

What are Conditional Intentions?

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Abstract

The main thesis of this paper is that, whereas an intention *simpliciter* is a commitment to a plan of action, a *conditional* intention is a commitment to a contingency plan, a commitment about what to do upon (learning of) a certain contingency relevant to one's interests obtaining. In *unconditional* intending, our commitment to acting is not contingent on finding out that some condition obtains. In conditional intending, we intend to undertake an action on some condition, impinging on our interests, which is as yet unsettled for us, but about which we can find out without undue cost.

Genuine conditional intentions are appropriate when we explicitly consider what to do in various contingencies . . .

Donald Davidson

1 Introduction

Conditional intentions are the upshot of contingency planning—that is, planning about what to do upon various contingencies obtaining that impinge on our interests. If I say that I intend to leave the party early *if my nemesis shows up*, I express the result of a bit of contingency planning. Contingency planning, both specific and general, is a pervasive feature of the life of any planning agent with a plurality of potentially conflicting goals in conditions of epistemic uncertainty about circumstances that bear on the reasonableness of action. For agents who are capable of conceiving of a branching future, conditional intentions are the outcome of practical deliberation as often, or perhaps even more often, than unconditional intentions. Conditional intentions turn out to be especially important in understanding many forms social interaction and cooperation.¹ Discussions that focus on conditional intentions, however, are in short supply, and I believe that we do not yet have a wholly satisfactory account.²

¹ See Ludwig (2014) for a discussion, inter alia, of the role of generalized conditional we-intentions in sustaining status functions and roles in social organization. See also Roth (2004, sec. 4) who discusses conditional intentions in the context of collective action and intention, and Minto (2004), who discusses the role of conditional intentions in agreement.

² Davidson (2001, pp. 92-95), originally published in 1978, provides a seminal if brief discussion of conditional intentions. As my epigram indicates, I draw my central theme from Davidson. Bratman (1979) contrasts simple or unconditional intention with conditional intention. Castañeda discusses conditional intentions in sections III and IV of Castañeda (1982), and provides examples of two mistakes, which I will note below. Bach (1984, p. 50) draws a distinction between conditional (I intend to *A* if *C*) and qualified intentions (I intend to *A* unless *C*), which parallels the distinction between conditional intentions that rely on reason-providing conditions and enabling conditions, as distinguished below. Critical discussion of Davidson's remarks can be found in Bratman (1985), Velleman (1997, 1989) and Scheer (1989). Cartwright (1990) and Campbell (1983) contain connected discussions of conditional intentions in relation to *mens rea* in the law. Vermazen (1993a) provides an interesting discussion of a range of different kinds of conditional intentions, and I will note some differences on particular points in the notes. Four recent discussions are Jacquette (2003), Klass (2009), Yaffe (2004) and Ferrero (2009). Klass and Yaffe are concerned with conditional intention in the context of the law. Jacquette (2003) is concerned with reasoning involving expressions of conditional intent. Aside from Davidson, I am most indebted to Ferrero (2009), who provides the most thorough and searching extant discussion of conditional intentions, though I depart in some important ways from Ferrero's analysis, particularly in not seeing the deep structure of intention as almost invariably involving enabling and reason-providing conditions. I will note differences between my account and Ferrero's in the discussion and notes, and highlight the most important thematic

What are conditional intentions? The main thesis of this paper is that, whereas an intention *simpliciter* is a commitment to a plan of action Bratman (1987), a *conditional* intention is a commitment to a contingency plan, a commitment about what to do upon (learning of) a certain contingency relevant to one's interests obtaining.³ In *unconditional* intending, our commitment to acting is not contingent on finding out that some condition obtains. In conditional intending, we intend to undertake an action on some condition, impinging on our interests, which is as yet unsettled for us, but about which we can find out without undue cost. In this paper, I develop this account of conditional intentions. Let us call the *contingency condition* expressed by the subordinate clause of a sentence announcing a conditional intention—such as, 'I intend to leave the party early if *my nemesis shows up*'—the *antecedent* of the conditional intention.⁴ (Note that the *antecedent* here is *not* the *expression* in the subordinate clause but *the condition it expresses*.) In section 2, I focus on constraints on the antecedents of conditional intentions that arise out of the idea that the antecedents are relevant to our interests in acting, and illustrate these with ordinary examples. In section 3, I consider epistemic constraints on the status of the antecedents of conditional intentions, that is, what is involved in thinking of it, from the agent's point of view, as a contingency relevant to planning. In section 4, I consider the relevance of having control over a condition that impinges on our interests to its being a potential antecedent. In section 5, I consider, in the absence of control, whether we can have a conditional intention when we try to influence whether its antecedent obtains or not. In section 6, I give an account of what commitments we incur by having a conditional in-

differences in the conclusion.

³ One limitation of this study is that I focus on conditional intentions expressed by sentences in which the complement of the verb is an infinitival clause in which the verb expresses an action, that is, sentences of the form 'I intend to *A* if *C*' where 'to *A*' is an action verb. Because of space limitations, I leave aside conditional intentions expressed by sentences of the form 'I intend that *p* if *C*'. My view is that intentions expressed by sentences of the form 'I intend that *p*' express either intentions to make it the case that *p* or intentions to make it the case that *p* if needed. The latter might be called maintenance intentions, and are a species of universally quantified conditional intention. Conditional intentions expressed by sentences of the form 'I intend that *p* if *C*' would be analyzed in accordance with the account given in this paper together with the sketch just provided for intentions expressed by sentences of the form 'I intend that *p*'. However, making the case for this would involve an extended discussion, and, in particular, I would need to address the arguments against this provided in Vermazen (1993*a*).

⁴ As Ferrero (2009, pp. 701-702) notes, a conditional intention is not a conditional that makes a statement about an intention in the consequent. If I say, "If I become more conservative in my old age, I will intend to vote for a Republican for President 2025," I am not announcing a conditional intention to vote Republican in 2025 if I become conservative in my old age, but making a prediction about what I will intend. My predication may be true though I have no current commitment to vote Republican upon that condition obtaining. However, if I conditionally intend to do so, I have a current commitment to do so on the condition obtaining. Ferrero usefully calls the first sort of condition external and the second sort internal. See sections 6 and 7 below.

tention, and the relation of conditional intentions to unconditional commitments when we discover that the antecedent obtains. In section 7, I provide an account of the satisfaction conditions of conditional intentions on analogy with the satisfaction conditions of conditional commands. In section 8, I give an account of the underlying logical form of expressions of conditional intentions and offer an explanation of the misleading surface form of the expression of conditional intentions in natural language. In section 9, I distinguish between conditional intentions and commitments to multistage action plans. In section 10, I summarize by providing a taxonomy of conditional intentions by way of their antecedents on the basis of the discussion, and conclude by contrasting my account with the most developed account in the literature by Luca Ferrero (2009).

2 Conditional Intentions and Reasons for and against Action

Since conditional intentions represent commitments to contingency plans about what to do upon ascertaining that certain conditions obtain (in the past, present or future, to be so understood henceforth), the conditions must be relevant to what to do or not if they obtain, from the point of view of the agent (this qualification to be read in henceforth). Thus, they must be relevant to what reasons one has to act or not act in those circumstances. There are two basic ways conditions can be relevant. Their obtaining or not may provide (i) a sufficient reason for undertaking an action (including negative actions), or (ii) a sufficient reason against undertaking an action that one would otherwise want to do.

(i) If I decide to leave the party early because I want to sleep early, I form an unconditional intention to leave the party early. If I decide to study at the library in order to avoid distractions, I form an unconditional intention to study at the library. In contrast, if I decide to leave the party early *if my nemesis shows up*, I form a conditional intention: the intention to leave the party if my nemesis shows up. The antecedent (i.e., contingency condition) provides, given the rest of my beliefs, preferences, and commitments (henceforth *the background*), *a sufficient reason* (for me) to leave the party (throughout reasons are relativized to the agent). The conditional commitment rests on a judgment (perhaps tacit) about what it is best to do all things considered given that the condition obtains. In this sense it is an upshot of contingency planning. This example focuses on what might happen in the future. However, a conditional intention may involve a condition contemporaneous with the intention or lie in its past.⁵ For a contemporaneous

⁵ Vermazen says that “reason-providing conditions must always be satisfied before the conditioned action is undertaken” (Vermazen 1993a, p. 234). But I may certainly have a conditional intention to do something before t , when the condition that provides a reason occurs after t . I may plan on

condition: I may intend to shake your hand *if you intend to shake mine* (or even if you intend conditionally to shake mine on the condition that I intend to shake yours if you so intend). For a past condition: I may intend to take revenge on my rival *if he has insinuated himself with my sweetheart while I have been away*.⁶

A requirement on a conditional intention to do something, when the condition provides a sufficient reason for it (fixing the background—I will elide this for the most part in the sequel), is that one not have a sufficient reason to do it *whether or not the condition obtains*. Otherwise one would form an unconditional intention to do it. Therefore, if I have a conditional intention to leave the party early if my nemesis shows up, I have no flat out commitment to leave early. Nor do I have a commitment not to leave early *if my nemesis does not show up*. The absence of a commitment (at *t*) to *A* in the absence of a certain condition obtaining (at *t*) is not a *commitment* not to *A* if it does not obtain. I may *in fact* intend not to leave early if my nemesis does not show up, but that is not entailed by my intending to leave early if he does. I may not have made up my mind whether I will leave early or not in the absence of my nemesis showing up.

(ii) The antecedents in the examples in (i) provide sufficient reasons *for* doing something. Contrast this with my deciding to study at the library *if it is open*. My commitment to study at the library is conditional on the library's being open, but the library's being open is not a reason to go. It is rather a *precondition on* being able to study at the library.⁷ If the condition does not obtain, then I cannot succeed.⁸ So its not obtaining provides a sufficient reason for me not to undertake (or to intend) to study at the library. In addition, the antecedent's obtaining, in removing a decisive objection to pursuing a course of action, clears the way for me to do something I otherwise have sufficient reason to do. That is, there are

buying tickets for the concert if it is not going to last more than an hour. I can act on this conditional intention without waiting until the concert is over. I just have to ascertain that it will not last more than an hour in order to act. Here one should resist the temptation to assimilate this to a conditional intention to buy tickets *if I come to believe or predict that the concert will not last more than an hour*. That is *not* the *contingency condition* though it is implicated in how it leads me to act. See note 20 for more discussion on this point.

⁶ These cases make it clear that the antecedent in a conditional intention to *A* if *C* is not a condition *the obtaining of which* makes it the case that one intends to *A*, because of course if it obtains and lies in the past or present one's intention is still conditional until one ascertains the condition obtains

⁷ Davidson denied that preconditions generate conditional intentions Davidson (2001). He thought preconditions were mentioned only when an agent wanted not to give a misleading impression of the chances of success. But while that is so in some circumstances (when we take a risk), it is not so for all enabling conditions, and the difference is expressed in whether we are committed to finding out whether condition obtains. See section 3 below.

⁸ *C* is a precondition on *x*'s *A*-ing iff *x* cannot *A* unless *C* as a matter of alethic necessity or nomic necessity (absolute or in the circumstances). In the present case, we are imagining someone who is thinking of studying in the library in a mode (e.g., in conformity with legal codes) that precludes accomplishing his end by breaking in when it is closed.

sufficient reasons to pursue the action provided that the obstacle is removed. That is why, if I find that the library is open, I then go there to study. Again, the condition may be contemporaneous with the intention, as in this example. It may lie in the future, as when I intend to study at the library next Tuesday *if it is open then*. Or it may lie in the past, as when I intend to get an annulment *if the marriage I entered into last night in a drunken haze was not consummated*.⁹

Ferrero (2009, p. 702) would classify the sort of condition in (i), which supplies a *sufficient reason for* doing something (against the background), a *restrictive* condition. Bratman (1985) calls these reason-providing conditions. I will adopt the latter terminology, understanding it to mean that the conditions give a reason *for* what is conditionally intended. Ferrero says that a restrictive condition “is any contingent circumstance that delimits what it takes for the agent to *carry out* her qualified intention to ϕ , that is, to *succeed* in that specific undertaking” (702). The idea is that the condition qualifies the content of the intention, so its obtaining is part of the success condition of the intention. More specifically, the idea is that the intention is to ϕ -in-condition-C. However, this will not be my conception of the relation of the antecedent in cases like (i) to the success conditions of the conditional intention.¹⁰ Ferrero calls the second sort of condition, illustrated in the case of the intention to go to the library if it is open, an *enabling* condition, in the sense of a precondition, following Bratman (1985, p. 19). However, there are also conditional intentions whose antecedents’ obtaining remove reasons against acting that are not strictly enabling conditions in Ferrero’s sense.¹¹ For example, I may intend to run for the nomination in a primary if the incumbent does not, simply out of respect for her. The incumbent’s not running doesn’t provide a rea-

⁹ We suppose here a jurisdiction in which consummation is required for a legal contract of marriage.

¹⁰ On my view, one forms a simple intention in the light of one’s aims and how one thinks the world is. The content of the intention is to perform a certain sort of action by way of that intention and an associated plan. The fact that one would not have that intention if one did not believe (and desire) certain things about the world is not a qualification on its content, but a condition on its rational formation. That does not make the intention a conditional intention. The conditional intention involves a distinctive sort of commitment, with distinctive satisfaction conditions, which include, when the antecedent obtains, that it generate an unconditional intention to perform the previously only conditionally intended action. See sections 6 and 7.

¹¹ On my reading, Ferrero treats enabling conditions as strictly preconditions on action in the sense of conditions on the (nomic or alethic) possibility of the action: “universal enablers of action . . . the general enablers of the action *type* ϕ . . . and the specific enablers required for x ’s performance of a token ϕ -ing in x ’s particular situation” (Ferrero 2009, p. 702). There is a genus under which both sorts of condition fall, and so it is a relatively minor emendation to the taxonomy, but it helps to bring out that what unifies candidates for the antecedents of conditional intentions is that they involve reasons for or reasons against undertaking a course of action. Reasons against breakdown into two subtypes, those that involve conditions on the possibility of the undertaking and those that involve conditions merely on the all things considered reasonableness of the undertaking rather than its possibility.

son to run, and it is not a precondition on running. I could run even if she does. Rather, her running provides a sufficient reason for me *not* to run given my all-in preferences. Her not running removes an obstacle to a course of action I would otherwise take. The contingency can lie in the future, as in this example, or in the present, as when I intend to go to the beach if it is not raining, or the past, as when I intend to purchase a car at a police auction provided that it was not used in a crime.

I will use ‘enabling condition’ to cover both types of antecedent that remove obstacles to action, calling the first sort *preconditions* and the second sort *qualifying conditions*.¹² The basic sorts of conditions are represented in figure 1.¹³

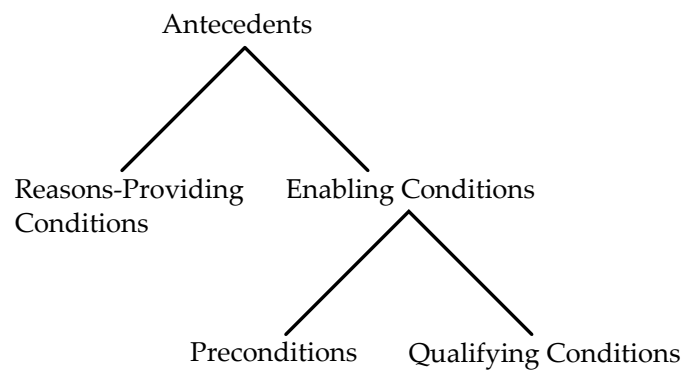


Figure 1.

Enabling conditions contrast with reason-providing conditions in the following way. For a reason-providing condition, intending to *A* if *R* requires that one not intend to *A* flat out, but does not require one to intend not to *A* if *R* is not the case. For a qualifying condition, intending to *A* if *Q* does require one to intend not to *A* if *Q* is not the case, since one has sufficient reasons *to refrain* if *Q* is not the case.

¹² Vermazen suggests there are inherence conditions as well. An example is ‘I intend to belch but only if I can do so unheard’. The idea is that the condition expresses a property of the intended action, and so inheres in it, and is something that cannot be satisfied before the action. However, on the most natural way of understanding this, someone wants to belch (for relief), but would be embarrassed to be heard. The contingency plan is to belch if a moment presents itself during which he will not be heard if he belches. So the conditional intention is more accurately expressed as: I intend to belch if a moment presents itself during which I will not be heard. This is a qualifying condition, like the incumbent not running. It is a condition that removes a consideration sufficient to rule against an action and clears the way for what otherwise one has sufficient reason to do. It may be satisfied before acting but it must also be satisfied at the time of acting. One could of course have the intention to perform an *unheard* belch, but that would be an unconditional intention, like an intention to have a *confidential* talk with someone.

¹³ There can also be mixed condition conditional intentions, as in my intention to study in the library tonight if the library is open and my upstairs neighbor is giving bongo drum lessons again. Here my neighbor giving bongo drum lessons provides a sufficient reason (against the background) to study at the library—provided that the library is open.

Thus, if I intend to run if the incumbent does not, I also intend not to run if the incumbent does. Thus, a qualifying conditional intention also involves a related reason-providing conditional intention directed at a negative action.¹⁴ Given this, one may express the same commitment by saying any of: I intend to run if the incumbent does not, I intend to run (but) only if the incumbent does not, and I intend to run if, but only if, the incumbent does not.¹⁵ In the case of *preconditions*, intending to *A* if *P* also involves a positive commitment not to *A* if it is not the case that *P*. However, since *P* is a condition for the possibility of performing an action

¹⁴ On my view, an intention to not *A* is directed at placing oneself in a state designed to prevent one from *A*-ing.

¹⁵ If I say I intend to *A* only if *B*, I express the commitment not to *A* if not *B*, that is, to conditionally refrain from *A*-ing if not *B*. This is an intention directed conditionally at a negative action. Usually in announcing that one intends to *A* only if *B*, one also intends to convey that one intends to *A* if *B*, which is why ‘I intend to run only if the incumbent does not’ works to express the intention to run if the incumbent does not. This is conveyed because a condition necessary for a commitment is conceived of as something that removes an obstacle to doing it, and there is no point to mentioning an obstacle if removing it is not sufficient for one to have all-in reason to pursue some course of action absent the obstacle. Against this, Vermazen (1993a, pp. 230-231) suggests that one may have an enabling conditional intention to *A* if *C* without intending not to *A* if not *C*. He imagines someone who intends to leave the party early if the back door is unlocked because he wants to leave only if he can do so inconspicuously, but who may leave early if he finds a convenient disguise even if the back door is locked. However, finding a convenient disguise changes the background against which the original conditional intention is formed, for that intention presupposes that a necessary condition on the reasonableness of leaving is that the backdoor be unlocked. (The condition in question is actually a qualifying condition rather than a precondition.) Vermazen also tries to construct a case of a necessary conditional intention only (48-9). His example is “I intend to sign this document if the paper is dry enough.” He imagines that one tests the dryness by trying to sign, and that one also has doubts about the pen having enough ink. But this isn’t a case of acting on a conditional intention. If one tries to sign the document, one simply takes a risk, as one can do in intending to do something, both with respect to the dryness and with respect to whether the pen has ink in it. There is no contingency planning, since that presupposes one acts *on finding that* the condition obtains, but here one acts independently of that. (This is why one cannot have a conditional intention to *A* if one can, when one is going to find out whether one can by trying—there is no way to ascertain the condition obtains as a condition for forming an unconditional intention to *A*.) Moreover, if one succeeds, one signed intentionally. Did one do so *without* having an intention to sign? See sections 3, 6 and 7 in this connection. What about “I intend to leave the party early only if the music is too loud” (250)? Vermazen imagines the party-goer wants to stay late and will do so if the music isn’t too loud, and may do so even if the music is too loud. He takes her to be expressing a necessary condition on her forming the intention to leave early but not a sufficient condition. In these circumstances, I think one would say: I won’t leave the party early unless the music is too loud. In any case, as Vermazen describes this, the party-goer has no commitment to leave early on any condition obtaining, and even if we could take this sentence to express what Vermazen says it does, it would not seem to express any commitment to action on any condition. Consequently, if one could express what Vermazen suggests with a sentence of this form, it would not be in the sense I am concerned with a conditional intention, for it is not about commitment to action at all. It is equivalent to the statement: I will form an intention to leave the party early only if the music is too loud. This is a conditional about an intention, not a conditional intention. Of course, if one announces this, one implies that one intends to remain at the party if the music isn’t too loud, so there is a related conditional intention.

of the relevant type, it is odd to say that one intends not to *A*, as if *A*-ing were an option. If, upon consideration, I do not think I can leap over tall buildings in a single bound, even if it would be convenient, I would not say that I intend *not* to do so. But we can say that I intend not to *undertake* to leap over tall buildings in a single bound, as a way of expressing my practical stance toward that in the light of my belief that it is not possible. In a similar vein, we can say that for preconditional conditional intentions, one is committed not to undertaking to perform the action if the antecedent does not obtain.

3 The Epistemic Status of the Antecedent

The epistemic status of a condition is relevant to whether it can be the antecedent of a conditional intention. There are two constraints. (i) The antecedent must be something that is *not settled for the agent*.¹⁶ (ii) The agent must be able to ascertain, at reasonable cost, whether the antecedent obtains in time for acting on it to be reasonable.

(i) If one knows that a condition obtains, it is not a contingency, but simply part of the background of planning. A condition is therefore a candidate for being a conditional intention's antecedent (in brief, can be an antecedent) only if one does not take oneself to know it obtains. If I (take myself to) know that my nemesis will show up, I form the unconditional intention to leave the party when or shortly after he shows up. If I (take myself to) know that the library is open, I will form the unconditional intention to study there. And so on. Whether (taking oneself to have) knowledge that a condition obtains is necessary as well as sufficient for its being settled for one is less clear. What's important is that there are things we take to be settled *for the purposes of planning*. These have a certain epistemic standing in our view of the world. These are fixed points in planning. They are secure enough to act on (holding everything else in place) *without further investigation*. This is what I mean by conditions being settled for us. Only conditions *not* in this way fixed points in planning can be antecedents for conditional intentions. I will say that these conditions are epistemically unsettled, or just unsettled, or epistemically

¹⁶ This represents an important point of difference with Ferrero (2009, p. 709), who treats "the circumstances relevant to the possibility and reasonability of an agent's intentions that the agent takes to obtain either now or any time prior to the completion of her plans" as part of the 'cognitive background' of the agent's plans and projects, but also as antecedents of conditional intentions because the agent's commitments rest on them. The cognitive background of an agent's plans and projects are in my sense settled for the agent, however, and so not candidates for antecedents of conditional intentions. This difference explains why Ferrero regards the deep form of most intentions to be conditional, while I do not. On Ferrero's view, discovering that the antecedent obtains moves it into the cognitive background but does not make the intention unconditional: "... the conditional intention never becomes an unconditional one" (709). See the concluding section for more discussion.

open, from the agent's point of view.¹⁷

Plausibly, what is settled is sensitive not just to (presumed) degree of justification, but also to other factors, such as the kind of justification, and perhaps what the stakes are. For example, one might make plans on what to do if one wins the lottery, or if there is a 100 year flood, though one would not make plans contingent on getting stranded in the subway, even though it is more likely than winning the lottery or there being a 100 year flood.¹⁸

(ii) In addition to its being unsettled, the agent must be able to find out about the condition in time for action without prohibitive cost. We consider in turn reason-providing, qualifying, and preconditions.

Reason-providing conditions: Suppose I wish to go to the party if my crush is going to be there, and it is open whether she will be. But suppose also either that I have no way of finding out, or that the only way would be to call her, which would be too embarrassing for me. In this case, it makes no sense to form a conditional intention to go to the party if my crush is going to be there. I may go intentionally anyway, hoping that she will be there, even though I don't really have any other reason to go. In this case, I take a chance, and if I find she is not there, I will leave (so her being there is not settled for planning purposes). It makes sense to form an *unconditional* intention to do something that is reasonable only on a certain unsettled but ascertainable condition just when (i) the cost of ascertaining it outweighs the value of successfully pursuing the end if the condition obtains, and (ii) it is still the case that the expectation value of the undertaking given one's current epistemic position is greater than that of other action options open to one. Then one has a reason to commit oneself to the undertaking unconditionally and *accept the risk of failure*. The same points apply if the antecedent lies in the present (I wish to call her if she likes me) or the past (I wish to apologize if I offended her), but is not ascertainable without unreasonable cost.

¹⁷ Thus, I reject the view that an unconditional intention (as canonically announced by 'I intend to A' or 'I intend that p') is an intention to do something no matter what, where that means no matter the conditions or consequences. For one may intend to do something in light of what one takes to be settled which one would not do no matter what, and, in particular, no matter whether what one takes to be settled is so or not. One may likewise intend to do something when things relevant to action are unsettled but one can't ascertain whether they obtain and so take a risk, though one does not intend to do it no matter what may come to light. One could use 'unconditional intention' in a technical sense to mean an intention to do something no matter what. What I am denying is that this captures the proper contrast with conditional intentions, with what Bratman once called simple intentions Bratman (1979).

¹⁸ One might reasonably expect something to happen, maybe even in the ordinary sense be said to believe that it will happen, but be working to ensure that it doesn't. It can't then be settled for one, in the sense at issue here, that it will happen. Bratman's example of Udall working to secure the democratic nomination in 1976 but intending to vote for Carter if Carter, as Udall expected, were to win the nomination (1979, p. 249), is an illustration. See the discussions of control and influence over conditions in relation to conditional intentions in sections 4 and 5.

Qualifying conditions: Suppose that it makes sense to vacation in Key West in May (and hence to buy tickets with that goal in mind) only if it is not then in the path of a hurricane, but that it is epistemically open. If there is no way I can determine that Key West will not lie in the path of a hurricane in May before I have to make a decision to buy tickets, I cannot condition my commitment to buying tickets on that contingency. I must just take my chances. Here also the unsettled condition represents a risk I take if I buy the tickets. If I buy tickets, I must still be alert to the weather forecasts as the time for the trip approaches (for I won't go if there's a hurricane), so it remains unsettled for me. But I accept the risks in buying the tickets. The same goes for conditions in the present (I want to ask someone out if she isn't in a bad mood) and the past (I wish to vacation in Key West if wasn't been washed away), when I can't find out with reasonable cost whether the antecedents obtain in time for action.

Preconditions: Suppose that I wish to apply for a fellowship if I am eligible, but I (know that I) can't find out before the deadline. I *cannot* conditionally intend to apply if I am eligible. I may still take a chance and try to apply, risking that I will not succeed because I am not eligible. Perhaps here I also intend to apply, hoping preconditions are met, while it is open for me that they are not. For a contemporaneous precondition, suppose I want to felicitously congratulate someone today if he just won the race, but it was too close to call and it won't be until tomorrow that the outcome is determined by photo finish. I cannot conditionally intend to do so when I cannot determine whether the precondition for doing so obtains. In this case, it would be odd to take a risk, for the trying would consist in giving congratulations, but there would be no way of determining its felicity. Plausibly a condition on felicity in congratulating in this case is that one knows or it is settled for one that the person won the race. If so, it would be impossible to give congratulations felicitously. For a past condition, I may wish to apply for a fellowship if the deadline has not passed, but have no way to find out. I can try, taking a chance on failure. Maybe I can intend, hoping the precondition is met. But I cannot intend conditionally to apply if the deadline hasn't passed.

What prevents me from forming the conditional intention in these cases is that it carries a commitment to finding out whether the antecedent obtains, since it is action relevant, but there is no point if one cannot find out, or do so at reasonable cost.¹⁹ (I return to this point in section 6.) Thus, the antecedent of a conditional intention must be, *from the agent's point of view*, both unsettled and something

¹⁹ Vermazen suggests that one may form a conditional intention to start one's car, if the battery isn't dead (Vermazen 1993b, p. 242). If one does not check to see whether it is dead before trying to start it, though, one does not have a conditional intention but an *unconditional* intention where one is uncertain that all the preconditions for success are in place. The point of contingency planning lies in part in the commitment to finding out whether the contingency obtains. For discussion of uses of the form 'I intend to A, if C' which do not express conditional intentions, see section 8.

ascertainable—without prohibitive cost—in time to act on it. In this case I will say that the antecedent is unsettled and *practically* ascertainable (that is, without prohibitive cost).

In general, then, a conditional intention involves a commitment the execution of which is contingent on some condition that is not yet settled for one, which is relevant to the reasonableness of undertaking an action, and which one takes to be practically ascertainable in time for effective action.²⁰ Further structure will emerge in the discussion of the nature of conditional commitment.

4 Control over the Antecedent

I will say one has *control over* a contemporaneous or future condition, or it is *in one's control*, if one can determine it to obtain or not if one chooses to. If one takes something to be in one's control, in the sense at issue, it is settled for one that one can, if one undertakes to, bring it about that the condition obtains or not. For example, it is (and I take it to be) in my control now whether or not to snap my fingers. It is not (and I do not take it to be) in my control whether or not it will snow before nightfall. For brevity, when I speak of having control over a condition, I will have in mind the agent's taking it to be in her control. Whether a condition can be an antecedent is a matter of *how it is regarded by the deliberator*—we have the agent's point of view of in mind throughout.

We can distinguish between one being in positive control of a condition, in the sense of being able to determine that it obtains, and one being in negative control of a condition, in the sense of being able to determine that it does not obtain. For example, for negative control, one might derail a train to keep it from getting to the station on time, but not be able to hurry it up to ensure it does so. For positive control, one might be able to switch it to a shorter route to ensure it gets there on time but not be able to slow it down. When I speak of something's being on one's control without a qualifier, I mean that one can control whether or not it obtains. Sometimes only one or the other is relevant.

If a condition is not in one's control, whether it can be an antecedent reduces to the question whether it is unsettled but practically ascertainable and would provide

²⁰ One might be tempted to think that since I won't act on a conditional intention to *A* if *C* unless I find out that *C* obtains, the real form of the conditional is: I intend to *A* if *C* and I find out that *C*. But this is a mistake because it treats finding out that *C* as having the same status in contingency planning as *C*. Contingency conditions are conditions the obtaining of which are relevant to the reasonableness of action from, as it were, the objective point of view. Finding out that *C* is not a condition that speaks for or against *A*. That *C* obtains represent a sufficient reason for acting for me or the removal of an obstacle, and so, if it is practically ascertainable, I can undertake a conditional commitment to do something if it obtains. The commitment to finding out is a commitment that arises out of the conditional commitment in order for it not to be idle, not a fuller specification of its antecedent.

a sufficient reason for or remove a sufficient reason against (all else speaking in its favor) a course of action. For example, when doing contingency planning for the hurricane season in Florida, whether there will be hurricanes is not under one's control, and as long as it is unsettled and practically ascertainable in time for action, a hurricane's occurrence is an appropriate condition in relation to which to plan. For conditions in one's control, we consider those that provide reasons for action and those that remove obstacles to action separately.

If conditions that provide reasons for action are in one's control, (a) one has a sufficient reason not to exercise one's control or (b) not. (a) In the first case, they can be antecedents.²¹ Thus, it may be in my control to determine that my nemesis does not go to the party, since I can call him and tell him (falsely) that his mother has died. But I regard this as dishonorable, and so have sufficient reason not to exercise control. Similarly, I could ask someone to invite him, but since I do not otherwise have reason to leave early, I have sufficient reason not to do so. In this case, I can still intend to leave early if he shows up. (b) In the second case, positive or negative control is relevant depending on whether I would or would not otherwise want to do what the condition would provide reason for. If I would not otherwise want to perform the action, as in the case of leaving early if my nemesis shows up, then what is relevant is being able to ensure that he does not show up, that is, negative control, for I could have no reason to exercise positive control even if I have it. If I have negative control, however, then if I have no reason not to exercise it, I will, and it is not then a contingency for me whether my nemesis will come to the party. If I want to perform the action, for example, if I want retire early if I save enough money, then it is positive control that is relevant, for I have sufficient reason not to exercise negative control given that I want to retire early. If I have positive control, then I will exercise it, and it is not then a contingency for me that I will make enough money.

If conditions that remove obstacles to action are under one's control, then, again, either (a) one has sufficient reason not to exercise control over them or (b) not. (a) If one has sufficient reason not to exercise control, then they can be antecedents. If I could assure that the library is open (or closed), but have sufficient reason not to do so, then I can still conditionally intend to study at the library if it is open. (b) In this case, it is positive control that is relevant because the conditions remove obstacles to action, rather than providing reasons for action. If one has positive control and no reason not to exercise it, then it is a matter of whether one has sufficient reason otherwise to do it. If so, the realizing the condition is seen as a necessary means to an end one has one sufficient reason to pursue. In this case, it

²¹ If a condition is in one's control, it is epistemically accessible. To exercise control over whether or not it obtains at the time of action one must know what would be the case otherwise. For if one decides to bring it about, or not, one must know it does not, or does obtain. So we need not here be concerned about cases in which the condition is not epistemically accessible.

is not a contingency.

In sum, if conditions are in an agent's control, they can be antecedents only if the agent has sufficient reason not to exercise control (negative or positive as the case may be) over their obtaining.

5 Influence over the Antecedent

Let us say one can *influence* or *has influence over* a contemporaneous or future condition, if one can do something that increases the chances that it will or will not obtain, but it is *not* in one's control. If one has influence over something, it is not settled for one that one can bring it about or prevent it if one undertakes to do so. Since it is still unsettled, intending to exercise influence over a condition is compatible with its being an antecedent. One may either (a) aim to prevent the antecedent from being realized, or (b) aim to bring about its realization.

(a) For example, we can formulate contingency plans for what to do if *certain goals that we are aiming for are not achieved*. One might pursue a career as an academic philosopher, but intend to become an investment banker if one fails to secure an academic position. One intends to secure that the antecedent not obtain, but is uncertain about success. Similarly, one may intend to take a cyanide pill if captured by the enemy to avoid torture, but intend to avoid capture. In these examples, one intends to ensure the antecedent of a conditional intention does not obtain.²²

(b) One can also intend to bring about the antecedent of a conditional intention, if it is open whether or not one will succeed, and success is a condition on having a reason for further action. One may thus intend to retire early if one makes enough money to do so, intend to make enough money, but be uncertain about success.

In all of these cases, the intention directed at the antecedent is distinct from the conditional intention with that antecedent. In the case of intending to take a cyanide pill if captured by the enemy, for example, one hopes never to have to carry through on the conditional commitment, and that is the point of intending to avoid capture. In the case of intending to retire early if one earns enough money, one hopes to carry through on the commitment, and that is the point of trying to ensure the antecedent is satisfied. The key in each case is that the antecedent, which is relevant to the reasonableness of an undertaking, remains unsettled for one at the time of planning.

²² This is not of course an action taken with the aim of satisfying the conditional intention, for that would be to confuse it with an intention to make a material conditional true. Rather, there are two commitments. One is to make the antecedent not obtain, and the other is to do something if it does (and, hence, if one fails to carry out the first intention).

6 Conditional Commitment

What is the nature of the commitment involved in a conditional intention? In having an unconditional intention to leave the party early, I have a settled commitment to a particular action the sufficient reason for which I have already in hand and the preconditions for which are settled. I could change my mind, if I am presented with new reasons, or a precondition I thought settled turns out not to be, and I know, in general, that this is possible.²³ But I am not anticipating it, and I have no commitment to investigating any particular contingencies with an eye to what to do.

In the case of my intention to leave the party early if my nemesis shows up, I do not, *when I form the conditional intention*, have a reason to leave the party. This contrasts with the first case. And I do not have a settled commitment or plan to leave the party, which also contrasts with the first case. However, I do have a settled disposition to do something (a commitment to do something, to carry out a plan) if something occurs or develops. This does not commit me to doing it *if the antecedent does not obtain*, and I will not (other things being equal) carry out the plan if I do not (at least) believe that the antecedent obtains. I am committed to executing the plan *if the antecedent obtains*; and if I accept (it becomes settled for me) that it does, I will (other things being equal), carry out the action plan. If my nemesis does not come, then if I do not leave, I am not counted as having failed to carry through on my commitment, and, while we might speak of the conditional intention as having been satisfied (by default as it were), there is no intention to do something full stop that was carried out, nothing I did or had to do to satisfy the conditional intention. If my nemesis comes, then if I do not leave the party, I fail to carry out my intention, no matter what else occurs.

The form of the conditional commitment is *a disposition to form an unconditional commitment to action on accepting that the antecedent obtains*. When one discovers or accepts that the antecedent of a conditional intention obtains, the antecedent becomes something that is settled for one. The conditional commitment then is executed by way of one's forming an unconditional commitment to do what one was before only conditionally committed to doing and then carrying it out.²⁴

²³ It is not that I take any particular thing that forms the backdrop of my decisions not to be settled. I just know that the world is complex and that I am fallible. Our position in acting is akin to that of the author in the Preface Paradox, who acknowledges there are likely to be errors in her book, but would endorse each sentence taken individually.

²⁴ This represents another difference with Ferrero (2009), who holds that discovering that the antecedent of a conditional intention obtains does not lead to the formation of an unconditional intention. This is connected, however, with his drawing the line between conditional and unconditional intentions not on the basis of whether a condition relevant to action is settled or unsettled for one, but on basis of whether an agent intends to do something no matter what else obtains, i.e., unconditioned by anything settled or unsettled for one (see note 16 and the concluding section). On

In a similar way, a prior intention in being executed leads to an intention-in-action, which must itself be carried through for the prior intention to be carried out. It would be a mistake to say that the conditional intention becomes an unconditional intention, just as it would be a mistake to say that a prior intention becomes an intention-in-action. But it is in the nature of each to lead (in the right way) to an intention appropriately related to it in its being executed, and this is required for them to be satisfied.

Upon settling whether the antecedent of a conditional intention obtains, one way or the other, I lose the conditional intention. If it obtains, it leads to an unconditional intention to do what I formerly conditionally intended to do. If it does not, then the conditional commitment is relinquished, its purpose being discharged.

That an intention is *conditional* does not entail that in having it one is not committed to further planning and action prior to finding out whether the condition obtains. First, a conditional commitment carries a commitment to finding out or being alert to whether the intention's antecedent obtains.²⁵ My intending to study at the library if it is open carries with it the commitment to finding out whether it is open. Likewise, my intending to leave the party if my nemesis shows up carries with it the commitment to be on the look out for him. This commitment to finding out whether the antecedent obtains is required if the commitment is not to be idle, and it is why the conditions must be practically ascertainable, as noted in section 3. In the case of enabling conditional intentions, I intend to *A* if *E*, the agent also has a commitment not to *A* if not *E*.

Second, (i) one is committed to doing what is necessary in order for one to undertake the action if the antecedent is realized and (ii) to constrain one's planning generally in the light of one's conditional commitments.²⁶ Suppose I intend

this point, I am in agreement with Vermazen (1993*a*), who treats conditional intentions as issuing in unconditional commitments when their antecedents are thought to obtain by the intenders. He calls them intention generating states (244). Unfortunately, the effect is slightly marred by Vermazen holding that this is so for only a subset of conditional intentions, which results from his incorrectly classifying expressions of reserve about success as conditions on intending, such as 'I intend to make ten carbon copies, if this set up works'. See section 8 for discussion of this last point.

²⁵ Ferrero discusses a case (Ferrero 2009, n. 38) which might be thought to cast doubt on this. You promise to give a friend \$5,000 if his business goes under. The friendship sours, and you make yourself scarce, though you still intend to give him \$5000 if his business goes under. Here you seem to be trying to avoid finding out whether the antecedent obtains. Yet, it seems clear that the change in heart is accompanied by a change in practical commitment (if not obligation) as well. It surely would be more accurate to describe your conditional intention (now) as the intention to give your erstwhile friend \$5000 if his business goes under and he manages to track you down and calls upon you to do what you promised. Whether that is strictly compatible with your *promise* is another matter: is it compatible with an obligation to do something in certain circumstances (help the needy) that you turn your head whenever you think you might witness circumstances that call on you to do something?

²⁶ See Ferrero (2009, sec. 5-6) for an excellent discussion of the requirements of means-end coher-

to ask a colleague to have lunch if he is at the department today. Since a success condition on going to lunch with my colleague (given other fixed points) is that I bring some money, I am rationally required to make provision for this when I form the conditional intention, just as I would be if I formed an unconditional intention to ask him to lunch, knowing that he is always in on Tuesdays. Likewise, conditional intentions, like unconditional intentions, are rationally required to be consistent with what other things one intends conditionally and unconditionally in the sense that what one aims to do in the relevant conditions be compatible with the totality of one's other commitments, conditional and unconditional, in the light of the beliefs one has about the conditions that would then obtain. For example, if I plan to ask my colleague to lunch if he is in, I cannot then at the same time unconditionally commit to attending a colloquium during the lunch hour.

7 Satisfaction Conditions for Conditional Intentions

What are the satisfaction conditions for conditional intentions? A conditional intention is not the same as an intention to make a conditional true.²⁷ If I intend to make it the case that if my nemesis shows up at the party, then I leave, I can carry out my intention by preventing my nemesis from coming to the party or by leaving whether or not he shows up. For the propositional attitude state I am in to count as satisfied, I must do something to bring it about that either the antecedent is false or the consequent is true. In contrast, if I have the conditional intention to leave if my nemesis shows up, as we have noted, I do not have to do anything unless a certain condition is met, and I do not count as *doing* what I committed myself to if I prevent my nemesis from coming to the party, or if he doesn't come and I leave before the party is over, even if that suffices for the complex attitude that is the conditional intention not to fail to be satisfied. Similarly, if I intend to study at the library if it is open, I do not count as carrying out my intention if I call in a bomb threat to ensure that it is closed, or if it is closed and I break in in order to study there.²⁸

ence, intention-belief consistency, and agglomerativity in connection with conditional intentions. Agglomerativity (Bratman 1987) is the requirement that to intend rationally to *A* (or that *p*) and intend rationally to *B* (or that *q*), one must be able to intend rationally to *A* and *B* (that *p* and *q*), given one's beliefs about the world. In the case of conditional intentions, to intend rationally to *A* if *C* and intend to *B* requires that one be able to intend rationally to *A* and *B*, if *C* obtains, given the rest of one's beliefs about what is and would be so given *C*, and to intend rationally to *A* if *C* and to *B* if *D* (where *C* and *D* are compossible) requires that one be able to intend rationally to *A* and *B*, if *C* and *D* obtain, given the rest of one's beliefs about what is and would be so given *C* and *D*.

²⁷ Castañeda (1982, 249 ff.) makes this mistake. See (Ferrero 2009, pp. 703-705) for further defense.

²⁸ I might say: I intend to study in the library, if it is open, and I intend to study in the library, if it is closed. But neither of these announces a conditional intention. These are both interpreted as conditionals in which the consequent is a sentence that announces an unconditional intention, and

Conditional intentions are akin to conditional commands. As intentions may be thought of as akin to commands to oneself, conditional intentions may be thought of as akin to conditional commands to oneself. If I am *told* to take a taxi home from the party, then I do not obey the command unless I take a taxi home as a result. If I am told to take a taxi home from the party if I drink too much, then it does not follow that I failed to obey the conditional command if I do not take a taxi home. If I drink too much, and do not take a taxi home as result of the command and on the basis of drinking too much, then I have failed to obey the conditional command. But if I do not drink too much, and do not take a taxi home, there is no requirement in effect that I take a taxi home that I could fail to respect.

Conditional commands are expressed by the use of the indicative in the antecedent and the imperative in the consequent of a conditional. The different sentential moods have associated with them different types of satisfaction conditions.²⁹ An indicative sentence relative to use in a context, as well as the assertive speech act it is paradigmatically used to perform, is true or false. An imperative relative to use in a context, as well as the directive it is paradigmatically used to perform, is complied with or not (I use ‘complied with’ to express both a semantic evaluation of the sentence relative to the context, and an evaluation of a directive speech act that may be performed with it.³⁰ These are related but distinct, for the sentence may be evaluated relative to a context without its having been uttered with the force of a directive speech act in that context.) We represent the satisfaction conditions for a conditional command by providing satisfaction conditions for the utterance of a conditional with an indicative antecedent (here and through the rest of this paragraph I mean the sentence in the subordinate clause) and an imperative consequent (where temporal variables may take on intervals as values).

For any speaker *s*, time *t*, any utterance *u* by *s* of ‘Take a taxi home if you drink too much’ is true relative to *s* at *t* if and only if, on the condition that ‘you drink too much’ is true relative to *s* at *t*, ‘Take a taxi home’ is complied with relative to *u*, *s* and *t*.

I say ‘on the condition that’ rather than ‘if’ here because if I falsely think that I have drunk too much (perhaps I have been drinking only ginger ale but I think it is a funny colored Champagne), and take a taxi home with the intention of obeying the command, I have not done what I was conditionally commanded to do. I was not

the point of uttering both is to emphasize that the intention is not conditional on the official hours of the library. ‘even if’ conditionals likewise serve to express an unconditional intention in the light of a condition one might have thought would have undercut it: I intend to vote no, even if it is unpopular to do so. See Vermazen (1993a, sec. 2) for a discussion of some other pseudo conditional intention sentences, which really have other points.

²⁹ For a fuller discussion, see Ludwig (1997), Boisvert & Ludwig (2006).

³⁰ I am using the terminology of Searle’s (1979) taxonomy of speech acts.

told to take a taxi home if I *thought* I had drunk too much. On the other hand, I have not failed to comply with the conditional command either. I do something *on the condition that* C provided that C obtains (past, present, or future), I recognize this, and act on that recognition.³¹ Unpacking this, where ‘ $x > y$ ’ means ‘ x is later than y ’, ‘ $\text{ref}(\text{“you”}, s, t)$ ’ means the referent of ‘you’ taken relative to s at t , and ‘ $A \rightarrow B$ ’ means ‘on the condition that A , B ’, we get:

For any speaker s , time t , any utterance u by s of ‘Take a taxi home if you drink too much’ is satisfied relative to s at t if and only if $([\forall t' : t' > t](\text{ref}(\text{“you”}, s, t) \text{ drinks-too-much}(t')) \rightarrow [\exists t'' : t'' \geq t](\text{ref}(\text{“you”}, s, t) \text{ takes-a-taxi-home}(t''))$ with the intention of satisfying u).

The satisfaction conditions require that the conditional command be complied with non-accidentally when the antecedent is satisfied, that is, as a result of the addressee responding intentionally to its content with the goal of satisfying it. What if the antecedent is not satisfied? There is a sense in which the conditional command does not take effect. It is moot, to borrow Ferrero’s phrase. Nonetheless, we can count it as satisfied (as distinct from carried out), if in an uninteresting way, just as we count a conditional true if its antecedent is false. These remarks extend to conditional intentions.

Conditional intentions are expressed in English in the following form, where ‘ C ’ expresses something practically ascertainable but unsettled for X which is either a sufficient reason for X to A (against the background) or a condition on its being reasonable for X to undertake to A .

X intends to A if C

An intention to make a conditional true, in contrast, would be represented as,

X intends to make it the case that if C , then X A s.

Conditional intentions have satisfaction conditions analogous to those for conditional commands, though we will add an element that represents properly basing the formation of an unconditional intention on recognition of the antecedent’s obtaining. We represent the satisfaction conditions for my intention to leave the party early if my nemesis shows up as in [a] and [b], where in [b] we make explicit the temporal quantifiers.

³¹ We will want to allow that one can act before a condition obtains as when you tell me to buy tickets to the concert if it’s not going to be more than an hour long. Acting on a condition does not require that the condition’s obtaining plays a causal role in one’s acting. When the condition lies in the past or present, that will be so, mediated by one’s recognition of it, but if the condition lies in the future it is one’s recognition that it obtains in the future that plays the causal role. See note 6 and below.

- a My intention x to leave the party if my nemesis shows up is satisfied iff, on the condition that my nemesis shows up, I intentionally leave the party in accordance with and because of x .
- b My intention x at t for any $t' \geq t$, to leave the party at some $t'' \geq t'$ if my nemesis shows up at t' is satisfied iff for any $t' \geq t$, on the condition that my nemesis shows up at t' , at some $t'' \geq t'$, I intentionally leave the party at t' in accordance with and because of x .

We require not that I leave the party because of my intention *if* my nemesis shows up but *on the condition that he does* (where this implies that he actually shows up and my recognition of this is the basis for my leaving) to rule out satisfaction of the conditional intention if I mistakenly think he has shown up and leave intentionally as a result. This is a misfire rather than a successful execution of the conditional intention. We require also that I *intentionally* leave the party in accordance with and because of my conditional intention in order to capture the requirement that the conditional intention lead to the action by way of the formation and successful execution of an unconditional intention directed at doing it. On this account, if I don't leave when my nemesis shows up my intention is not satisfied, whether or not I realize that he has shown up. If I falsely think he has and leave as a result, as noted, I have not carried out the intention. But, as in the case of conditional commands, I have not failed to carry out my conditional intention either. If the antecedent does not obtain, we can say the conditional intention is satisfied, but we would not want to say it was carried out, because that requires execution of a commitment. So we distinguish between satisfaction of a conditional intention and its execution, as we do between satisfaction of a conditional command and its being carried out. For an enabling conditional intention, since it is in effect the intention to A iff E , the satisfaction conditions are given by a conjunction of two conditional intentions: the intention to A if E and the intention (or practical commitment in the case of preconditions) not to A if not E .

The temporal quantifiers will vary depending on whether the antecedent lies in the past, present, or future, and whether there are constraints on the time of action. For example, for the intention to get an annulment if the marriage I contracted last night was not consummated, my intention is to get an annulment in the future if at no time in the past was the marriage consummated, and it is satisfied iff on the condition that at no time in the past was it consummated, at a future time I get an annulment in accordance with and because of it. For the intention to buy tickets to the concert if it is not going to be more than an hour long, I intend to buy tickets at a future time before the concert if the concert is not more than an hour long, and it is satisfied iff on the condition that the concert isn't more than an hour long, at a time before that but after now I buy tickets in accordance and because of it.

This extends straightforwardly to general policies or principles about what to do in various circumstances. For example, one may intend to neither a lender nor a borrower be, or to buckle up when driving a car. These express universally quantified conditional intentions, which may be represented as follows.³²

For any time t , for any x , I intend to refuse to give a loan to x at t if x asks me for a loan at t , and I intend not to borrow money from x at t if x offers me a loan at t .

For any time t , I intend to buckle my seat belt at t if I am – about to begin – driving at t .

These express complex commitments, but there is no difficulty in specifying their satisfaction conditions along the lines indicated earlier. In practical terms, it is expressed in an agent's being prepared for each time to do the thing expressed in the consequent on the condition that the thing expressed by the antecedent for that time obtains, where, in this case, that condition specifies part of a reason for the action in question. One may also have policies regarding conditions that provide reasons against actions. I can intend to go to the library whenever it is open, or to enter a race for political office whenever the incumbent is not running.

8 Logical Form and the Expression of Conditional Intention

What is the logical form of a sentence such as 'I intend to leave the party if my nemesis shows up'? While the surface form is that of a conditional, it is not used to express a conditional. It is not asserted because the consequent is true or because the antecedent is false, nor because there is a connection between the truth

³² The key idea here is that the quantifier binds into both the clause giving the action type and the condition upon which the agent would be committed to doing something of that type. This contrasts with Vermazen's rendering of a universally quantified conditional intention that puts the quantified sentence after 'intends that', as in: I intend that (t)(if I am about to begin driving at t , then I buckle my seat belt at t). The mistake here can be explained perspicuously in terms of the representation of the logical form of statements of conditional intention, ' x intends to A if C ', given in section 8, as a three-place predicate relating the subject to two propositions: 'conditionally-intends(I , $\langle A \rangle$, $\langle C \rangle$)'. There is only one sentence supplied by Vermazen's rendering, and so one slot goes unfilled. In contrast, another example of Vermazen's, 'If anyone reads my epitaph, I intend him or her to reflect on the fragility of life', is properly rendered as an unconditional intention directed at a universally quantified conditional: I intend anyone reading my epitaph to reflect on the fragility of life. And this difference is reflected in what sort of commitment we understand to be expressed by the sentence, namely, a commitment now to do something that has as a future consequence that anyone reading my epitaph reflect on the fragility of life (in Vermazen's example, that I arrange my epitaph to be "As flies to wanton boys ..." to remind readers of the line in *King Lear* that continues: "... are we to th' gods. They kill us for their sport").

of the antecedent and the truth of the consequent that shows that the consequent cannot be false in circumstances in which the antecedent is true. The construction ‘...if ___’ in this use therefore is not understood in terms of the usual compositional account. It is rather an idiom, which has arisen to fill a semantic gap in the language, whose meaning is not derivable from the meanings of its significant components and standard rules for understanding their composition in the sentence. The form of the commitment is not expressed by the verb ‘intend’ as it is understood outside this construction. The commitment involves two propositions (or proposition forms), the one expressed by the complement and the one expressed by the subordinate clause. The logical form is similar to that of other attitude verbs that relate two proposition-like entities, such as preferring vacationing in Paris to vacationing in New York: $\text{prefer}(I, \langle I \text{ vacation in Paris} \rangle, \langle I \text{ vacation in New York} \rangle)$, where ‘ $\langle p \rangle$ ’ means ‘the proposition that p ’. For a conditional intention, to express its logical form more clearly, we can then introduce a verb with two sentential complements: $\text{conditionally-intend}(I, \langle I \text{ leave the party} \rangle, \langle \text{my nemesis shows up} \rangle)$. Thus, effectively, ‘ x intends to A if C ’ functions as a three place predicate where ‘ A ’ and ‘ C ’ occupy positions for propositional arguments (or propositional functions to allow quantifying in).³³

Why do we express conditional intentions in this way? I suggest that the form ‘ x intends to A if C ’ has developed for expressing conditional intentions as a result of a modification of a natural way of conveying, as opposed to stating, a conditional intention, given the pressure to state one’s commitment explicitly, when there is no standard form for it in the language. The idea is this: if one has a conditional intention, a contingency plan, then it is settled from one’s own point of view that if the contingency obtains, then one will flat out intend to do something. Thus, if the condition is C and the action is A -ing, one is justified in asserting ‘if C , then I will intend to A ’, and asserting this would be a natural way of indicating to an audience that one has the relevant conditional intention. But there would be a natural temptation in some circumstances to say something stronger, that is, to say outright that one has the commitment to doing a certain thing in a kind of circumstances whose obtaining is still open from one’s perspective. As ‘intend’ is the verb we use to express action commitments, and ‘I will intend to A if C ’ is a natural expression of the commitment, ‘I intend to A if C ’ is a natural attempt to obtain the virtues of both.

Sometimes we utter sentences of the form ‘I intend to A , if C ’ when we are not announcing a conditional intention. For example, if I say, ‘I intend to be there, if God is willing’, I am not announcing a commitment that requires me to investigate whether God is willing that I be there before I undertake it. I am simply acknowl-

³³ For present purposes I am ignoring argument places introduced by implicit quantifiers over times and states introduced by tense and by the attitude verb.

edging that there are things outside my ken that may interfere with my carrying out my intention. (I might have said, ‘if everything goes according to plan’ or ‘barring the unexpected’.) There is no particular contingency I have in mind (in saying this) that any commitment of mine is conditional on. A more interesting case is one in which my carrying out a commitment may be prevented by the occurrence of something specific, which there is some reason, even if not preponderant, to think will occur, but whose occurrence is uncertain, and for which there is no practical method to determine whether it will occur (which entails I don’t control it or have any significant influence over it). In this case, the best I can do is to aim at my target and hope that the world will cooperate. For example, suppose that the Internal Revenue Service has been auditing my tax returns. I am aware of certain irregularities in income reporting, and I am heading off to take a flight to a conference. I may have reason to think that the IRS suspects me of tax fraud, and that there may even be a warrant out for my arrest, which they will attempt to execute at the airport. I say to a colleague, in these circumstances, ‘I intend to go to the conference, if I am not arrested’. Not being arrested is neither a reason to go to the conference nor a reason not to go. But it is not settled for me whether or not I will be arrested, and if it occurred, it would prevent me from going to the conference, and so if I knew it was going to occur, I would have a reason not to undertake to go to the conference because the enterprise could not be carried through in that circumstance. However, there is nothing I can do (practically) to either avoid it, if it is going to occur, to find out whether it will occur. Therefore, it cannot function as a contingency in relation to the goal of going to the conference. I can undertake to do things on the assumption that I will not be arrested. But my decision is limited to whether to commit myself to going to the conference despite the uncertainty about success or not to commit myself to anything in relation to going to the conference. So when I say ‘I intend to go to the conference, if I am not arrested’, I do not express the result of a piece of contingency planning on my part, that is, a conditional intention. I merely acknowledge something that makes it uncertain whether I can carry out my plan to go to the conference.

The form the announcement takes is strictly speaking infelicitous, for the antecedent is more properly thought of as conditioning my going to the conference rather than my intending to go.³⁴ It is clear that the intent is not to say that there is (absurdly) a connection between not being arrested in the future and having an intention now. Nor is it to say that if I am not arrested in the future, I will *then* have an intention to go to the conference, as if I were making a prediction, for I

³⁴ This is true for ‘I intend to be there, if God is willing’ as well. The difference is that in this case I don’t have (and no one thinks I have) any particular reason to think that God is not willing, and so while I am making as if to say something of the sort I say when I say ‘I intend to go to the conference, If I am not arrested’, it is recognized as non-serious, and as therefore an indirect way of acknowledging our inability to predict how things will turn out with certainty.

announce a present commitment. Rather, in announcing this, I intend to signal that there is something that I anticipate that might occur that would prevent my carrying out my intention, which it is conversationally salient to mention. The thought would be better expressed with: As a result of my intention to go to the conference I will do so, if I am not arrested at the airport. Significantly, in speech it would be natural to pause before adding the 'if'-clause, or in writing to include a comma before it. In the case of announcing a conditional intention this would not be appropriate. Typically one announces an intention to do something only if one thinks one will do it, and one announces that one will do something only if one intends to do it. Thus, it is easy to see how starting with an assertion of an intention, which implies that one thinks one will do something, one may add as an afterthought a condition aimed not at the intention but at the implication that one will do what one intends.³⁵

9 Multistage Action Plans

What is the relation between multistage action plans and conditional intentions? Suppose that one intends to do *A*, which is a condition on or reason for then doing *B*, which one intends to do after doing *A*, and which is a condition on or reason for then doing *C*, which one intends to do after completing *B*, and so on, to one's ultimate goal. A step in a multistep action plan can provide a reason for the next step in the plan or represent a necessary condition for carrying out the next step, just as the antecedent of a conditional intention may provide a reason or be a necessary condition for the action it is directed at. Is the intention to do *B* after *A* a conditional intention? The answer is: it depends on whether it is settled for one that one will do what one intends to do. It need not be settled for one that one will be successful in what one intends to do unconditionally, as in the case of intending to make enough money to enable one to retire early. If the outcome makes a difference to subsequent planning, for example, whether one retires early or not, one engages in contingency planning. One plans what to do if successful, and if not. These intentions will be conditional intentions and one's planning will involve branching possibilities. If it is settled for one that one will carry out one's intention, then it does not represent a contingency.³⁶ Then the intention to *B* after *A*-ing is like the intention to go to Mexico when summer arrives. This latter intention is not a conditional intention because that summer will arrive is not

³⁵ Compare this to a salesperson saying, 'If you need anything, I'm Jill', which is not the announcement of a conditional identity but the telescoping of 'I am Jill; if you need anything, ask me'.

³⁶ Castañeda (1982, pp. 251-252) appears to identify a multistep action plan with an intention to perform the first step, then a conditional intention to do the next if the first is performed, and so on. Sometimes we plan in this way, but not all multistep action plans involve conditional intentions.

something that is unsettled. It is an unconditional intention to go to Mexico next summer. When the time comes, one executes the intention. Thus, one may intend to go to the store to buy some cream to use in a sauce for dinner, without there being any conditional intentions involved. Similarly, if one knows that one will have enough money to retire early, and one intends to retire when one has enough money, one does not have a conditional intention, but simply a multistep action plan: make enough money, retire early.

10 Conclusion

We can summarize discussion in diagram 1, which classifies conditions relevant to contingency plans in terms of the features discussed above. Text of the bottom-most nodes is green ✓ if the conjunction of features the node represents suffices for a condition meeting them to be a candidate for an antecedent of a conditional intention (a potential antecedent). I say that they are potential antecedents because conditions having the relevant features are not *ipso facto* antecedents of conditional intentions, since an agent may not take the condition into account. Diagram 1 starts with things that matter to us for planning purposes. To matter a condition (a) must impinge upon the reasons we have for doing things, and (b) must be something which is not completely beyond our ken—something that we can never have reason to think does or does not obtain. With respect to (a), for most of us, whether the rate of the expansion of the universe is increasing or decreasing does not impinge upon our planning because it doesn't connect with any reasons we have for action. With respect to (b), whether we are being deceived by Descartes's Evil Demon, though relevant to our interests, is beyond our ken, and so not something that matters for planning purposes. What things matter of course differs from agent to agent.

Among the things that matter, some are settled and others unsettled. In saying something is settled for an agent, we mean that it is a fixed point for planning purposes – we rely on it without further investigation (though we may change our minds with new information). Things that are *settled* for an agent cannot be antecedents. They are things that an agent plans on, but not the basis for conditional commitments. To be an antecedent, a condition must be both unsettled and something one can ascertain in time for action without prohibitive cost. When a condition is unsettled but not ascertainable without prohibitive cost, it represents a risk for any undertaking that relies on it. Such contingencies are relegated to the domain of chance.

Among things that matter and that are unsettled for an agent are (i) those that provide sufficient reasons for action and (ii) those that provide sufficient reasons against action which otherwise one would undertake. In the case of things

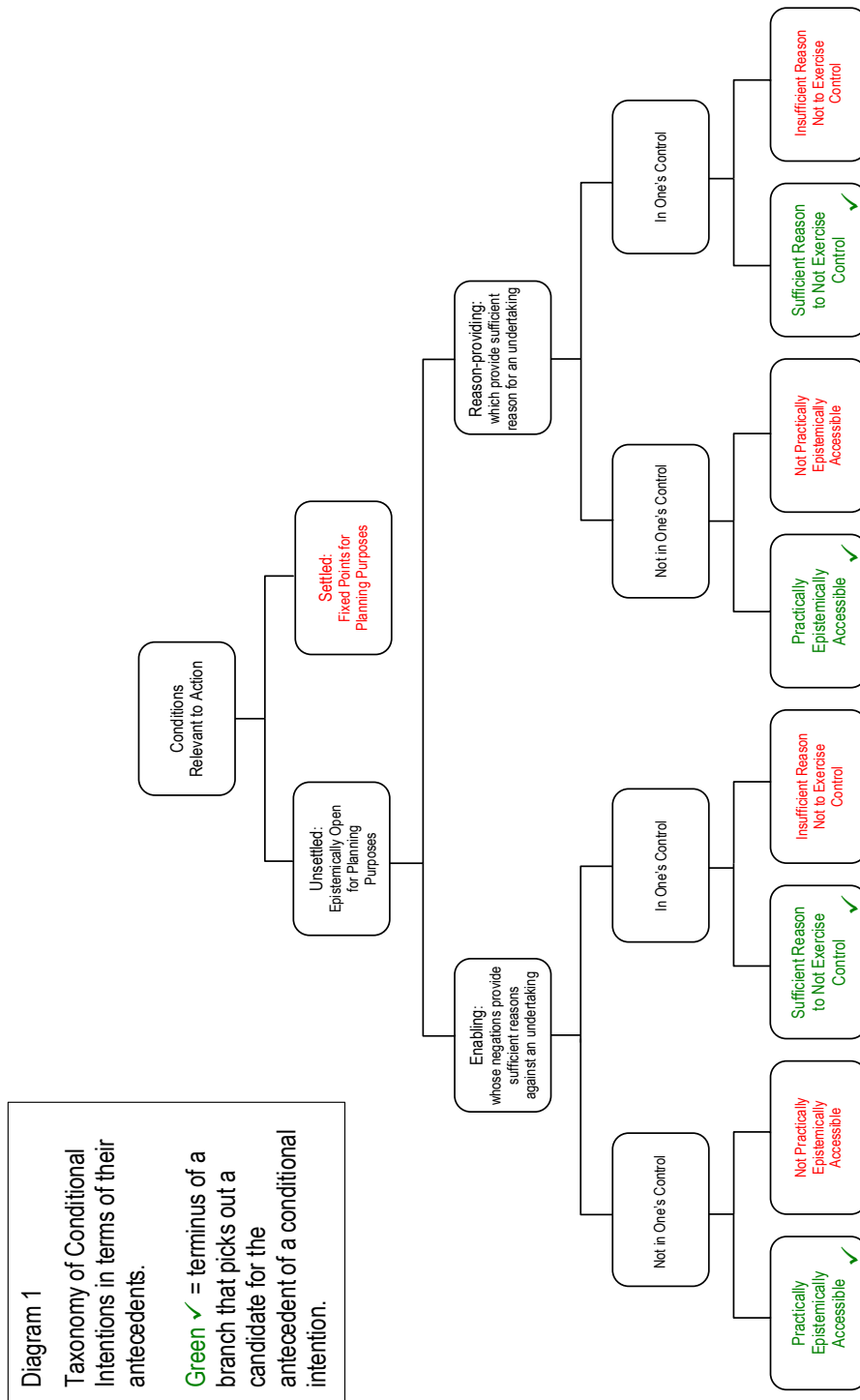


Diagram 1 - Taxonomy of Conditional Intentions.

that provide reasons for an action, the reason giving conditions are potential antecedents. In the case of things that provide reasons against an undertaking one would otherwise pursue, it is the negation of the condition³⁷ that provides the reason against that is a potential antecedent. It represents the removal of an obstacle, in the absence of which there is sufficient reason for action. Conditions expressing obstacles are enabling conditions. Enabling conditions subdivide into preconditions and qualifying conditions as in figure 1. I borrow ‘enabling condition’ from Ferrero but as I have noted I repurpose it to subsume both preconditions (Ferrero’s enabling conditions) and qualifying conditions. I will not indicate this further division in diagram 1.

For both reason-providing and enabling conditions, there are (a) those that one takes not to be in one’s control (conditions that lie in the past, and some that lie in the present and future) and (b) those that one takes to be in one’s control (some present and future conditions). (a) If conditions positively related to action are not in one’s control and are unsettled as well as practically ascertainable, then they can be antecedents. This point extends to conditions one aims to prevent obtaining (or to bring about), for lacking control in the sense we’ve specified, it is epistemically open that one fail (or succeed), and one can plan on what to do in that case. (b) If a condition is in one’s control, it is settled that one can determine whether or not the condition obtains. In this case, either one has a sufficient reason not to exercise control (positive or negative as the case may be) over them or not. In the first case, they can be antecedents. In the second case, since one has control over whether the antecedent obtains, and no reason to abstain from exercising it, the question of whether to do so reduces to the question whether to pursue unconditionally the end that it would (i) provide a sufficient reason for or (ii) remove an obstacle to, and there is no ground for a conditional commitment.

Thus, there are four basic categories of conditions that are potential antecedents. First, there are conditions that provide a sufficient positive reason for action—*reason-providing conditions*—that are *not under one’s control but are practically epistemically accessible*. Second, there are *reason-providing conditions* that are *under one’s control but with regard to which one has a sufficient reason not to exercise that control*. Third, there are conditions whose negations provide reasons against action except for which one would have sufficient reason to undertake it – *enabling conditions* – that are *under one’s control but for which one has a sufficient reason not to exercise that control*. Fourth, there are *enabling conditions* that are *not in one’s control but which are practically epistemically accessible*. In every case, the formation of a conditional intention carries with it a commitment to ascertain whether or not the condition obtains, when and how being determined by the best fit with one’s other plans and

³⁷ The negation of a condition *C* is expressed by the negation of the sentence expressing the condition.

beliefs, within the constraint that one find out in time to act on the commitment if it does.

In concluding, I contrast my account of conditional intentions with Ferrero's 2009 account. The two most important differences are these.

(1) I provide a more general perspective from which to understand conditional intentions, focusing on the antecedents as bearing on reasons for or against action, which enables us to see that beyond reason-providing conditions and preconditions there are conditions whose negations provide sufficient reasons against action that can figure in the antecedents of conditional intentions, yet which aren't preconditions for action, namely, qualifying conditions.

(2) I give central place to the epistemic status of the antecedent in conditional intentions as *unsettled but practically ascertainable*, which captures the idea that they are commitments to *contingency* plans. Ferrero's account does not capture this. In particular, Ferrero (2009, p. 709) treats "the circumstances relevant to the possibility and reasonability of an agent's intentions that the agent takes to obtain either now or any time prior to the completion of her plans" as part of the 'cognitive background' of the agent's plans and projects, but still as in effect antecedents of intention because *the agent's commitments rest on them*. That is, Ferrero treats conditional intentions as commitments the agent has that, from the agent's point of view, rest on the obtaining of various circumstances in the sense that if the agent believed that they did not obtain, the agent would not be committed to doing something. But this includes things that are settled, as well things that are still open, for the agent.³⁸ Unconditional intentions, on this view, are commitments to do something no matter what, with no preconditions. Thus, the category of conditional intention on Ferrero's account threatens to swallow all intentions, for it is unlikely that we have any intentions that do not rest on our accepting that some preconditions for action obtain and accepting that some contingent conditions obtain that

³⁸ Ferrero's epistemic version of the deep structure of conditional intentions is closer to what I have in mind by conditional intentions (Ferrero 2009, p. 720): (DS-E) x intends to [GIVEN $P_1, P_2 \dots$; PRE $P_m, P_{m+1} \dots$] (GIVEN $C_1, C_2 \dots C_n \cdot \Phi$ IF $C_n, C_{n+1} \dots$). Here the clauses that begin with 'GIVEN' are followed by preconditions ($P_1, P_2 \dots$) and restrictive conditions ($C_1, C_2 \dots$) that the agent takes as given. This would correspond to conditions that I have called settled for the agent. So one might say that while my account of conditional intentions is different from Ferrero's, the class of conditional commitments I identify corresponds to a subcategory of conditional intentions that Ferrero's theory identifies, the conditional intentions which rest in part on conditions unsettled for the agent. But this is not quite correct. The remaining preconditions ($P_m, P_{m+1} \dots$) and restrictive conditions ($C_n, C_{n+1} \dots$) still do not capture the class of conditions that my account says are potential antecedents of conditional intentions. First, there are qualifying conditions, which are not represented here. Second, and more importantly, not every condition that is unsettled for an agent and relevant to action is a potential antecedent for a conditional intention because not all of them will be ascertainable for the agent without prohibitive cost in time for effective action. It is the combination of being unsettled but practically ascertainable that captures the kind of condition relevant to contingency planning.

are relevant to whether we have reasons to pursue what we intend.

This fails to capture an important theoretical and practical distinction. Whether a condition that impinges on reasons for acting is *unsettled* and *practically ascertainable* is clearly salient from the standpoint of deliberation. It makes a difference to how we plan, how our commitments organize action, whether our plans are branching or not, and consequently what we investigate before acting. We have an interest in finding out whether relevant conditions obtain, and acting appropriately on the result. The upshot of contingency planning of this sort is a conditional commitment that has the features I have described. This is not the same as a commitment conditioned by our background view of the world. We form intentions and act in light of our background picture of the world, but we do not regard features of it as needing further investigation prior to action.

Furthermore, restricting antecedents of conditional intentions to conditions that are unsettled but practically ascertainable for us tracks our actual practice of reporting intentions as conditional or not. Reports of conditional intentions are reports about the results of our contingency planning. We do not think of ourselves as involved in contingency planning, making conditional commitments, or having conditional intentions, when we take ourselves to know that something obtains that is relevant to the reasonableness of an action. For example, my intention to take an umbrella with me when I step outside because I can see (through the window) that it is raining is not treated as a conditional intention, and would not be properly reported by saying: I intend to take an umbrella with me when I step outside *if it is raining*. This is so even though my intention clearly rests on my belief that it is raining. Thus, our ordinary practices in reporting conditional intentions tracks what I have argued is a salient category of commitment for understanding the structure of our planning and commitments. It is something we should expect to find marked in how we talk about commitments. Reflection on our practice shows that it is marked, and that it is expressed in the idiom of conditionalizing an announcement of intention on an unsettled but practically ascertainable condition that is pertinent to the all-in reasonableness of undertaking an action.

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