

# UNSELF-CONSCIOUS CONTROL: BROADENING THE NOTION OF CONTROL THROUGH EXPERIENCES OF FLOW AND *WU-WEI*

by *Valérie De Prycker*

*Abstract.* This paper both clarifies and broadens the notion of control and its relation to the self. By discussing instances of skillful absorption from different cultural backgrounds, I argue that the notion of control is not as closely related to self-consciousness as is often suggested. Experiences of flow and *wu-wei* exemplify a nonself-conscious though personal type of control. The intercultural occurrence of this type of behavioral control demonstrates its robustness, and questions two long-held intuitions about the relation between self-consciousness and the experience of control. The first intuition holds that the conscious self initiates and controls actions, thoughts, and feelings. The second is the view that losing this self-conscious type of control is a negative and upsetting experience. By focusing on “the paradox of control” in these experiences of skillful absorption, I argue that a feeling of control can occur without a self that narratively claims control. Furthermore, this type of control can be a very positive and pleasurable experience. Therefore, the common views of the notion of control are in need of broader conceptualization and further refinement.

*Keywords:* control; flow; self; skillful absorption; *wu-wei*

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## CONTROL, SELF, AND CONSCIOUSNESS

In folk psychology, “being in control” is considered an essential aspect of agency. Genuine agency, so it claims, can be distinguished from mere bodily movement in virtue of an agent’s capacity to control his behavior. But what is control? While control is assigned an important role in defining agency, its precise meaning is often obscure. As Bernhard Hommel (2007) rightly remarks, current theorizing about control suffers from major conceptual flaws. Specifically, it is often unclear to which object control is directed. Samuel Klausner (1965) distinguishes four categories of objects, and thus four corresponding categories of control: (1) control of performance or behavior, (2) control of underlying physiological drives, (3) control of intellectual functions, and (4) control of emotions. In what follows, the notion of control will be limited to the first category.

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A second clarification is required concerning the role of consciousness in control processes. There is a strong tendency in scientific and philosophical literature to identify control with conscious control. “The belief is often so strong that authors speak of ‘conscious control’ as if there could be no alternative (i.e., no other type of control is ever mentioned)” (Hommel 2007, 161). In philosophical and empirical debates, agential control is often seen as a direct product of self-consciousness (Frankfurt 1988; Velleman 2004; 2009), and this deliberate conscious control is generally distinguished from automatic, stimulus-driven actions (Wegner and Bargh 1998; Norman and Shallice 1986; Johnson and Proctor 2004), as if other forms of control are inconceivable. One possible explanation is that it is difficult to ignore the introspective impression that our own conscious will initiates our actions (Hommel 2007). When reflecting upon our actions, we have the intuition that we—our conscious selves—cause our own actions and are in control of these actions.<sup>1</sup> Although some research suggests this intuition is illusory (Halligan and Oakley 2000; Wilson 2002; Wegner 2002), it is nonetheless a very powerful impression that contributes to the intuition that the loss of this control would be an upsetting and negative experience (Pockett, Banks, and Gallagher 2006). Another possible reason why consciousness and control are often implicitly identified is the fact that automatic processes are characterized by the fading of conscious self-awareness. This gives the impression that control processes will inevitably be conscious (Hommel 2007). In this paper, I will show that there are types of control other than conscious control that are in fact ubiquitous, and that therefore a broader conceptualization of control is needed.

In what follows, I will question two assumptions about the close relationship between the feeling of control and self-consciousness, assumptions that are widespread not only in our common-sense intuitions, but also in scientific and philosophical debates. The first assumption holds that the conscious self initiates and controls thoughts, actions, and feelings. The second is the assumption that the loss of this kind of control is a negative and disturbing experience. I will return to this later.

Essentially then, the primary assumption is that people are conscious agents in control of their own behavior, with control believed to be something either exerted or possessed by “a” self (Frankfurt 1988; Velleman 2004; 2009). Against this view, some authors argue that this conscious experience of control is an illusion, and point to the numerous complex mental processes that guide behavior unconsciously (Halligan and Oakley 2000; Wegner 2002; Wilson 2002). I too intend to question the standard notion of conscious control, but from a different point of view. While I will not question the actuality of our common experience of controlling our own behavior, I do intend to show that having a sense of control is not as closely related to self-consciousness as we are inclined to think. This I will do by discussing some remarkable paradoxes to be found in

the characterization of experiences of skillful absorption. More specifically, I will focus on internal tensions in Mihaly Csikszentmihalyi's notion of flow and the Daoist notion of *wu-wei*. These terms will be explained in the next section.

Now these experiences, which exemplify the "other types of control" mentioned by Hommel (2007), are particularly interesting for us here because when they occur, there is a feeling of control without the presence of self-consciousness. Nor are these actions purely automatic. But because control and self-consciousness are generally believed to be closely related, the absence of the latter in the feeling of control leads to what has been called the *paradox of control*. And although it has not yet been discussed in the literature on controlling processes, this type of paradoxical process is ubiquitous and universal. This I will demonstrate by looking at instances of skillful absorption taken from different cultural traditions. I will then focus on the internal tensions characterizing these experiences, before turning my attention specifically to the *paradox of control*. I will then show how this paradox demonstrates the need for a broader conceptualization of control.

To conclude, I will question the second assumption about control mentioned above, one which in fact rests upon the first: because the (first) intuition of a self that controls behavior is so strong, one has the impression that losing this type of control would necessarily be an upsetting and negative experience. In a departure from the literature on skillful absorption, I will end by formulating some arguments that refute this intuition. My claim will be that experiences of absorption demonstrate that the loss of self-conscious control may potentially be a very positive experience.

#### FLOW AND WU-WEI: A SENSE OF CONTROL WITHOUT A SELF THAT CLAIMS THIS CONTROL

Instances of skillful absorption, such as flow and *wu-wei*, may illustrate that a feeling of control need not always be accompanied by a self that claims this control for itself. The notion of flow refers to experiences of absorption in an activity performed without self-conscious control. The activity is performed very efficiently and the actor has the feeling of being in control over his actions (Delle Fave and Massimini 2005). Nevertheless, self-consciousness has temporarily disappeared. Empirical research has shown that this experience occurs cross-culturally (Carli, Delle Fave, and Fausto 1998; Moneta 2004a, b; Asakawa 2004). Flow is very similar to experiences of absorption that occur during meditative processes, but it is in fact a much broader notion. It is an experience that occurs frequently in everyday life and can—in principle—occur during almost any type of activity, from doing the dishes to climbing a mountain. In this sense, flow is very similar to the Daoist idea of spontaneous action.

The notion of *wu-wei* is—just like flow—a metaphor for any action that is performed without self-consciousness, and yet is done very efficiently and effortlessly (Slingerland 2003). In the next two sections, I will take a closer look at the distinctive phenomenology of both flow and *wu-wei* insofar as it challenges common views about the relation between control and self-consciousness. The cross-cultural similarity of these phenomena indicates that they are universal phenomena.

#### FLOW EXPERIENCES

The concept of flow was introduced by Csikszentmihalyi (1975) to describe a specific experience of fluid performance in which the actor is not only involved, but is effectively immersed. Flow can occur in virtually any activity as long as certain conditions are met (Csikszentmihalyi 1998a). Flow occurs when a person's skill matches the demands of the task at hand, and when the activity has clear goals and provides quick and unambiguous feedback. One must know what needs to be done and how well one is doing. When these features are present, a subjective state is achieved in which the person is completely involved in the activity. Attention is fully invested in the task at hand. This focusing of attention leads to a merging of action and awareness: a person in flow has no self-awareness aside of the activity being performed, is so completely involved with and immersed in the activity that no attention is left over to monitor stimuli irrelevant to the activity. One forgets time, fatigue, worries, and even oneself. During flow, self-consciousness is temporarily lost. This does not mean that the self is completely lost. There is only a loss of the consciousness of self. This can be understood in terms of James Mead's terms "I" and "me" (Mead 1934/1970): "During flow the self manifests itself nondualistically as "I"—acting, controlling, attending, observing, but *not reflecting* dialectically. The 'me' is absent when one is fully involved" (Logan 1998, 178).

Despite this disappearance of a reflective self, the activity is performed very efficiently and the person has a subjective feeling that the outcome of the activity is under his/her control. Flow experiences are associated with high levels of control over one's behavior or performance. From the point of view, which maintains that control and self-consciousness are very closely related if not identical, the idea that this heightened sense of control might occur without the presence of self-consciousness may seem paradoxical. However, when these notions are detached and their connection is minimized, this paradox resolves itself. I will elaborate this idea as we continue.

#### WU-WEI

Another example of skillful absorption can be found in classical Daoist texts,<sup>2</sup> and more specifically in descriptions of the notion of *wu-wei*.

The concept of *wu-wei* consists of two Chinese characters: *wu* (non) and *wei* (action). Although this is usually translated literally as nonaction (Needham 1956; Csikszentmihalyi and Ivanhoe 1999) or as doing nothing (Graham 1989), *wu-wei* is in fact a specific type of action. It is action as nonaction (Miller 2003) or effortless action (Slingerland 2003). *Wei* is ordinary human action performed after deliberation and for a purpose, and thus in contrast with the spontaneous processes of nature that are “so of themselves” (Graham 1989). Consequently, *wu-wei* can be described as an action without purposive effort. It is associated with “following along with the way things naturally are and not adding any human effort” (Xiaogan 1999, 214). Some authors therefore describe *wu-wei* as “not interfering in any way at all with the course of things in the world” (Lafargue 2001, 50) or as “refraining from activity contrary to Nature” (Needham 1956, 68). Other authors prefer a description of *wu-wei* that stresses the noncognitive aspects of this type of action. *Wu-wei* is then described as “nondeliberative, noncalculating, nonpurposive action” (Van Norden 1999; Roth 1999) or as “unmediated, unstructured, unprincipled, spontaneous action” (Hall 2001). Yet, another description of this Daoist concept stresses the absence of a distinction between subject and object. David Loy (1985) translates *wu-wei* as nondual action because there is “no awareness of an agent that is believed to do the action distinct from the objective action done” (Loy 1985, 73).

#### SIMILARITIES BETWEEN FLOW AND WU-WEI

Despite some differences,<sup>3</sup> flow and *wu-wei* may be considered as very similar experiences<sup>4</sup> (Csikszentmihalyi 1998b; 1990; Velleman 2008; Jochim 1998). I will briefly discuss the most striking similarities between these two notions, giving specific attention to some mutual internal tensions. The foremost similarity is that flow and *wu-wei* are both metaphors for a phenomenal state of an actor who acts in an effortless way, because he is completely immersed in the activity (Csikszentmihalyi 1975; Slingerland 2003). These two metaphors refer to a state of skillful absorption conducted without self-conscious control. Just like flow, instances of *wu-wei* are often described as skillful behavior that becomes second nature. “The skilled woodcarver, the skilled butcher, the skilled swimmer does not ponder or ratiocinate on the course of action he should take; his skill has become so much part of him that he merely acts instinctively and spontaneously and, without knowing why, achieves success” (Watson 1968, 6). However, this does not imply that *wu-wei* actions are automatic, completely unconscious, or purely physiological. These actions contain complex cognitive as well as somatic elements. “The individual still makes choices—and may at times pause to weigh various options or consider the situation ahead—but even such deliberations are

**Table 1.** Internal tensions in the characterization of flow

1.	Subjective perception of skills and challenges	Absence of self-evaluation
2.	Subjective perception of challenge	Effortless feeling
3.	Clear goals	Absence of extrinsic goals
4.	Immediate feedback	Absence of self-consciousness
5.	Feeling of control	Absence of consciously controlling self

performed with a sort of effortless ease” (Slingerland 2003, 8). *Wu-wei* actions are thus not purely automatic processes. The control that is gained over one’s action entails a gradual learning process in which attention is focused on challenges in the surroundings and where skills are perfected as one progresses toward an effortless level of performance.

Since *wu-wei* and flow both refer to a state of absorption, additional similarities include deep concentration and focus on the activity at hand, as well as an absence of self-consciousness and goal-consciousness. In both experiences, action and awareness merge. According to Loy (1985), the most fundamental characteristic of *wu-wei* is the absence of awareness of an agent distinct from the objective action being performed. This is similar to flow in which “you’re so involved in what you’re doing you aren’t thinking about yourself as separate from the immediate activity” (Csikszentmihalyi 1975, 40). In the absorption of flow and *wu-wei*, not only self-consciousness but also goal-consciousness temporarily disappears. Having a clear goal in mind is an important condition for flow. But during flow, consciousness is liberated from all extrinsic goals and concerns. In other words, flow is an intrinsically motivated experience. Similarly, *wu-wei* involves the forgetting of results. The mind is emptied of external goals and judgments and one neither thinks nor hopes for certain results or profits. Therefore, both flow and *wu-wei* are nonreflective experiences (Vittersø 2003; Van Norden 1999; Roth 1999) in which the action is not controlled in a deliberate way.

#### INTERNAL TENSIONS IN FLOW AND WU-WEI

One final similarity between flow and *wu-wei* is particularly relevant to my investigation of the relation between control and self-consciousness. I found that both flow and *wu-wei* are characterized by some striking internal tensions. These are most pronounced in flow. Table 1 summarizes the most prominent tensions between the characteristic features of flow.

First, there is a tension between the subjective perception of one’s skills and challenges faced, and the absence of self-consciousness during flow: namely, they seem to be mutually exclusive. One cannot be consciously aware of one’s skills and the challenges faced in a task without the presence of self-consciousness.

Second, feeling challenged and being aware of the difficulty of the task contrasts with the feeling of effortlessness associated with flow. This tension is also found in the notion of *wu-wei*. Chinese philosophers describe the effortless, perfected action represented by *wu-wei* as a state that needs to be trained for and achieved. Sinologist Edward Slingerland (2003) has remarked that this trait is in tension with the spontaneous nature of *wu-wei*, and thus presents a paradox. This tension is found in both Confucian and Daoist accounts of *wu-wei*.<sup>5</sup> Slingerland's analysis of this paradox can be considered as an expansion of Nivison's earlier discussion of the "paradox of virtue." According to Nivison (1996), the cultivation of virtue as described in Chinese philosophy is paradoxical, since actions that generate virtue cannot be chosen with the explicit aim of cultivating virtue. Philip Ivanhoe (2007, 277) describes the motivational aspect of this paradox as follows: "one cannot increase one's stock of moral charisma if one's actions are motivated primarily by the desire to increase one's moral charisma. This is because moral charisma is enhanced only when one acts out of genuine moral motives—and wanting to increase one's moral charisma—and thereby one's moral reputation and 'power' over others—is not such a motive."

Third, having clear goals is in tension with the absence of extrinsic goals during flow. Flow is an intrinsically motivated experience of absorption in which no goals other than the activity itself appear to consciousness. Nevertheless, having clear goals is an important prerequisite for flow to occur.<sup>6</sup> The same tension exists between the features of immediate feedback and the absence of self-consciousness. And there is a fifth and final tension to be addressed: the absence of self-consciousness characteristic of flow seems incompatible with the feeling of control that Csikszentmihalyi (1998a) lists as a feature of flow. This tension will be further investigated in the next section.<sup>7</sup>

#### THE PARADOX OF CONTROL IN FLOW EXPERIENCES

Flow experiences are associated with a high sense of control. Antonella Delle Fave and Fausto Massimini (2005) have shown that a phenomenal experience of control is one of the most stable characteristics of flow experiences. In their study on the psychological features of flow across different activities, they found that the cognitive components of concentration and control constitute the core and stable structure of flow, around which affective and motivational components fluctuate according to the structure of the associated activities. The fact that this sense of control occurs without the presence of self-consciousness is said to be one of the paradoxes of flow (Csikszentmihalyi 1999). One must be in control of the activity to experience flow, yet one should not try to consciously control what one is doing. Csikszentmihalyi (1975; 1987; 1990;

and 1996) tried to clarify this paradox by introducing the notion of potential control:

Thus, the flow experience is typically described as involving a sense of control—or, more precisely, as lacking a sense of worry about losing control that is typical in many situations of normal life. Here is how a dancer expresses this dimension of the flow experience: “A strong relaxation and calmness comes over me. I have no worries of failure. (. . .)” And a chess player: “I have a general feeling of well-being, and that I am in complete control of my world.” What these respondents are actually describing is the *possibility, rather than the actuality, of control* (my emphasis). The ballet dancer may fall, break her leg, and never make the perfect turn, and the chess player may be defeated and never become a champion. But at least in principle, in the world of flow perfection is attainable. (Csikszentmihalyi 1990, 59–60)

He describes the sense of control characteristic of flow as a lack of concern regarding one’s ability to control the situation (Csikszentmihalyi 1987) or as an absence of the fear of failure (Csikszentmihalyi 1996). Some people might be prone to call this “a feeling of total control; but actually we are not in control, it’s just that the issue does not even come up” (Csikszentmihalyi 1996, 112). The notion of potentiality has not been documented or explained by previous literature or research. Csikszentmihalyi’s use of the concept suggests it can be best understood in terms of the absence of self-reflection during flow. It is only by looking reflectively at the flow experience that it will give rise to an actual sense of control, which primarily occurs after the flow episode: “(. . .) in flow (. . .) he is in control of his actions and of the environment. He has no active awareness of control but is simply not worried by the possibility of lack of control. Later, in thinking back on the flow episode, he will usually conclude that, for the duration of the flow episode, his skills were adequate for meeting environmental demands; and this reflection might become an important component of a positive self-concept” (Csikszentmihalyi 1975, 44).

But even with this explanation, the notion of potential control does not clarify the sense of control characteristic for flow experiences. On the contrary, the notion is rather confusing since it is not clear in what precisely this potentiality consists. Does it involve a potential for self-conscious control, or a potential for something else? In the first case, the notion is even more confusing because it then seems to suggest that the only genuine form of control involves the self-conscious or reflective awareness of control. Because of these obscurities, I will not use the concept of potential control in my further examination of the specific sense of control characteristic for instances of skillful absorption. I will approach the paradox of control in a different way. The paradox may resolve itself if one broadens the conceptualization of control. If one assumes that control is identical with conscious control, then the two crucial features of flow—having a sense of control and the absence of self-consciousness—



become incompatible, and this implies that flow is defined inconsistently. In what follows, I will show that these features need not be incompatible were one to adopt a broader view of control. In this manner, I hope to avoid the refutation of the subjective feeling of control that has been proven to be a stable feature of flow (Delle Fave and Massimini 2005).

#### BROADENING THE NOTION OF CONTROL

The paradox of control in flow experiences demands further clarification of the notion of control. While control generally refers to a self-conscious awareness of control, flow exemplifies a type of nonself-conscious, though personal, control. This type of control falls outside the scope of classical dual-process models in which rational, conscious processes are distinguished from nonconscious automatic processes. Conscious processes are generally considered to be mental acts of which we are aware, that we intend, that require effort, and that we can control (Bargh and Chartrand 1999). Although there is no consensus on the features of automatic processes, they are generally related to subpersonal processes such as reflexes. These processes involve a form of behavioral control that is unconscious and nonintentional. John Bargh and Tanya Chartrand (1999) have claimed that some automatic processes, like the effortless actions of an expert, do involve an intentional stance. Experiences of flow and *wu-wei* are very similar to these expert experiences. While Bargh and Chartrand (1999) categorize these experiences as automatic control processes, we prefer to classify them under a third category of control. Along with conscious control and the nonconscious control of total automaticity, we associate flow and *wu-wei* with nonconscious but personal control. We call it a personal type of control because during skillful absorption the self is still active but not in a reflective way. As Csikszentmihalyi (1990) already made clear, the fading of self-consciousness during flow does not imply a complete loss or transcendence of the self. The sense of control one has in flow is connected to a specific sense of self that can be described as follows:

The absence of the self from consciousness does not mean that a person in flow has given up the control of his psychic energy, or that she is unaware of what happens in her body or in her mind. In fact, the opposite is usually true. When people first learn about the flow experience, they sometimes assume that lack of self-consciousness has something to do with a passive obliteration of the self, a “going with the flow” Southern California-style. But in fact, the optimal experience involves a very active role for the self. A violinist must be extremely aware of every movement of her fingers, as well as of the sound entering her ears, and of the total form of the piece she is playing, both analytically, note by note, and holistically, in terms of its overall design. A good runner is usually aware of every relevant muscle in his body, or the rhythm of his breathing, as well as the performance of

his competitors within the overall strategy of the race (Csikszentmihalyi 1990, 64).

If the self is still active during flow, which aspects of the self disappear during flow? I suggest that flow involves an absence of the narrative dimension of the self. Flow involves a feeling of control without the presence of a narrative self. Allow me to clarify this. When we carry out an action, we usually have the feeling “that we are both the author and the owner of our own actions” (Choudhury and Blakemore 2006, 39). These feelings are generally explained by the narrative dimension of the self. Daniel Dennett (1991; 1992) describes the self as the principal character at the center of an autobiography that is continuously written and rewritten: “Our fundamental tactic of self-protection, self-control, and self-definition, is not spinning webs or building dams, but telling stories, and more particularly concocting and controlling the story we tell others—and ourselves—about whom we are. (. . .) Their effect on the audience is to encourage them to (try) to posit a unified agent whose words are, about whom they are: in short, to posit a center of narrative gravity” (Dennett 1991, 418).

This narrative capacity is the basis of our sense of a continuous and consistent self. All our experiences are brought together in a consistent story or autobiography about “the self.” The narrator gives us the impression that we—our conscious selves—are the owner and the initiator of our actions, thoughts, and feelings. In telling stories to ourselves and others, the self appropriates its own actions, thoughts, and feelings. It is this appropriation that gives rise to an intuition of conscious control and authorship. Some authors suggest this intuition is illusory (Hamilton 1996; Halligan and Oakley 2000; Wilson 2002; Wegner 2002). Others believe it is an essential component of conscious awareness. For instance, consciously experiencing pain not only implies the activation of specific regions of the brain, but also a process in which the experiences of pain are integrated in one’s personal biography (Damasio 1999). This line of argumentation resembles that of the higher order theorists of consciousness (Rosenthal 2002). They believe that a first-order mental state only become conscious when a second-order mental state takes it as its object. The second-order mental state then connects the first-order state with the self. In this way, the self appropriates first-order thoughts.

When flow experiences are said to involve an absence of the self, this refers to the absence of a narrative self-claiming control over the action.<sup>8</sup> I want to emphasize here that I am not addressing questions of identity. Although the notion of a narrative self is mostly used in discussions on the actuality or fictionality of the self, I am consciously bracketing these discussions. Therefore, I am only referring here to the mechanism that creates the character of the mental story of our autobiography. It is thus useful to distinguish between the narrator and the character that is created

by this narrator. When I hypothesize the absence of a narrative self during flow, I am referring to the absence of a narrator or a narrative mechanism that is claiming control over the action by creating stories of authorship and ownership. During flow this narrative awareness of control is (temporarily) absent. In these experiences, it is the nonnarrative, phenomenal self that controls behavior.

Now the question arises whether this narrative dimension is completely absent in every flow experience? I will explore this question in the next section. I postulate that in some flow experiences, narratives can arise in consciousness, while in others, all narratives have disappeared. This gradual approach to instances of skillful absorption can also be found in literature on meditation and other experiences that are closely related to flow.

#### DIFFERENT GRADATIONS OF SELF-CONSCIOUSNESS IN EXPERIENCES WITH A SENSE OF CONTROL

As we have already seen, flow can occur in a wide range of activities. Examples frequently cited include complex activities such as mountain climbing or playing a musical instrument. But flow can also occur in more trivial activities, such as conversing or doing the dishes. I already discussed the features that characterize this broad range of flow experiences. But it is not clear how many of these characteristics need to be present for flow to occur (Kiemiecik and Stein 1992). In one passage, Csikszentmihalyi states that flow occurs when *at least one* of these features is present (Csikszentmihalyi 1990, 49), while in another passage, he gives the impression that they *all* have to be present for flow to occur (Csikszentmihalyi 1998a, 33). In yet another passage, we find a possible clarification of his point of view: “As long as we keep the essential component of the experience the same, we will be still talking about the same phenomenon, albeit at very different levels of intensity and complexity. In other words, my impression is that the experience of flow is on a continuum between almost imperceptible *microflow* events, and the truly memorable occasions of *deep flow*” (Csikszentmihalyi 1992, 183).

In his more recent work, this “essential component” of flow is said to be total involvement in an activity (Csikszentmihaly et al. 2005). Flow involves intense and focused concentration on what one is doing at the present moment. Empirical research by Delle Fave and Massimini (2005) confirms this and adds to it a high sense of control over the situation. These components are said to be the most stable aspects of the structure of flow.

These experiences of focused concentration and heightened control occur at different levels of intensity and complexity. Csikszentmihalyi refers here to the notions *microflow* and *deep flow* that he introduced in his early work (Csikszentmihalyi 1975). *Microflow* occurs in seemingly trivial activities such as reading a book, watching television, or talking to

someone. These are the “weakly structured, low-challenge counterparts of the fully developed flow activities” (Csikszentmihalyi 1975, 142). These notions are problematic for the model of flow currently in use, where flow occurs only when challenges and skills are above the personal mean (Massimini and Carli 1998). Research has shown that these experiences do not have the positive effects typical of flow experiences (Massimini and Carli 1998), and so this model transforms the domain of *microflow* into the domain of apathy, which includes experiences characterized by a low level challenge and a high level of skills (Massimini and Carli 1998). This problem needs further investigation.

Notwithstanding this methodological problem within the flow model, it is still useful to talk about different levels of intensity across different flow experiences. The degree of absorption in an activity can vary across flow experiences. In some flow experiences, the immersion in the activity is incomplete, allowing certain narratives to arise in consciousness. A certain degree of self-consciousness is, for example, possible when writing a diary. In more intensely absorbed states, these narratives do not arise in consciousness. This will be the case in complex activities that require a complete focus of attention, such as mountaineering.

Self-consciousness can thus occur in different degrees across flow experiences. But in all these experiences, there is a high degree of control over the activity. We can say that different flow experiences can occur in different gradations between self-conscious and nonself-conscious control. Every flow experience has different properties and can be placed at a specific location on the continuum of absorption. This gradual approach to instances of skillful absorption can also be found in literature on meditative absorption and *wu-wei*.

Meditative processes<sup>9</sup> may be associated with a gradual fading of self-consciousness, while control over one’s breathing, thoughts, and feelings is unusually high. In his analysis of the different stages that a person goes through during meditation, James Austin (2001) describes how the self is gradually deconstructed and transformed. If the self is considered to be a multilayered construct,<sup>10</sup> then meditative absorption may be seen as a gradual peeling process. In the first stage of meditation, some unusual bodily and visual sensations may occur. At this level, no changes in self-consciousness are registered. This only starts at the stage of absorption,<sup>11</sup> where consciousness is clear and focused, while the self gradually fades away. Because sensory input is impeded or blocked, the explicit physical self—the so-called body image (Gallagher and Cole 1995)—will disappear. In yet deeper stages of absorption, the sensory blockade expands to other parts of the brain, including the limbic system. This will eliminate every affective connection to perceptions and thoughts.<sup>12</sup> The subject focuses on the objective immediate perception of the here and now. As Austin stresses, this does not mean that the self and all emotions have completely

disappeared, which would be impossible. Rather, there remains a pragmatic self—the “I” as agent (Austin 2001).

*Wu-wei* actions also occur with different gradations of intensity, so it is useful to distinguish between *wu-wei* as a spiritual ideal and *wu-wei* in the practice of daily life. In most classical Daoist texts, *wu-wei* is described as the ideal attitude of the sage. Liu Xiaogan (1999) calls this an entirely natural form of *wu-wei*, involving freedom from any internal striving. But when one is trying to apply this wisdom to one’s life, it is evident that this state of effortlessness and naturalness is not attained directly. One first has to specify this natural way of acting as a goal to be attained, which means that one must deliberately want to be *wu-wei*. This is called an intentional form of *wu-wei*. It is considered a lower form of *wu-wei* than the entirely natural one that embodies the spiritual ideal of *wu-wei* (Xiaogan 1999).

Flow experiences, meditative absorption, and *wu-wei* actions can thus occur with different gradations of intensity. Some instances involve intentional and self-conscious processes, while others are completely spontaneous and nonself-conscious. Just like flow, all *wu-wei* actions involve a high level of control over the activity. The activity is performed very efficiently, and this occurs without effort or self-conscious intervention. The different instances of absorption discussed above are all associated with an experience of thorough control over one’s actions, whereas the level of self-consciousness is variable. This suggests that the heightened sense of control in these experiences has nothing to do with the intervention of the self creating a narrative about these experiences. And this implies that common views on control are mistaken when they identify the narrative or reflective self with the behavioral center of control.

#### THE LOSS OF CONSCIOUS CONTROL CAN BE A POSITIVE EXPERIENCE

Another widespread intuition is the belief that the loss of self-conscious control is always a negative experience. People do not enjoy “being out of control.” In a discussion on determinism, Daniel Dennett expresses this intuition as follows: “(. . .) we very definitely do not want to lose control or be out of control or be controlled by something or someone else—like a marionette or puppet. We want to be *in control*, and to control both ourselves and our destinies” (Dennett 1984, 51). This intuition of fear for the loss of control is closely related to the first intuition that I discussed in this paper. It is because the idea of consciously controlling our behavior is so strongly embedded in our intuition that the loss of this type of control is considered upsetting. As the following quote makes clear, these two intuitions are closely related: “All normal humans experience a kind of basic, on-the-ground certainty that we, our conscious selves, cause our own voluntary acts. When this certainty is removed (e.g., by whatever causes

schizophrenia), its loss tends to be very upsetting” (Pocket, Banks, and Gallagher 2006, 1).

In pathological cases, the loss of self-conscious control is evidently upsetting. But this does not entail that the same holds for all experiences of nonself-consciousness. In the experiences of skillful absorption discussed above, the loss of self-consciousness is neither an upsetting nor negative experience. Based on research of these experiences, I will now demonstrate how these experiences may contribute to the actor’s quality of life. By distinguishing this type of unself-conscious experiences from pathological cases, I will show how common-sense intuitions on control are oversimplified.

The literature on skillful absorption shows that these experiences are performed very efficiently and contribute to the general quality of life of the actor. Experiences of flow, meditative absorption, and *wu-wei* lack self-conscious control over behavior, but nevertheless have various positive effects on the actor.

One specific characteristic of flow experiences is their enjoyable and rewarding nature. Flow experiences are associated with great inner clarity or an ordered consciousness. Their internal harmony makes these experiences very enjoyable, but because of one’s absorption in the activity, this is often not noticed during the experience itself—it is only realized afterward (Csikszentmihalyi 1998a). Research has shown that flow is not only beneficial while it is taking place, but that it also contributes to the overall quality of the actor’s life (Massimini and Carli 1998; Lefevre 1998; Wells 1998; Csikszentmihalyi 1998a). People who experience flow frequently claim to be happier, more cheerful, friendly, strong, concentrated, and sociable (Massimini and Carli 1998). This carry-over effect of flow not only induces more positive emotions, but also influences other psychological processes. These people also turned out to be more motivated, creative, and satisfied (Massimini and Carli 1998; Lefevre 1998).

Just like flow, meditative absorption is characterized by a heightened sense of control. Attention is focused on a limited stimulus field and consciousness is freed from the domination of impulses, thoughts, and feelings. As concentration is heightened, self-consciousness fades into the background, and in more advanced states, the self will be transcended (Austin 2001). Research on the effects of meditation has shown that these experiences of intense absorption have positive effects on the person performing it. Studies have shown that meditation has positive effects on the physiological, psychological, transpersonal, and behavioral level. A survey of these studies can be found in Shauna Shapiro, Gary Schwartz, and Craig Santerre (2005). Meditation has proved effective in interventions for cardiovascular disease, chronic pain, anxiety and panic disorders, substance abuse, and reduction of depressive symptoms. Concerning psychological health, increases have been observed in the levels

of happiness, self-actualization, and empathy, on one's sense of coherence, stress-resistance, and self-esteem. Positive behavioral effects documented in the literature include heightened perception, improvements in reaction time and responsive motor skills, and increased concentration and attention (Shapiro et al. 2005).

As an instance of skillful absorption, *wu-wei* is—just like flow—associated with an efficient performance of the activity. Actions that follow the principle of *wu-wei* are believed to give better results than acting purposively (Xiaogan 2001). *Wu-wei* is not a negation of action, but aims at a higher standard of human action, meaning “a balance between minimal effort and best results” (Xiaogan 2001, 334). This efficient way of performing an action is also associated with mental tranquility: *wu-wei* has, just like flow, a positive influence on the performance and clarity of mind of the actor. Acting according to the principle, *wu-wei* will additionally have positive effects on the actor's environment. These actions are said to be spontaneous and natural in the sense that they do not harm the environment but engender harmony with it.

## CONCLUSIONS

In this paper, I approached the relation between the notions of control and self by discussing different instances of skillful absorption and the positive effects they bring about. Because people do not have a clear sense of what being in control means, two common-sense intuitions on control were critically approached and clarified in this paper. The first one holds that it is the conscious self that initiates and controls our thoughts, actions, and feelings. I nuanced this idea by showing that behavioral control is not as closely related to the reflective self as our intuition suggests. A feeling of control can occur without a narrating self that claims this power of control. I have shown that different experiences of flow, *wu-wei*, and meditation can be placed on a continuum from modest to deeper absorption. These different types of absorption are all associated with a high sense of control over one's actions, whereas the level of self-consciousness is variable. This suggests that the heightened sense of control in these experiences has nothing to do with the intervention of a self that claims to be in control. The narrative integration of our experiences gives us the false impression that our conscious selves initiate and own these experiences. This narrative dimension can occur in different gradations, but even when it is completely absent, behavior can be controlled very efficiently. In these cases, it is the nonreflective phenomenal self that controls behavior.

The specific sense of control characteristic of these instances of skillful absorption necessitates a broader conceptualization of control. This paper has shown that apart from the reflective, conscious type of control that is generally intended, control can also be associated with nonreflective

personal processes as well as with automatic nonconscious processes. This subdivision adds one more dimension to classical dual-process models that distinguish conscious from automatic processes (Bargh and Chartrand 1999). In experiences of flow and *wu-wei*, a nonreflective sense of control arises in which the self still plays an active role.

A second conclusion that can be drawn is that losing self-conscious control over one's behavior is not always a negative experience. This conclusion may nuance the common-sense intuition that the loss of self-conscious control is an upsetting experience. By distinguishing positive unself-conscious experiences from pathological cases, I have shown that this intuition concerning control is oversimplified. The experiences of skillful absorption that I discussed lack self-conscious control, but nevertheless have been shown to be pleasurable and to contribute to an individual's overall quality of life.

In addition to broadening the conceptualization of the notion of control, this paper has also contributed to the elaboration of the notion of flow. I focused on the relation between flow and the self by discussing some internal tensions in flow and by putting flow experiences on a continuum. Since not all the internal tensions I discussed have been solved, further research on the intricate relation between flow and the self is necessary. This article focused mainly on one specific tension related to the paradox of control in flow. One has to be in control of an activity to experience flow, yet one should not try to self-consciously control what one is doing. Further research on this specific feeling of control that occurs without a narrative self claiming control over behavior will be necessary.

#### ACKNOWLEDGMENTS

This research was funded by the Fund for Scientific Research Flanders. I thank Johan Braeckman, Philip Van Looke, Willem B. Drees, and two anonymous reviewers for their helpful comments.

#### NOTES

1. In scientific and philosophical literature as well as in common-sense intuitions, the self is generally associated or identified with self-reflection. The self is seen as the observer of one's actions, feelings, and thoughts. But this capacity of self-reflection is only one layer of the self. The self has more than one dimension. Experiencing one's self does not always involve a reflective stance toward one's own actions, feelings, or thoughts. Apart from a reflective self that is generally intended by the notion, the self also includes nonreflective components. In response to an overly reflective approach to the self, some authors stress the importance of the nonreflective dimension of the bodily and social components of the self (Gallagher and Cole 1995; Neisser 1993). This difference between reflective and nonreflective components of the self was already made by William James (1901). He distinguished the reflective or conscious "me" from the nonreflective "I." In order to illustrate some shortcomings in the traditional literature on self-consciousness and control, I will use the notion of the self in its most narrow sense. Self and self-consciousness will be used interchangeably and will be understood as a high-order reflective mental process.



2. *Wu-wei* is a spiritual ideal that is discussed often in classical Chinese texts. This ideal not only appears in the work of classical Daoist thinkers such as Laozi and Zhuangzi, but also in the Confucian and Neofucian works of Confucius, Mencius, and Xunzi. Generally, the notion of *wu-wei* is associated with Daoism rather than with Confucianism, because the idea is more frequently and elaborately discussed by Daoist authors.

3. We can summarize these differences into three points. A first point of difference lies in the process of self-cultivation associated with both notions. Flow is said to bring about a complexification and actualization of the self. Frequently experiencing flow results in more complex skills and challenges and in this way empowers the self (Csikszentmihalyi 1993; Wells 1998). This type of self-development is of another type than the Daoist one that is rooted in a spiritual tradition. The self-cultivation related to practicing *wu-wei* requires a modification of one's behavior and purification of the mind. This involves a deconstruction of the self and a reduction of personal desires and goals. This is associated with a "forgetting" of the self. A second point of difference is the fact that flow only refers to an individual experience of internal harmony, while the internal harmony of *wu-wei* actions also involves an external harmony. In Daoism experiencing, internal harmony involves a harmonious relation with the environment. A third point of difference lies in the normative connotation of both notions. Flow is a scientific term that is morally neutral. Flow can refer to actions that are morally good or wrong. *Wu-wei*, on the other hand, is in the first place a religious or spiritual ideal that involves relating the individual to a larger normative, cosmic order (Slingerland 2003). *Wu-wei* is a state of personal harmony in which actions are harmonized with the demands of conventional morality. In Daoist texts, this is believed to occur without following moral principles or rules.

4. Csikszentmihalyi himself pointed at their relatedness (Csikszentmihalyi 1990; 1998a; Csikszentmihalyi and Jackson 1999). Instead of *wu-wei*, he focused on another Taoist concept, "*yu*." *Yu* refers to the right way of following the Way or Dao. It can be translated as wandering, "walking without touching the ground," swimming, flying, or "flowing" (Csikszentmihalyi 1998a, 380–382). This metaphor frequently occurs in the writings of Zhuangzi. It refers to a "totally free and purposeless" attitude (Watson 1968, 6). Csikszentmihalyi points at the similarity with flow: "Chuang Tzu believed that to *Yu* was the proper way to live—without concern for external rewards, spontaneously, with total commitment—in short, as a total autotelic experience" (Csikszentmihalyi 1990, 150). This Daoist metaphor for an aimless but very efficient performance of an artist or craftsman is thus very closely related to *wu-wei*, which is "a course of action that is not founded upon any purposeful motives of gain or striving" (Watson 1968, 6). Csikszentmihalyi believes this Daoist idea of spontaneous action is not any different for what he calls flow. He remarks that one might think they are different, because *flow* is related to the mastery of challenges, while Daoists focus on spiritual playfulness in which the individual gives up conscious mastery (Csikszentmihalyi 1990, 150). He believes, however, that this difference is insignificant, since *yu* also depends on the discovery of new challenges and the development of new skills: "The mystical heights of the *Yu* are not attained by some superhuman quantum jump, but simply by the gradual focusing of attention on the opportunities for actions in one's environment, which results in a perfection of skills that with time becomes so thoroughly automatic as to seem spontaneous and otherworldly" (Csikszentmihalyi 1990, 151). In this interpretation, flow and the Daoist view on spontaneous actions are believed to be the same experience.

5. Confucians tend to describe *wu-wei* by emphasizing the effort and training that is required to achieve the proper attitude that brings it about. But this description is problematic. How can one try not to try? The successful cultivation of *wu-wei* requires the proper internal motivation. How can one otherwise be trained to spontaneously, unself-consciously love the Way if one does not love it already (Slingerland 2003, 13)? This problem motivated Daoist thinkers to emphasize the effortless and spontaneous qualities of *wu-wei*. One does not have to train or try to achieve *wu-wei*. It comes about naturally. There is yet another problem with this description. If the path toward *wu-wei* is so effortless and spontaneous, then why do these Daoist thinkers have to tell us to pursue it? Slingerland (2003) concludes that both ways of describing *wu-wei* are insufficient to capture the idea, but they cannot be taken together, since they are incompatible. Because the Chinese thinkers were never able to formulate a fully consistent and entirely satisfying solution to the tension in the conception of *wu-wei*, Slingerland concludes that this tension is a genuine paradox.

6. This fourth tension can be explained by referring to redundancy effects that not only occur on the perceptual and conceptual level, but also with regard to goals. Many goals fade from consciousness as long as they remain predictable. Nevertheless, on the behavioral level, these redundant goals continue to operate as goals (Baars 1988). Having clear goals is important for flow to happen, but in absorption these goals fade from consciousness.

7. Csikszentmihalyi addresses some of these tensions, the first, third, and fourth of which he calls the conditions for flow. In more recent literature on flow, the balance of subjectively perceived skills and challenges, having clear goals and immediate feedback are described as prerequisites and not as phenomenal aspects experienced during flow (Csikszentmihalyi 1997; Csikszentmihalyi, Abuhamdehand, and Nakamura 2005). Moreover, in his latest work Csikszentmihalyi omits the absence of self-consciousness in the list of characteristics of flow (Csikszentmihalyi 1999; Csikszentmihalyi et al. 2005). This change might be related to the problems raised by the internal tensions in the characterization of flow.

8. One can say a more advanced form of agency arises. Flow experiences can be compared to advanced stages of skill development, such as expressed by the notion of expertise (Dreyfus and Dreyfus 1986). In the first stages of skill development, explicit narratives about what one is doing arise in consciousness. In more advanced stages, the expert does not need these narratives and acts with an implicit situational understanding. His actions are nonreflective and intuitive (Dreyfus and Dreyfus 1986). Not only flow, but also *wu-wei*, can be associated with such an advanced form of agency (Velleman 2008). Following Harry Frankfurt, David Velleman (2008) believes reflective awareness is the most distinctive characteristic of humans. In flow and *wu-wei*, this human essence is temporarily transcended. According to Velleman, this type of agency should not be seen as an alternative to reflective agency, but as the next step embodying the ultimate form of agency. It is considered a higher form of agency, since self-regulation is transcended but remains in reserve in case it is needed.

9. As Csikszentmihalyi (1990; 1998a) remarks, experiences of flow are very similar to differing forms of meditation, such as yoga, Zen, and many other techniques.

10. The main layers that Austin (2001) distinguishes are the sensory-motor self, the conceptual self, and the affective self.

11. Austin (2001) distinguishes two types of absorption. External absorption involves a merging of consciousness with an object or activity on which attention is totally focused. Most flow experiences are instances of this type. Meditation, on the other hand, mostly concerns an internal form of absorption in which attention is focused inward.

12. In this sense, the absence of self-consciousness during deep meditative absorption differs from the one in flow experiences. Flow experiences do not necessarily involve an elimination of the emotional attachment to one's experiences. It is mainly the narrative dimension of the self that is absent.

## REFERENCES

- Asakawa, Kiyoshi. 2004. "Flow Experience and Autotelic Personality in Japanese College Students: How Do They Experience Challenges in Daily Life." *Journal of Happiness Studies* 5(2):123–54.
- Austin, James. 2001. *Zen and the Brain*. Cambridge and London: MIT Press.
- Baars, Bernhard J. 1988. *A Cognitive Theory of Consciousness*. Cambridge: Cambridge Univ. Press.
- Bargh, John A., and Tanya L. Chartrand. 1999. "The Unbearable Automaticity of Being." *American Psychologist* 54(7):462–79.
- Carli, Massimo, Delle Fave, Antonella, and Fausto Massimini. 1998. "The Quality of Experience in the Flow Channels: Comparison of Italian and U.S. Students." In *Optimal Experience: Psychological Studies of Flow in Consciousness*, ed. Mihaly Csikszentmihalyi and Isabella S. Csikszentmihalyi, 288–306. Cambridge: Cambridge Univ. Press.
- Choudhury, Suparna, and Sarah-Jayne Blakemore. 2006. "Intentions, Actions and the Self." In *Does Consciousness Cause Behavior*, ed. Susan Pockett, William Banks, and Shaun Gallagher, 296–312. Cambridge and London: MIT Press.
- Csikszentmihalyi, Mark, and Philip J. Ivanhoe, eds. 1999. *Religious and Philosophical Aspects of the Laozi*. Albany and New York: State Univ. of New York Press.

- Csikszentmihalyi, Mihalyi. 1975. *Beyond Boredom and Anxiety: The Experience of Play and Work in Games*. San Francisco and London: Jossey-Bass Publishers.
- . 1987. “The Flow Experience.” In *The Encyclopedia of Religion*, Vol. 5. ed. Mircea Eliade, 361–63. New York: Free Press, MacMillan.
- . 1990. *Flow: The Psychology of Optimal Experience*. New York: Harper Collins.
- . 1992. “A Response to the Kimiecik & Stein and Jackson Papers.” *Journal of Applied Sport Psychology* 4:181–83.
- . 1993. *The Evolving Self: A Psychology for the Third Millennium*. New York: Harper Collins Publishers.
- . 1996. *Creativity: Flow and the Psychology of Discovery and Invention*. New York: Harper Collins Publishers.
- . 1997. *Finding Flow: The Psychology of Engagement with Everyday Life*. New York: Basic Books.
- . 1998a. “The Flow Experience and Its Significance for Human Psychology.” In *Optimal Experience: Psychological Studies of Flow in Consciousness*, ed. Mihalyi Csikszentmihalyi and Isabella Csikszentmihalyi, 15–35. Cambridge: Cambridge Univ. Press.
- . 1998b. “The Future of Flow.” In *Optimal Experience: Psychological Studies of Flow in Consciousness*, ed. Mihalyi Csikszentmihalyi and Isabella Csikszentmihalyi, 364–83. Cambridge: Cambridge Univ. Press.
- . 1999. “If We Are So Rich, Why Aren’t We Happy.” *American Psychologist* 54(10):821–27.
- Csikszentmihalyi, Mihalyi, S. Abuhamdehand, and Jeanne Nakamura. 2005. “Flow.” In *Handbook of Competence and Motivation*, ed. A. Elliot and C. Dweck, 598–608. New York: Guilford Press.
- Csikszentmihalyi, Mihalyi, and Susan A. Jackson. 1999. *Flow in Sports: The Keys to Optimal Experiences and Performances*. Champaign: Human Kinetics Books.
- Damasio, Antonio. 1999. *The Feeling of What Happens: Body, Emotion and the Feeling of Consciousness*. London: Heinemann.
- Delle Fave, Antonella, and Fausto Massimini. 2005. “The Investigation of Optimal Experience and Apathy: Developmental and Psychosocial Implications.” *European Psychologist* 10:264–74.
- Dennett, Daniel. 1984. *Elbow Room: The Varieties of Free Will Worth Wanting*. Cambridge: MIT Press.
- . 1991. *Consciousness Explained*. London and New York: Penguin Books.
- . 1992. “The Self as a Center of Narrative Gravity.” In *Self and Consciousness: Multiple Perspectives*, ed. F. Kessel, P. Cole, and D. Johnson, 103–15. New York: Erlbaum.
- Dreyfus, Herbert, and Stuart Dreyfus. 1986. *Mind over Machine: The Power of Human Intuition and Expertise in the Era of the Computer*. New York: Free Press.
- Frankfurt, Harry. 1988. *The Importance of What We Care about: Philosophical Essays*. Cambridge: Cambridge Univ. Press.
- Gallagher, Shaun, and J. Cole. 1995. “Body Image and Body Schema in a Deafferented Subject.” *Journal of Mind and Behavior* 16(4):369–89.
- Graham, Angus C. 1989. *Disputers of the Tao: Philosophical Argument in Ancient China*. La Salle, Ill. Open Court.
- Hall, David. 2001. “From Reference to Deference: Daoism and the Natural World.” In *Daoism and Ecology: Ways within a Cosmic Landscape*, ed. N.J. Girardot, James Miller, and Liu Xiaogan, 245–63. Cambridge: Harvard Univ. Press.
- Halligan, Peter, and David Oakley. 2000. “What Do You Mean When You Talk about ‘Yourself?’” *New Scientist* 168(2265):35–39.
- Hamilton, William Donald. 1996. *Narrow Roads of Gene Land: The Collected Papers of W.D. Hamilton: Evolution of Social Behavior*. 1 vol. Oxford: Freeman and Stockton Press.
- Hommel, Bernhard. 2007. “Consciousness and Control: Not Identical Twins.” *Journal of Consciousness Studies* 14(1–2):155–76.
- Ivanhoe, Philip. 2007. “The Paradox of Wu-Wei?” *Journal of Chinese Philosophy* 34(2):277–87.
- James, William. 1901. *The Principles of Psychology*. London: MacMillan.
- Jochim, Chris. 1998. “Just Say No to ‘No Self’ in Zhuangzi.” In *Wandering at Ease in the Zhuangzi*, ed. Roger Ames, 35–74. Albany and New York: State Univ. of New York Press.

- Johnson, Addie, and Robert W. Proctor. 2004. *Attention: Theory and Practice*. Thousand Oaks, Calif.: Sage.
- Kiemiecik, J.C., and G.L. Stein. 1992. "Examining Flow Experiences in Sport Contexts: Conceptual Issues and Methodological Concerns." *Journal of Applied Sport Psychology* 4:114–60.
- Klausner, Samuel Z. 1965. *The Quest for Self-Control*. New York: Free Press.
- Lafargue, Michael. 2001. "Nature as Part of Human Culture in Daoism." In *Daoism and Ecology: Ways within a Cosmic Landscape*, ed. N. J. Girardot, James Miller, and Liu Xiaogan, 45–60. Cambridge: Harvard Univ. Press.
- Lefevre, Judith. 1998. "Flow and the Quality of Experience during Work and Leisure." In *Optimal Experience: Psychological Studies of Flow in Consciousness*, ed. Mihaly Csikszentmihalyi and Isabella Csikszentmihalyi, 307–18. Cambridge: Cambridge Univ. Press.
- Logan, Richard D. 1998. "Flow in Solitary Ordeals." In *Optimal Experience: Psychological Studies of Flow in Consciousness*, ed. Mihaly Csikszentmihalyi and Isabella Csikszentmihalyi, 172–82. Cambridge: Cambridge Univ. Press.
- Loy, David. 1985. "Wei-Wu-Wei: Nondual Action." *Philosophy East and West* 35(1):73–87.
- Massimini, Fausto, and Massimo Carli. 1998. "The Systematic Assessment of Flow in Daily Experience." In *Optimal Experience: Psychological Studies of Flow in Consciousness*, ed. Mihaly Csikszentmihalyi and Isabella Csikszentmihalyi, 266–87. Cambridge: Cambridge Univ. Press.
- Mead, George H. 1934/1970. *Mind, Self and Society*. Edited by C.W. Morris. Chicago: Univ. of Chicago Press.
- Miller, James. 2003. *Daoism: A Short Introduction*. Oxford: Oneworld Publications.
- Moneta, Giovanni B. 2004a. "The Flow Experience across Cultures." *Journal of Happiness Studies* 5(2):115–21.
- . 2004b. "The Flow Experience of Intrinsic Motivation in Chinese: Cultural and Personal Moderators." *Journal of Happiness Studies* 5(2):181–217.
- Needham, Joseph. 1956. *Science and Civilization in China, Volume 2: History of Scientific Thought*. Cambridge and London and New York: Cambridge Univ. Press.
- Neisser, Ulrich. 1993. "The Self Perceived." In *The Perceived Self: Ecological and Interpersonal Resources of Self-Knowledge*, ed. Ulrich Neisser, 3–23. Cambridge and New York and Melbourne: Cambridge Univ. Press.
- Nivison, David, and Bryan W. Van Norden. 1996. *The Ways of Confucianism: Investigations in Chinese Philosophy*. La Salle, Ill.: Open Court.
- Norman, Donald A., and Tim Shallice. 1986. "Attention to Action: Willed and Automatic Control of Behavior." In *Consciousness and Self-Regulation*, ed. Richard J. Davidson, G. E. Schwartz, and D. Shapiro, Vol. 4, 1–18. New York: Plenum Press.
- Pocket, Susan, William P. Banks, and Shaun Gallagher. 2006. "Introduction." In *Does Consciousness Cause Behavior*, ed. Susan Pockett, William P. Banks, and Shaun Gallagher. Cambridge and London: MIT Press.
- Rosenthal, David. 2002. "Explaining Consciousness." In *Philosophy of Mind: Classical and Contemporary Readings*, ed. David Chalmers, 406–21. Oxford: Oxford Univ. Press.
- Roth, Harold D. 1999. "The Laozi in the Context of Early Daoist Mystical Praxis." In *Religious and Philosophical Aspects of the Laozi*, ed. Mark Csikszentmihalyi and Philip J. Ivanhoe, 59–96. Albany and New York: State Univ. of New York Press.
- Shapiro, Shauna L. Gary E. Schwartz, and Craig Santerre. 2005. "Meditation and Positive Psychology." In *Handbook of Positive Psychology*, ed. C. R. Snyder and Shane L. Lopez, 632–45. Oxford: Oxford Univ. Press.
- Slingerland, Edward. 2003. *Effortless Action: Wu-Wei as Conceptual Metaphor and Spiritual Ideal in Early China*. Oxford: Oxford Univ. Press.
- Van Norden, B.W. 1999. "Method in the Madness of the Laozi." In *Religious and Philosophical Aspects of the Laozi*, ed. Mark Csikszentmihalyi and Philip J. Ivanhoe. Albany and New York: State Univ. of New York Press.
- Velleman, David. 2004. "Précis of the Possibility of Practical Reason." *Philosophical Studies* 121(3):225–38.
- . 2008. "The Way of the Wanton." In *Practical Identity and Narrative Agency*, ed. Kim Atkins and Catriona MacKenzie, 169–92. New York: Routledge.

- . 2009. *How We Get along*. Cambridge: Cambridge Univ. Press.
- Vittersø, Joar. 2003. "Flow versus Life Satisfaction: A Projective Use of Cartoons to Illustrate the Difference between the Evaluation Approach and the Intrinsic Motivation Approach to Subjective Quality of Life." *Journal of Happiness Studies* 4(2):141–67.
- Watson, Burton. 1968. *The Complete Works of Chuang Tzu*. New York and London: Columbia Univ. Press.
- Wegner, Daniel M. 2002. *The Illusion of Conscious Will*. Cambridge: MIT Press.
- Wegner, Daniel M., and John A. Bargh. 1998. "Control and Automaticity in Social Life." In *Handbook of Social Psychology, Vol.1*, ed. Daniel Gilbert, Susan T. Fiske, and Gardner Lindzey, 446–96. New York: McGraw-Hill.
- Wells, Anne J. 1998. "Self-Esteem and Optimal Experience." In *Optimal Experience: Psychological Studies of Flow in Consciousness*, ed. Mihaly Csikszentmihalyi and Isabella Csikszentmihalyi, 327–41. Cambridge: Cambridge Univ. Press.
- Wilson, Timothy. 2002. *Strangers to Ourselves: Discovering the Adaptive Unconsciousness*. Cambridge and London: Belknap Press of Harvard Univ. Press.
- Xiaogan, Liu. 1999. "An Inquiry into the Core Value of Laozi's Philosophy." In *Religious and Philosophical Aspects of the Laozi*, ed. Mark Csikszentmihalyi and Philip J. Ivanhoe. Albany and New York: State Univ. of New York Press.
- . 2001. "Non-Action and the Environment Today: A Conceptual and Applied Study of Laozi's Philosophy." In *Daoism and Ecology: Ways within a Cosmic Landscape*, ed. N. J. Girardot, James Miller, and Liu Xiaogan. Cambridge: Harvard Univ. Press.