

## TERTIARY WAYWARDNESS TAMED\*

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### I

Wayward causal chains present an obstacle for causal theories of intentional action —as is well known. It is not enough that the intention to A cause one's A-ing, it must cause it non-deviantly in order to be intentional A-ing. For without excluding deviant causal pathways, many cases which should not be counted as intentional actions would slip through the net and become classified as intentional. S intends to drop the precious vase, but his intention so unnerves him that it causes him to shake, thereby causing him to drop and break the vase. Even if S had changed his mind (which he did not) and ceased to intend to drop the vase, he could not have avoided dropping it. Although the intention to drop the vase is a key player in the etiology of S's vase-breaking, we are not inclined to count it as intentional breaking.

Recently, Myles Brand [5] has catalogued two varieties of deviance (waywardness) in causal chains which might prevent an action's being intentional, even if caused by

\* I would especially like to thank Al Mele and Paul Yu for helpful comments and encouragement. Other help came from Robert Audi, Myles Brand, and Hugh McCann.

an appropriate intention. He calls them “antecedential” and “consequential” waywardness, respectively. In antecedential waywardness, there is a wayward link between the intention to A and the bodily movement portion of the performance of A-ing—as in our “vase-breaking” example above where the intention caused the nervousness which caused the dropping. In consequential waywardness the deviant portion may come after the bodily movement portion of one’s action. S intends to shoot the burglar, aims, fires widely, but unexpectedly the bullet glances off the brass lamp post and hits the burglar. S does what he intends (shoots the burglar), but here the deviance comes after S’s intention causes his pulling the trigger—his bodily movement portion of the act of shooting the burglar is over when the waywardness takes place.

On the way to an analysis of intentional action, Brand suggests ways for each type of waywardness to be blocked in order for intentional action to occur. In the “antecedential” cases Brand claims we must allow a “gap” between the intention and the bodily movement. No gap, no chance of deviance. The intention to A must cause the bodily movement portion of the A-ing *proximately*, no intermediary. In the “consequential” cases Brand says that intentions comprise *plans* which, as it were, *script* the intentional action. If the act does not go according to the script (as in our burglar example where S did not plan on the bullet’s glancing), the action is not intentional.

These solutions may well work. I shall not consider them here, for in [6] Al Mele claims the count of types of wayward causal chains has just gone up—there are now three! Mele claims to have uncovered a *new* type of causal waywardness not yet discussed in the action theory literature and not covered by either solution Brand presents for the other two. Mele leaves us with a challenge to those

who hanker for a causal theory of intentional action —try to handle tertiary waywardness! I have come to attempt to answer his challenge.

I shall present his example, analyze the structure of the waywardness, and show how a straightforward cybernetic model of intentional action tames tertiary waywardness.

## II

Here is Mele's example:

Fred is taking a machine-readable multiple choice test. His strategy is to circle on the question-sheet the identifying letters next to the answers that he feels certain are correct and then, after all such circling is completed, to fill in the corresponding spaces on his answer sheet. At this point, he will take up the more difficult questions.

An hour has elapsed, and Fred is reading the forty-fifth question. He is confident that the answer is "bee", which word appears next to the letter "a" on his question sheet. However, as a result of an understandable slip of the pencil, he circles the letter "b". As luck would have it, "b" is the correct answer. Later, when filling in the answer sheet, Fred looks at the circled "b" under question 45 and fills in the space under "b" on his answer sheet —intending thereby to provide the right answer ([6], 56).

Mele claims that this example is of a type that is neither "antecedential" nor "consequential" waywardness. Thus, it is not covered by either of Brand's solutions. It is not antecedential because Fred's intention to circle the correct answer on question # 45 causes his circling the correct answer on # 45 straightaway —no gaps. It is not consequential waywardness. Fred's action is according to a plan —the plan is simply to provide the correct answer by filling in the blank under "b" on the answer-sheet. This Fred does as well. Thus, it is, Mele

claims, a new “tertiary” form of waywardness.<sup>1</sup> Indeed, according to Mele, it is a type in which the deviance comes prior to the formation of the intention —unlike either antecedential or consequential waywardness.

We may, with Mele, concede that there is an element of accident in the correct answering of question # 45 sufficient to render it unintentional action. Still, there are sub-actions of Fred’s which, as components of the larger act, are unproblematic. His dutiful translation of circle at question # 45 into filled space was surely intentionally done. And at that time he intended to be providing the right answer. So that component of his action is not at issue. I shall not consider it further.

The real problem, and I believe Mele would agree, is in the mistake of circling answer *b* in the beginning. For that is an essential component of his action of “answering question # 45 correctly” and that is where the unintentionality takes place. Fred intended to circle the right answer, but he intended to circle it under the description or name “answer *a*”. This he did not do. For, since “bee” (which he thought was right) was next to letter “a” —he ought to have circled “a”, given his *modus operandi* for the test. Instead, Fred circled “b”. But, assuming that he clearly saw the “b” and that he knew what he was doing at the time (circling it), even his circling of “b” was inten-

<sup>1</sup> Mele acknowledges that one could claim this is a form of consequential waywardness. All we must do is show that Fred has a more detailed plan (to translate answers without slips of the pencil, say) and then Fred does not follow his plan. However, rightly, Mele constructs the case (it is *his* example) such that Fred has a very minimal plan (fill slot on sheet according to letter circled, thereby providing correct answer to # 45). One could still complain that this is part of a larger plan and only when we look at the larger plan (initial circling) can we see that Fred does not follow his plan. But Mele could always put in temporary forgetting of the earlier plan, or some such. So let us grant him that this is not consequential waywardness and simply try to solve the puzzle. I believe the model I will suggest solves Mele’s puzzle when classified as “consequential” or as “tertiary” waywardness.

tional. The only thing unintentional was his “answering question # 45 correctly”. He circled the correct answer by mistake even though he intended to circle the right answer. He thought that he knew which was the right one, but he made a mistake in circling when confusing “bee” with *b*.

Let’s call this mistake a syntactic-semantic processing error (SS-error, for short). Fred confused the semantic importance of a word (“bee”) with its syntactic-phonological distractor (“b”). After this point, I claim, Fred’s providing the correct response was informationally out of his control and not intentionally done (though Fred was not aware of this). Let us say that the SS-error caused Fred to have the true belief that letter *b* was correct. It was correct, but Fred had the false belief that he was circling the letter next to “bee”, viz. letter *a*. And it was “the letter next to the word ‘bee’” that Fred intended to circle. That is, Fred had a true *de re* belief about the correct answer —that he was circling it. But he had a false *de dicto* belief about it —that it was the answer “bee” (and that it was next to the letter *a* on the question sheet). The SS-error and its resultant false beliefs render Fred’s action of “answering question # 45 correctly” non-intentionally done. And, importantly, the SS-error takes effect prior to the formation of the intention “to provide the correct answer to question # 45 by filling the space on the answer sheet corresponding to the letter circled on the question sheet”.

### III

We have analyzed the structure of the case. We have only to generate a principled way of dealing with the case and we will have tamed tertiary waywardness —thereby answering Mele’s challenge. I shall analyze the structure

of an answer to his challenge, but it is important to notice that the answer is much broader than his example. For I have analyzed the example such that there is a false belief generated by Fred's SS-error. However, the false belief alone is not the culprit. It is the SS-error which generates a lack of control of Fred's action.

Elsewhere I have given the structure of a cybernetic model of goal-directed behavior—including intentional action [3]. I will not replay the argument for it here. Instead, I shall appeal to the idea that an intentional action is one over which the agent has at least a large element of control. When control is lost the outcome becomes accidental relative to the beliefs and desires (i.e. goals) of the agent (even if the beliefs are all true). Were the beliefs or desires to change they would not causally influence the outcome in the right way. That is sufficient to "loose control".<sup>2</sup>

An essential feature of intentional action is that a person has control over his actions—at least control over the bodily movements which feature in his action. Accordingly, a control model of intentional action offers the following conditions: S intentionally does A *just in case*:

- (i) S has an intention to do A;
- (ii) S's bodily movements directed toward A-ing are controlled and monitored by an information feedback loop in which S's movements (as output) provide new information (as input) compared with his intention (in (i)) and from which error-corrections flow;
- (iii) S's bodily movements which result in the action of

<sup>2</sup> See [2] where I discuss some of the formal features of control systems, generally. For instance, I face the challenge that all action seems to go "purely ballistic" at some point and must be outside the domain of the agent's feedback control. I show how this objection can easily be disarmed.

type A (if forthcoming) causally depend upon the feedback process of condition (ii) [4].

Let us express one of the necessary conditions on control (and thereby intentional action) by saying that the agent must not have the feedback control loop broken prior to his part in the action coming to a close. That is, there must not be a break prior to the completion of the agent's bodily movements which comprise his part in the action.

So, for example, antecedential waywardness breaks condition (iii) —for the agent's intention may be to do A, but between intention and the doing of A a deviant causal chain is introduced. The production of A is unintentional since control of action by intention is lost. In the vase-breaking example, S's nervousness breaks the dependency of output (dropping) on the intention and input (knowing where one's hands are perceptually). The nervousness alone is sufficient to cause the dropping.

In tertiary waywardness (at least in Mele's example of it), the control loop is also broken —condition (ii). There are several ways to break a feedback control loop in an information feedback control system: break the forward loop (immobilize someone's arm so they can't effect an action A); break the feedback loop (blindfold or anesthetize them so they can't tell if they've done A); or misinform them so that they have in fact done B (not = to A), but they receive false information to the effect that they have done A.

An information processing error of the type Fred suffers in the example above counts as a break in the information feedback loop of the last type. The SS-error which caused Fred's false belief caused misinformation at input (letter *b* circled) to be processed as though it were correct information about completing his goal (to circle the letter next to the word "bee"). Fred did not complete *this goal*,

which was an essential sub-goal, from his point of view, of the larger goal of answering question # 45 correctly. Since Fred did not complete his sub-goal in his larger plan, his action was not intentional. He believed that he had completed his sub-goal because of the processing error (SS-error). At that precise point, Fred's action was informationally out of control. For Fred's action was not sensitive to his original sub-goal (sub-intention). In fact, his sub-goal was to circle the letter next to the word "bee" —which he did not do. This alone shows that his action was not under his control. Ordinarily, Fred would have processed the information feedback about the error in his goal to circle the letter next to the word "bee". But due to the SS-error, he processed the information being fed back incorrectly —thereby thinking he had successfully completed his sub-goal (he mistook the 'b' for "bee"). Fred's action of answering question # 45 correctly was, therefore, not intentionally done. There was a component in that action of which Fred was not informationally in control because of a break in the information feedback loop of his control system.

#### IV

The control model, therefore, generates the solution to Mele's challenge. It shows what goes wrong in "tertiary waywardness" and why. It can also be adapted to handle the other forms of waywardness—but not here.<sup>3</sup> Furthermore, it is accidental to the solution that there is a false belief generating the unintentionality. The real solution is that the control loop of intentional action is broken. Even if no false beliefs arise, an action would be unintentional if one's control were lost. For instance, in cases of antecedential waywardness (vase-dropping example)

<sup>3</sup> I discuss other forms of waywardness in [2] and in [3].



there need be no false beliefs. S's dropping of the vase was unintentional because the dependency of dropping on intending to drop had been broken. Since there are a wealth of ways to break a control loop, there are equally as many varieties of wayward causal chains in the offing. Rather than join in the cataloguing of them, I am trying to indicate the solution to all at a single stroke.

The general lesson to draw from this, I believe, is that a cybernetic (control) model of intentional action is a very powerful one for action theory. I have shown elsewhere how it stands up to the usual objections to such models [2] and how it solves other problems in action theory [4]. I have also indicated how I believe it can help us with the problem of semantic content in the philosophy of mind, generally [1]. Tertiary waywardness is also tamed, if I am not mistaken. Intentional action escapes such waywardness just when the control loop of action is not broken.<sup>4</sup>

## REFERENCES

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*Recibido: 24 octubre 1988.*

<sup>4</sup> See [3] for more details on the control model of goal-directed behavior and the information-theoretic notion of "control".