

Talk about the future¹

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Prediction is very difficult, especially about the future.

Niels Bohr, Danish physicist (1885 - 1962).

[Published in Stavros Assimakopoulos (ed.), *Pragmatics at its interfaces*. Mouton de Gruyter, 2017, pp. 53-70.]

Abstract

In a recent paper (Korta 2015), I compared assertions about the contingent future with what speech act theory calls commissive and directive speech acts, which are also about contingent acts situated in the future. I concluded that those assertions are closer to commissives and directives than to assertives. Contrary to what standard speech act theory assumes, they should all share a common direction of fit between the propositional content of the utterance and the world: world-to-words or upward (\uparrow). That would explain why the indeterminacy intuition, as MacFarlane (2003) calls it, arises in our estimates of the future. I now think, however, that my point about the upward direction of fit of predictions is not correct. The aim of this paper is to discuss this and to correctly identify what all predictions —assertive, commissive and directive alike— have in common: a propositional content concerning the future. Being about the future presents common specific problems for their propositional contents. I discuss these problems and their solutions.

1. Introduction

Most philosophical papers about future contingents that discuss the issue raised by Aristotle in his *Peri Hermeneias*, and revived more recently by John MacFarlane in his ‘Future contingents and relative truth’ (2003), focus on predictions about, say, meteorological or nautical events, leaving aside statements about future actions of the speaker or the addressee. Using Anscombe’s (1957) terms, one would say that they discuss estimates of the future rather than expressions of intention; or, using Searle’s (1969, 1975) taxonomy of speech acts, that their apparent interest is on assertive speech acts and not on commissives and directives, even if they all involve the contingent

future. In a recent paper (Korta 2015), I compared these three kinds of utterances, and against mainstream speech act theory, I claimed that estimates of the contingent future are closer to commissives and directives than to assertives. Thus, all statements about the contingent future, including commissives and directives, share the world-to-words (or upward, ↑) direction of fit. That explains why the indeterminacy intuition, as MacFarlane (2003) calls it, is present in our estimates of the future. Unlike assertions about the past or the present, estimates of the future are not just the sort of speech act that is true or false. They are more like promises or requests, which are not true or false, but fulfilled or not fulfilled, accurate or inaccurate.

Now I think that the point about the upward direction of fit of predictions is not correct. I incorrectly identified the relation of direction of fit between the propositional content of the speech act and the truth-maker of the speech act —the relation between ‘words’ and ‘world’— with a temporal relation. As I took it, if the truth-maker of the propositional content lies in the past or the present with respect to the time of the utterance, then the direction of fit is words-to-world (or downward, ↓); and, if the truth-maker of the propositional content lies in the future of the utterance, the direction of fit is world-to-words (↑). But direction of fit, in its original presentation by Anscombe (1957) or in standard speech act theory (Searle 1969, 1975; Searle and Vanderveken 1985; Vanderveken 1990), is not a temporal relation but a causal one.

Still, even if estimates of the future, unlike commissives and directives, are like assertions on their direction of fit, they are not true or false at the time of their utterance, and this is because, like commissives and directives, their propositional content is about the future. Being about the future, they present common specific problems regarding the notion of propositional content. The main aim of this paper is to consider this notion, which is in need of revision for two reasons. First, because, as Korta and Perry (2007, 2011) argue, in speech act theory, propositional content is required to play two incompatible roles. On the one hand, it should represent what speech acts with different illocutionary force may have in common; on the other hand, it should meet different propositional conditions that are specific to various illocutionary forces. And second, because, from commonsense views about the existence of objects and events in time, our predictions (including estimates of the future as well as expressions of intention) could lack not only a truth-value (as the indeterminacy intuition suggests), but even a full propositional content. I argue that Korta and Perry’s content-pluralism (2007, 2011, 2013) offers a natural account of these issues, according to which, our predictions lack a truth-value at the time of utterance, but do have full truth-conditions, even when they concern inexistent events and objects. In those cases, predictions lack *referential* truth-conditions, but they do have utterance-bound truth-conditions.

The structure of the paper is the following. In the next section, I present a summary of the classic dilemma about future contingents. Section 3 sums up the relevant notions of speech act

theory, necessary to understand the subsequent discussions about the direction of fit of predictions (section 4), the propositional content of speech acts in general (section 5) and the propositional content of predictions in particular (section 6). I finish with some brief concluding remarks in section 7.

Before proceeding, however, it is worth adding various preliminary caveats about the scope of the paper. First, this paper deals with literal statements or utterances of simple declarative sentences about events and objects that lie in the future, and not with the semantics and pragmatics of the future tense – which, incidentally, according to most linguists, is not even properly a tense. Second, their truth (or falsity) must be contingent and not determined by facts existing at the time of the utterance. Thus, only (1) to (5) below fall into the scope of the paper. (1) to (4) need no clarification. (5) is in, because, even if it uses the present tense, it concerns a future and contingent state of affairs. (6) is out if we interpret it not as concerning the future but rather a present and uncertain state of affairs. (7) does not concern a future state of affairs but an eternal truth, so it is clearly out; as is (8), which though contingent, is determined by a past fact, my birthday (and supposing I am still alive next year).

- (1) Tomorrow it will rain in Donostia.
- (2) There will be a sea battle tomorrow.
- (3) I will leave the room.
- (4) You will leave the room.
- (5) Your mother arrives tomorrow.
- (6) Your son will be alright.
- (7) Two plus two will equal four.
- (8) Next year I will be 51 years old.

For convenience, all statements about the future contingent considered throughout the paper, including estimates of the future and expressions of intention, i.e. assertives, commissives and directives alike, will be called “predictions.”

Finally, it is worth noting that no underlying strong assumption is made regarding the metaphysics of time. The only assumptions are that time exists, that moments (instants or intervals) are objects that can be referred to and thought about, in the sense that they can be constituents of our propositional contents, and that the future is open, that is to say, that past and present facts do not wholly determine what is going to happen in the future. It is not only that we do not know what is going to happen, but that the future *is* open.

2. The dilemma of future contingents

In his celebrated 'Future contingents and Relative Truth' (2003),² John MacFarlane revisits Aristotle's classic issue regarding the truth of estimates of the future. Consider again the following utterances (renumbered below for convenience):

- (1a) Tomorrow it will rain in Donostia.
- (2a) There will be a sea battle tomorrow.

Uttered today, we have the intuition that they are neither true nor false. This intuition is associated with a view of the world that takes it to be non-deterministic. Focusing on (2a), if it were true today, then, no matter what we do, a sea battle will happen tomorrow. It is commonly assumed, however, at least with regard to events like sea battles, that the future is "open," that there is something we can do to alter the course of events, that is, something we can do today to avoid (or to promote) the occurrence of the battle tomorrow.³ This inevitably leads one to consider that today (2a) is neither true nor false. MacFarlane calls this the 'indeterminacy intuition.'

Now, suppose the following day someone is assessing the facts. In MacFarlane's words:

Sally is hanging onto the mast, deafened by the roar of the cannon. She turns to Jake and says 'Your assertion yesterday turned out to be true'. Sally's reasoning seems unimpeachable:

Jake asserted yesterday that there would be a sea battle today
There is a sea battle today
So Jake's assertion was true.

When we take this retrospective view, we are driven to assign a determinate truth-value to Jake's utterance: this is the determinacy intuition. (MacFarlane 2003: 324-5)

We can make the same point in a slightly different way. Suppose Jake utters (2a) on day 1, referring with '*tomorrow*' to day 2. Then it seems that Sally would say the same thing when uttering (2b) on day 2, or (2c) on day 3:

- (2b) There is a sea battle today.
- (2c) There was a sea battle yesterday.

Hearing (2b) or (2c) from Sally, we would be naturally inclined to admit that what she said was either true or false. But if what she said is true (or false), and she said the same thing (i.e. expressed the same proposition) as Jake, then what Jake said uttering (2a) must also be true (or correspondingly false). Put this way, the determinacy intuition would be directly about (2b) and

(2c), and indirectly, via a different intuition of same-saying, about (2a). Anyhow, we would be compelled to assign a truth-value to (2a), and this, according to MacFarlane, would go against the indeterminacy intuition:

If Jake's utterance is neither true nor false, as the indeterminacy intuition demands, it is not true and it is not false. But the determinacy intuition demands that it must be one or the other. (MacFarlane 2003: 327)

It is interesting that, in this context, estimates of the future like (1a) and (2a) have rarely been compared with other utterances about the future, like (3) and (4), that can be taken to be not only estimates of the future but also expressions of intention, or, using speech act theoretic jargon, a commissive (a promise, for instance) and a directive (e.g. an order), respectively. I contended elsewhere (Korta 2015) that the comparison sheds some light on the competing intuitions on future contingents, and I still think it does. But I think I was wrong in taking estimates of the future to be non-assertions. I reconsider this in section 4, but, before I do so, I need to introduce some basic notions of speech act theory.

3. Basic notions of speech act theory

An early lesson from John L. Austin (1961, 1962) was that asserting that a certain state of affairs is real is one among many things we can do with utterances. We can get married, baptise a ship, promise to finish a paper, bet 20 euros that our favorite team will win the match, etc. John Searle (1969, 1975) developed Austin's insights into what is known as speech act theory, according to which, in a speech act, we should distinguish between its illocutionary force F and its propositional content p . In the right circumstances, the following utterances would share their propositional content but differ in illocutionary force:

- (9) John left the room.
- (10) [=3] I will leave the room [uttered by John].
- (11) John, leave the room!
- (12) I wish John would leave the room.

The propositional content p contains John, a certain room, and the action of leaving the room at a particular time t .⁴ But each utterance constitutes a speech act with a different illocutionary force F that belongs to a different class of illocutionary act. According to Searle (1975), illocutionary points

serve to build the taxonomy of speech acts into five classes: assertives, commissives, directives, declaratives and expressives. Each illocutionary point determines a certain sincerity condition, a direction of fit,⁵ and certain conditions of satisfaction, that together with some other elements of the speech act like the preparatory conditions, the mode of achievement, or the degree of strength, determine the illocutionary force of the speech act.

An assertion like (9) illustrates the assertive illocutionary point, which consists in representing a state of affairs as real. That's what the speaker minimally intends when making an assertion, according to speech act theory. Besides, the sincerity condition establishes that the speaker believes that the state of affairs is real, i.e. that the propositional content of the speech act is true. That's the mental state she expresses in producing a speech act with assertive illocutionary point. The direction of fit of an assertion is words-to-world (or downward, ↓), that is to say, the propositional content is supposed to fit reality, which is supposed to be causally independent of the speech act. The conditions of satisfaction of an assertive are just its truth-conditions: an assertive illocutionary act is satisfied if and only if its propositional content is true.

A promise like (10) is the standard commissive act, in which the speaker commits to perform a future action. If he's sincere, he intends to perform the action represented by the propositional content. In this case, the direction of fit is world-to-words (or upward, ↑), i.e. it is the world that is supposed to fit the words; and the change in the world is causally dependent on the propositional content, as the speech act will be satisfied if and only if the speaker performs the action because he committed to do it.

(11) is an order, the paradigm of the directive illocutionary point. Here, the speaker tries to make the addressee do the act represented by the propositional content, and she is sincere if she desires the addressee to do so. The direction of fit is again world-to-words (or upward, ↑), i.e. it is the world that is supposed to fit the words; and the change in the world is causally dependent on the propositional content, because the speech act will be satisfied if and only if the addressee performs the action with the intention to comply with the order.

(12) is an expressive speech act, but for the sake of simplicity, I will ignore expressives here, as I will also ignore speech acts with the declarative point, which roughly correspond to explicit performatives.

For my purposes in this paper, there is another component of the illocutionary force of a speech act that deserves attention: the conditions on the propositional content. Some illocutionary points put some conditions on the propositional content of the speech act. The commissive point, for instance, requires that the propositional content represent a future action of the speaker, while the directive requires it to represent a future action of the addressee. The assertive illocutionary point,

however, does not pose any such condition on the propositional content, which is an important difference between assertives, on the one hand, and commissives and directives, on the other.⁶

4. Estimates of the future are assertives

Turning to predictions, one might ask whether they have any speech act theoretic feature other than being about the contingent future. In Korta (2015), I argued that they do. Contrary to what traditional speech act theory assumes,⁷ I contended that our estimates of the future have the world-to-words (\uparrow) direction of fit because they are about the future. So, utterances like (1a) and (2a) should be classified together with commissives and directives, and separated from assertives. The notion of direction of fit is central to speech act theory but it is not clearly defined and I suspect that my mistake was to take the notion of direction of fit to involve a temporal relation instead of a causal one.⁸ As I took it, the difference in direction of fit would amount to this: at the time of utterance, the truth-makers of asserted propositional contents are situated in the present or the past, while the truth-makers of propositional contents of predictions —including commissives and directives— are situated in the future. But I now see that this is quite wrong.

Causes typically precede effects, so when the utterance (words) is causally relevant for the occurrence of the event (world), and, hence, there is a world-to-words direction of fit (\uparrow), then the event (world) will typically lie in the future with respect to the utterance (words). Yet, we have no guarantee that the reverse is also true. We cannot establish that whenever the event lies in the future of the speech act there is a world-to-words direction of fit (\uparrow). Furthermore, we have several reasons to say that the suggested correspondence between direction of fit and temporal order of utterance and event is incorrect. For one, there is the fact that we can have an utterance occurring more or less simultaneously with the relevant event with either of the two main directions of fit. Suppose you are typing (world) as you think (words). As pointed out by Anscombe herself (and, apparently, other distinguished scholars some time earlier about other cases), this can be considered a case in which your thoughts represent truly (or falsely) what you are typing. But it can also be taken to be a case in which you type to fit what you think:

[...] facts are, so to speak, impugned for not being in accordance with the words, rather than vice versa. This is sometimes so when I change my mind; but another case of it occurs when e.g. I write something other than I think I am writing: as Theophrastus says (Magna Moralia, [footnote: Assuming that we are correctly told that Theophrastus was the

author.], 1189b 22), the mistake here is one of performance, not of judgement.
(Anscombe 1957: 4-5)

Besides, in assertives, which have words-to-world (↓) direction of fit, the speech act is satisfied if and only if the state of affairs represented by the propositional content exists, with no causal and, hence, no temporal relation between propositional content and state of affairs. There is no condition over the present, past or future existence of the state of affairs. Commissives and directives, on the other hand, establish causal conditions on the occurrence of the event represented by the propositional content. And that's what makes them have a world-to-words (↑) direction of fit.

When we promise something or issue an order, future events happen because they were promised or ordered; because the speech act was made with a certain illocutionary force and a certain propositional content. In contrast, when we estimate that such-and-such will happen, the occurrence of the such-and-such is independent of the speech act; it would have happened all the same, even if nobody had estimated anything.⁹

To make things clearer, it can be worth comparing a mere estimate of the future with a promise made using the very same sentence and with the very same propositional content. As Anscombe's example of the shopping lists (1957: 54-55) shows, a difference in direction of fit results in different conditions of success and failure. Consider a man going shopping using a shopping list and a detective following his steps and writing down everything the shopper buys. Ideally, the contents of the two lists will be identical. But a discrepancy between list and reality in each case will be significantly different. If the shopper's list reads chicken and he buys turkey, the error is in his actions, not the list. But if the detective's list says chicken when the shopper buys turkey, the error is on the list, not the actions. The resolutions are, of course, very different. The detective should correct her list. The shopper would be cheating or self-deceiving if he did that.

Let's now turn to see what would count as a discrepancy between propositional content and the relevant event, and what would constitute a resolution in each case. Consider the sentence

(13) In 2020, I'll be married and with children.

This can clearly be a promise, i.e., an expression of intention, a speech act with world-to-words (↑) direction of fit, whose fulfilment requires not only that the speaker be married and with children in 2020, but also that the speaker brought about that state of affairs because she wanted to fulfil the promise. But the utterance can also be a mere estimate of the future, whose fulfilment does not require more than the truth of the propositional content. If in 2020 the speaker is not married and with children, it is clear that the discrepancy has different sources in each case. Not fulfilling a promise is a matter of performance; when the time arrives, I do not do what I promised to do (the

error is in the shopper's acts). Making an inaccurate estimate of the future is an error of judgment; as it turns out, when I uttered (13) I had wrong beliefs or expectations (the error is in the detective's list).

If this is so, pace Korta (2015), we should conclude that estimates of the future are assertives and have words-to-world (\downarrow) direction of fit, while commissives and directives have world-to-words (\uparrow) direction of fit. Other than that, the account given in Korta (2015) on the competing intuitions regarding our estimates of the contingent future is left practically intact. The determinacy intuition is just a by-product of an intuition of same-saying —or common propositional content— among utterances with different temporal relations to the relevant state of affairs. The indeterminacy intuition is a natural consequence of our estimates of the future. Their truth-maker is inexistent at the time of the utterance, so they have no truth-value then. The notion of propositional content in speech act theory is problematic, however. That is our next issue.

5. The propositional content of illocutionary acts

There are at least two problems related to the notion of propositional content that should be addressed. One concerns all kinds of speech acts and belongs to the roles of the notion within speech act theory. The other is particular to predictions and affects any theory of propositional content that takes at least some constituents of the proposition to depend on the existence of particular objects or events. The solution to both problems will come from the adoption of a view that puts forward content-pluralism. I will start by considering the first general problem.

As Korta and Perry (2007) argue, the notion of propositional content is supposed to play two roles in speech act theory. On the one hand, the propositional content represents what utterances like (9)-(12) have in common in the right circumstances: what they say. This is what remains when all components of illocutionary force are left aside. We can represent this propositional content as the proposition constituted by a certain individual, John, a certain room, the act of leaving and some particular time:¹⁰

(14) **JOHN LEAVE THE ROOM AT T.**

Being the propositional content that is common to all these speech acts requires objects themselves to be the constituents of the propositions, and not any identifying condition associated to the particular expressions used. Take (9) and (10), for instance. The speaker of (9) uses the name 'John' to refer to John; in (10) he uses the first-person singular pronoun. If there is a common element contributed by these two sub-utterances, it must be their referent. The same seems to be the case for

any other referential expression. This means that the notion of propositional content as the common content of utterances with different illocutionary force (in the appropriate circumstances) favours a direct reference view on the contribution of referential terms to the propositional content. It also points to a de-tensed view of the representation of time such that the temporal adverbs in (2a)-(2c) contribute with a particular day to their common propositional content, and not with any inherently perspectival identification of the day.

As I have explained in section 3, however, speech act theory assumes that illocutionary points and forces can put some requirements on their propositional contents. The commissive illocutionary point, for instance, requires the propositional content to represent a future act of the speaker, and thus (14) would not be an appropriate formulation of the propositional content of (10). Instead, the correct propositional content respecting the conditions established by the commissive illocutionary point would be the following one:¹¹

(15) ***THE SPEAKER OF (10) LEAVES THE ROOM AT A TIME LATER THAN THE TIME OF (10).***

This proposition is determined by the fact that a certain utterance —(10)— has occurred and the meaning of the sentence uttered. It is a general (existential) proposition about the speaker of the utterance and a time which is later than the time of the utterance, and it is singular about the utterance itself (and the room). (15) meets the requirements imposed by the commissive illocutionary point, but the price is to include elements that, following the previous notion of propositional content as the common content of (9)-(12), were required to be left aside in (14). In other words, the two roles that the notion of propositional content is required to play in speech act theory yield two different propositions for an utterance of (10): (14) and (15). (14) represents faithfully the propositional content common to (9)-(12), but it is not able to meet the propositional content conditions of the commissive illocutionary point of (10).¹² (15) appropriately represents these conditions but does not work as a representation of the common propositional content of (9)-(12).

This dilemma points toward a general assumption in contemporary semantics and pragmatics that Korta (2007) dubs ‘monopropositionalism’. Leaving presuppositions and implicatures aside, monopropositionalism associates one single proposition to the utterance; a proposition which is supposed to play various semantic or pragmatic roles such as what is said, the proposition expressed, the literal content, the literal truth-conditions, the subject matter, the thought expressed, the common possible content of speech acts with different illocutionary points, and what not. The problem is that, as in speech act theory, it is impossible for a single proposition to play all these roles. A way out of the dilemma is to adopt a content pluralism like the one proposed by Perry (2012) and Korta and Perry (2011, 2013).¹³

According to Korta and Perry's content-pluralism, (14) and (15) correspond to (10)'s referential content and utterance-bound (reflexive) content, respectively. The utterance-bound content is determined by the meaning of the sentence used plus the fact that an utterance of that sentence has been made. This does not constitute what the speaker said in uttering the sentence nor its subject matter, but it is the relevant propositional content when considering the propositional content conditions established by the illocutionary point. To get at the subject matter, we need to consider the referential content of the utterance that gets determined by what determines the utterance-bound-content plus the facts that determine the referents of names, pronouns and other referential expressions. This is the kind of content that gets at what the utterances (9)-(12) have in common.

This sort of content-pluralism, which is independently motivated to deal with problems related to reference and communication, is well equipped to tackle the general problem of the notion of the propositional content in speech act theory as well as another problem that has to do with the propositional content of our predictions.

6. The propositional content of predictions

As I said in section 1, our only explicit metaphysical assumptions about time are that time exists, that we can refer to instants or intervals as objects, and that the future is open. These assumptions require that the events (states, acts...) that our predictions predict do not exist at the time of utterance. As Perry puts it,

Until an event happens (...), the event is a merely possible event, and not a real event. And by saying it is merely a possible event, I mean to say, basically, that it is not an event at all; there are descriptions and abstract types, that will denote or characterize the event once it exists to be denoted or characterized. But there is no concrete event. (Perry 2006: 15-6)

This sounds pretty plausible to me. It does not affect the propositional content of all predictions, however. Even if events are the truth-makers of the propositional content of predictions, and do not exist at the time of utterance, they do not belong to the propositional contents of all predictions. Take (1a), for instance.

(1a) It will rain in Donostia tomorrow.

The speaker of (1a) refers to Donostia and tomorrow, given the singular terms used in the sentence and the contextual facts determining a particular town and a particular date, but there is no reference to a particular event. The event is not a constituent of the propositional content of (1b) or (1c) either (uttered on the subsequent two days, respectively):

(1b) It is raining in Donostia today.

(1c) It rained in Donostia yesterday.

Here, the event is not referred to, but existentially quantified over. Similarly, (2a)-(2c) do not refer to any sea-battle, so the inexistence of the sea-battle at the time of (2a) creates no problem. There is no problem with (2a)-(2c) sharing a common propositional content either. This agrees with our diagnosis of the indeterminacy intuition associated to predictions, which is also in tune with Broad's view:

[Predictions] do not refer to any fact, whether positive or negative, at the time when they are made. They are therefore at that time neither true nor false. They will become true or false when there is a fact for them to refer to; and after this they will remain true or false, as the case may be, for ever and ever. (Broad 1923: 73)

The problem with the propositional content of predictions arises with singular terms that are supposed to refer to future individuals, i.e. individuals that do not exist yet. I am not talking about an utterance like (13). In this case, if uttered by me, the first-person pronoun refers to me at the time of the utterance, and not to my future self in 2020. I am thinking about utterances like (16), in which I could be using the name 'Kepa junior' to talk about the first son I will eventually have:

(16) Kepa Junior will have curly hair.

Kepa Junior does not exist and, given present circumstances, will also not exist in the immediate future, so the time referred to is an indeterminate and possibly distant future. So, given that 'Kepa Junior' is a proper name, i.e. a referential term that normally contributes its referent to the propositional content of the utterance, how can an inexistent individual be referred to and enter as a constituent of the prediction?

A solution is the admission of gappy propositions; propositions that have empty slots and have no values (references) for future individuals. This kind of proposition is used for the case of "empty" and fictional names, for example.¹⁴ Another option is to bite the bullet and accept that the causal-historical chains that secure reference backwards do also work forward and secure reference to

future objects (Jeshion 2010). With these options in mind, let's explore another way here: the solution put forward by content-pluralism.

Once we admit that utterances can have at least two kinds of contents —one referential, the other utterance-bound— the solution comes natural. At the time of the utterance, (16) does not have referential truth-conditions, because “*Kepa Junior*” does not have a referent, since Kepa Junior does not exist. The name, however, provides an identifying condition for an individual in the future. In other words, at the time of utterance, (16) does not express a singular proposition about my son but a general one about the future existence of such an individual. Like any other prediction, the utterance does not have a truth-value at the time of the utterance, but it has complete truth-conditions; it is thus a complete proposition, and not a gappy one.¹⁵

The problem of the propositional content of predictions would generalise if we make stronger metaphysical assumptions about the inexistent future. In this case, any prediction would involve a referential gap, because as Broad puts it:

Something called tomorrow is not a constituent of judgments which are grammatically about “to-morrow”, any more than the individual called Puck is a constituent of judgments which profess to be about “Puck”. (Broad 1923: 77)

The problem, of course, concerns not only “*tomorrow*”, but any prediction. If we assume, as I do, that propositions are temporally complete and that they include a temporal parameter (articulated or unarticulated by the sentence uttered), all predictions should include a temporal future element; but what could this parameter be, if future times, dates and years do not exist? How do we refer to inexistent times? Well, we do not; we only describe them.

According to the proposed solution, the propositional content of predictions would involve identifying descriptions of days instead of days themselves. Take (1a), at the day of the utterance. Given the inexistence of the day corresponding to “*tomorrow*,” it would lack referential truth-conditions, but it would have utterance-bound truth-conditions:

(16) RAIN ON ***THE DAY AFTER THE DAY IN WHICH (1A) OCCURRED*** IN DONOSTIA.

(16) is the utterance-bound content of (1a). It is a singular proposition about Donostia and (1a). The utterance itself is also a constituent of the proposition, but, at the time of the utterance, the following day is not. In its place, we have an identifying condition —i.e. the day after the day of the utterance. Given that the utterance occurred on a particular day, say, August 30th, 2015, we can also distinguish its *time-bound* content:

(17) RAIN ON *THE DAY AFTER AUGUST 30TH, 2015* IN DONOSTIA.

or, equivalently:

(18) RAIN ON *AUGUST 31ST, 2015* IN DONOSTIA.

Notice, however, that this is not a singular proposition about that date, neither can it be, given that we assumed that (1a) was uttered on August 30th and future days do not exist. The day itself is not a constituent of (18), but just the identifying condition provided by the date (in bold italic).¹⁶

It can be concluded then, that the issue of the propositional content of predictions, even when generalised by a certain conception of time that takes the future to be inexistent, is satisfactorily tackled by a content-pluralism à la Korta and Perry. Of course, this does not count as evidence for that or any other metaphysical view about time, but it shows that content-pluralism offers a natural way of dealing with a common-sense view about the future and our natural ways of talking and thinking about it.

7. Conclusions

In this paper, I have done two things. First, I have amended a previous approach to predictions that held them all to have a world-to-words (↑) direction of fit and that separated estimates of the future from the speech acts with assertive illocutionary point. Second, I have offered a content-pluralistic view of the propositional content of predictions.

Regarding the first issue, I have argued that estimates of the future are assertive —they have words-to-world (↓) direction of fit, but still, like commissives and directives, they are not true or false at the time of utterance, so the indeterminacy intuition is justified. The determinacy intuition, on the other hand, stems from intuitions of same-saying that only arise when the circumstances for doing the correspondent assertions about the present and, then, the past are met, that is to say, the event satisfying the speech act has occurred.

Regarding the second issue, I have shown, first, that the notion of propositional content is problematic for speech act theory and, second, that, given some assumptions about the future derived from a conviction that it is metaphysically open, predictions can be taken to have incomplete propositional contents. I have demonstrated that a pluralistic view of content à la Korta and Perry (2011, 2013) provides a natural account for both these issues, by suggesting that our predictions lack a truth-value at the time of utterance, but do have full truth-conditions, even when

they concern inexistent events, objects or times. In those cases, predictions lack *referential* truth-conditions, but they do have *utterance-bound* or *reflexive* truth-conditions.

References

- Anscombe, G. E. M. 1957. *Intention*. Oxford: Blackwell.
- Austin, John L. 1953. How to talk--some simple ways. *Proceedings of the Aristotelian Society* 53. 227-46.
- Austin, John L. 1961. Performative utterances. in J.O. (James Opie) Urmson & G.J. (Geoffrey James) Warnock (eds.), *Philosophical papers*. Oxford: Clarendon.
- Austin, John L. 1962. *How to do things with words*. Oxford: Clarendon.
- Bach, Kent 1999. The myth of conventional implicature. *Linguistics and Philosophy* 22. 327-366.
- Bach, Kent & Robert M. Harnish. 1979. *Linguistic communication and speech acts*. Cambridge, MA: The MIT Press.
- Broad, C. D. (Charlie Dunbar) 1923. *Scientific thought*. London: Kegan Paul.
- Carston, Robyn 2002. *Thoughts and utterances: The pragmatics of explicit communication*. Oxford: Blackwell.
- Gale, Richard M. 1968. *The language of time*. London: Kegan Paul.
- Gale, Richard M. & Irving Thalberg 1965. The generality of predictions. *Journal of Philosophy* 62. 195-210.
- Jeshion, Robin 2010. Singular thought: Acquaintance, semantic instrumentalism, and cognitivism. In Robin Jeshion (ed.) *New essays on singular thought*. Oxford: Oxford University Press.
- Korta, Kepa 2007. Acerca del monoproposicionalismo imperante en Semántica y Pragmática. *Revista de Filosofía* 32. 37-55.
- Korta, Kepa 2015. Mañana lloverá (o no): Aserciones, predicciones y verdad. In Eleonora Orlando (ed.), *Significados en contexto y verdad relativa: Ensayos sobre semántica y pragmática*, 243-264. Buenos Aires: Título.
- Korta, Kepa & John Perry 2007. How to say things with words. In Savas L. Tsohatzidis (ed.), *John Searle's philosophy of language: Force, meaning, and thought*, 169-189. Cambridge: Cambridge University Press.
- Korta, Kepa & John Perry 2011. *Critical pragmatics: An inquiry into reference and communication*. Cambridge: Cambridge University Press.
- Korta, Kepa & John Perry 2013. Highlights of *Critical Pragmatics*: reference and the contents of the utterance. *Intercultural Pragmatics* 10. 161-182.

- Korta, Kepa & María de Ponte 2014a. Tenses, dates and times. *Research in Language* 12. 1-17.
- Korta, Kepa & María de Ponte 2014b. On times and contents. In Iwona Witzak-Plisiecka (ed.), *Cognitive and Pragmatic Perspectives on Speech Actions*, Berlin: Peter Lang. 13-34.
- MacFarlane, John 2003. Future contingents and relative truths. *The philosophical quarterly* 53. 321-336.
- Neale, Stephen 1999. Coloring and composition. In Kumiko Murasugi & Robert Stainton (eds.), *Philosophy and linguistics*, 35-82. Boulder, CO: Westview.
- Perry, John 2006. How real are future events? In Friedrich Stadler and Michael Stöltzner (eds.), *Time and History, Proceedings of the 28th International Wittgenstein Symposium*, 13-30. Frankfurt : Ontos Verlag.
- Perry, John 2012. *Reference and reflexivity*. 2nd edn. Stanford: CSLI Publications.
- Perry, John 2013. Temporal indexicals. In Heather Dyke & Adrian Bardon and (eds.), *A companion to the philosophy of time*, 486-506. Oxford: Blackwell.
- Prior, Arthur 1959. Identifiable individuals. *Review of Metaphysics* 12. 521-539. [Reprinted in Prior, Arthur. 1968. *Papers on time and tense*. Oxford: Clarendon Press].
- Ryle, Gilbert. 1954. *Dilemmas*. Cambridge: Cambridge University Press.
- Searle, John R. 1969. *Speech acts: An essay in the philosophy of language*. Cambridge: Cambridge University Press.
- Searle, John R. 1975. A taxonomy of illocutionary acts. In Keith Gunderson, (ed.), *Language, Mind and Knowledge*. Minneapolis: University of Minnesota Press, 344-369.
- Searle John R. 1979 *Expression and meaning*. Cambridge: Cambridge University Press.
- Searle, John R. & Daniel Vanderveken 1985. *Foundations of illocutionary logic*. Cambridge: Cambridge University Press.
- Vanderveken, Daniel. 1990. *Meaning and speech acts: Volume I - Principles of language use*. Cambridge: Cambridge University Press.

Notes

¹ I am grateful to Josu Acosta, Eros Corazza, María de Ponte, Joana Garmendia, John Perry and Larraitz Zubeldia for their comments and suggestions. I also thank Stavros Assimakopoulos for his patient help. The work was partially supported by grants of the Spanish MINECO/FEDER (FFI2012-37726; FFI2015-63719-P) and the Basque Government (IT780-13).

² Awarded *the Philosophical Quarterly* Essay Price 2002, this paper has had a great impact in the literature on future contingents, and relative truth applied to problems of ‘faultless’ disagreements, aesthetic judgments, epistemic modals, etc.

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- ³ With regard to the weather, we might think that there is no room for indeterminacy, but global climate change seems to show that the intervention of humans can decisively affect the future.
- ⁴ At this point, I am assuming that propositional contents are non-relative regarding time, and adopt a fairly orthodox notion of propositional content. In sections 5 and 6 that follow, we will see that this notion needs to be refined and substantially changed to meet the requirements of speech act theory.
- ⁵ The term “direction of fit” was coined by Austin (1953) but was made popular by Anscombe (1957) and especially Searle (1969, 1975). For a systematic and formal presentation of these notions, see Searle and Vanderveken (1985) and Vanderveken (1990).
- ⁶ Incidentally, I venture that the propositional content conditions of commissives and directives should also include that the propositional content brings about a contingent event. According to Searle (1969), a promise to do something that is going to be done, anyway, is a defective promise, and the same seems to go for commissives in general and, perhaps, directives also.
- ⁷ See, for example, Searle (1975), Bach and Harnish (1979), Searle and Vanderveken (1985), Vanderveken (1990).
- ⁸ “It would be very elegant if we could build our taxonomy entirely around this distinction in direction of fit, but though it will figure largely in our taxonomy, I am unable to make it the entire basis of the distinctions” (Searle 1975/1979: 4).
- ⁹ So-called “self-fulfilling” prophecies present an interesting exception. Prophecies, in general, are a kind of estimate about the future, with words-to-world (↓) direction of fit; self-fulfilling prophecies, however, play a causal role in their own satisfaction, causing the occurrence of the event that is being predicted, so their direction of fit seems to be world-to-words (↑). Or, perhaps, they have double direction of fit like declaratives.
- ¹⁰ Small capitals are used to represent propositions. Roman bold means that it is the objects themselves which are the constituents of the proposition, and not any identifying condition associated with them via the particular expression used. In this case, it is also assumed that the incomplete description ‘the room’ is used referentially and that the verbal tense refers to a particular time.
- ¹¹ Italic bold indicates that it is the identifying conditions associated to the first-person pronoun and the future tense particle which are constituents of the proposition and not the referents themselves.
- ¹² The same point arises with a directive like (11), of course. The common propositional content would be aptly represented by (14), while the proposition meeting the propositional content conditions of the illocutionary point would include the condition of being the addressee of the utterance who performs the act at a later time.
- ¹³ Bach (1999), Carston (2002) and Neale (1999) are early proposals of different versions of content-pluralism for particular issues. For a content-pluralistic account of tense and time, see Korta & Ponte (2014a, 2014b).
- ¹⁴ Broad (1923) takes future times to be fictional entities and compares an expression like “*tomorrow*” with fictional names, as we will shortly see.
- ¹⁵ A consequence of this approach is that we cannot express singular propositions or entertain singular thoughts about future entities. This is in agreement with Gale (1968), Gale and Thalberg (1965), Prior (1959) and Ryle (1954).
- ¹⁶ This supports Perry’s suggestion that dates are descriptions, designating days in terms of an identifying condition, but quite extraordinary descriptions given their systematicity (see Perry 2013).