

Intention and Volition

JING ZHU
Department of Social Sciences
Graduate School of the Chinese Academy of
Sciences
Beijing 100039
China

I Introduction

The volitional theory of human action has formed a basis for a prominent account of voluntary behavior since at least Aquinas. But in the twentieth century the notions of will and volition lost much of their popularity in both philosophy and psychology. Gilbert Ryle's devastating attack on the concept of will, and especially the doctrine of volition, has had lingering effects evident in the widespread hostility and skepticism towards the will and volition.¹ Since the 1970s, however, the volitional theory has received some renewed interest in the philosophy of action.²

1 Ryle, *The Concept of Mind* (London: Hutchinson 1949), ch. 3. See also A.I. Melden, *Free Action* (London: Routledge & Kegan Paul 1961), ch. 5.

2 B. Aune, 'Prichard, Action, and Volition,' *Philosophical Studies* 25 (1974) 97-116; *Reason and Action* (Dordrecht, Holland: Reidel 1977), ch. 2; L. Davis, *Theory of Action* (Englewood Cliffs, NJ: Prentice-Hall 1979); C. Ginet, 'Voluntary Exertion of the Body,' *Theory and Decision* 20 (1986) 223-45; *On Action* (Cambridge: Cambridge University Press 1990); A. Goldman, 'The Volitional Theory Revisited,' in M. Brand and D. Walton, eds., *Action Theory* (Dordrecht, Holland: Reidel 1975), 67-84; E.J. Lowe, *Subjects of Experience* (Cambridge: Cambridge University Press 1996), ch. 5; *An Introduction to the Philosophy of Mind* (Cambridge: Cambridge University Press 2000), ch. 9; H. McCann, 'Volition and Basic Action,' *Philosophical Review* 83 (1974) 451-73; 'Trying, Paralysis, and Volition,' *Review of Metaphysics* 28 (1975) 423-42; *The Works of Agency* (Ithaca and London: Cornell University Press 1998); N.M.L. Nathan, *Will and World: A Study in Metaphysics* (Oxford: Clarendon 1992); D. Odegard, 'Volition and Action,' *American Philosophical Quarterly* 25 (1988) 141-51; B. O'Shaughnessy, *The Will: A Dual Aspect Theory* (Cambridge: Cambridge University

Some philosophers even consider that 'in current philosophy of action it is perhaps the most widely held view, at least regarding the immediate antecedents of action.'³

Perhaps the most interesting and important development in action theory in the past two decades has been the appearance of a number of sophisticated accounts of intention that establish intention as a distinctive, irreducible concept in understanding human action.⁴ Intention has also become an important topic in contemporary developmental psychology and social psychology.⁵

There has been a tradition that equates volition with intention. Some volitionists view volition as a special kind of intention. John Stuart Mill, for instance, says:

Now what is an action? Not one thing, but a series of two things: the state of mind called a volition, followed by an effect. The volition or intention to produce the effect, is one thing; the effect produced in consequence of the intention, is another thing: the two together constitute the action. (*Logic*, Bk. 1, ch. 3, sec. 5)

For Wilfrid Sellars, volitions are 'but one variety of occurrent intention (state), as perceptual takings are but one variety of occurrent belief (state).'⁶ The content of a volition can be expressed in the form of 'I shall

Press 1980); C. Ripley, 'A Theory of Volition,' *American Philosophical Quarterly* **11** (1974) 141-7; W. Sellars, 'Volitions Re-Affirmed,' in M. Brand and D. Walton, eds., *Action Theory* (Dordrecht, Holland: Reidel 1975), 47-66.

3 R. Audi, 'Volition and Agency,' in his *Action, Intention, and Reason* (Ithaca, NY: Cornell University Press 1993), 74.

4 M. Brand, *Intending and Acting: Toward a Naturalized Action Theory* (Cambridge, MA: The MIT Press 1984); M. Bratman, *Intention, Plans, and Practical Reason* (Cambridge, MA: Harvard University Press 1987); *Faces of Intention: Selected Essays on Intention and Agency* (Cambridge: Cambridge University Press 1999); G. Harman, 'Practical reasoning,' *Review of Metaphysics* **79** (1976) 431-63; 'Willing and intending,' in R. E. Grandy and R. Warner (eds.), *Philosophical Grounds of Rationality: Intentions, Categories, Ends* (Oxford: Clarendon Press 1986), 363-82; *Change in View* (Cambridge, MA: The MIT Press 1986), chs 8 & 9; A. Mele, *Springs of Action: Understanding Intentional Behavior* (New York: Oxford University Press 1992); J. Searle, *Intentionality* (Cambridge: Cambridge University Press 1983), ch. 3.

5 P. Zelazo, J. Astington and D. Olson, eds., *Developing Theories of Intention: Social Understanding and Self-control* (Mahwah, NJ: Lawrence Erlbaum Associates 1999); B.F. Malle, L.J. Moses, and D.A. Baldwin, eds., *Intentions and Intentionality: Foundations of Social Cognition* (Cambridge, MA: The MIT Press 2001).

6 'Volitions Re-affirmed,' 53.

do *A* here and now.⁷ Frederick Adams and Alfred Mele, who are both non-volitionists, have recently offered a detailed reductive account of volition.⁸ According to them, 'the major functional roles ascribed to volition are nicely filled by a triad composed of intention, trying, and information feedback.'⁹ Hence they conclude that 'volitions are simply intentions at work — or intentions themselves.'¹⁰

In this paper I will argue that, contrary to this widely received misconception and against Adams and Mele's account, volitions cannot be reduced to intentions. Although intentions play a crucial role in initiating, guiding and sustaining intentional action, they alone are insufficient to account for the initiation and execution of all kinds of intentional actions. Rather they must be supplemented with volitions, which are conventionally conceived as acts of the will.

II Volition, Intention, and Trying

As Robert Audi has observed, there is much theoretical diversity among volitionists on what volitions really are.¹¹ To remedy this shortcoming, drawing on recent research in psychology and cognitive neuroscience, I have developed a unifying and comprehensive conception of volition.¹² Volitions are construed as special kinds of *mental action* by which an agent actively and mindfully bridge the gaps between deliberation, decision, and action. In his recent book *Rationality in Action*, John Searle argues that there are three gaps in human practical reasoning and action:

First, there is the gap of rational decision making, where you try to make up your mind what you are going to do. Here the gap is between the reasons for making up your mind, and the actual decision that you make. Second, there is a gap between the decision and the action. Just as the reasons for the decision were not causally sufficient to produce the decision, so the decision is not causally sufficient to

7 Ibid., 47.

8 'The Intention/Volition Debate,' *Canadian Journal of Philosophy* **22** (1992) 323-38.

9 Ibid., 323.

10 Ibid., 337.

11 See R. Audi, 'Volition and Agency' for a critical review.

12 'Understanding Volition,' *Philosophical Psychology* **17** (2004) 247-73; 'Locating Volition,' *Consciousness and Cognition* **13** (2004) 302-22; 'Reclaiming Volition: An Alternative Interpretation of Libet's Experiment,' *Journal of Consciousness Studies* **10** (2003) 61-77 (No. 11).

produce the action. There comes the point, after you have made up your mind, when you actually have to do it. And once again, you cannot sit back and let the decision cause the action, any more than you can sit back and let the reasons cause the decision. ... There is a third gap that arises for actions and activities extended in time, a gap between the initiation of the action and its continuation to completion. ... Even once you have started you cannot let the causes operate by themselves; you have to make a continuous voluntary effort to keep going with the action or activity to its completion.¹³

The first gap that Searle describes is between reasons for practical decision, which may be certain combinations of beliefs and desires or preferences, and the decision to be reached or the intention to be formed. The second and third gaps are between a decision or intention to act, and the actual initiation of the intended action as well as the sustained execution and implementation of the intention. As Searle maintains, these gaps are the source from which the traditional philosophical problem of 'the freedom of the will' arises, and where the mental activities conventionally called 'volitions' take place.¹⁴

Three kinds of mental action may be exerted by an agent to bridge these gaps. In deliberation, you cannot just sit back and passively let the desires, beliefs and reasons cause your decisions. You must actively *do* something to make up your mind, to resolve the uncertainty about what to do, and thereby commit yourself on a certain course of action. If you have more than one reason to do a certain thing, you may *select* one of them to act on. A function of practical decision-making is thus to terminate the process of deliberation, which brings about a settlement of conditions of doubt or uncertainty about what the agent will do. As some philosophers have argued, to decide to *A* is to perform a momentary mental action which typically results in the formation of an intention to *A*.¹⁵ And making a practical decision is traditionally understood as involving an act of will, namely, a volition.¹⁶

Some classical volitionists view volitions as being essential in bridging the second gap, which translate thoughts into actual bodily movements

13 J. Searle, *Rationality in Action* (Cambridge, MA: The MIT Press 2001), 14-15.

14 *Ibid.*, 13, 275-6.

15 A.S. Kaufman, (1966). 'Practical Decision,' *Mind* 75 (1966) 25-44; S. McCall, 'Decision,' *Canadian Journal of Philosophy* 17 (1987) 261-88; H. McCann, *The Works of Agency*, ch. 8; A.R. Mele, 'Deciding to Act,' *Philosophical Studies* 100 (2000) 81-108.

16 N.M.L. Nathan, *Will and World*, ch. 9; H.M. Wells, *The Phenomenology of Acts of Choice: An Analysis of Volitional Consciousness* (Cambridge: Cambridge University Press 1927); M.J. Zimmerman, *An Essay on Human Action* (New York: Peter Lang 1984), ch. 3.

by triggering the initiation of action. Locke, for example, put this classical view succinctly:

Volition or Willing is an act of the Mind directing its thought to the production of any Action, and thereby exerting its power to produce it. (*An Essay Concerning Human Understanding*, II. XXI. 28)

One can have a decision or intention to perform a certain action, but the decision or intention will remain as a thought in the head, until it is executed by the relevant body parts. We do not execute, or even try to execute, all our intentions. Many people experience cases of akrasia, or weakness of will, in which we have developed an intention and retain it until the time for action, but find ourselves somehow unable to carry it out. Sometimes we simply change our minds, abandoning a certain intention or substituting another for it. Volition is thus postulated as a mediating executive mental process, by which an agent somehow puts (or tries to put) the relevant body parts into action in the execution of an intention.

For some extended actions, such as writing a book, even once you have started their execution you cannot simply let them run to completion by themselves; you need to make continuous efforts to keep going with these actions to their completion. Executive control refers to the process by which an agent *actively* and *mindfully* implements or realizes her intention through action. To carry out an intention under executive control, an agent needs to be able to maintain the intention or plan in a working condition. This is especially useful in guiding, coordinating and controlling complex and flexible behavior in a changing environment. The agent needs also to be able to purposefully and actively direct her attention to monitor her own performance and the changes in environment, and to exert efforts to overcome both mental and physical resistance.

Why should we characterize these three different types of mental activity, namely, practical decision-making, conscious initiation of intentional action, and the executive control of intention implementation, into a single category named 'volition'? Two answers are in order. First, all three of these sorts of mental action are essentially constitutive of an agent's *unity of agency*. To be an agent is to be able to intentionally make things happen by one's actions. The integrity of agency will be essentially diminished, if an agent cannot volitionally make his own decisions or choices, perform actions in accordance with his own will, or successfully carry out intentional actions to their completion. Secondly, all these three kinds of mental activity are traditionally associated with the notion of *will*. The first gap in human practical reasoning, which is between reasons for action and the decision to act, is the place where 'the freedom

of the will' is conventionally supposed to reside. This is a source of an agent's sense that it is up to him to make his choice and he could have done otherwise if he had made another decision. Our ordinary conviction of free will is largely built on this sense of alternative possibilities. The second and third gaps, which are between intention and the actual performance and completion of intentional action, are relevant to the notion of *willpower*. When an agent has decided that it is better to do *A*, but instead is intentionally doing *B*, his action is a case of *akrasia*, which embodies 'the weakness of the will.' In contrast, when an agent makes efforts or endeavors to realize his intentions, we may say that he is exerting 'the strength of his will.' The concept of volition hence provides a unifying perspective that links these three distinctive types of mental action with the conative aspect of the mind as 'acts of the will.'¹⁷

Whereas volitions are *acts* of mind, 'intentions, by contrast, are *states* of mind that persist through time and guide actions.'¹⁸ According to Mele's account of intentional action, intentions are executive attitudes toward plans.¹⁹ Like beliefs and desires, intentions have representational contents, which are typically action-plans. Among contemporary theorists of intention, Mele particularly emphasizes the executive or motivational dimension of intention.²⁰ Intending to do *A* implies being settled upon doing *A*, which means the agent is committed to carrying out the intention either at the present or in the future, although the commitment is not necessarily irrevocable. 'Intentions are executive states whose primary function is to bring the world into conformity with intention-embedded plans.'²¹ Some main functions of intention are implicated in its executive aspect: intentions are involved in initiating and sustaining intentional actions; intentions serve a role in guiding and monitoring the execution of intentional action.²² Mele draws the distinction between two kinds of intention: *proximal intentions*, which are concerned with the

17 Recent findings in cognitive neuroscience indicate that the neural underpinnings that are essential in supporting these three types of mental activities share some common brain structures and are organized in an integral, meaningful way. See my 'Locating Volition' for a review.

18 R. Kane, *The Significance of Free Will* (New York and Oxford: Oxford University Press 1996), 24.

19 Mele, *Springs of Action*, chs 8-11; *Motivation and Agency* (Oxford: Oxford University Press 2003) 27-8.

20 See *Springs of Action*, ch. 9 & 10.

21 *Ibid.*, 162.

22 *Ibid.*, 130-7.

'specious present,' and *distal intentions*, which are for the nonimmediate future.²³ Proximal intentions, according to Mele, play a crucial role both in initiating intentional action and in sustaining the execution of action.

Adams and Mele's strategy to reduce volition to intention can be reconstructed in two steps: first, they argue that the concept of *trying* can do the main explanatory work attributed to volitions; then they provide an account of tryings as effects of the normal functioning of appropriate intentions.²⁴

The revived interest in volition theory in the 1970s was largely inspired by the philosophical discussion of *trying*.²⁵ Much discussion about the phenomenon of trying is derived from a famous case described by William James:

Close the patient's eyes, hold his anaesthetic arm still, and tell him to raise his hand to his head; and when he opens his eyes he will be astonished to find that the movement has not taken place.²⁶

Why is this patient surprised? Because he tried to raise his hand, and under normal conditions, his hand should be over his head; but unknown to him, his paralyzed arm failed to move in accordance with his intention and attempt. He tried, but failed. But even if he cannot physically raise his arm, he can still try. It seems that a typical voluntary action consists of at least two distinctive components: an inner mental event or process of trying, and certain overt bodily movements.

Many contemporary volitionists consider volition as equivalent to trying. David Armstrong states that 'all intentional action involves a mental event and that this event is a "trying" or "attempting" to do something.... Perhaps there is no term for this mental something in our ordinary discourse, and some term of art, such as "volition" is re-

23 Brand (in *Intending and Acting*) and Bratman (in *Intention, Plans, and Practical Reason*) make similar distinctions. Cf. Searle's distinction between *prior intention* and *intention in action* in his *Intentionality*, ch. 3.

24 See their 'The Intention/Volition Debate.'

25 D.M. Armstrong 'Acting and Trying,' in his *The Nature of Mind and Other Essays* (Ithaca, NY: Cornell University Press 1980), 68-88; L. Davis, *Theory of Action*; J. Hornsby, *Actions* (London: Routledge & Kegan Paul 1980); H. McCann, 'Trying, Paralysis, and Volition'; B. O'Shaughnessy, 'Trying (as the Mental 'Pineal Gland'),' *Journal of Philosophy* 70 (1973) 365-86; *The Will*.

26 W. James, *The Principles of Psychology*, Vol. 2 (Cambridge, MA: Harvard University Press 1981), 1101.

quired.²⁷ Trying is a mental activity by which agents consciously exert their active power to drive, or attempt to drive the willed bodily movements. This is what some traditional philosophers have had in mind in speaking of volition. Brian O'Shaughnessy says: 'Another name for this act of will is "strive." Another is "try."²⁸

In our ordinary language, however, 'try' usually implies some degree of uncertainty or doubt about the anticipated outcome of an action, as well as a special effort to overcome resistance and difficulty. Trying implies the subjective possibility of failure and difficulty. We tend not to apply the term 'try' to actions that we can easily and reliably achieve. Since a majority of our daily actions are reliable and effortless, how can we say that every action involves *trying*? Theorists may reply that 'trying' should be understood as scaled, in that there are degrees of trying. The measure of trying could be the degree of effort required for success. Quite commonly in our experience, for some novel, difficult tasks, we have to try hard, to devote significant efforts, and success is not guaranteed. But with consistent practice, the required concentration, attention and effort eventually recede and we can perform the tasks more easily and reliably. For effortless actions, we may not apply the term 'trying' in the ordinary sense, since the degree of trying is low. But the inner mental process by which we exert our power in performing bodily movements does not disappear, just as James's example of an anaesthetized patient suggests.

How can volitions or tryings, understood as mental events or processes, be reduced to intentions, as mental states that persist through time? At the heart of Adams and Mele's reductive account is the notion of *intention acquisition*. Strictly speaking, it is not intentions, but rather acquisitions of intentions — the events — that are proposed to do the works traditionally attributed to volitions. On Adams and Mele's reductive account, 'Acquisition of a proximal intention to *A* initiates an attempt to *A* precisely when the intention begins to instantiate its functional role.'²⁹ The initiation of a trying is the immediate effect of the formation or acquisition of a certain proximal intention. According to Adams and Mele, 'tryings are effects of the normal functioning of appropriate intentions. Roughly, trying to *A* is an event or process that has *A*-ing as a goal and is initiated and (normally) sustained by a pertinent intention.'³⁰ In

27 D.M. Armstrong 'Acting and Trying,' 70.

28 B. O'Shaughnessy, *The Will*, 264.

29 'The Intention/Volition Debate,' 328.

30 *Ibid.*, 326.

normal conditions, which are such that the motor mechanisms are in proper working order, tryings will successfully produce corresponding bodily movements. But trying is an internal, mental process by which an agent directly drives an intended bodily movement, which can occur regardless of whether the intended bodily movement can be properly generated, as James' well-known example suggests. So, Adams and Mele claim:

Complete tryings are actions. But it does not follow that all tryings are actions. Some tryings are incomplete. That is, they fall short of any intended goal. In some such cases, perhaps, the normal route between intention and corresponding intentional action is blocked before the agent does anything that can count as action. If and when that happens, the trying, we shall say, is radically incomplete.³¹

On Adams and Mele's view, proximal intentions not only initiate, but also causally sustain and guide tryings:

Proximal intentions stand in two sorts of causal relation to tryings: they initiate tryings and (depending upon the duration of a trying) sustain them. A proximal intention begins its work by initiating a trying, its continued work normally includes the sustaining of a trying. Proximal intentions stand in the same relations to actions.³²

Mechanisms of goal-directed feedback control rooted in cybernetic theory have been introduced to supplement intention in supporting its sustaining and guiding function in intentional action.³³ In Adams and Mele's control model of intentional action, an intention sets the goal and plan of action, provides a standard for determining error and correction or damages control when the plan goes awry, and provides criteria for goal-success, which help to determine when the intended action has been completed. Hence intentions causally figure in the guidance and correction of the execution of intentional actions, in which feedback control plays a crucial role.

It is worth noting that Adams and Mele's reductive account of volition to intention does not aim to cover practical decisions, traditionally conceived as acts of will.³⁴ In a recent paper, 'Deciding to Act,' Mele

31 Ibid., 328.

32 Ibid., 327.

33 See Adams and Mele, 'The Role of Intention in Intentional Action,' *Canadian Journal of Philosophy* 19 (1989) 511-32.

34 See 'The Intention/Volition Debate,' 331-2 for a list of the phenomena that volitions

argues that making a practical decision is a momentary mental action of intention formation, by which an agent actively settles upon a course of action.³⁵ So if making a practical decision is a volition, Mele may not be bothered to endorse volition in this sense. But on behalf of the reductive account, practical decision-making as volition can as well be construed as *actional* acquisition of intention. Thus the spirit of the reductive account of volition can be preserved.

I am inclined to agree with Adams and Mele that trying, taken as a technical term, can capture most of the essential conceptual and explanatory properties ascribed to volition. In particular, trying is the bridge between the classical concept of volition as action initiator and the more cognitive-psychologically oriented view of volition as executive control. When someone is trying to *A*, this fact entails that he is starting *A*-ing, and his exertion of executive control over *A*-ing will normally last until he has completed or ceased trying to *A*. Hence trying is not merely the triggering of a course of action, but also implies the agent's sustaining contribution to the execution of the action. Furthermore, trying serves a crucial bridge function between certain inner, mental activities and overt voluntary body movements, and this aspect is exactly why volition is postulated to account for the nature of action.³⁶ In addition, trying is not totally alien to our ordinary experience of volitional action. Trying, understood as a technical term, does not necessarily involve making a special effort, overcoming an uncommon difficulty, or a degree of subjective uncertainty about the outcome of action. But it is continuous and consistent with these ordinary connotations, which are intimately associated with the subjective experience of volitional agency.

III Volition in Action Initiation

Volitional theories of action need not deny that intentions have an executive dimension, and that proximal intentions can play an important role in action initiation and executive control. What any theory of volition must insist upon is that intentions alone are not sufficient in initiat-

are postulated to explain. Adams and Mele argue that trying can perfectly do the explanatory work attributed to volitions.

35 Mele, 'Deciding to Act,' *Philosophical Studies*, 100 (2000) 81-108. See also his *Motivation and Agency* (Oxford: Oxford University Press 2003), ch. 9.

36 See B. O'Shaughnessy, 'Trying (as the Mental "Pineal Gland").'

ing all kinds of intentional action and controlling their execution — they must be supplemented by volitions.

Let us begin with the issue of action initiation. First of all, intentions alone are insufficient to *cause* intentional actions. All intentions are mental states, not events. Thus even though intentions are crucial in producing intentional actions, there must be something else — some changes — taking place in order to cause the initiation of an action. Adams and Mele are clearly aware of this point. On their view, it is the *acquisition* of a proximal intention — the event — that triggers actional mechanisms. But how does the acquisition of a proximal intention initiate an intentional action? Mele states:

In all cases of overt intentional action, the acquisition of a proximal intention settles for the agent the practical question “What shall I do now?”, thereby triggers appropriate actional mechanisms — unless they are already operating — and the intention causally sustains their functioning.³⁷

This account faces some problems. As William James’s well-known example of getting out of bed on a freezing morning suggests, one may fail to produce intended bodily movements even if one has already settled the practical question: ‘I *must* get up now, this is ignominious.’³⁸ Why does the acquisition of this proximal intention fail to generate the corresponding intentional action? James replies that the conscious feelings of warmth and cold in such a condition impede the initiation of the intended bodily activity of rising. For cases involving conflicting or antagonistic ideas, James says, ‘an additional conscious element, in the shape of a fiat, mandate, or express consent, has to intervene and precede the movement.’³⁹ This ‘additional conscious element’ is what traditional theorists call volition. Mele acknowledges that the failure of action initiation in such cases ‘is a difficult question’ for his account that the acquisition of a proximal intention can *automatically, causally* trigger the corresponding actional mechanisms.⁴⁰ In the discussion of a similar example of someone’s fear being so great that when he forms a proximal intention to jump from the third story of a burning building, his forming that intention has no motor effect, Mele replies that ‘the explanation may be that the agent’s fear caused pertinent actional mechanisms not to

37 Mele, *Springs of Action*, 177 and 192.

38 *The Principles of Psychology*, Vol. 2, 1132-3.

39 *Ibid.*, 1130.

40 *Springs of Action*, 179.

work normally.⁴¹ From these examples, therefore, we are led to consider that at least in the conditions under which the actional mechanisms are not 'working normally,' we may need some additional mental acts or events, something like 'volitions' endorsed by traditional volitional theorists, to supplement the acquisition of proximal intentions in order to initiate intentional actions.

How can we draw the distinction between the actional mechanisms that are *not* working normally and those working in a proper order? If there is some severe neurophysiological impairment on the pathways from the cortex to motor muscles, such as those typically in patients of the Parkinson's disease, we can say that the agent's actional mechanisms are working abnormally. However, from the above discussion we can see that in Mele's sense the condition for an agent's actional mechanisms not working normally is much broader. Even some normal emotions can cause pertinent actional mechanisms not to work 'properly.' Five minutes ago, when I failed to get out of bed immediately after I had formed a proximal intention to do so, my actional mechanisms were not working normally. Now I am up without any significant struggle, as a result of my actional mechanisms working normally. In this case, isn't the distinction too arbitrary and trivial between the conditions in which my actional mechanisms are working normally and those in which they are working abnormally? Before jumping from the third story of a burning building, perhaps most people would hesitate for a moment. Does it mean that the actional mechanisms of most people were out of order at that moment? This appears implausible. On this account, if there are conditions under which one's actional mechanisms are 'working normally,' they must be quite limited. At least they would have to exclude the influence of many emotions, such as fear, which may cause 'pertinent actional mechanisms not to work normally.' However, emotion is an important dimension of our mental life and plays a significant role in the generation and execution of action.⁴²

Adams and Mele thus owe us a non-arbitrary, non-trivial account on the distinction between the conditions in which actional mechanisms are working normally and abnormally. This cannot be done simply by employing a circular explanation: the acquisition of a proximal intention fails to initiate the intended bodily movement because the pertinent actional mechanisms are not working properly; the pertinent actional

41 Ibid.

42 See J. Zhu and P. Thagard, 'Emotion and Action,' *Philosophical Psychology*, 15 (2002) 19-36.

mechanisms are not working normally because they cannot initiate the intended action after a proximal intention is formed or acquired. We need an explanation that is about the actional mechanisms *themselves* — why sometimes they function normally and why sometimes not.

In all cases of overt intentional action, Mele claims, by settling first-person practical questions about what is to be done immediately, acquisitions of proximal intentions trigger actional mechanisms if they are working normally. But how does the acquisition of a proximal intention causally trigger the corresponding actional mechanisms? Mele suggests that the activation or triggering of appropriate actional mechanisms is a part of the *default condition* of the acquisition of a proximal intention:

The idea is roughly this: the mental and physical architecture of any being capable of intentional action is such that when such a being acquires a proximal intention to A, an immediate effect is the triggering of appropriate actional mechanisms, unless something prevents it.⁴³

We can further imagine that there is an executive unit in the architecture of the mind similar to the executive unit inside the CPU of a computer. When a computer is turned on, the executive unit is in the default working condition. Its function is to carry out any instruction or procedure fed to it. Analogously, when an agent is awake, the executive unit of the mind is in the default condition. It can execute any formed or acquired proximal intention immediately as a default. James believes that consciousness has this sort of executive function. Simple voluntary acts can take place once the mental representation of the intended bodily movement is brought into consciousness, because 'consciousness is *in its very nature impulsive*.'⁴⁴ No special mental act or fiat is needed for simple actions. However, according to James, an additional conscious element, namely volition, is required if the agent has conflicting ideas on action.

If actional mechanisms can be triggered, by default, by acquisitions of proximal intentions, then no special mental acts are needed in such action initiation, provided the appropriate mechanisms are working properly. However, how to set the default condition of the acquisition of a specific proximal intention, may be *directly* influenced by the agent's intentional, active control. When I entered my office, I decided that I would not take any phone calls this morning, since I needed to concentrate on pressing work. When the phone rings, through a default route,

43 *Springs of Action*, 167.

44 *The Principles of Psychology*, Vol. 2, 1134.

I may acquire an intention to answer it as usual.⁴⁶ But the acquisition of this proximal intention does not trigger the corresponding actional mechanisms as default, because my previous distal intention of not answering phone calls this morning blocks the triggering, and I form a proximal intention not to answer this call. Now suppose that the rings remind me that this call may be an important one that I arranged one week ago, then the relevant actional mechanisms are activated and as a result, I pick up the receiver and say 'Hello.' From this example we can see that, even though no special mental act is needed in action initiation through a default route, what define a default condition and the condition for appropriate actional mechanisms 'working normally' are susceptible to active mental control. With only a few acts of will, we can set and change the default condition for the acquisition of a proximal intention to automatically trigger the appropriate actional mechanisms.

In this section, I have argued that intentions alone, through the mental events of acquisitions of proximal intentions, are not sufficient to initiate all kinds of intentional action. According to Adams and Mele's reductive account, the acquisition of a proximal intention can automatically trigger corresponding actional mechanisms as defaults only if they are working normally. So for the intentional actions generated in abnormal working conditions, we may need special mental acts to trigger the appropriate actional mechanisms. Moreover, the condition under which actional mechanisms are working normally seems fairly limited. At least they should be immune to the influences of emotions, which are pervasive in our real life situations. Furthermore, in many circumstances, with only a few acts of will we can easily set and change the default condition for the acquisition of a certain intention, and the default condition for the corresponding actional mechanisms to work properly. These cases suggest that intentions need to be supplemented by volitions in the initiation of intentional action.

IV Volition in the Execution of Intention

According to the reductive account of volition proposed by Adams and Mele, since intentions have the functions of sustaining and guiding intentional action, working with feedback control mechanisms, they can causally sustain and guide the execution of intentional action. Therefore no further active volitional control is required.

46 See Mele, *Springs of Action*, ch. 12 for a discussion on the default condition of acquisitions of intentions.

I will show that Adams and Mele's intention-based control theory of the execution of intentional action does not work in all cases of action control. Consider the case of action slips. For some routine, well-learned tasks, people are susceptible to inadvertent errors or slips.⁴⁷ For instance, in front of an automatic hot beverage vendor intending to buy a cup of Colombian Decaf, you may find to your surprise that you actually pushed the button for Cappuccino. All of us have had the experience of doing or saying something deviant from our intentions, to our surprise and embarrassment. Sometimes slips or lapses of action can even cause catastrophic accidents and major disasters.⁴⁸ How can these inadvertent errors happen, which differ from those made out of ignorance or forgetfulness? What is the difference between your successfully doing *A* intentionally and your inadvertently doing *A* with the intention of doing *B*? What is the difference between a slip of the tongue and the voluntary imitation of the slip just made?

Some psychologists suggest that slips in human action and speech reveal the problem of volition,⁴⁹ and volition is essential for executive self-control of voluntary action.⁵⁰ Slips or lapses indicate the existence of the gap between one's proximal intention and its correct execution. After all, if all proximal intentions were properly connected to their corresponding bodily actions, no slip would occur. Thus 'slips are in essence a mismatch between intention and performance.'⁵¹ Slips usually occur *automatically*, in the absence of proper attention, awareness, effort and mindful control. They generally take place in routine, familiar situations, and the performances are usually over-learned or habitual. When they

47 D.A. Norman, 'Categorization of Action Slips,' *Psychological Review* 88 (1981) 1-15; J. Reason and K. Mycielska, *Absent-Minded? The Psychology of Mental Lapses and Everyday Errors* (Englewood Cliffs, NJ: Prentice-Hall 1982); J. Reason, *Human Error* (Cambridge: Cambridge University Press 1990); H. Heckhausen and J. Beckmann, 'Intentional Action and Action Slips,' *Psychological Review* 97 (1990) 36-48; B.J. Baars, ed., *Experimental Slips and Human Error: Exploring the Architecture of Volition* (New York: Plenum 1992).

48 Reason and Mycielska, *Absent-Minded? The Psychology of Mental Lapses and Everyday Errors*, ch. 10; Reason, *Human Error*, ch. 7.

49 Baars, ed., *Experimental Slips and Human Error: Exploring the Architecture of Volition*; 'Why Volition is a Foundation Problem for Psychology,' *Consciousness and Cognition* 2 (1993) 281-309.

50 W.A. Hershberger, ed., *Volitional Action: Conation and Control* (Amsterdam: Elsevier 1989).

51 Baars, 'Introduction,' in *Experimental Slips and Human Error: Exploring the Architecture of Volition*, 4.

are consciously recognized, they tend to cause surprise. Nevertheless, slips are events that would have been avoided had the agent managed to keep proper control. The agent has the capacity of performing the intended action, thereby avoiding slips. So slips are not something *out of the control* of the agent, but rather something that happened in the absence of proper executive control.

Adams and Mele's intention-based control model is inadequate to account for both the occurrence of action slips and an agent's executive action control, two sides of the same coin. Many distracting factors, from both external and internal environment, can divert an agent from performing an intended action. Slips of action are not the result of malfunction of the intention-feedback loop. Rather, when an action slip occurs, the intentional behavior that an agent is intending to carry out has been replaced by the execution of another behavior schema that is elicited by environmental stimuli. And the later takes over the guiding and sustaining role in behavior control. However, if the agent were to devote proper executive control, action slips could usually be avoided. Executive control involves the psychological mechanisms by which an agent actively and mindfully bridges the gap between intention and action. The agent must be able to maintain the appropriate intentions that he wants to carry out in a working condition, which enables the intentions to assume the guiding and sustaining role in behavior control. The agent also needs to be able to effectively override and regulate irrelevant or intervening reflexive, habitual or routine responsive schemas that can be elicited immediately by environmental stimuli. Of course, feedback mechanisms that enable an agent to examine his own actional performance in relation to intentions and contextual knowledge as well as situational changes, and to correct erroneous responses, are required. But they are usually a part of the whole action control system that supports an agent's active, purposeful and voluntary exertion of attention and effort. 'Voluntary attention is an exertion of effort in activities which are selected by current plans and intentions,' which corresponds to what we are actively doing, rather than what is happening inside us.⁵² The difference between a slip of the tongue and the voluntary imitation of the slip just made is that the latter implicates volitional elements embodied in the executive control of a purposeful, voluntary behavior, whereas the former is a case of deviance from intention execution which occurs in the absence of mindful, volitional control.

52 D. Kahneman, *Attention and Effort* (Englewood Cliffs, NJ: Prentice-Hall 1973), 4.

V Blocking the Reductive Account

In the previous two sections, I argued that intentions alone are insufficient in initiating all kinds of intentional action and in the executive control of intentional actions, and they must be supplemented by volitions. Reduction theorists like Adams and Mele, however, might remain unconvinced and reply that, in all the cases where volitionists insist that volitions are required, either in action initiation or in intention execution, volitions can be readily replaced by the acquisition of pertinent proximal intentions working with an intention-based control system with embedded feedback mechanisms. Therefore, volitions are superfluous and can be reduced to (the acquisitions of) intentions.

I will show that this reply is implausible, since the acquisitions of intentions cannot do the works traditionally attributed to volition. Let us return to the issue of action initiation. Sometimes people can exercise self-control to overcome the obstacles that thwart the initiation of intended actions, and hence resist *akrasia* or weakness of will. Mele usefully draws a distinction between two different kinds of resistance — what may be called *brute* and *skilled* resistance.⁵³ Brute resistance ‘is what we have in mind when we speak, in ordinary parlance, of someone’s resisting temptation by sheer effort of will.’⁵⁴ Mele goes on to suggest that we understand brute resistance as follows:

To make an effort of brute resistance in support of one’s doing *X* is to form or retain an intention to do *X* in order to bring it about that, rather than succumbing to temptation, one *X*-s. That is, it is with a *further intention* that the agent exercising brute resistance forms or retains the intention to do *X* — with the intention, namely, of bringing it about that he *X*-s rather than *Y*-s.⁵⁵

One may wonder that, however, why the acquisition of a further intention, whose content is the same as that of the previous thwarted ones, namely ‘I shall do *X* here and now,’ can do the job that the previous intention acquisitions failed to do. Mele claims that ‘this account captures ... the element of effort, involved in brute resistance.’ And ‘anything intentionally done plainly requires *some* effort’; ‘some instances of brute resistance may involve more effort than others.’⁵⁶ So it seems that

53 Mele, *Irrationality: An Essay on Akrasia, Self-deception, and Self-control* (New York: Oxford University Press 1987), 26-7.

54 *Ibid.*, 26.

55 *Ibid.*

56 *Ibid.*

the acquisition of the further intention corresponds to the *greater* effort that the agent devotes to resist akrasia. Since the agent devotes more effort, he may be able to overcome the obstacles that have frustrated his previous attempts. This may be done in two different ways. First, to resist akrasia, the agent can form, acquire or retain a further, *stronger* proximal intention. This treatment, however, appears peculiar in contemporary literature on intention. Whereas it is quite common to assign motivational strength to desires or wants,⁵⁷ it seems unusually odd to treat intentions in this way.⁵⁸ Moreover, like desires, a stronger intention in terms of motivational strength does not naturally imply more efforts. For example, John, who is more determined and wholehearted to become a professional philosopher, may have a stronger intention to do so than Tom; but it does not follow that he will devote more efforts than Tom in pursuing a career in philosophy. Another option is to construe brute resistance as the agent's *more forceful* acquisition of a proximal intention, which embodies the agent's greater effort. But clearly, on this account, an additional volitional element is involved in characterizing the more 'forceful' *actional* event, which features the more effortful acquisition of the intention, and seems apt to be understood as an act of will. It is the more forceful actional event of acquisition, rather than the proximal intention itself, that is at work. Thus it seems more natural and economical to construe this actional event as volition, a mental action that the agent effortfully performs to trigger the relevant actional mechanisms in order to bring about the intended action, rather than to bring in the acquisition of yet a further intention. Volitions vary in their intensities, and a stronger volitional intensity naturally corresponds to the agent's exertion of more effort. The reduction of volition to intention acquisition cannot preserve this conative feature of volition and therefore fails to provide an adequate account for brute resistance as a form of exercising self-control that reflects an agent's 'sheer effort of will.'

In cases of skilled resistance, according to Mele, 'the agent actively manipulates his motivational condition' to let certain intentional actions be triggered.⁵⁹ For instance, Janet knows that she must study tonight to

57 See Mele, 'Motivational Strength,' *Noûs* 32 (1998) 23-36. Cf. I. Thalberg, 'Questions about Motivational Strength,' in E. LePore and B. MeLaughlin, eds. *Actions and Events* (Oxford: Basil Blackwell 1985).

58 See H. McCann, 'Intention and Motivational Strength,' *Journal of Philosophical Research* 20 (1995) 571-84. Cf. Mele, 'Motivation and Intention,' *Journal of Philosophical Research* 21 (1996) 51-67.

59 Mele, *Irrationality*, 26.

prepare for an exam, but a TV program is so engaging that it has made half a dozen of her acquisitions of the proximal intention 'I must go to the library now' fail to generate effects. However, Janet can apply some self-control strategies to increase her motivation for studying, or to decrease her motivation for watching TV. For example, she can think of how upset she will be if she fails to do well in the exam, and the negative effects that this failure may bear on her further study (e.g., applying for graduate schools). The modification of her motivational condition may facilitate her acquisition of the intention to study in the library to generate normal actional effects. So, by actively applying some self-control techniques to manipulate her motivational condition, Janet can try to skillfully resist her akrasia in order to successfully bring about her intended actions. However, her active, purposeful and mindful exercise of certain sorts of self-control, which can be nicely characterized by the notion of volition construed as the mental activity of exercising of executive control (see Section II), is entirely *extrinsic* to the very mental event of the acquisition of pertinent proximal intention. The reduction of volition to the acquisition of intention thus leaves something essential outside the central picture in understanding an agent's skillful resistance of akrasia as an exercise of agency.

VI Conclusion

Intention and volition figure differently in the etiology of intentional action. Conceptually, intentions are '*states* of mind that persist through time and guide actions,' whereas volitions are mental *events* or *activities* by which an agent directly drives or actively exerts control over his thoughts and bodily movements. By construing volitions as tryings, then unpacking tryings as acquisitions of proximal intentions working with an intention-based control system that embeds feedback mechanisms, Adams and Mele attempt to reduce volition to intention. In this paper I argued that they are unsuccessful. Intentions alone are insufficient in accounting for the initiation and executive control of many significant kinds of intentional action, and must be supplemented with volitions in the production and control of intentional action. And the acquisitions of intentions cannot do all the works conventionally attributed to volitions.⁶⁰

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