A conceptual and a grammatical distinction for modals

The progressive and habitual uses of imperfectives have been claimed to be modal, with universal quantification over “normal” or “inertial” worlds or situations (Cipria and Roberts 2000, e.g.). Futures such as *be going to* and *will* have also been claimed to be modal in the same sense (Copley 2002, e.g.). Assuming that both claims are correct, an account of the obvious differences between modal aspects and modal futures is needed.

Traditionally, it has been presumed that modal aspects place an event simultaneous with the local evaluation time (LET), while modal futures place it following the LET (where the LET is determined by tense). Contrasts such as the one in (1), for example, support such a generalization. Yet in many languages, English included, this generalization is not valid. It is well known that progressive sentences can be used to talk about the future when the event under discussion is something that is planned or scheduled, as in (2a), and indeed the modal future *be going to* in (2b) seems to make a similar reference to an ongoing intention for John to make pizza. The same pattern is observed in habituals and dispositional *will* sentences, both of which assert a lawlike connection between the subject and the event. The difference, at least initially, appears to be that habituals (as in (3a)) require the event to have been instantiated at least once. But as pointed out by Carlson (1995), some habituals do not require instantiation, as in (4a). Crucially, the event there is intended by (we assume) the faculty; the law is manmade rather than physical.

The new generalization is given in (5); only in non-intentional cases does a difference between modal aspects and modal futures appear with respect to instantiation in the actual world, at or before the LET. The generalization applies to conditionals as well, as demonstrated in (6) through (9). Since the aspectual or future modal takes scope over the entire conditional (Figure A), the entire causal sequence must be instantiated in the case of inertial modal aspects. This is apparently impossible with non-intentional progressives, as well as with habituals that refer to non-repeatable events (but repeatable events are predictably fine, as in (10)).

These facts suggest a theory in which a *conceptual distinction* between physical forces and intentional forces (i.e., “forces of will”, obligations or plans applied by animate entities) interacts with a *grammatical distinction* between modal aspects and modal futures. The conceptual distinction: Forces of will, unlike physical forces, have effects spatiotemporally distant from the time and place at which the force is applied; i.e., an obligation or a plan can be placed on someone else somewhere else now to do something in the future. Interestingly, this conceptual distinction is apparently not reflected in the grammar, at least in these modals. For instance, the intentional cases, as in (2), can be made infelicitous or false if there are stronger physical forces than the intention (e.g., John is stuck on a desert island so he isn’t making pizza tomorrow, no matter how much he wants to). Apparently without regard to whether the net force is intentional or physical, the modal quantifies universally over the worlds in which that force is not disturbed by outside forces (this is inertia, essentially as an ordering source, cf. Kratzer (1991)). The grammatical distinction: Modal futures can use any forces, motions, or positions to calculate a net force. Modal aspects, however, calculate a net force only from forces whose application is spatiotemporally local to the subject; motion and position of the subject are also considered. Thus modal aspects can refer to an event (effect) distant from the LET only when the net force is intentional. With a physical force, the event must overlap the LET, as physical forces cannot have distant effects.

This theory also promises to relate the modality of aspects and futures to root modality. Cross-linguistically, root modals can be realized with either aspectual or future morphology. The Tagalog abilitative, which expresses physical ability, is one such modal (11). Compositionally such forms are obscure; e.g., a future-marked abilitative does not mean “will be able to.” But the imperfective-marked form requires instantiation, while future-marked form does not, as expected if the contrast is the grammatical distinction argued for above. Indeed, preliminary cross-linguistic investigations suggest that this grammatical distinction is quite common among root modals.
(1)  
  a. #John is getting sick tomorrow. modal aspect, physical
     b. John is going to get sick tomorrow. modal future, physical

(2)  
  a. John is making pizza tomorrow. modal aspect, intentional
     b. John is going to make pizza tomorrow. modal future, intentional

(3)  
  a. #Our grad students are so tough, they even eat cardboard, though thankfully it’s never come to that. modal aspect, physical
     b. Our grad students are so tough, they will even eat cardboard, though thankfully it’s never come to that. modal future, physical

(4)  
  a. Our grad students answer the mail from Antarctica, though there hasn’t been any so far. modal aspect, intentional
     b. Our grad students will answer the mail from Antarctica, though there hasn’t been any so far. modal future, intentional

(5)  
  Physical: Modal aspects require instantiation, modal futures do not
     Intentional: Neither modal aspects nor modal futures require instantiation

If you drop that vase...

(6)  
  a. #...it’s breaking. modal aspect, physical
     b. ...it’s going to break. modal future, physical

(7)  
  a. ...you’re picking it up. modal aspect, intentional
     b. ...you’re going to pick it up. modal future, intentional

(8)  
  a. #...it breaks. modal aspect, physical
     b. ...it will break. modal future, physical

(9)  
  a. ...you pick it up. modal aspect, intentional
     b. ...you will pick it up. modal future, intentional

(10) If you drop a vase/that kind of vase, it breaks.

(11) **Dell (1987)** (physical forces only)
     a. Nakakainom siya ng sampung bote nang sunod-sunod. abil-impf-drink he-nom gen ten bottle nang follow-follow
        ‘He can drink ten bottles in a row.’ (must have at least started to do so)
     b. Makakainom siya ng sampung bote nang sunod-sunod. abil-future-drink he-nom gen ten bottle nang follow-follow
        ‘He can drink ten bottles in a row.’ (need not ever have done so)

References


