perfective aspect (as opposed to the quantificational nature of perfect aspect) that is

responsible for anchoring perfective antecedents to what is actually going on. In my implementation of this idea, perfective aspect introduces a (free) event pronoun (see also Arregui (2004)). I have modified Kratzer (1998)'s proposal for perfective aspect accordingly (it comes together with an event pronoun):

$$(16) \quad [[\textit{perfective -e}_i]]^{\text{g}, w^0} = \lambda P \lambda t \lambda w [P([[e_i]]^{\text{g}, w^0})(w) \ \& \ \tau ([[e_i]]^{\text{g}, w^0}) \subset t]$$

The event pronoun is interpreted via the function assigning values to variables. In combination with a property of events, the aspectual head-plus-pronoun denotes a property of times true of a time in a world iff the event referred to by the pronoun has the relevant *P*-property, occurs in the worlds *w* in question, and has a running time included within the *t*-times. Given the proposal in (16), the proposition corresponding to the antecedent clause of (2) will be (17):

$$(17) \quad \text{for some non-past time } t_i \\ \lambda w [\textit{she-makes-her-first-soufflé} ([[e_I]]^{\text{g}, w^0})(w) \ \& \ \textit{next-Tuesday} \\ ([[e_I]]^{\text{g}, w^0})(w) \ \& \ \tau ([[e_I]]^{\text{g}, w^0}) \subset t_i]$$

This proposition is different from the proposition in (15). Under the assumptions we have been making about events, the denotation of the event pronoun in (17) will be an actual world individual. This event can only be identified in other worlds via counterparts. The counterparts of this event-individual in other worlds will match it in terms of spatio-temporal properties. So, for example, if the event of her making her first soufflé has occurred last Tuesday in the actual world, that event will occur last Tuesday in all worlds in which it has a counterpart.

This view of how event pronouns work has consequences with respect to the predicates that can successfully be applied to them. The proposition in (17) will only be true in worlds in which the counterparts of the actual world event of her making her first soufflé take place next Tuesday. But the counterpart events can only have that spatio-temporal property if the actual world event has that spatio-temporal property. Since she made her first soufflé last Tuesday, the proposition in (17) won't be true in any possible world. Arguably, this makes it unsuitable as a restrictor for the modal, and explains the deviance of (2).

4. Conclusion

In this paper I have discussed Ogihara's (2000) proposal for the interpretation of perfect aspect in (future oriented) *would*-conditionals. Ogihara treats the perfect as a past tense responsible for the temporal location of a proposition contrasting with the antecedent clause. I have shown that Ogihara's analysis makes some wrong empirical predictions. I have proposed instead an aspect-based account of the role of the perfect. Following Arregui (2004), I have sketched an analysis according to which perfect aspect quantifies over events, while perfective aspect makes reference to events. Antecedent clauses with perfect aspect result in propositions that are true in worlds in which there is simply some event with the

relevant antecedent-properties, whereas antecedent clauses with perfect aspect can only be true in worlds in which a counterpart of an actual world event has the relevant antecedent-properties. The difference in the antecedent clause propositions is responsible for deriving the difference between perfect and perfective *would*-conditionals.

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