

Choose between metaphysical and epistemic alternatives

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This paper proposes a new way of analyzing a special kind of item, called Free Choice Items (FCIs). As the name reveals, these items express *freedom of choice* and are therefore grammatical in contexts which express variation among alternatives, such as in imperatives: *pick any card* (Vendler 1967). Until now, attention has been mostly given to the licensing conditions of these items and scholars have claimed that FCIs are grammatical in all contexts that presuppose alternatives. In this paper, based on novel English and Greek data, I argue that focus should also be given to the nature of the alternatives that FCIs denote. I pursue the hypothesis that FCIs are divided into two subclasses: FCIs that denote epistemic alternatives and FCIs that denote metaphysical alternatives.

1. Introduction

English, as all the world's languages, exhibits a special class of items that appear in contexts that denote *freedom of choice*. Vendler (1967) coined this term in his description of *any*: the item *any* combines *indetermination* with *generality* and expresses *freedom of choice* "so much that in situations that exclude such freedom, the use of *any* becomes nonsensical".

Based on this observation, Ladusaw (1979) coined the term Free Choice (FC) *any* as opposed to Polarity Sensitive (PS) *any*. The second term is primarily, but not exclusively, used when *any* appears in negative contexts (1) and is distinguished from the first in that it is primarily, but not exclusively, used when *any* appears in some types of modal contexts (2).¹

(1) I didn't see any girl

(2) You may take any flower

¹ For instance, the root modal *must* does not license *any*:

(i) *You must take any flower

In the recent literature, attempts have been made to provide a uniform analysis for PS and FC *any* (see Kadmon & Landman 1993; Horn & Lee 1994) leaving open some crucial questions concerning the semantic properties of *any* itself and of its counterparts in other languages. In this paper, I do not try to unify the two flavors of *any*. Far from that, I analyze the semantics of FCIs based on data from English and Greek. Due to space restrictions, a discussion on whether or not the hypothesis proposed here extends to PS items (PSIs) is beyond the scope of this paper.

The literature on FCIs has, for many years, shown that they constitute a homogeneous class whose salient distributional property is ungrammaticality in contexts that do not express variation. For this reason, FCIs have been analyzed as a subclass of PSIs whose distribution is restricted to a certain semantic property of the context in which they appear. In more concrete terms, FCIs are allergic to episodic contexts (3), which describe one and only one event that took place once in the past (4).

(3)*Yesterday, I saw anyone

(4)Episodicity (Giannakidou 1997a, 2001)

$\exists!e \phi(e)$

Therefore, as Giannakidou (2001) points out, “Free Choice Items are items which are not acceptable in episodic contexts, but they become licit if we insert an operator including plurality of events or situations”. As Giannakidou (1997b, following Dayal 1997) claims, modality is one of the good licensors of FCIs because “the FCI variable must be assigned distinct values in each world or situation we consider”. Therefore, she argues that FCIs are grammatical whenever variation among identity-alternatives (hereafter *i-alternatives*), as defined below, is contextually expressed.

(5)i-alternatives

A world w_1 is an i-alternative wrt a iff there exists some w_2 such that $[[a]]^{w_1} \neq [[a]]^{w_2}$

The term is synonymous to the term *counterpart* that Lewis (1968, 1986) introduced. He argued that it is possible for the same descriptions to apply to different individuals in different worlds. These individuals are called *counterparts*. The approaches that propose an analysis of FCIs in terms of variation use the term *alternative*. I also use this term throughout this paper.

Imperatives also constitute good FC contexts in which the existence of different alternatives can be contextually or pragmatically given.

(6)Take any card!

Moreover, according to these analyses, i-alternatives are epistemic alternatives and are therefore defined according to the speaker's epistemic state. The notion of epistemic i-alternatives has been used as the most salient semantic property of FCIs. This of course predicts correctly that FCIs are grammatical whenever they are used in a context that expresses variation (see Jayez & Tovenca to appear for a recent overview of the variation-based approaches).

The controversy evolved when cross-linguistic studies on the phenomenon of FCIs brought to the surface, some intriguing data for the analysis presented above. For instance, Lee (1999) published a paper on Korean FCIs in which he claimed that not all FCIs are anti-episodic. Lee's data are very interesting because they provide evidence that the class of FCIs is not homogeneous.

As far as the items themselves are concerned, all analyses of English FCIs have been based on the distributional properties of *any* without analyzing another candidate which has also the flavor of *freedom of choice*: the class of items like *whoever*, called hereafter *complex wh-items*. All non-English FCIs have been translated randomly either into the former or into the latter without making any distinction between these two items. This "new" class of FCIs is formed by a *wh*-item and the particle *ever*. Horn (2000) has argued that complex *wh*-items constitute the distributional twins of *any* items.

Indeed, complex *wh*-items, just like *any*, are grammatical when used in contexts that allow for some kind of variation. This is borne out by the example below.

(7)Whoever can solve this problem is intelligent

However, there are some other contexts in which the two series of items do not present the same grammaticality conditions.

(8)Whoever/(*anyone that) John chooses, there will be a loss of confidence²

Example (8) constitutes an instance of what has been analyzed in the literature as a special type of conditional, namely a Universal Concessive Conditional (UCC) (Koenig 1986; Gawron 2001). Gawron (2001) analyses these sentences as equivalent to alternative NPs and to concessive sentences introduced by *even if*. Clearly, (8) expresses variation among i-alternatives-candidates that John can choose. From the above analyses, we would predict that FCIs would be grammatical in this context. Surprisingly, as shown above, *any* is ungrammatical in this context.

From this demonstration, it becomes obvious that there are more than the one kind of FCI that has traditionally been recognized. The claim that the basic semantic property of FCIs is that they are licensed in contexts which express

² The topic-like character of complex *wh*-items *contra any* seems to indicate also another distinction between these two kinds of FCIs: complex *wh*- FCIs are definites and *any* items are indefinites (cf. Vlachou 2003b, 2004b, to appear b).

variation among *i*-alternatives is not a cure-all. It does not describe adequately the semantic properties of all FCIs.

In this paper, I propose that the above differences are due to the different nature of alternatives denoted by each particular FCI. More precisely, I pursue the hypothesis that complex *wh*-items denote epistemic alternatives whereas *any*-items denote metaphysical ones. Evidence is also given from Greek, a language that exhibits a morphologically rich paradigm of FCIs.

The paper is organized as follows. In section 2, I overview the paradigms of English FCIs formed by *any* and complex *wh*-items, and the Greek FCI *opjosdhipote* and their respective distributional properties. In section 3, I focus on UCCs, which are not good licensing contexts for FC *any*, and present their semantic properties. This will help us to better understand the differences between complex *wh*- and *any* items. In section 4, the main hypothesis of this paper is presented. FCIs are divided in two classes depending on the alternatives that they denote: a) FCIs that denote epistemic alternatives and b) FCIs that denote metaphysical alternatives. In section 5, the conclusions of this paper are given.

2. *The paradigm of English and Greek FCIs*

In this section, the paradigm of English FCIs and of the Greek FCI *opjosdhipote* is given in order for the reader to acquire a better understanding of the forms used throughout this paper.

2.1. *English FCIs*

As we saw above, English possesses two, morphologically distinct, classes of FCIs. Both of these types can be used either as adjectives or as pronouns.³

(9) English FCIs

Any: anyone, anybody, anything, anywhere, anyhow, anyway
 Complex *wh*-items: whoever, wherever, whenever, whatever, however,
 whichever

³As claimed in (Hoeksema & Klein 1995; Vlachou 2003a, to appear a) the licensing conditions of FCIs vary depending on whether they are used as adjectives or as pronouns. In this paper, I am not concerned with this difference.

2.2 The Greek complex *wh*- FCIs

Greek is a very interesting language with respect to FCIs as it possesses five FCI-candidates.⁴ Giannakidou (1997a, 2001) has presented an extensive analysis of one of them: *opjosdhipote*. This FCI is formed by a *wh*-item, the emphatic particle *dhi* ‘indeed’ and the Greek particle *pote* ‘ever’ (Giannakidou 2001). For the purposes of the present paper, I will concentrate only on this one and will leave the others untouched (cf. Vlachou 2003c, 2003d for a complete overview of the other FC-classes).⁵

(10) Greek complex *wh*-FCIs (slightly modified from Giannakidou 2001)

(opjos/opja/opjo)dhipote:	FC-person;	anyone, anybody, whoever
otidhipote:	FC-thing;	anything, whatever
(osos/osi/oso)dhipote:	FC-quantity;	any quantity, as much as
opudhipote:	FC- place;	any place, wherever
opotedhipote:	FC-time;	any time, whenever
oposdhipote:	FC-way;	any way, at any rate, however

2.3. Their respective distributional properties

As we saw in the previous section, both types of English FCIs are grammatical in modal contexts, but they differ with respect to their grammaticality in episodic and UCC contexts. As far as the Greek paradigm is concerned, its distributional properties show that it is semantically closer to complex *wh*- than to *any* FCIs. Consider the following data. First, it is grammatical in modal contexts and ungrammatical in positive episodic contexts.

(11) Opjosdhipote bori na erthi sto parti⁶
 FCI. can.SUB come to the party
 ‘Anyone can come to the party’

⁴ 1) complex *wh*-items, 2) bare *wh*-items combined with the Greek concessive marker *and if*, 3) bare *wh*-items combined with the form *and SUB*, 4) complex *wh*-items combined with the Greek concessive marker *and if*, 5) complex *wh*-items combined with the form *and SUB*.

⁵ The results reported in this paper are part of a database project which aims to analyze the semantic properties of FCIs in English, Greek and French. Many data used throughout are extracted from this database. For the moment, the results I have come up with are not sufficient for an item-by-item analysis. For this reason, I leave the analysis of the semantic differences between the five Greek FCI-classes open for future research.

⁶ It should be made clear that English complex *wh*-items, unlike Greek *opjosdhipote* and *any*, always introduce Free Relative (FR) constructions. Exceptions constitute its indiscriminate uses:
 (ii) I will eat whatever

- (12) *Xthes idha opjondhipote
 Yesterday, saw FCI
 ‘*Yesterday, I saw anyone/whoever’

Second, as shown below, it is grammatical in negative episodic contexts and in UCCs.

- (13) Dhen milisa me (ton) opjondhipote—*(milisa me ton proedhro)⁷
 Not spoke with the FCI spoke with the president
 ‘I didn’t talk to *(just) anyone—I talked to the president’
- (14) Opjondhipote dhialekse o janis, tha iparksi elipsi ebistosinis.
 FCI chose the John will THERE.BE loss confidence
 ‘Whoever/*Anyone (that) John chose, there will be a loss of confidence’

These data are very interesting for the whole discussion on FCIs cross-linguistically and show that not all FCIs are ungrammatical in episodic contexts or, in other words, that not all are grammatical only in contexts which express variation.

Opjondhipote is grammatical in negative episodic contexts whereas *FC anyone* is not. The latter becomes immediately grammatical in negative, episodic contexts whenever preceded by *just* or, as we will see in a while, when transformed by intonational patterns. What do all these facts reveal about the semantic properties of FCIs? The answer to this question will be our main concern in the following section.

Let us summarize our discussion up to this point, before we go on to the analysis. FCIs have been long analyzed as a homogeneous class of items and as belonging to the general class of PIs. Novel data from Korean have shown that this class is not homogeneous. In the previous sections, we saw that English data point towards this hypothesis. The two morphologically distinct classes of FCIs that English possesses differ in their conditions of grammaticality in UCC contexts. This shows that FCIs form two semantically distinct classes. This hypothesis is also supported by Greek data: the Greek FCI *opjondhipote* is grammatical in negative episodic contexts and in UCCs.

I claim that grammaticality of some FCIs in episodic contexts and the ungrammaticality of others in contexts that denote variation do not question the analyses on FCIs presented in the introduction of this paper. Far from that, they verify it. I propose that importance should however be given to the nature of alternatives that these items denote.

In the remainder of this paper, I overview the semantic properties of UCCs and pin down the difference of grammaticality of FCIs in this context to the nature of the alternatives that they denote.

⁷ The definite article before *opjondhipote* is not obligatory.

3. Universal Concessive Conditionals

In this section, we go through the basic semantic properties of UCCs. This is very important for the reader in order to understand why ungrammaticality of *any* in these contexts is crucial for the whole analysis of FCIs.

Morphologically, UCCs are either clauses or NPs, and they are introduced either by an English complex *wh*-item or by some other form as shown below. They may be placed clause initially, but need not be.

(15) No matter what you do, he will kill me

(16) Whether John ate creampuffs or napoleons is not an issue

(17) John accepted whatever salary he has been offered (Gawron 2001)

Semantically, UCCs express independence between the protasis and the apodosis. They assert that, for all values of x , g is true. When the variable occurs both in the protasis and the apodosis, the UCC expresses (18). If not, the UCC expresses (19).

(18) $\forall x f(x) \Rightarrow g(x)$ ⁸

(19) $\forall x f(x) \Rightarrow g$

They differ from universal quantifiers in that the last ones become pragmatically odd in UCC contexts (20). As explained in Gawron (2001), this difference is due to the fact that UCCs invoke a pragmatic scale and denote an entity that takes a minimum on that scale. This scale is invoked through *ever*.

(20) *Everything (that) you do, he will kill me

Remember that all analyses of FCIs claim that they are grammatical in contexts that express variation (see Dayal 1997, Giannakidou 1997b). However, these analyses make the following wrong prediction: since UCCs are equivalent to alternative NPs (Gawron 2001), and therefore express variation, they must be good FC contexts. However, as shown in (21), this is only partially true since *any* is ungrammatical in such contexts (see also ex. 8 above).

(21) Whatever/*any dish John cooks, Mary is usually pleased

In order to understand the reason for which *any* is ungrammatical in such contexts, we need to understand the semantics of sentences such as (21). The

⁸ Whichever decision you take, I will approve *it*.

speaker predicts that there is a world in which John cooks and Mary is pleased. This world is not the actual world but is described according to what the speaker believes about what the world *could* be like. In other words, (21) is synonymous to *Mary must be pleased with the dishes that John cooks*.⁹ The speaker's beliefs are based on what she knows about the dishes that John cooks. In other words, the alternatives denoted are epistemically accessible to the speaker.

Such a context cannot license *any*. It seems that *any* is ungrammatical in contexts that require that the alternatives be epistemically accessible. This point is, moreover, supported by the fact that in negative episodic contexts, as in (22), FC *any* is grammatical if and only if it is preceded by a focus particle or transformed by intonational means. Such external devices make the nature of the alternatives denoted epistemically accessible to the speaker. If it is the case that *any* does not denote epistemically accessible alternatives, then the question is what is the nature of the alternatives that it denotes.

(22) John didn't talk to *(just) anyone/*ANYone—he talked to the president¹⁰

4. Epistemic versus metaphysical alternatives

In the previous section, it has been claimed that complex *wh*-items denote epistemically determined alternatives. The goals of the present section are the following. First, I show that, indeed, *any* FCIs, contrary to complex *wh*-items, do not denote epistemically accessible alternatives. Second, I propose that the alternatives denoted in the case of *any* are metaphysical. Third, I argue that the Greek FCI *opjodhipote* also denotes epistemically accessible alternatives.

Before doing so, however, let us consider the meaning of the terms “epistemic” and “metaphysical” alternatives. The alternatives are of different natures depending on whether we have an epistemic or metaphysical modal basis. The term *epistemic modality* has received many heterogeneous analyses. Basically, some scholars use it as contributing to the truth conditions of a sentence and others as expressing the speaker's attitude towards the content of the sentence (see Papafragou to appear for a summary of both approaches). In this paper, the term *epistemic* is used as synonymous to the second definition. The alternatives become available to the speaker through her epistemic state. It should be made clear that *epistemic* should not be confused with *true*. This term describes the nature of the alternatives denoted. No information is given about whether the sentence is true or not.

⁹ *Must* here should be understood as expressing possibility and not necessity.

¹⁰ As Horn (2000) points out, prosody or diacritics can accomplish the same effect as *just*:
 (iii) A: I am not supposed to be talking to anybody about this case
 B: First of all, I am not anyone. I'm a licensed dealer in celebrity collectibles.
 (from Horn 2000, Dialogue from episode of ABC television series “Murder One”, Dec. 1996)

On the other hand, metaphysical modality refers to non-actualized events which have been considered as possible before the utterance of a clause containing them (see Condoravdi 2001).

More precisely, in (23), the modality is epistemic or, as Condoravdi points out, “the possibility is in view of the epistemic state of the speaker”. In (24), the modality is metaphysical: “we are now located in a world whose past included the (unactualized) possibility of his winning the game”. Modality describes how the world would be if he won the game.

(23) He may/might have (already) won the game (# but he didn’t)

(24) At that point, he might still have won the game, but he didn’t in the end

After this brief overview of epistemic and metaphysical modalities, let us go back to our old friends. Remember that we said that complex *wh*-items denote epistemically accessible alternatives and are grammatical in contexts that describe a possibility-prediction based on the speaker’s epistemic state. This predicts that they are not grammatical in contexts that describe a world whose past included the unactualized possibility of an event to take place. On the other hand, *any* items are predicted to be grammatical in such contexts.

(25) *Last year, the law was that whoever submitted the assignment late failed but finally all students submitted their assignments in time

(26) Last year, the law was that anyone who submitted the assignment late failed but finally all students submitted their assignments in time¹¹

The data above show that sentences introduced by complex *wh*-items cannot give rise to metaphysical interpretations whereas the ones introduced by *any* can. The Greek FCI *opjosdhipote* seems to pattern with the first one¹²

(27) *Tin perasmeni xronia, o nomos itan oti opjosdhipote arghuse na paradhosi tin ergasia tu, kovotan, ala telika oli tin paedhosan stin ora tus
 ‘*Last year, the law was that whoever submitted the assignment late failed finally all students submitted their assignments in time’

A final indication which shows that the alternatives denoted by *any* are not epistemically accessible is given by the following example. Following Dayal

¹¹ This is also one of the major differences between *any* items and universal quantifiers:

(iv) *Last year, the law was that everyone who submitted the assignment late failed but finally no one did.

¹² This reminds us also of Jacobson’s (1995) analysis of FRs in terms of existential presupposition.

(1997), *whatever* expresses speaker's ignorance as the continuation *but I don't remember what it was* indicates. *Any* is ungrammatical in such context.

(28) I ate whatever dish John cooked, although I don't remember what it was

(29) *I ate any dish that John cooked, although I don't remember what it was

Up to this point, we saw that, contrary to Dayal (1997) and Giannakidou (1997b), not all FCIs denote epistemically accessible alternatives: *any* denotes metaphysically accessible alternatives whereas *complex wh*-items and the Greek FCI *opjodhipote* epistemically accessible ones. This is due to two different modal operators that these two types of FCIs contain. FC *any* contains a metaphysical modal operator whereas English and Greek complex *wh*-FCIs contain an epistemic one.

The idea that FCIs contain a modal operator is not new. To my knowledge, it has been first proposed by Dayal (1998). The main contribution of the present paper is that it proposes that the different properties of FCIs can be pinned down to the nature of the alternatives that they denote and not only to the modal operator that they contain.

This also explains why *any* is not grammatical in negative episodic contexts if not preceded by the focus particle *just*. As is well known, *just* refers to the least likely entities from a scale of alternatives. *Any* alone cannot.

The epistemic character of the alternatives that complex *wh*-items denote explains also their difference from universal quantifiers. Observe more closely the examples below from Gawron (2001).

- (30) a. #John would accept every salary they offered
 b. John would accept whatever salary they offered

The first is pragmatically odd (#) because it describes *John being offered an arbitrary number of salaries and accepting each*. This does not hold for the second example. In this example, *whatever* invokes a pragmatic scale and denotes an entity that takes the minimum on that scale. For this reason, Gawron (2001) claims that *whatever* is non-quantificational and proposes that (30b) should be represented as in (31) where $\{s,x\}$ indicate the variables that need to be universally quantified over by the conditional operator.

(31) $[\text{job}(s)(x) \Rightarrow_{\{s,x\}} \text{offer}(s)(\text{they},x) \wedge \text{accept}(s)(j,x)]$

As Gawron explains, quantificational readings as the ones we saw above arise by scalar implicature and this comes from *ever*. Therefore, the scale is an entailment ordering such that x is a minimum if and only if.

(32) $\forall y \in S \square [\text{OS}(x) \rightarrow \text{OS}(y)]$

The modality expresses that the scale measures a likelihood: in all likely worlds, the implication holds. (30b) denotes a minimum x and presupposes the above implication.

$$(33) \Pi(P, Q, x) \equiv \forall y \in P \square [Q(x) \rightarrow Q(y)]^{13}$$

Finally, the hypothesis that *any* contains a metaphysical modal operator is reminiscent of the following observation by Vendler (1967): “the *any*-proposition is an unrestricted warranty for conditional statements and forecasts and we may add, for contrary-to-fact conditionals. In other words, to draw an obvious conclusion, it is an open hypothetical, a law-like assertion”.

5. Conclusion

In this paper, I have shown that Free Choice Items do not constitute a homogeneous class but they are divided into two subclasses. Evidence is given from English and Greek data. I have shown that English and Greek complex *wh*- differ from *any* items in that the nature of the alternatives that they denote is different. *Any* denotes metaphysical alternatives and complex *wh*-items denote epistemic ones. The metaphysical nature of FC *any* accounts for its ungrammaticality in UCCs and in negative episodic contexts.

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¹³ Π is an operator that gives the pragmatic scale and holds of the domain set, the scaling property and the minimum of the scale (Gawron 2001).

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