

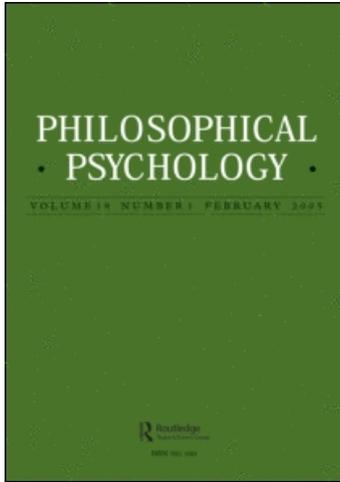
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Free will in everyday life: Autobiographical accounts of free and unfree actions

Tyler F. Stillman, Roy F. Baumeister, and
Alfred R. Mele

What does free will mean to laypersons? The present investigation sought to address this question by identifying how laypersons distinguish between free and unfree actions. We elicited autobiographical narratives in which participants described either free or unfree actions, and the narratives were subsequently subjected to impartial analysis. Results indicate that free actions were associated with reaching goals, high levels of conscious thought and deliberation, positive outcomes, and moral behavior (among other things). These findings suggest that lay conceptions of free will fit well with the view that free will is a form of action control.

Keywords: Consciousness; Determinism; Folk Beliefs; Free Will

1. Introduction

Do people have free will? The question has been fiercely debated, and intermediate answers continue to be the focus of arguments in many contexts, including philosophical analysis, legal judgment, and theological dogma. The present investigation will not seek to establish whether or to what extent people have free will. Rather, its topic is a question about lay conceptions of free will: when ordinary people describe their own free versus unfree actions, what are the operative differences? In simpler terms, what does free will mean to ordinary people when they reflect on their own lives and experiences?

Lay intuitions of free will are of interest to philosophers, psychologists, and other academics. Often, however, what is described as lay conceptions of free will

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“originate from scholars’ armchairs, in neglect of folk beliefs” (Monroe & Malle, 2010). There are some exceptions, as researchers have begun to probe folk conceptions of free will empirically. One approach has been to ask participants to rate their agreement with various statements about free will (e.g., Paulhus & Carey, 2011; Stroessner & Green, 1990). Typically these studies find that participants agree with items favorable to free will, suggesting that people generally believe in free will.

A different approach to understanding lay intuitions about free will has been to understand how judgments about human actions vary when the actions are described as originating in a deterministic universe as compared to a nondeterministic universe (Nahmias, Morris, Nadelhoffer, & Turner, 2005; Nichols, 2004, 2006). Often such studies find that laypersons have some compatibilist leanings, indicating that laypersons do not necessarily view free will and determinism as mutually exclusive.

A recent, innovative method has been to ask laypersons to provide a definition of free will. The definitions are subsequently subjected to impartial analysis (Monroe & Malle, 2010). Choice emerged as crucial to definitions of free will. Moreover, contrary to the assumption of some theorists such as Montague (2008) that free will invokes a soul or other nonphysical entity, Monroe and Malle found scant evidence of Cartesian dualism in layperson conceptions of free will.

All such methods yield findings that are useful in the formidable task of unraveling folk intuitions about free will. Yet none has shed much light on the kinds of actions that are viewed by laypersons as stemming from the exercise of free will. The present investigation sought to fill this gap.

Our approach was to obtain autobiographical accounts from laypersons. This research method involves having participants write first-person narratives of events from their own lives that fit some theme relevant to the researcher. In particular, two or more sets of parallel accounts are obtained, which can then be coded for relevant features, furnishing a basis for statistical comparison. These accounts thus complement laboratory studies by obtaining genuine, naturally occurring experiences from people’s lives and assessing how people have interpreted them in their own thoughts and words. Such methods have been used to elucidate anger and victimization (Baumeister, Stillwell, & Wotman, 1990), life change (Heatherton & Nichols, 1994), self-understanding (McAdams, 2006; McAdams, Josselson, & Lieblich, 2006), heartbreak (Baumeister, Wotman, & Stillwell, 1993), commitment and generativity (McAdams, Diamond, de St. Aubin, & Mansfield, 1997), and many other topics.

In the present investigation, half the participants were instructed to write about actions they deemed to be free. The rest were instructed to write about their own past behaviors that they felt had not reflected their own free will. The content of these autobiographical accounts was systematically assessed by subjecting them to the analysis of independent raters (research assistants naïve to study aims), who rated each account on a series of dimensions based on our hypotheses about how the two kinds of narrative would differ.

Our method had several advantages as a complement to prior work. First, participants were not constrained to agree or disagree with statements made

by researchers. Rather, responses were open-ended and allowed participants the liberty to respond according to their own perspectives—unencumbered by the views of the experimenters. Second, participants were not asked to react to hypothetical or artificial scenarios. Rather, they provided concrete examples of real actions, circumstances, and events from their own lives. Third, we focused specifically on descriptions of actions because people have an enormous number of prior behaviors from which to select an exemplar of free will (or a lack thereof). We anticipated that this would enable participants a high degree of precision in selecting which of their actions best fit how they perceived free or unfree actions. Fourth, we presumed that most people would be more adept at describing their own behavior than at defining philosophical constructs. We assume that no single method is the single best one, particularly for addressing such complex issues as lay conceptions of free will, and so convergence across multiple methods offers the best hope for scientific progress and theoretical advancement in the long run.

The next sections will elaborate hypotheses and predictions about how the two sets of autobiographical narratives would differ. The null hypothesis, which would mean that there are no perceived differences between free and unfree actions (which is what would obtain if people failed to make systematic distinctions between free and unfree actions), would be that the two sets of autobiographical accounts would not differ. We expected otherwise.

2. Free Will and Adaptation

There are some ostensibly scientific perspectives that regard the very idea of free will as anathema, tantamount to denying the power of scientific causation (e.g., Crick, 1994; Montague, 2008; Pinker, 2002). However, other approaches treat free will as an evolved adaptation for reaching desired states and goals. Essentially, they say that natural selection led to a kind of action control in humans that is based on and derived from, but may be considerably more powerful and flexible than, what is found in simpler animals. The main difference is that human action control is highly developed to make it suitable for reaching objectives in the increasingly complex social and cultural environments in which humans live. Essential to this argument is the notion that free will has enabled humans to achieve goals that biologically older forms of action control—those evidently associated with nonhumans and the ancestors to modern humans—were less able to do (e.g., Baumeister, 2005; Dennett, 2003).

We did not expect laypersons to articulate the evolved action-control view with great precision. However, the essence of the evolved action-control view is that free will should facilitate desired outcomes, especially ones that require functioning within human society and culture. We did anticipate that lay conceptions of free will would fit with the evolved action-control view broadly.

We do not mean to suggest that there are only two perspectives on free will: a deeply skeptical one and a nonskeptical evolutionary one. The amount of attention

we pay to a specific evolutionary perspective here is partly explained by the fact that this article reports a segment of a much larger investigation of that perspective. Also, readers will notice that our discussion moves fluidly between the expressions “free will” and “free action.” This reflects our inclination to conceive of free will as the ability to perform free actions and to treat free action as the more basic notion in terms of which free will is to be defined (see Mele, 2006). However, we realize that there are other ways of conceiving of the relationship between free will and free action in the philosophical literature (see Frankfurt, 1971; Watson, 1987), and we wish to keep an open mind about this. Our instructions to our participants featured the expression “of your own free will.” Readers are free to read “free action” in this article as shorthand for “action done of the agent’s own free will.”

Research assistants working on behalf of the authors rated narratives for both positive outcomes and goal attainment (and were naïve to study aims and to instructions given to participants). We predicted that actions described by laypersons as being the product of free will would feature goal attainment and positive outcomes.

3. Positive Outcomes and Goal Attainment

3.1. *Self-Interest and Time Frame*

As noted above, Dennett (2003) proposed that free will is only worth having (and by extension would only have emerged via natural selection) to the extent that it enables the individual to get what he or she wants. What the person wants, to be sure, is a rather elastic category. Research on self-regulation and related topics has emphasized that benefits to self may be immediate or delayed, and moreover often the immediate benefits are in conflict with the delayed ones. Nearly all animals are able to pursue what benefits them in the short run, and so nature hardly needed to evolve a new action control mechanism to help them choose what is immediately beneficial. In contrast, choosing delayed benefits at the expense of immediate ones is a biologically problematic form of choice. The limited time perspective of most animals (see Roberts, 2002) entails that they lack the capacity to choose delayed benefits over immediate ones beyond seconds or at best a few minutes. In contrast, humans are able to delay gratification for days, months, and even years.

Hence the evolution of free will might well have involved developing a capacity to make choices that would maximize long-term benefits even despite some sacrifice in the short run. Indeed, self-control research began with Mischel’s (e.g., 1974) studies on delay of gratification, which were based on procedures that offered such a choice. For example, in the much-discussed “marshmallow test” children might be offered the choice between a single marshmallow right away or several marshmallows after a brief delay. In many spheres of human culture and social life (such as education, science, medicine, and religion), being able to resist the temptation of immediate gains in order to obtain greater but delayed gains is adaptive. The marshmallow test thus encapsulates many of the adaptive dilemmas faced by prehistoric hominids and

humans today. Indeed, the progress of human civilization would be unthinkable without agriculture, which depends on the capacity to work steadily for months toward delayed gratification.

Thus, delaying immediate gratification in order to achieve long-term goals is an important part of humanity's unique form of action control, and we expected laypersons to associate delay of gratification with free will. Accordingly, research assistants rated participants' accounts as to whether long-term goals were achieved as well as whether short-term goals were achieved. We expected that laypersons would associate free actions with those aimed at long-term self-interest. In contrast, we predicted that pursuing immediate benefits would be viewed as relatively unfree.

3.2. Consciousness and Freedom

A further issue is the contribution of conscious processes in causing behavior. Many authors have proposed that if there is any reality to the notion of free will, it is to be found in close association with conscious processes (e.g., Donald, 2002; Mele, 2009). Automatic, unconscious responses are less congenial to the idea of free will. Hence we predicted that accounts of freely chosen actions would have a higher level of conscious thought, analysis, and decision than accounts of unfree actions.

3.3. Morality and Collective Benefits

The very concept of free will emerged in Western history in connection with moral choice, and moral and legal judgment of individuals to this day depends in part on the assessment of the degree to which the questionable action was performed freely. Indeed, the American legal system has provisions for releasing individuals from legal contracts and obligations insofar as one can judge that they entered into those contracts under duress. For example, a formalized promise of marriage or payment that was extracted at gunpoint is considered less binding than one that the person made without external constraint. This form of judgment is apparently without any precedent in nature, including among other social animals, and so it seems especially relevant to understanding free will as an adaptation to facilitate life in human culture. Now, the precise conceptual connection between duress and free will is not obvious. On one view, doing something under duress entails not doing it of one's own free will. On another, in performing some actions under duress people may exercise free will to some extent, but, even so, it would be wrong to hold them responsible for what they do. We refrain from taking a stand on this difficult conceptual issue.

The broader context for our analysis treats morality as a system of ideas that addresses one of the fundamental problems of social life, namely how to reconcile the natural selfishness of individuals with the requirements of group life (e.g., Baumeister, 2005; Hogan, 1973). In this analysis, nature developed brains and agency to enable individual creatures to pursue their self-interest, so that all animals are naturally selfish (Lorenz, 1962). The main refinement to this assumption has been that the operative category is genetic self-interest rather than organismic self-interest

(Dawkins, 1976; Hamilton, 1964). That is, animals may sacrifice their own self-interest for the sake of offspring and perhaps other kin, insofar as these others share one's genes. Still, for the most part, nature has fostered selfishness.

Living in social and especially cultural groups, however, requires some sacrifice of narrow self-interest in order to get along. Successful cultures persuade individuals to act in ways that sometimes go against their self-interest, or at least their immediate self-interest, such as by waiting one's turn, respecting the property of others, and paying taxes (or making charitable donations) to help the less fortunate parts of society. Morality, in this view, is largely a set of injunctions to do what is best for the collective even when that conflicts with what is best in the context of naked, short-term self-interest.

The equation of morally virtuous action with free will has distinguished precedent. Kant (1797/1996) proposed that selfish action is unfree in that it follows directly from situational stimuli and self-interested drives, whereas resisting impulses in order to do what is morally right reflects a high sort of freedom. If lay intuitions accord with Kant's view (i.e., selfish action is unfree) then free actions should generally be perceived as more moral than unfree ones. Therefore we had judges rate whether participants seemed to be acting in a manner consistent with their own moral values.

The functional analysis of morality holds that moral behavior serves the group. We have proposed that free will enables that sort of action. If the hypothesis is correct, then free actions should benefit one's social group more than unfree actions, whereas unfree actions should be relatively more harmful to the social group. We instructed research assistants to rate whether the actions described in these stories were potentially detrimental to the social group to which the individual belonged. The hypothesis was that the free actions should be more beneficial to the social group than unfree ones. This hypothesis might be regarded as contrary to the self-interested action hypothesis, according to Dennett's (2003) analysis. After all, if free will is mainly for helping the person get what he or she wants, and self-interest is sometimes opposed to collective group benefits, then free will might contribute to doing things that would be harmful to the group. However, the evolved action-control view holds that free will evolved precisely to promote forms of action that could be beneficial to both the individual and the group, or more precisely, to enable the person to advance his or her enlightened self-interest while respecting the demands of human social and cultural life. If that view accords with lay conceptions, then unfree actions should be viewed as those damaging to one's social group. Therefore, we sought ratings as to whether the actions participants described were damaging to their social group.

3.4. External Influence

A final question concerned the relationship between free action and external constraint. The action-control perspective proposes that free will evolved in part to overcome natural selfishness, and on that basis one might predict that free will would involve accommodating external pressures and influences. However, the action-control view actually holds that free will likely evolved to enable individuals to pursue

their enlightened self-interest in the context of a social environment with many rules, constraints, and opportunities. The ability to resist specific external influences would therefore be paramount.

Hence our reasoning was that free action would be associated with resisting or overcoming external pressures. After all, free will would hardly be needed for acting in concert with external and situational pressures. Any non-human animal can act in ways that the situation strongly promotes. In contrast, acting contrary to situational pressures, perhaps in service of enlightened self-interest, would entail resisting external pressures. Hence our prediction was that free action would be associated with resisting external influences and pressures. In contrast, allusions to highly powerful others would predominate among the accounts of unfree action.

4. Method

4.1. Participants

Participants were 99 undergraduates (55 women/44 men) in lower-division psychology classes who participated in exchange for partial course credit. The average age was 20.2 years.

4.2. Materials and Procedure

After giving informed consent, participants were randomly assigned to a condition by virtue of the narrative topic they were given. Participants in the free-will condition were instructed to “describe an experience in your life when you took action that you consider to have been of your own free will.” Participants in the unfree condition were given similar instructions, with the exception that they were asked to describe an experience in which their behavior was “not the result of free will.” All participants were encouraged to select an especially important event, and to describe it as fully as possible.

A group of four research assistants, working independently, read and rated the experiences described in the narrative on several dimensions from 1 (not at all) to 10 (completely). The evaluative dimensions are as follows: *positive outcome* (extent to which the outcome of the event was positive; there was very strong agreement among raters as measured by the intra-class correlation coefficient, or ICC = .92), *goal attainment* (achieving a desired end or state; ICC = .91), *long-term self-interest* (acting in a way that provides a long-term benefit, despite a possible short-term cost; ICC = .74), *short-term self-interest* (acting selfishly, or seeking an immediate benefit at a possible long-term cost; ICC = .82), *consciousness* (careful and thoughtful consideration of one’s actions; ICC = .73), *moral behavior* (acting in a manner consistent with the participant’s own moral compass; ICC = .86), and *external pressures* (acting contrary to external forces; ICC = .86).

We also assessed two additional variables by having raters code for *harm to social group* (ICC = .64) and *presence of powerful other* (ICC = .74). All narratives were

coded as 1 (indicating the variable was absent) unless there was clear evidence to the contrary, in which case they were coded as 2. We used this very conservative means of assessment for these variables because we considered them the most likely to be rated erroneously.

5. Results

The main findings are summarized in Table 1.

In the table, 'M' refers to Mean and 'SD' refers to Standard Deviation. Possible mean values ranged from 1 to 10 for rated dimensions and from 1 to 2 on coded dimensions. Higher scores indicate higher ratings for the variable.

Participants in the free will condition wrote accounts that differed systematically and reliably from those in the unfree condition. Participants in the free will condition described events in which they acted against external forces, achieved goals, evinced conscious thoughtfulness, had a positive outcome, and behaved consistently with their morals. Participants in the free condition were also more likely than those in the unfree condition to report acting in a manner consistent with their enlightened self-interest, although narratives that included the pursuit of enlightened self-interest were uncommon in both conditions. Experimental condition did not have an effect on short-term self-interest.

Compared to those in the free condition, participants in the unfree condition were more likely to write a narrative in which a powerful figure was present. The unfree condition was also associated with a failure to act against external forces, suggesting that powerlessness or passivity characterized unfree actions. Further, participants in the unfree condition were less likely to write about positive outcomes, more likely to write about a failure to achieve goals, and more likely to describe actions that harmed their social group (although this was rare in both conditions). Thus unfree actions were generally perceived as suboptimal acts.

Table 1 Characteristics of narratives as a function of condition.

	Free Narrative		Unfree Narrative			<i>p</i>
	M	SD	M	SD	<i>t</i> (98)	
<i>Rated dimensions</i>						
Positive outcome	7.00	2.52	4.18	2.44	5.60	<.001
Goal attainment	7.46	2.23	3.59	1.97	9.04	<.001
Long-term self-interest	4.20	2.05	2.50	1.51	4.70	<.001
Short-term self-interest	2.64	1.80	2.29	1.68	1.01	.31 <i>ns</i>
Level of consciousness	7.69	1.32	6.13	1.28	5.93	<.001
Moral behavior	7.63	2.10	5.55	2.30	4.65	<.001
Acting against external forces	6.48	2.21	2.67	1.42	10.11	<.001
<i>Coded dimensions</i>						
Powerful other	1.17	.26	1.49	.35	5.09	<.001
Harm to social group	1.07	.16	1.18	.27	2.61	.01

Free actions had more positive outcomes and higher rates of goal attainment than did unfree actions. We note that the average ratings for both positive outcome (7.00) and goal attainment (7.46) dimensions were above the scale midpoint (5.5) when in the free-action condition. Thus, positive outcomes and goal attainment were features of free actions both in an absolute sense and relative to the narratives in the unfree action condition.

Long-term self-interest varied as expected with experimental condition, but short-term self-interest did not. Specifically, long-term self-interest was almost wholly absent from accounts of unfree actions ($M = 2.50$), but not from accounts of free actions ($M = 4.20$). Short-term self-interest did not emerge as a prominent feature of either accounts of free actions ($M = 2.64$) or accounts of unfree actions ($M = 2.29$). This was contrary to our expectation, which was that narratives of unfree actions would include short-term self-interest.

There were relatively high levels of reflectivity and conscious thought among those describing free actions ($M = 7.69$) and unfree actions ($M = 6.13$). Perhaps one reason for these relatively high ratings was that we explicitly requested that participants relate a meaningful action. Descriptions of inconsequential actions—those generally associated with an absence of reflectivity—were absent. Even so, the level of conscious thought was higher among those reporting free actions than among those reporting unfree actions, as predicted.

Ratings of moral actions (defined by whether participants were acting according to their own moral beliefs, not those of the raters) were at the midpoint for unfree actions ($M = 5.55$), but were quite high among those in the free-will condition ($M = 7.63$). Thus people associated free will with acting in accordance with their moral beliefs. One dimension of moral behavior is not harming those in one's social group. As expected, people associated free will with acting in a manner that did not harm their social group; more unfree narratives were coded as evincing harm to the writer's social group (incidents of harm were coded as 2; $M = 1.18$) compared to free narratives (no harm was coded as 1; $M = 1.07$).

There was a significant difference between conditions in whether participants were acting contrary to an external force. As expected, free will was associated with acting against an external force (such as social pressure), $M = 6.48$. In contrast, an absence of free will was associated with not acting against external forces, $M = 2.67$. Thus, one important dimension of free action is the ability to rise above circumstances. We also found that participants mentioned a powerful person in their unfree narratives (e.g., a parent or other authority figure) more than in their free narratives. Powerful figures were frequently included in the unfree narratives (the presence of a powerful figure was coded as 2; $M = 1.49$), but not in the free narratives (the absence of a powerful figure was coded as 1; $M = 1.17$). In short, powerful figures were more common in unfree narratives, but defying their demands would be associated with free action.

It seemed plausible, post-hoc, that those reporting free actions would have an easier time recalling an experience than those reporting unfree actions, as most people believe in free will. If so, ease of recall, or perhaps the number of details one recalled, could potentially explain some of the current findings. Therefore we

counted the number of words in each essay, to determine whether there were more words in the free condition than the unfree condition. We found no differences between conditions in word count, $t < 1$. However, we hesitate to draw any firm conclusions regarding ease of recall based on this null finding.

6. Discussion

The present investigation sought to elucidate the lay understanding of free will by comparing two sets of stories from people's lives. One set involved actions that they regarded as reflecting their own free will, and the other set consisted of actions that they regarded as not the result of free will. Coders who were blind to the experimental conditions (i.e., the thematic assignment of free vs. unfree) rated and coded all the narratives. Measures of inter-rater agreement indicated acceptably high reliability. The resulting differences between the two sets of stories offer a glimpse into how free will (along with its occasional absence) is perceived to operate in everyday life.

We hasten to reiterate that research like this cannot begin to prove or disprove the existence of free will. Rather, it shows that ordinary people understand the term "free will" to refer a certain class of phenomena, and it clarifies what those phenomena are. In fact, we hope that researchers and theorists across the full spectrum of opinion about free will may find these results useful. Those who believe in free will can build on them to understand how free will seems to operate in daily life. Those who disbelieve in it can use these findings to understand what sorts of phenomena are commonly mistaken for free will and may have given rise to the illusion that such a thing exists. Those who are undecided or indifferent can use them to appreciate that human action can ensue from at least two types of inner processes, which are subjectively and perhaps objectively different.

The main findings were as follows. First, free will was associated with relatively high levels of positive outcome and goal attainment. Among others, Dennett (1984, 2003) has repeatedly asserted that free will is only worth having if it helps people get what they want, and apparently free will was perceived as meeting this requirement in the lives of our participants. These findings are also congenial to the broader view that what people understand as free will evolved to enable people to function amid the advanced forms of social life that humans have created, including culture. Compared with the social structures of simpler animals, human civilization presents vastly more constraints and opportunities. In order to navigate them effectively so as to live comfortably, the person requires an action control system that can adjust to multiple contingencies. In our sample, at least, people regard free will as something that has been positively helpful in that connection.

Second, free will was associated with bringing delayed rather than immediate benefits. That is, actions identified as free were significantly more conducive than unfree ones to producing some benefit that came along substantially later than the action pursuing it. These actions may even have incurred short-term costs. In contrast, there was no difference between the two sets of stories as to short-term

benefits to self. Neither set of accounts contained much in the way of short-term benefits.

The link between free will and a long time span (i.e., pursuit of delayed goals and benefits) is conceptually important for several reasons. The ability to think about the future and then flexibly adjust actions in the present on that basis is a hallmark of human behavior and is central to the functioning of human culture. Therefore this finding is again highly congenial to the view of free will as an adaptation for culture. Moreover, the ability to pursue delayed gratifications instead of immediately available ones is a central form of self-control and has been shown to predict beneficial outcomes. Most notably, children who were best able to delay gratification on a laboratory task at age 4 went on to become more successful in both work and relationships, into adulthood (Mischel, Shoda, & Peake, 1988; Shoda, Mischel, & Peake, 1990).

Indeed, the link between free will and delayed benefits offers a basis for critique of the influential experiments by Libet (1985), which have often been interpreted as discrediting the very idea that conscious thought can contribute to free action. The procedures of Libet's studies ruled out any delayed or planned action, instead instructing participants to make a conscious initiation of an immediate wrist movement. Although such research may have value, it fails to capture some important aspects of free action, such as the connection of present actions to distal goals and benefits.

The issue of conscious process brings up our next finding: accounts of free acts were significantly more likely than the accounts of unfree acts to indicate that the person engaged in conscious reflection prior to the action. Although the work of researchers such as Bargh (1997) and Wegner (2002) has questioned whether conscious thoughts are effective in the direct, immediate control of action, indirect control may be nonetheless both possible and highly adaptive. Conscious thinking may be useful for simulating future actions prior to performing them. With all due respect to the radical fringes of expert opinion, sometimes it really is better to think before you act. These mental simulations may enable the person to evaluate various options and, crucially, their likely downstream consequences. Simulations can thus help decide what is best to do, and they also contribute to effective performance of the subsequent actions, even after substantial delays and interruptions (e.g., Gollwitzer, 1999; Mele, 2009).

It is important to point out that the present findings are not inconsistent with a certain thesis advanced by Wegner, Bargh, Libet and others. We do not claim to have found that conscious thought directly caused some actions. Rather, our findings suggest that people carefully considered what they should do before they engaged in actions they later regarded as good examples of free will. Conscious thoughts may thus contribute to free action by helping the person weigh and compare options and by facilitating the formation and refinement of plans. A fourth set of findings linked free action to moral behavior and to not harming the social group. That is, acts identified as unfree were more likely than free ones to go against the person's moral values and to bring harm to the person's social group. Earlier in the paper, we

acknowledged a view of morality as rules designed to benefit the group so that people could live together and enjoy the benefits of group systems, including culture. The link between free action and moral, group-benefiting action is thus again consistent with the idea that free will is a form of action control designed to enable people to live and function in culture.

We noted that moral rules sometimes require the person to sacrifice immediate self-interest for the sake of what is best for the group. The individual does normally benefit from belonging to the group, so such sacrifices for the sake of moral virtue are often offset by the advantages of belonging. Our findings regarding moral values and group harm mesh well with the findings we reported earlier about positive outcomes, goal achievement, and long-term self-interest. In this sample of stories, apparently, moral prescriptions and group benefits could be reconciled with individual self-interest (especially delayed or enlightened self-interest, as opposed to purely short-term selfish gain). Such a reconciliation may often be a delicate task of balancing competing demands—but presumably that is precisely why a relatively complex and flexible form of action control is needed to make human culture successful and to enable individual humans to thrive within it.

The last set of findings was that free actions were more likely than unfree ones to be characterized as going against external forces, while powerful others and authority figures were more common in accounts of unfree than free actions. Although some theorists may distinguish political freedom from free will or free action, that sort of distinction was apparently not highly salient to our participants. Undeniably, people often encounter circumstances where authority figures and other external forces push them to follow a particular course of action. Consistent with the legal definition of free will, participants seemed to think that free will involved the inner capability to resist those forces. Going against external pressure was associated with free will, whereas going along with it was associated with unfree acts.

7. Limitations and Strengths

The autobiographical narrative method has both strengths and weaknesses. As noted above, it sacrifices the precision and control of laboratory experimentation in order to gain external validity and rich diversity. Strong causal conclusions about how certain psychological processes might actually produce certain outcomes cannot be drawn from data such as these. Instead, these data show how people understand these processes and interpret their own experiences. As such, they are a highly valuable complement to controlled laboratory work, but clearly no substitute for it.

A main source of ambiguity with such studies is that it is impossible to know how participants selected which of their past experiences to describe. Almost certainly, they all have had many experiences of both free and unfree action, and presumably they chose one that to them epitomized the category they were assigned. Still, unknown factors may have swayed their selection among several that could have

served equally well. This concern is endemic to this method rather than being specific to the present investigation.

On the positive side, all our findings point to content that participants spontaneously generated and thus do not indicate responses to demand characteristics or suggestion by the researchers. We did not suggest the issues or dimensions to them, such as by asking them to furnish ratings on dimensions we had chosen as particularly relevant. We gave them just one line of instruction, namely to describe an act that reflected free will or its opposite. What they wrote thus reflects the cognitive structures in their minds as to what is relevant to that topic.

8. Concluding Remarks

Although expert opinion remains deeply divided about whether the concept of free will belongs in a scientific or philosophical account of human action, ordinary people seem quite comfortable with the notion and seem routinely to think and judge on that basis. Our study has sought to flesh out how people understand free will in relation to specific actions from their own lives and experiences.

From this work, free action emerges as a personally beneficial form of action. It invokes thinking before acting and thereby improving one's outcomes. Free action produced benefits, especially ones that were not immediately realized, and it accomplished this by means of careful thinking prior to action. It facilitated doing what was best both for the self in the long run and for the social group. These results are consistent with the view of free will, or the possibly mistaken conception of free will, as referring to a form of action control that evolved to enable humans to get the most out their advanced forms of social life.

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