

Random Choice Modality: Spanish *Uno Cualquiera**

Luis Alonso-Ovalle — McGill University

Paula Menéndez-Benito — University of Göttingen

Abstract. Across languages, we find indefinites that signal that an agent made a random choice. This paper paves the way towards a better understanding of these ‘random choice indefinites’ by investigating the type of modality expressed by Spanish *uno cualquiera*. We propose that the random choice effect of *uno cualquiera* comes about because this item requires the agent’s decision to have a particular content.

Keywords: Modal indefinites, random choice, agent indifference, *uno cualquiera*.

1. Introduction

In many languages, we find indefinites that trigger modal inferences when they appear in non-modal sentences (Haspelmath, 1997). Some of these indefinites (‘epistemic indefinites’) convey ignorance (see, e.g., Alonso-Ovalle and Menéndez-Benito (forthcoming) and references therein). Other modal indefinites indicate that an agent made a random choice.² German *irgendein*, the Korean *-na* indeterminates or Spanish *uno cualquiera* belong to this category (see, for instance, Kratzer and Shimoyama (2002); Jayez and Tovená (2005); Choi (2007); Choi and Romero (2008); Rivero (2011); Alonso-Ovalle and Menéndez-Benito (2011)). For example, the Spanish sentence in (1) says that Juan took a book, and that he chose the book indiscriminately.³

- (1) Juan compró un libro cualquiera.
Juan bought a book CUALQUIERA
‘Juan bought a random book.’

While there is by now a substantial amount of research on epistemic indefinites, random choice indefinites have received less attention in the literature.⁴ The goal of this paper is to better our un-

*We are very grateful to Ana Arregui, María Biezma, Angelika Kratzer and Keir Moulton, the audiences at SALT 21, the University of Göttingen, the School of Linguistics and Language Studies at Carleton University, the McGill Syntax-Semantics Research Group, and the Fifth Toronto-Ottawa-Montréal Workshop on Semantics. Our names are listed in alphabetical order. Luis Alonso-Ovalle received support by FQRSC Programme Soutien aux Équipes de Recherche Grant 1446 (principal investigator: Lisa Travis) and FQRSC Programme Établissement Nouveaux Professeurs-Chercheurs Grant 164823 (principal investigator: Luis Alonso-Ovalle).

²The random choice meaning component is often referred to as ‘agent indifference’ (see, for instance, von Stechow (2000), Tredinnick (2005), and Choi (2007)). This label is misleading when it comes to describing *uno cualquiera*, since, as we will see, this indefinite is appropriate in cases where the agent is not truly indifferent.

³We use *random* in the English translations, but this is only for convenience. We do not want to claim that a *random book* conveys exactly the same meaning as *un libro cualquiera*.

⁴For some representative works on epistemic indefinites, see references quoted in Alonso-Ovalle and Menéndez-Benito (forthcoming). For recent work on random choice indefinites, see Choi (2007), Kim and Kaufmann (2007), Choi and Romero (2008), Alonso-Ovalle and Menéndez-Benito (2011), and Zabbal (2004), which is unpublished. For

derstanding of random choice indefinites by investigating the type of modality that *uno cualquiera* expresses.

The paper is organized as follows. Section 2 presents some facts about the distribution of *uno cualquiera* and sets aside some issues that will not be discussed in this paper. Sections 3 and 4 discuss how the random choice component of *uno cualquiera* should be characterized. Building on von Stechow (2000), Choi (2007) argues that the random choice component of Korean *-na* indefinites can be given a counterfactual paraphrase. Choi and Romero (2008) propose that this account can be applied to *uno cualquiera*. In Alonso-Ovalle and Menéndez-Benito (2011) we argued that the counterfactual account makes wrong predictions for *uno cualquiera*. Section 3 summarizes and extends that discussion. Section 4 shows that *uno cualquiera* does not convey agent indifference. Section 5 puts forward a hypothesis that traces back the random choice effect to the decision made by the agent of the event described by the sentence. Finally, section 6 presents a summary and briefly lays out some issues for further research.

2. Setting the Stage

Morphologically, *uno cualquiera* consists of the indefinite determiner *un* (which can be replaced by plural numerals or the determiner *otro* ('other'), as in (2-a)) and the Free Choice item *cualquiera*, which doubles up as a determiner in its reduced form *cualquier* (2-b).⁵

- (2) a. [DP un ({ dos, tres ... }) / otro [NP libro(s) [cualquiera]]]
 b. [DP cualquier [NP libro]]

The determiner *cualquier* differs significantly from *uno cualquiera* in both interpretation and distribution. For instance, as illustrated below, *uno cualquiera* is licensed in episodic contexts, but *cualquiera* is not.⁶

- (3) *Ayer, Juan cogió cualquier carta.
 yesterday Juan took CUALQUIER card

(Menéndez-Benito, 2005, 2)

- (4) Ayer, Juan cogió una carta cualquiera.
 yesterday Juan took a card CUALQUIERA
 'Yesterday, Juan took a random card.'

In what follows, we will not discuss *cualquier* and we will not attempt to derive the interpretation of *uno cualquiera* compositionally from *un* and *cualquiera*. The question of whether this can be

the indifference / random choice reading of *whatever*, see, e.g., von Stechow (2000), Tredinnick (2005), and Rawlins (2008).

⁵The form *cualquiera* appears in pronominal uses and in combination with a partitive.

⁶See Rivero (2011) for a discussion of the differences between *uno cualquiera* and *cualquier*. Some studies that focus on *cualquier* are Arregui (2006), Quer (2000), Menéndez-Benito (2005), and Menéndez-Benito (2010).

accomplished is of course an important one. However, to address this question, we first need to achieve a better understanding of the random choice effect induced by *uno cualquiera*. We have chosen to make this first step the focus of our paper.

Before proceeding, let us note that *uno cualquiera* does not always convey random choice. Consider again the example in (5). Apart from the random choice reading (that Juan bought a book and chose it indiscriminately), (5) can have what we will call an ‘evaluative reading’: that Juan bought a book, and that the speaker thinks that the book that Juan bought is unremarkable.

- (5) Juan compró un libro cualquiera.
 Juan bought a book CUALQUIERA
 ‘Juan bought a random book.’

The difference between these two readings can be illustrated with the help of the scenarios below.

- (6) a. Juan went to the bookstore. He wanted to buy *The Unbearable Lightness of Being*, and did so. I don’t think this book is special in any way.
 b. Juan went to the bookstore, and bought a book at random. The book turned out to be *The Unbearable Lightness of Being*. I think this book is remarkable.

In (6-a), I can truthfully utter (5) on its evaluative reading (since I consider the book that Juan bought unremarkable), but not on its random choice reading, given that Juan’s choice was not indiscriminate. In contrast, my utterance of (5) in (6-b) would be false on the evaluative reading but true on the random choice reading.⁷

In sentences where *uno cualquiera* saturates the agent role, we only find the evaluative reading: the sentence in (7), for instance, can only mean that a student spoke and that the speaker considers this student unremarkable.

- (7) Habló un estudiante cualquiera.
 spoke a student CUALQUIERA
 ‘An unremarkable student spoke.’

Although we would like to eventually understand if the two interpretations of *uno cualquiera* can be traced back to a common source, in this paper we will assume that *uno cualquiera* is ambiguous between the random choice reading and the evaluative reading, and we will focus on the former. Our aim will be to provide an analysis that predicts the right truth conditions for the random choice reading of (5) and the absence of this reading in (7). We will start by assessing the analysis proposed by Choi (2007) for Korean *-na* indefinites and extended to *uno cualquiera* in Choi and

⁷Rivero (2011) makes further distinctions regarding the evaluative reading. For instance, she claims that *uno cualquiera* has ignorance readings and depreciative readings. For our purposes, it is enough to distinguish between the random choice reading and an evaluative reading where the speaker expresses some judgment about the witness of the existential claim.

Romero (2008).

3. The Counterfactual Approach

Choi (2007) shows that Korean *-na* indeterminates have a random choice component. The example in (8), for instance, conveys that John picked a card and that he did so randomly.

- (8) John-un amwu-khadu-na cip-ess-e.
 John-TOP AMWU-card-OR take-PAST-DEC
 ‘(Lit.) John took just ANY card.’ (Choi, 2007, 204)

Choi puts forward an analysis of *-na* indeterminates that is modeled after von Fintel’s account of English *-ever* free relatives, which also have an indifference / random choice component: the example in (9) says that Zach indiscriminately voted for the person that was at the top of the ballot (von Fintel (2000); Tredinnick (2005); Rawlins (2008)).

- (9) Zach simply voted for whoever was at the top of the ballot. (von Fintel, 2000, 32)

According to von Fintel, the indifference component of *whatever* can be given a counterfactual paraphrase: on this view, (9) conveys (i) that Zach voted for the person who was at the top of the ballot, and (ii) that if the person at the top of the ballot had been a different one, Zach would have voted for that person just the same. On von Fintel’s analysis, (i) corresponds to the assertion of the sentence and (ii) is derived via a presupposition.⁸

Choi (2007) extends von Fintel’s analysis to Korean *-na* indeterminates. The basic intuition behind her proposal is that a sentence like (8) conveys that Juan took a card and that he would have taken a card regardless of what cards were available. To capture this intuition, she proposes that (8) asserts that Juan took a card in w_0 , and presupposes (roughly) that in all the closest worlds where the set of cards differs from the set of cards in w_0 , Juan took a card if and only if he took a card in w_0 .

The analysis is implemented as in (10) below, where the indefinite takes as arguments a world of evaluation, a set of worlds F (a modal base), and two properties P and Q . The function *min* in the metalanguage takes a world w and a proposition p and returns the worlds in which p is true that are maximally similar to w . Similarity here is determined with respect to the properties of w : for any worlds w' and w'' , w'' is at least as close to w as w' if and only if the set of propositions that are

⁸It should be mentioned that von Fintel himself casts doubt on the presuppositional status of the counterfactual component. In cases like (i), for instance, this component does not project out of the *unless* clause, contrary to what we would expect if it were a presupposition.

- (i) Unless Zack simply voted for whoever was at the top of the ballot, he must have spent at least five minutes in the voting booth. (von Fintel, 2000, 36)

true in both w and w'' is a subset of the set of propositions that are true in both w and w' .⁹

- (10) a. LF: $\text{wh-}/\text{amwu-}(\text{N})\text{-na}(w_0)(F)(P)(Q)$
 b. *Presupposition*:

$$\forall w' \in \min_{w_0} \left[F \cap \left(\lambda w''. \left[\begin{array}{c} \{x : P_{w''}(x)\} \\ \neq \\ \{x : P_{w_0}(x)\} \end{array} \right] \right) \right] : \begin{array}{c} \exists x [P_{w'}(x) \wedge Q_{w'}(x)] \\ = \\ \exists x [P_{w_0}(x) \wedge Q_{w_0}(x)] \end{array}$$

 c. *Assertion*: $\exists x [P_{w_0}(x) \wedge Q_{w_0}(x)]$ (See Choi (2007, 114))

Choi and Romero (2008) argue that this account can be extended to *uno cualquiera*. In Alonso-Ovalle and Menéndez-Benito (2011), we presented evidence that the random choice component of *uno cualquiera* is truth-conditional. We also showed that adopting a version of (10) where the counterfactual component is part of the truth conditions does not correctly characterize the random choice reading of *uno cualquiera*. First of all, this approach would predict wrong truth conditions for the example in (11). Intuitively, (11) is true in the scenario in (12). However, the counterfactual account predicts it to be false: the counterfactual condition in (13) is not satisfied, as Juan would not have picked a card if the cards were different.¹⁰

- (11) Juan cogió una carta cualquiera de esta baraja.
 Juan took a card CUALQUIERA of this deck
 ‘Juan took a random card in this deck.’
- (12) Juan is a gambler. As a rule, he will only pick a card if he is playing with his own cards, and if the deck consists of the standard fifty-two cards. This time, this condition was met: the deck was complete and there were no extra cards. Juan picked a card at random.
- (13) In all the worlds where the set of cards in this deck differs from the actual set of cards and that are otherwise closest to w_0 Juan picked a card iff he picked a card in w_0 .

We now add another argument against the counterfactual approach. This account does not predict the distribution of the random choice reading. Consider (14), where *uno cualquiera* is in subject position.

- (14) Habló un estudiante cualquiera.
 spoke a student CUALQUIERA
 ‘An unremarkable student spoke.’

⁹Choi (2007) introduces an additional condition: that for each individual d in the extension of the noun phrase, the set of possible worlds that is being quantified over includes worlds where the extension of the noun phrase is a singleton set containing only d . See Choi (2007) for motivation, and Alonso-Ovalle and Menéndez-Benito (2011) for discussion of problems that this condition raises.

¹⁰This is a variation on one of the examples discussed in Alonso-Ovalle and Menéndez-Benito (2011).

The counterfactual account predicts that this example should have the reading in (15): that a student spoke and that, if there had been other students, a student would have spoken as well. However, this reading is unattested. As noted above, this sentence can only be interpreted as saying that a student spoke and the speaker considers this student unremarkable.

- (15) a. A student spoke in w_0 .
 b. In all the closest worlds where the set of students differs from the set of students in w_0 , a student spoke if and only if a student spoke in w_0 .

We conclude that Choi's counterfactual proposal cannot account for the interpretation and distribution of *uno cualquiera*. In the next section, we will evaluate the possibility that *uno cualquiera* makes reference to the agent's preferences.

4. Agent Indifference

When discussing the random choice reading of English *whatever*, von Fintel (2000) briefly entertains the possibility that *whatever* makes reference to the preferences of the agent. On this view, the sentence in (16) would convey that the speaker grabbed the tool that was handy, and didn't care what tool it was.

- (16) I grabbed whatever tool was handy. (von Fintel, 2000, 32)

However, von Fintel convincingly shows that *whatever* does not express agent indifference. For instance, the use of the adverb *grudgingly* in the example in (17) clearly suggests that the speaker does have a preference as to what email program to use. In this section, we will argue that *uno cualquiera* is not amenable to an agent indifference account either.

- (17) I had no time to play around, so I grudgingly used whatever email program was installed on the computer. (von Fintel, 2000, 33)

On an agent indifference account, the sentence in (18) would be true if and only if Juan took a card and, before doing so, he was indifferent as to what card to take. That is, (18) would be true only if the two conditions in (19) were satisfied. Intuitively, only Juan's preferences at a particular time close to the actual taking event should be relevant. In (19) we locate this time at the preparatory stage of the event described by the sentence.

- (18) Juan cogió una carta cualquiera.
 Juan took a card CUALQUIERA
 'Juan took a random card.'
- (19) a. There is an actual event e of Juan taking a card.
 b. For every (relevant) card y in w_0 , there is a world w where Juan's desires at the preparatory stage of e are satisfied and Juan takes y in w .

This hypothesis makes the right predictions in many cases. Consider, for instance, the scenarios below. The sentence in (18) can felicitously describe the scenario in (20-a), where taking any card would be fine with Juan, but not (20-b) (where Juan has some preferences), or (20-c) (where Juan wants to take a particular card).

- (20)
- a. There were several face-up cards in front of Juan. Juan wanted to take a card. He took the ace of spades, but any other card would have been fine with him.
 - b. There were several face-up cards in front of Juan. Juan wanted to take a card, but he did not want to take the queen or the jack of hearts. Any other card was fine with him. He took the ace of spades.
 - c. There are several face-up cards in front of Juan. Juan wanted to take the ace of spades and he did so.

However, there are cases where *uno cualquiera* is acceptable, even though the agent is not indifferent. A case in point is the scenario in (21). Intuitively, (18) is true in this scenario. However, the proposal in (19) predicts it to be false: the condition in (19-b) is not satisfied, since in all the worlds where Juan's desires are satisfied, he takes the ace of spades.¹¹

- (21) There are two face-down cards in front of Juan. Juan knows that one is the ace of spades, and the other one is the queen of hearts. He wants to take the ace but he does not know whether the ace is the card on the right or the card on the left. He takes a card at random.
(Based on a scenario in Aloni (2001))

The scenario in (21) provides us with the crucial observation that will motivate our proposal. In this scenario, the agent wants to take a particular card — the ace of spades. However, if he is rational, he cannot *decide* to take the ace of spades: given that the cards are face-down, he does not know how to proceed in order to do so. In what follows, we will capitalize on this observation, and we will put forward an account that traces back the random choice component of *uno cualquiera* to the way the agent's decision is constrained by the circumstances and by what he knows.

¹¹Building on Stalnaker (1984), Heim (1992) argues that *a wants p* is true in *w* iff any world compatible with *a*'s beliefs in *w* where *p* is true is more desirable to *a* in *w* than any maximally similar belief world where *p* is false. A bouletic analysis of (18) inspired by Heim's proposal might look as follows:

- (ii) true in *w* iff
- a. In *w*, Juan took a card *x*
 - b. For every two cards, *y*, *x*, for every doxastic alternative *w'* for Juan in *w*: every world maximally similar to *w'* where Juan takes *x* is as desirable to Juan in *w* as every world maximally similar to *w'* where Juan takes *y*.

This formulation also runs into problems in the scenario in (21), as any doxastic alternative where Juan takes the ace of spades is more desirable to him than any maximally similar doxastic alternative where he takes the queen of hearts.

Una carta cualquiera will denote a function of type $\langle\langle e, \langle v, \langle s, t \rangle \rangle \rangle, \langle v, \langle s, t \rangle \rangle\rangle$. This function is defined for a particular $R_{\langle e, \langle v, \langle s, t \rangle \rangle \rangle}$ if the condition in (25) is met. $\llbracket \text{una carta cualquiera} \rrbracket(R)$, when defined, is a relation $P_{\langle v, \langle s, t \rangle \rangle}$ that is true of an event e and a world w iff the two conditions in (26-a) and (26-b) obtain. That is, *una carta cualquiera* existentially quantifies over cards (26-a) and imposes a constraint on the content of the agent's decision (26-b).

(25) *Definedness condition:*

$\llbracket \text{una cualquiera} \rrbracket$ is defined for a relation $R_{\langle e, \langle v, \langle s, t \rangle \rangle \rangle}$ iff
 $\forall x \forall e \forall w [R_w(x)(e) \rightarrow \text{there is a decision } d_e \text{ in } w \text{ by the agent of } e \text{ that causes } e]$

- (26) a. *Existential Condition:* $\exists x [\text{CARD}_w(x) \ \& \ R_w(x)(e)]$
 b. *Decision Condition:* the content of d_e is
 $\lambda e'. \exists w' \exists x [\text{CARD}_{w'}(x) \ \& \ R_{w'}(x)(e') \ \& \ \text{AG}(e') = \text{AG}(d_e)]$

The definedness condition blocks the combination of *uno cualquiera* (on its random choice reading) with non-agentive predicates. This as it should be: Choi and Romero (2008) note that *uno cualquiera*, on its random choice reading, is out with non-agentive predicates. The example in (27), for instance, only has the evaluative reading (that Juan stumbled upon an unremarkable object).

- (27) Ayer Juan tropezó con un objeto cualquiera.
 yesterday Juan stumbled with an object CUALQUIERA
 ‘Yesterday, Juan stumbled on a random object.’ (Cf. Choi and Romero (2008, 96))

In our example (22) (repeated below as (28)), the definedness condition is satisfied. Assuming existential closure of the event argument, and leaving aside the contribution of aspect, (28) is predicted to be true in a world w iff the two conditions in (29) are met.

- (28) Juan cogió una carta cualquiera.
 Juan took a card CUALQUIERA
 ‘Juan took a random card.’

- (29) a. *Existential Condition:*
 There is a (past) event e of Juan taking a card in w .
 b. *Decision Condition:*
 the content of Juan's decision is:
 $\lambda e'. \exists w' \exists x [\text{CARD}_{w'}(x) \ \& \ \text{TAKE}_{w'}(x)(e') \ \& \ \text{AG}(e') = j]$

If the only cards under consideration are the ace of spades and the queen of hearts, the set in (29-b) will contain all possible events of Juan taking the ace of spades and all possible events of Juan taking the queen of hearts. Thus, the decision condition requires that Juan's decision be compatible with him taking any card in the domain.¹⁴

¹⁴The set in (29-b) contains *all* possible events of Juan taking an (actual) card. This is probably too unrestricted, and we may want to add a suitable accessibility relation. This opens up the question of what the right accessibility relation

Let us now revisit the cards scenario, repeated in (30) below.

- (30) There are two face-down cards in front of Juan. Juan knows that one is the ace of spades, and the other one is the queen of hearts. He wants to take the ace but he does not know whether the ace is the card on the right or the card on the left. He takes a card at random.

What is the content of Juan's decision in this scenario? His mental state and the circumstances at the time of his decision impose certain constraints on what he can decide. A decision amounts to a commitment to act in a particular way, in order to bring about one of the events compatible with the decision. Assuming that the agent is rational, he will make this commitment because it satisfies a particular goal of his. But there are cases where the agent cannot decide to act upon a particular goal because he does not know how to bring about this goal. For instance, I cannot decide to solve a quadratic equation if I don't know how to solve a quadratic equation. Some conditions that a property of events P has to satisfy to be the content of a decision to act d taken by agent a in w are, then, the following:

- (31) a. *Goal*: In every w' where a 's goals (in w , at the time of d) are satisfied, there is a P -event.
 b. *Know-How*: In w , at the time of d , a knows how to bring about a P -event.¹⁵

In the cards scenario, the property of events in (32-a) below is not the content of Juan's decision, because Juan didn't want to take the queen (*Goal* is not satisfied). And even though Juan wanted to take the ace, the property in (32-b) cannot be the content of his decision either, because Juan didn't know what to do in order to take the ace (*Know-How* is not satisfied). However, given Juan's goals and what he could do, we can assume that the property in (32-c) is the content of his decision. The decision condition is then satisfied. As the existential condition is also met (Juan took a card), our sentence comes out true in the scenario, as desired.

- (32) a. $\lambda e. \exists w [\text{TAKE}_w(Q\heartsuit)(e) \ \& \ \text{AGENT}(e) = j]$
 b. $\lambda e. \exists w [\text{TAKE}_w(A\spadesuit)(e) \ \& \ \text{AGENT}(e) = j]$
 c. $\lambda e. \exists w' \exists x [\text{CARD}_w(x) \ \& \ \text{TAKE}_{w'}(x)(e) \ \& \ \text{AG}(e) = j]$

The proposal above replicates the predictions of the indifference account for the scenarios in (33-a) to (33-c). The sentence in (28) is correctly predicted to be false in (33-b) and (33-c), where it is not true that Juan's decision is compatible with taking any card. What about (33-a)? Didn't Juan decide to take the ace? Not given the way we are conceptualizing decisions here. Note that we are assuming that for a property of events P to be the content of a decision d , all the worlds where the goals of the agent of d are satisfied must be worlds where there is a P event (31-a). For (32-b) to be the content of Juan's decision in (33-a), Juan's goal should have been to take the ace of spades. But this was not the case. His goal was more general — to take a card. Accordingly, we can take

might be. In what follows, we will ignore this issue, as we think it is orthogonal to the arguments we are presenting.

¹⁵Spelling out what it means for an agent a to know how to bring about P is not an easy task (See Roberts (2009) for a recent account of *know-how*). In what follows, we will rely on an intuitive understanding of the condition above.

the content of his decision to be (32-c).

- (33) a. There were several face-up cards in front of Juan. Juan wanted to take a card. He took the ace of spades, but any other card would have been fine with him.
 b. There were several face-up cards in front of Juan. Juan wanted to take a card, but he did not want to take the queen or the jack of hearts. Any other card was fine with him. He took the ace of spades.
 c. There are several face-up cards in front of Juan. Juan wanted to take the ace of spades and he did so.

Finally, the proposal above squares well with the fact that *uno cualquiera* is odd (on the intended reading) in cases where the agent performs an involuntary action. Suppose that Juan is a rock star that is greeted by a bunch of groupies at the airport. For publicity purposes, Juan decides to hug one of the girls, and picks one at random. Unfortunately, Juan trips and ends up pushing the girl accidentally. Unless we want to say that the girl in question is unremarkable, we cannot use the sentence in (34) to describe that scenario (even though Juan picked the girl randomly). This is predicted by our account: for the sentence to be true, the content of Juan's decision should be the set in (35), a condition that is not met in the scenario.

- (34) Juan empujó a una chica cualquiera.
 Juan pushed a UNA girl CUALQUIERA
 'Juan pushed a random girl.'

- (35) $\lambda e. \exists w' \exists x [\text{GIRL}_w(x) \ \& \ \text{PUSH}_{w'}(x)(e) \ \& \ \text{AG}(e) = j]$

5.2. Agent Role: Revising the Proposal

While the proposal above correctly captures the interpretation of cases where *uno cualquiera* saturates the theme role, it runs into problems with cases like (36), where *uno cualquiera* fills the agent role.

- (36) Habló un estudiante cualquiera.
 spoke a student CUALQUIERA
 'An unremarkable student spoke.'

As we noted above, (36) only has the evaluative reading: that a student spoke, and the speaker believes that this student is unremarkable. However, our proposal predicts (36) to have another, unattested reading. Let us see why.

Given our assumptions, (36) will have the LF in (37-a). Following Kratzer (1996), we will assume that the functional head *Agent* has the denotation in (37-b). Combining (37-b) with the denotation of *hablar* (in (37-c)) by (an intensional version of) Kratzer's Event Identification rule yields

(37-d).¹⁶

- (37) a. LF: [Tense [Aspect [un estudiante cualquiera] [Agent [hablar]]]]
 b. $\llbracket Agent \rrbracket = \lambda x \lambda e. AGENT(e) = x$
 c. $\llbracket hablar \rrbracket = \lambda e \lambda w. TALK_w(e)$
 d. $\llbracket [Agent [hablar]] \rrbracket = \lambda x \lambda e \lambda w. TALK_w(e) \ \& \ AGENT(e) = x$

Applying the denotation of *un estudiante cualquiera* to (37-d) and factoring in the contribution of tense, we get that (36) will be true in the actual world w_0 if and only if the two conditions in (38) are satisfied.

- (38) a. *Existential Condition:*
 There is an actual (past) event of a student talking.
 b. *Decision Condition:*
 the content of the student's decision d_e is
 $\lambda e'. \exists w' \exists x [STUDENT_{w_0}(x) \ \& \ TALK_{w'}(e') \ \& \ AG(e') = x = AG(d_e)]$

This amounts to saying that (36) is true if and only if there is an event of a student x talking and x had decided to talk. These truth conditions can be satisfied in situations in which a student talked and the speaker believes that this student is remarkable. As (36) is judged as false in this kind of situation, the reading in (38) is not attested.

In what follows, we will present a modification of the proposal that blocks this reading. On the account in 5.1, *uno cualquiera* requires the content of the decision to be a particular set of possible events. We will now propose that *uno cualquiera* also introduces a competition with subsets of this set. While this modification will have no effect when *uno cualquiera* fills the theme role, it will yield a contradiction in cases like (36). Let us spell this out.

So far, we have said that *una carta cualquiera* combines with a relation R and requires that the content of the agent's decision in the world of evaluation w be the set of events in (39-a). Now, let us assume that *una carta cualquiera* also imposes the condition in (39-b). That is, it looks at all the subsets of (39-a) that can be generated by restricting further the domain of cards and says that none of these subsets is the content of the decision.

- (39) a. $\lambda e'. \exists w' \exists x [CARD_w(x) \ \& \ R_{w'}(x)(e') \ \& \ AG(e') = AG(d_e)]$
 b. There is no $D \subset \{x : CARD_w(x)\}$ such that
 $\lambda e'. \exists w' \exists y \in D [R_{w'}(y)(e') \ \& \ AG(e') = AG(d_e)]$
 is the content of d_e .

¹⁶When $\llbracket \alpha \rrbracket$ is a function of type $\langle e, \langle v, t \rangle \rangle$ and $\llbracket \beta \rrbracket$ is a function of type $\langle v, \langle s, t \rangle \rangle$, $\llbracket [\alpha \beta] \rrbracket$ is that function f of type $\langle e, \langle v, \langle s, t \rangle \rangle \rangle$ such that for any individual d , event e and world w , $f(d)(e)(w)$ is true iff $\llbracket \alpha \rrbracket(d)(e)$ is true and $\llbracket \beta \rrbracket(d)(e)(w)$ is also true.

Of course, in cases like (40), the new condition imposed by *uno cualquiera* is vacuous. The condition in (39-a) requires that the content of Juan's decision be the property in (41). And assuming that the only relevant cards are the queen of hearts and the ace of spades, the condition in (39-b) requires that none of the sets in (42) be the content of the decision. As the first condition entails the second, (39-b) has no effect.

- (40) Juan cogió una carta cualquiera.
 Juan took a card CUALQUIERA
 'Juan took a random card.'
- (41) $\lambda e'. \exists w' \exists x [\text{CARD}_w(x) \ \& \ \text{TAKE}_{w'}(x)(e') \ \& \ \text{AG}(e') = \text{AG}(d_e)]$
- (42) a. $\lambda e. \exists w [\text{TAKE}_w(Q\heartsuit)(e) \ \& \ \text{AGENT}(e) = j]$
 b. $\lambda e. \exists w [\text{TAKE}_w(A\spadesuit)(e) \ \& \ \text{AGENT}(e) = j]$

However, the modification above will make a difference in cases like (43). To see why, assume that the students in the domain are Juan and Sara. Suppose further that (in the relevant stretch of time) there is an actual event e_1 of Juan talking (caused by decision d_1) and that there are no events of Sara talking. In this case, e_1 is the only actual event that satisfies the existential claim. The condition in (39-a) requires the content of d_1 to be (44). And the condition in (39-b) requires it *not* to be (45). As (44) and (45) are the same function, there is no way of satisfying the two conditions. As a result, the random choice reading in (43) is a contradiction. We contend that this renders the random choice reading ungrammatical and, that, as a result, (43) only has the evaluative reading.

- (43) Habló un estudiante cualquiera.
 spoke a student CUALQUIERA
 'An unremarkable student spoke.'
- (44) $\lambda e. \exists w \exists x \in \{j, s\} [\text{STUDENT}_w(x) \ \& \ \text{TALK}_w(e) \ \& \ \text{AG}(e) = x = j]$
- (45) $\lambda e. \exists w \exists x \in \{j\} [\text{STUDENT}_w(x) \ \& \ \text{TALK}_w(e) \ \& \ \text{AG}(e) = x = j]$

The claim that sentences can be ruled out as ungrammatical because they denote contradictions (or tautologies) has been proposed in connection with a number of constructions, including durational phrases (Dowty, 1979), existential sentences (Barwise and Cooper, 1981), exceptive constructions (von Stechow, 1993), degree constructions (Fox and Hackl, 2006), negative islands in comparatives (Gajewski, 2008), weak islands (Abrusán, 2007, 2008) and universal free choice items (Menéndez-Benito, 2005, 2010). However, this line of analysis has to deal with an obvious objection: that there are grammatical contradictions and tautologies, as illustrated in (46).

- (46) a. Most students are students.
 b. Every circle is a square.

Gajewski (2002) has claimed that there is a fundamental distinction between different types of contradictions and tautologies.¹⁷ He argues that there is a formal principle of grammar that rules out contradictory and tautological sentences, and that applies at a level of representation ('the logical skeleton') that is underspecified with respect to the content of non-logical words.¹⁸ The logical skeleton of a sentence is derived from the sentence's LF by (i) identifying the maximal constituents containing no logical words, and (ii) replacing each such constituent with a distinct variable of the appropriate type. On Gajewski's account, a sentence is ungrammatical whenever its logical skeleton contains a constituent that is false (or true) under every variable assignment.¹⁹

In the examples in (46), only the quantifiers are logical words. As a result, these sentences have the logical skeletons in (47). These representations will come out true under some variable assignments and false under others (as, e.g., (48-a) is true and (48-b) is false), and therefore, the sentences in (46) are grammatical.

- (47) a. [[Most P] [Q]]
 b. [[Every P] [Q]]
- (48) a. Every circle is round.
 b. Every circle is elliptical.

Assume now that *uno cualquiera* and functional heads like *Agent* belong to the set of logical words. The logical skeleton corresponding to (36), (49) below, will come out false under every assignment, and thus Gajewski's proposal will render the random choice reading of (36) to be ungrammatical, as desired.

- (49) [Tense [Aspect [un estudiante cualquiera] [Agent [P]]]]

6. To Conclude

In this paper, we have examined the interpretation and distribution of the random choice reading of *uno cualquiera*. We have discussed the analysis of Korean *-na* indeterminates presented in Choi (2007), according to which these items invoke worlds in which the extension of the noun phrase that they combine with is different from the actual one. Contra Choi and Romero (2008), we argued that this type of approach does not extend to *uno cualquiera*. We then argued that *uno cualquiera* does not convey agent indifference. Finally, we proposed that the random choice component of *uno cualquiera* should be traced back to a constraint on the type of decision made by the agent of the event described by the sentence that *uno cualquiera* is part of.

¹⁷For an earlier proposal in the same spirit, see Chierchia (1984).

¹⁸Gajewski assumes that logical words are those that are permutation-invariant, in the sense of van Benthem (1989)

¹⁹For recent applications of Gajewski's proposal, see Fox and Hackl (2006), Abrusán (2007, 2008), Gajewski (2008), and Menéndez-Benito (2005, 2010). Gajewski (2009) discusses and further elaborates the ideas explored in Gajewski (2002).

Many issues remain open. One pressing question is whether we are justified in assuming a lexical ambiguity between the random choice reading and the evaluative reading. Another, whether it is possible to trace back the interpretation of *uno cualquiera* to that of the determiner *cualquier*. Furthermore, we would like to know to what extent the analysis presented here can be extended to random choice indefinites in other languages, and to other items conveying (something like) random choice. We hope to be able to address these issues in future research.

References

- Abrusán, M. (2007). *Contradiction and Grammar: The Case of Weak Islands*. Ph. D. thesis, M.I.T.
- Abrusán, M. (2008). Islands of contradiction: Presuppositional and negative islands. In T. Friedman and S. Ito (Eds.), *Proceedings of Semantics and Linguistic Theory XVIII*, Ithaca, pp. 1–18. Cornell University.
- Aloni, M. (2001). *Quantification under Conceptual Covers*. Ph. D. thesis, University of Amsterdam.
- Alonso-Ovalle, L. and P. Menéndez-Benito (2011). Expressing indifference: Spanish *un NP cualquiera*. In M. A. et al. (Ed.), *Proceedings of Semantics and Linguistic Theory XXI*, pp. 333–347.
- Alonso-Ovalle, L. and P. Menéndez-Benito (forthcoming). Two views on epistemic indefinites. *Language and Linguistics Compass*.
- Arregui, A. (2006). *Cualquier*, exception phrases, and negation. In J. Doets and P. González (Eds.), *Romance Languages and Linguistic Theory 2004*, pp. 1–22.
- Barwise, J. and R. Cooper (1981). Generalized quantifiers and natural language. *Linguistics and Philosophy* 4, 159–219.
- Chierchia, G. (1984). *Topics in the Syntax and Semantics of Infinitives and Gerunds*. Ph. D. thesis, University of Massachusetts Amherst.
- Choi, J. (2007). *Free Choice and Negative Polarity: A Compositional Analysis of Korean Polarity Sensitive Items*. Ph. D. thesis, University of Pennsylvania.
- Choi, J. and M. Romero (2008). Rescuing existential free choice items in episodic sentences. In O. Bonami and P. C. Hoffner (Eds.), *Empirical Issues in Syntax and Semantics 7*, Volume 7, pp. 77–98.
- Dowty, D. R. (1979). *Word Meaning and Montague Grammar*. Dordrecht: Kluwer.
- Fox, D. and M. Hackl (2006). The universal density of measurement. *Linguistics and Philosophy* 29, 537–586.

- Gajewski, J. (2002). L-analycity in natural language. Unpublished ms. UConn.
- Gajewski, J. (2008). More on quantifiers in comparative clauses. In *Proceedings of Semantics and Linguistic Theory XVIII*, Ithaca, pp. 340–357. CLC Publications.
- Gajewski, J. (2009). L-triviality and grammar. Handout of a talk delivered at the UConn Logic Group, february 27, 2009.
- Haspelmath, M. (1997). *Indefinite Pronouns*. Oxford: Oxford University Press.
- Heim, I. (1992). Presupposition projection and the semantics of attitude verbs. *Journal of Semantics* 9(3), 183–221.
- Heim, I. and A. Kratzer (1998). *Semantics in Generative Grammar*. Malden, MA: Blackwell.
- Jayez, J. and L. Tovena (2005). Free-choiceness and non individuation. *Linguistics and Philosophy* 28(1), 1–71.
- Kim, M.-J. and S. Kaufmann (2007). Domain restriction in freedom of choice: A view from Korean *indet-na* items. In E. Puig-Waldmüller (Ed.), *Proceedings of Sinn und Bedeutung*, Barcelona, pp. 375–389. Universitat Pompeu Fabra.
- Kratzer, A. (1996). Severing the external argument from its verb. In J. Rooryck and L. Zaring (Eds.), *Phrase Structure and the Lexicon*, pp. 109–137. Dordrecht: Kluwer.
- Kratzer, A. (2012). *Modals and Conditionals. New and Revised Perspectives*. Oxford University Press.
- Kratzer, A. and J. Shimoyama (2002). Indeterminate pronouns: The view from Japanese. In Y. Otsu (Ed.), *Proceedings of the 3rd Tokyo Conference on Psycholinguistics*, pp. 1–25.
- Menéndez-Benito, P. (2005). *The Grammar of Choice*. Ph. D. thesis, University of Massachusetts Amherst, Amherst, MA.
- Menéndez-Benito, P. (2010). On universal free choice items. *Natural Language Semantics* 14(1), 33–64.
- Quer, J. (2000). Licensing free choice items in hostile environments: The role of aspect and mood. *SKY Journal of Linguistics* 13, 251–268.
- Rawlins, K. (2008). *(Un)conditionals: An Investigation in the Syntax and Semantics of Conditional Structures*. Ph. D. thesis, University of California, Santa Cruz.
- Rivero, M. (2011). *Cualquiera* posnominal: Un desconocido *cualquiera*. *Cuadernos de la Asociación de Lingüística y Filología de la América Latina* 3, 60–80.
- Roberts, C. (2009). *Know-how: A compositional approach*. In E. Hinrich and J. Nerbonne (Eds.), *Theory and Evidence in Semantics*. CSLI Press.

- Stalnaker, R. (1984). *Inquiry*. Cambridge, MA: The MIT Press.
- Tredinnick, V. A. (2005). *On the Semantics of Free Relatives with -Ever*. Ph. D. thesis, University of Pennsylvania.
- van Benthem, J. (1989). Logical constants across types. *Notre Dame Journal of Formal Logic* 30(3), 315–342.
- von Stechow, P. (1993). Exegetic constructions. *Natural Language Semantics* 1, 123–148.
- von Stechow, P. (2000). Whatever. In B. Jackson and T. Matthews (Eds.), *Proceedings of Semantics and Linguistic Theory X*, Ithaca, NY, pp. 27–40. CLC Publications.
- Zabba, Y. (2004). A compositional semantics of the French expression *n'importe*. Ms. University of Massachusetts Amherst.