

# Logical Analysis of Intention and Desire

## Persisting Intentions - ALFRED R. MELE

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## 1 Motivation

## 2 Kinds of Intention

- Proximal and Distal intentions
- Occurrent and Standing intentions

## 3 Persisting Occurrent Intentions

- Account of persisting occurrent intentions
- Presisting of intentions

## 4 Persisting Short-Term Standing Intentions

- Account for persisting standing intentions
- Proposal for persisting standing intentions conditions

## AI and the Corkscrew.

Did AI have an intention to put the corkscrew away that persisted from the time he acquired the intention until he put the corkscrew away?

# Assumptions

- Intentions exist.
- Anyone who intends to A has an intention to A.
- Some causal account or other of the production of intentional actions is correct,.
- More specifically, some such account according to which whenever agents act intentionally, at least one of the following does important causal work: some intention of theirs, the acquisition or persistence of some intention of theirs, or the neural correlate of one or more of the preceding items.

# What is an intention?

## In what does the persistence of an intention consist?

Developing an account of intentions is a project in its own right, therefore for now, understand intentions however you want, given that the assumptions stated above hold true.

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# Proximal Intentions

## Proximal Intentions

A proximal intention to A is an intention to A now.

Proximal intentions also include intentions to continue doing something one is presently doing and intentions to start A-ing

## Example

An intention to answer ones phone now

An intention to start running a mile right away

# Distal Intentions

## Distal Intentions

Distal intentions are intentions agents have at a time for (and only for) action in the non-immediate future.

## Example

The intention I have now, at noon, to take my daughter to a 7:00 movie tonight.



# Mixed Intentions

## Mixed Intentions

Some intentions have both proximal and distal aspects.  
An intention of this kind specifies something to be done now and something to be done later.

## Example

Al may have an intention to run a mile without stopping, beginning now.  
(He estimates that the deed will take six minutes.)

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# Goldman's Distinction

## Theorem

*Goldman's Distinction* An Occurrent want is a mental event or prices; it is a going on or happening in consciousness. A standing want is a disposition to have an Occurrent want , a disposition that lasts with the agent for a reasonable length of time.

## Example

We can say that John wants to be president of his company because he has a disposition to have occurrent wants to this effect. This disposition is present, though it is not being manifested.

# Problems with Goldman's Distinction

## Goldman's way of drawing the distinction is problematic

An important part missing is to mark the difference between:

- (1) desires to A (or for X) that are wholly constituted by dispositions to have desires to A (or for X) that manifest these dispositions.
- (2) desires that are functionally more closely connected to action than such dispositions are.

## Example

The characteristic functional role of Beth's standing desire for a career in biology is to contribute to her having occurrent desires for a career in biology. Her standing desire's functional connection to action features its contributing to her having occurrent desires that manifest it. But not all desires with a more direct connection to action are present to consciousness.

# Problems with Goldman's Distinction

## Example

Carl might have spoken to Debra as he did because he wanted to hurt her feelings, even though he was not conscious at the time of a desire to do that. Carl might not have had a standing desire to hurt Debras feelings. But if he did have one, and if it played the role characteristic of standing desires, it was manifested in a desire of another kind to hurt her feelings an occurrent desire to do that.

## Implausibility

Goldman implausibly makes being a going on or happening in consciousness an essential feature of occurrent wants or desires. An agent being conscious of a desire is not required for the desire playing a role in action production that suffices for it not being a standing desire thus an Occurrent one.

# Standing desires, intentions, and beliefs

## Standing desires, intentions, and beliefs

Are wholly constituted by dispositions of certain kinds to have corresponding occurrent desires, intentions, and beliefs.

## Example

A standing belief that  $p$  is wholly constituted by a disposition of a certain kind to have occurrent beliefs that  $p$ .

# Proximal Intentions, A revisit

- In typical instances, agents begin executing their proximal intentions almost as soon as they acquire them.
- If standing intentions to A are wholly constituted by dispositions to have occurrent intentions to A, then, because such dispositions are not executable, no executed intention is a standing intention.
- And simply in virtue of its being executed at a time, a proximal intention has a claim to being an occurrent intention at that time.
- All executed intentions are occurrent intentions.

# Distal Intentions, A revisit

- Many of them are intentions for prospective actions
- Acquisition may have significant practical effects in the immediate future.

## Example

An intention generating another intention, the first intention has the claim to be Occurrent at the time.



# An example

- My daughter calls at noon, asks me for a movie at 7pm
- I write a note to remind myself
- I remember at 6:30 without looking at the note
- Did my intention to M persist from noon to 7pm? and If it did, did it persist as an occurrent intention throughout that span of time?

# Revisiting Goldman's account

- If occurrent intentions were to be defined as intentions of which the agent is conscious it would be clear that my intention to M did not persist as an occurrent intention from noon into the evening.
- I was not conscious of that intention throughout the entire span
- Carl might have spoken to Debra as he did because he intended to hurt her feelings, even though he was not conscious at the time of his intention

## Occurrent Intentions

Being nondeviantly at work at a time in initiating, sustaining, or guiding A-ings of theirs that are being initiated at that time or are in progress at the time is sufficient to be an Occurrent intention.

However, one need not actually A at a time in order for one's intention to A to be occurrent at that time; one might try to A and fail.

- An occurrent intention to A may be at work in producing intentions and actions that are preparatory to one's A-ing.
- Being aware of an intention to A that one has or being aware that one intends to A may also be regarded as a conceptually sufficient condition of the intention being occurrent at the time.
- If there are both occurrent and nonoccurrent intentions to A, The intention persisting from noon to lunch is more likely the latter.

# Standing Intentions

## Standing Intentions

If standing intentions to A are understood on the model of a familiar conception of standing wants, they are wholly constituted by dispositions to have occurrent intentions to A.

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# Occurrent Intentions

## Sufficient Conditions

- Intention is suitably at work at that time in producing relevant intentional actions or preparatory intentional actions
- At that time the agent is aware that he intends to A and this intention is not wholly constituted by a disposition to have occurrent intentions to A.
- A persists as an occurrent intention to A as long as it is suitably at work or is a conscious intention that satisfies condition 2.

# Occurrent Intentions

## Representation

### Occurrent intentions and plans

Occurrent intentions are executive attitudes toward plans.

They have representational content, which is an action-plan.

An agent who successfully executes an occurrent intention is guided by the intention-embedded plan.

### Example

The intention to check her e-mail that Jan executed this evening incorporated a plan that included clicking on her e-mail icon, then typing her password in a certain box, then clicking on the OK box.

# Occurrent Intentions

## Orientation

- The executive dimension of occurrent intentions is intrinsic to the attitudinal orientation intending.
- We can have a variety of attitudes toward plans.
- To have the intending attitude toward a plan is to be settled (but not necessarily irrevocably) on executing it.
- Someone who desires to A, even someone who desires this more strongly than he desires not to A may still be deliberating about whether to A in which case he is not settled on Aing.



# Occurrent Intentions

## Desire

- Occurrent intentions to A essentially encompass motivation to A, but without being reducible to a combination of desire and belief
- Part of what it is to be settled on A-ing is to have a motivation encompassing attitude toward A-ing
- Lacking such an attitude, one lacks an element of a psychological commitment to A-ing that is intrinsic to being settled on A-ing, and therefore to having an occurrent intention to A.

# Occurrent Intentions

## Beliefs

- S intends to A only if S lacks the beliefs that he will not A and that he probably will not A
- An agent may have an executive attitude toward a plan for A-ing without having an intention to A

### Example

A golfer may have an executive attitude toward a plan for sinking a putt that he believes he probably will miss.

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# Presisting Conditions

- whether an occurrent intention to A persists depends, among other things, on whether the agent acquires a belief that he probably will not A.
- An agent who intends to unlock his office door may try, fail, and try again. After another attempt or two, he may come to believe that he probably will not unlock it and try again anyway.
- Acquisition of this belief suffices for the nonpersistence of his intention to unlock the door.

# Presisting things, changing

In what ways can an occurrent intention change while it persists?

An occurrent intention cannot persist while no longer being an executive attitude or while no longer having a plan as its content.

## Plan changes

- Addition
- Substitution
- Fork Resolution

The intention that was being executed does not survive the change, owing to the agents having opted against a node in his original plan in favor of a course of action that was not in his plan.

# Different timings, same intentions?

## What does it take for two intentions to be the same?

The question is whether an occurrent intention  $N1$  that one has at  $t1$  and an oc- current intention  $N2$  that one has at a later time  $t2$  need to have the same plan-component in order to be the same occurrent intention?

If Correct, then OIP holds true

## Theorem

*OIP Occurrent intention  $N1$  at  $t1$  and occurrent intention  $N2$  at  $t2$  are the same occurrent intention only if they have the same plan-component.*

# OIP analysis

## Biconditionality

### Can OIP be biconditional?

The question is whether an occurrent intention N1 that one has at  $t_1$  and an oc- current intention N2 that one has at a later time  $t_2$  need to have the same plan-component in order to be the same occurrent intention?  
If Correct, then OIP holds true

### OIP

A biconditional version of OIP is implausible.

### Theorem

*OIPa Occurrent intention N1 at t1 and occurrent intention N2 at t2 are the same occurrent intention if and only if they have the same plan-component*

### Example

A counter example is as follows,

- The noon intention and the 7pm intention of taking Angela to the movies have the same plan components. However, it is implausible that an occurrent intention to take Angela to a 7:00 movie persists as an occurrent intention from noon into the evening.
- Two intentions may have the same plan component even though one is an intention to A and the other is instead an intention to try to A.



## Theorem

*OIPa In an agent  $S$ , occurrent intention  $N1$  at  $t1$  and occurrent intention  $N2$  at  $t2$  are the same occurrent intention if and only if*

- (1) they have the same plan-component*
- (2) there is no time between  $t1$  and  $t2$  at which no intention with that plan-component is suitably at work in  $S$  in producing intentional actions performed by  $S$  or in producing items appropriate for the production of intentional actions by  $S$  or is a conscious non-standing intention*
- (3) between  $t1$  and  $t2$   $S$  undergoes no change of belief that would suffice for an intention with that plan-component being a different intention from  $N1$*

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# Intention State

## In what state did the intention persist?

After putting the broom and dustpan away, Al paused because he forgot what he intended to do next. If Al had had an intention to put the corkscrew away he would have put it away then. Similarly, if he had had a conscious non-standing intention to put the corkscrew away then, he would have put it away then. Instead, he paused to try to recall what he intended to do next.

## Open options

- Al has a persisting standing intention to put the corkscrew away
- Al has a persisting intention to do this that is occurrent at some times but not occurrent at others.
- Al has no persisting intention at all to do this.

Even while Al has temporarily forgotten what he intended to do, he may have a disposition to recall that he intended to put the corkscrew away.

# Occurrent and Standing Beliefs

## Motivation

If recalling this is sufficient to generate a proximal intention to put the corkscrew away, is Al plausibly regarded as having, for some time, a standing intention to put it away when he finishes sweeping the floor a standing intention to C?

Als disposition to have occurrent intentions to C was produced in part by his acquiring an occurrent intention to C.

## Theorem

*SB A disposition to have occurrent beliefs that  $p$  is a standing belief that  $p$  if and only if the persons acquiring an occurrent belief that  $p$  played a role in producing the disposition.*

# Third type of intention

## Intention buffer

Suppose that whenever normally functioning human beings consciously acquire a distal intention to A that they do not proceed straight- away to revoke, there is an interesting internal effect. One possible effect is that the distal intention an executive attitude toward a plan is stored as an intention in an intention buffer.

# Third type of intention

## 3Intention

While the agent is aware that he intends to A, the stored distal intention is an occurrent intention. Suppose that even if the agent forgets that he intended to A, the stored intention persists for a time. Because the intention is not itself a disposition to have occurrent intentions, it is not a standing intention. And if, during some span of time, it is neither at work in relevant ways nor a conscious intention, it is not an occurrent intention during that time.

## 3Intention and standing intentions

Because he has a 3-intention to A, an agent has a disposition to acquire occurrent intentions to A therefore this is a reason to judge that the disposition counts as a standing intention to A.

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# Sufficient conditions for standing conditions

## Acquiring occurrent intentions' effect on standing intentions

An agents disposition to have occurrent intentions to A is a standing intention to A only if his having acquired an occurrent intention to A helps to account for the dispositions existence

## Theorem

*SI S has, throughout a span of time t, a standing intention to A, if*  
*(1) throughout t, S has a nondeviantly produced standing true belief that he acquired (or had) an intention to A and*  
*(2) he has nondeviantly come to be so constituted that the activation of this belief at any time during t will quickly generate an occurrent intention to A.*



## Back to the Movie intention

At 3:00, Al may be aware that he intends to take Angela to a 7:00 movie without the occurrent intentions doing any work of the kinds just mentioned at the time. If things work out, an occurrent intention to take Angela to a 7:00 movie will eventually help to produce appropriate actions.

- A position on what it is for an intention to be an occurrent intention at a time and an account of the persistence of occurrent intentions to A as occurrent intentions to A.
- A sufficient condition for somethings being a standing intention to A.
- Discussion of Relatively short-term standing intentions.
- Outlook
  - Explore long term counterparts of persisting standing intentions.

# For Further Reading I



A. Mele.

*Persisting Intentions.*

Florida State University, 2007.