

Because It Is There: The Challenge of Mountaineering ... for Utility Theory

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*If the old question, the one that Mallory tried to answer is
a valid one, I have given up trying to meet it rationally.*

David Roberts, Mountain of My Fear.

I. INTRODUCTION

Among recent contributions of psychology to economics, perhaps the most compelling and influential have been those that have enriched the economic concept of utility. In its early incarnations, utility was a robustly psychological construct. In the century following Bentham's (1789) conception of utility, economists and moral philosophers devoted considerable discussion to its characteristics and determinants. The evolution of the utility concept during our century, however, has been characterized by a progressive stripping away of psychology, culminating in notions of ordinal utility and revealed preference that encompass little more psychological insight than the observation that people choose what they prefer.

In the last few decades, however, some of the original richness and complexity of the utility concept has been restored. This restoration has involved, in part, a rediscovery of the benefits of the hedonic, Benthamite, notion of utility, which

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Daniel Kahneman has resurrected as 'experience utility' (Kahneman and Snell 1990, Kahneman, Wakker and Sarin 1997; for a history see Loewenstein 1992). When we deal with experience utility, it is meaningful to ask questions that make no sense with ordinal utility, such as whether people correctly predict the utility they will experience from a particular activity, or whether they successfully maximize experienced utility.

These refinements of the utility concept have been accompanied by efforts to derive empirically some of the specific properties of representative utility functions. One of the most important advances along this line has been the discovery of 'loss aversion' – the tendency to weight losses much more heavily than gains of equal absolute value (Tversky and Kahneman 1991). Recognition of loss aversion has led to advances in modeling a wide range of behaviors, including behavior under risk and uncertainty (Kahneman and Tversky 1979), intertemporal choice (Loewenstein and Prelec 1992), labor supply (Camerer et al. 1997), investment behavior (Bernartzi and Thaler 1995), and consumer behavior (Hardie, Johnson and Fader 1993).

Other refinements of utility have entailed an expansion of the arguments of the utility function to incorporate motives involving other people, such as social comparison (Loewenstein, Thompson and Bazerman 1989), reciprocity (Fehr and Gächter 1998), and fairness (Rabin 1993). In addition, psychologically minded economists have begun to recognize the importance of *intrapersonal* comparisons. Utility functions have been proposed and tested that incorporate the effect of past consumption on current utility, via either memory (Wolfe 1970) or level of adaptation (e.g., Clark 1998). Other formulations incorporate utility from anticipation (Loewenstein 1987) or from disappointment or regret arising from a comparison of realized outcomes against those that could have happened but did not (Loomes 1987, Sugden 1994). Many of these developments were anticipated by Bentham, who included in his rather short list of pleasures and pains, those arising from memory, expectation, imagination, disappointment, and regret.

Despite the blossoming of the utility concept and expanding appreciation for the diverse determinants of utility, the list of human motives that have been codified in utility functions, and hence incorporated into economic analyses, remains seriously incomplete. All of the ingredients of utility that are commonly rendered in utility functions share an important feature: they involve consumption, broadly construed (or in some cases leisure and wealth). The consumption may not be one's own. It may be planned for the future or have happened in the past. It may *never* happen (but could have happened if events had unfolded differently). But even when all of these complexities are incorporated, the resultant utility function is still based on *consumption*.

How important is consumption as an input into experienced utility? Even Bentham did not view consumption as all-important. Although the first two sources of utility in his list – pleasures of sense and pleasures of wealth – *do* seem to fit into an inclusive conception of consumption, the seven that follow do not. These are the pleasures of skill, self-recommendation, a good name, power, piety, benevolence, and malevolence. My central argument in this essay is that several of these non-consumption-related sources of utility are powerful and important motivators of human behavior. In the classic case of searching for the wallet under the lamp-post, these motives have been left out of most economists' utility functions, not because their importance is denied, but because they are difficult to formalize in decision-theoretic terms.

To illustrate the importance of motives that are unconnected to consumption, I will focus on personal accounts of a specific activity: *mountaineering*. Why mountaineering? Admittedly, I examine mountaineering in part because it so obviously is *not* about pleasure from consumption. Serious mountaineering – which I define broadly to include polar exploration¹ – tends to be one unrelenting misery from beginning to end. The reason why mountaineers are so often asked why they climb mountains, and the reason why their explicit answers are so often unilluminating (e.g., Mallory's 'because it is there') is precisely that their reasons don't fit neatly into materialistic notions of human motivation. Dentists, investment bankers, and real estate brokers are rarely asked why they are engaged in these activities (though I suspect that the extent to which they are motivated by material considerations is exaggerated).

Although mountaineering is ideal for illustrating these non-consumption-related motives, it could be argued that, as a pathological activity engaged in by a small number of unusual people, it has little relevance to economics. The descriptions of mountaineering included in this essay will do nothing to dispel such opinions. But, as I argue in the conclusion, the motives that drive mountaineers are also pervasive in the general population in diverse domains of behavior.

If mountaineers aren't very good at answering the 'why' question when it is posed *directly*, a close reading of the mountaineering literature reveals myriad clues about their motives. In this essay I draw on works by and about mountaineers to illustrate the importance for human behavior of motives that don't *directly* involve pleasure from consumption.

1. The conditions experienced in mountaineering and polar exploration – e.g., cold, hunger, and exhaustion – are similar. Moreover, there is some overlap in central figures. For example, Reinhold Messner – arguably the greatest living mountaineer – made a solo trip across Antarctica.

II. THE MISERIES OF MOUNTAINEERING

To understand why mountaineering cannot be interpreted as a pleasurable consumption experience, one needs to have some appreciation of its hardships, which are amply catalogued in the mountaineering literature. They include relentless cold (often leading to frostbite and loss of extremities, or death), exhaustion, snow-blindness, sunburn, altitude sickness, sleeplessness, squalid conditions, hunger, fear, and realization of that fear (in the form of accidents). Mountaineering death rates are mind-boggling. Approximately one person has died for every four who have successfully ascended Everest; in 1996, seven lost their lives in a single day. Ten years earlier 27 men and women reached the top of K2 during the climbing season, but 13 died, several while descending after summiting. On smaller mountains such as Denali (aka, Mount McKinley), and even on the tourist route of the Matterhorn, death rates are also shockingly high.

Despite the tremendous literary talents revealed in the mountaineering literature, an appreciation for these hardships is almost impossible to achieve from the typical reader's vantage point of warmth, rest, comfort, and satiety². In a recent paper (Loewenstein 1996), I have argued that people who are not experiencing 'visceral' states such as cold, exhaustion, pain, or hunger are bad at imagining how they would feel or behave when experiencing one of these sensations. When you are warm it is virtually impossible to empathize with the miseries of cold; when rested to understand exhaustion; or when satiated to appreciate the intensity of hunger pangs. Mountaineering writers are exquisitely aware of this problem. Thus, for example, Joe Simpson (1997, p. 206), who, after escaping from the crevasse which he fell into when his partner cut the climbing rope with a knife, dragged himself with a broken leg through a giant ice-field, expressed frustration at his inability to convey the true misery of the experience:

'however painful readers may think our experiences were, for me this book still falls short of articulating just how dreadful were some of those lonely days. I simply could not find the words to express the utter desolation of the experience'.

2. The same is true of battle, as Michael Norman (1996) commented in a *New York Times* article about war movies: 'No war film has ever or will ever, capture the fierce savagery, the ineffable suffering and the galling waste of combat. Samuel Fuller, a combat veteran of World War II and the director of "The Steel Helmet", "The Big Red One" and other war films, once told an interviewer that the only way to recapture the reality of war on film was to put a machine gun behind the screen and gun down the audience. I'd amend that with: then prop up the wounded and cut their hearts out'.

This 'empathy gap' is not only a problem for readers of mountaineering literature; mountaineers themselves can't remember the miseries of climbing, which helps to explain why they keep returning for more. In his account of an earlier climb in the Alps, Simpson (1993, p. 137) described conditions as

'harshly uncomfortable, miserable and exhausting',

and also admitted to experiencing near-debilitating fear both before and during the climb. However, he reports, his perspective changed almost instantly after he and his partner had achieved the summit:

'On the summit my memory edited out the anxiety and tension and fed me happy recollections of the superb climbing, the spectacular positions we had been in, feeling confident and safe, knowing we were going to succeed'.

Mike Stroud (1993, p. 178), in his brilliant account of the first unassisted crossing of Antarctica, noted that

'Even though I can clearly remember saying to myself every day of the journey "I must never do this again", I don't feel now as I did then. The memory deficit is playing its tricks already'.

The strange thing about both Simpson's and Stroud's recollections is that they recognize that their memories are faulty, but don't make the obvious adjustments to their behavior. It is as if, though they can remember the misery at an abstract level, it has no real meaning to them when it comes to deciding whether to expose themselves to the misery again.

If the physical sensations of mountaineering are distinctly aversive, one might hope to discover the answer to the 'why' question in the interpersonal realm. The older mountaineering literature did, in fact, emphasize the solidarity of the assault team and the depth of interpersonal relations forged by hardship. But more recent accounts tell a different story, whether because human solidarity has broken down or (as I believe) because the new generation is more honest. The new literature conveys the tremendous loneliness and isolation of mountaineering, and profound separation even from one's climbing partners. Being roped to another person, and dependent on him or her for one's safety is not, as one might think, a 'bonding' experience, but one that fosters supreme alienation, and far from forging deep and lasting friendships, mountaineering often creates enemies out of friends. Thus, in the course of a two month ordeal that ended in a failed attempt on Alaska's Mount Debora, Roberts (1991, p. 224) writes,

'Because of the intensity of being forced together for so long (for more than a month, we never got farther than a rope-length apart), we began to antagonize each other. We spent much of the trip in silent anger and parted at the end of the summer with harsh words'.

Mike Stroud similarly describes one horrible disagreement after another with his partner Ralph Fiennes, culminating in a bitter feud when it was over that they aired over the media and in the books that each wrote about the expedition (for the opposing view, see Fiennes 1995). Jim Curran (1987), in *K2: Triumph and Tragedy*, reports that during the 1996 climbing season on K2, intense squabbling broke out in the British expedition even before the climbers had left base camp, and that two members of a small French expedition lugged an extra tent up the mountain (in a situation where every ounce counts) so they wouldn't have to sleep in the same tent.

The isolation of mountaineering is exacerbated by the hot/cold empathy-gap which renders mountaineers unable to truly appreciate their partners' miseries. As Stroud (1993, p. 109) recounts,

'Ran's foot was much worse. Ever since the graft had broken down it had been getting worse and a deep ulcer was now eroding his forefoot. In the mornings it gave him hell, particularly when we had just started, and although he would generally steel himself and say nothing, occasionally even he would have to say something about the pain – try to share a part of it. Then he would be ashamed of himself, and call himself a wimp. I could do nothing but reassure him that I understood, though I didn't really. *Pain is a problem that cannot be shared*' (italics added).

What about the thrill? Mountaineering does have its thrilling moments, but they are rare. In fact, mountaineering suffers from the worst possible combination of long periods of stultifying boredom punctuated by brief periods of terror. On a typical ascent, the vast majority of time is spent in mind-bogglingly monotonous activities – for example, 'weathered out' in a cramped, squalid, tent, or 'ferrying' crushingly heavy packs up endless snow-slopes with fixed ropes. The monotony of endless plodding combined with constant exhaustion produces a kind of catatonia that many climbers allude to. Mike Stroud (1993, p. 108), for example, reports that

'when not gloating over Ran's difficulties (his aforementioned foot-wound), I occupied my head with inanities. This consisted chiefly of silly songs, such as "The Teddy Bear's Picnic".'

Joe Simpson (1997, p. 161) was similarly tormented not only by hunger, thirst, and pain from his broken leg but also by his inability to silence a song

'that I hated. Somehow I couldn't get its insistent chant out of my mind,...'Brown girl in the ring...Tra la la la la...''.

Even the much-vaunted beauty of the mountains is overplayed. Aside from subtle distinctions between, say, limestone and granite, one glacier, couloir, corniced ridge, or jagged peak looks much like another. Base camps of major peaks tend to be squalid shanty-towns overflowing with human excrement. And the view from the top often isn't much better. According to Beck Weathers (1998), who was lucky to survive his 1996 trip to Everest with his life, albeit minus all of his left and much of his right hand as well as several large chunks of his face, the major navigational landmarks on the higher reaches of Everest consist of

'the discarded oxygen tank canisters of the prior expeditions and the scattered bodies of the climbers who preceded you'.

Why, then, do people do it? This question preoccupies many climbers, particularly in times of hardship. The answer to the why question constitutes a – perhaps *the* – central theme in the climbing literature.

III. SELF-SIGNALING

Clearly, recognition, prestige, or as Bentham expressed it, 'the pleasure of a good name' is an important motive. Jon Elster (forthcoming) quotes John Adams to the effect that

'The desire of esteem is as real a want of nature as hunger: and the neglect and contempt of the world as severe a pain as gout and stone'.

Mountaineering is a prestigious activity, at least in some social circles. Almost anyone will be wowed by the first ascent of a major peak or by the first unassisted crossing of Antarctica. Although loath to admit that they care about public acclaim, mountaineers are forced to confront the reality. As Mike Stroud (1993, p. 27) writes,

'There was one less acceptable motivation – ego. How much of me wanted to go out and prove myself ... to others? How much of me wanted to revel in admiration and praise? They were difficult questions and although I liked to think they were unimportant, I sometimes wondered whether I was fooling myself and just not admitting that it was the achievement in the eyes of others that mattered. After all, everything we tried was an attempt to be 'first', and if it had been done before, I doubt that we would have bothered with it. This ... would seem to hint at a need to impress'.

Expressing similar doubts, Joe Simpson (1993, p. 87) grappled with his own motives for climbing:

'The truth seemed uncomfortably egoistical. I wanted to do only hard climbs, great north faces, impressive and daunting rock routes. I wanted a 'tick list' of hard routes under my belt ... It seemed wrong to want such things, shallow and superficial'.

Incorporating a desire to impress into a utility function is complicated, but possible. In fact, many economic analyses have incorporated the desire to impress others with one's consumption (Leibenstein 1976), as well as more general positional concerns (Frank 1985).

More complicated to formally model than the desire to impress would be the desire to impress without appearing that one is trying to impress. These dual motives have influenced the configuration of many mountaineering expeditions. To avoid the appearance of being motivated by a desire for public acclaim, many expeditions that seek to accomplish 'firsts' disguise their true purpose by including a 'scientific' or 'humanitarian' component. For example, the French expedition to climb an 8,000-meter peak, which is documented in Herzog's classic *Annapurna*, included a doctor who ministered to the poor of Nepal. Shackleton's ill-fated attempt to cross Antarctica required

'the blessings of the government and of various scientific societies ... to justify the expedition as a serious scientific endeavor' (Lansing 1959, p. 15).

Stroud's Antarctic expedition incorporated medical research (the men collected daily urine samples) as well as a philanthropic component (they raised money for muscular sclerosis though they never explained why they had chosen this particular cause). These scientific or humanitarian goals not only help to disguise the mountaineers' obsessive drive for fame, but also provide at least one goal that, by nature of its ambiguity, is almost certain to be achieved. Thus, when Mike Stroud and Ranulph Fiennes finally reached the limit of their endurance and terminated their Antarctic crossing in the middle of the Ross ice-shelf, Fiennes attempted to comfort his partner by noting that

'we ... have raised millions for charity, and your scientific programme is a success. All we haven't achieved is to cross the ice-shelf, the ice shelf that isn't part of the continent' (Stroud 1993, p. 167).

Closely related to, but more difficult to model formally than the need to impress others, is the need to impress oneself – what Bentham referred to as 'pleasures of self-recommendation'. Deferring again to Stroud,

'the need to impress ... does not altogether exclude self-satisfaction as a motive. Doing something first or best can still be for oneself' (p. 27).

Although pride is one of the 'deadly sins', most mountaineers view ego as a much more acceptable motive for their endeavours than impressing others.

Like the desire to impress, people's concern about their own motives can be translated into utility terms, though the complexities that are introduced are significant. In an insightful paper titled 'The Diagnostic Value of Actions in a Self-signaling Model', Ronit Bodner and Drazen Prelec (1996, see also Akerlof and Kranton 1998) show how it can be done. They distinguish between 'outcome utility', which corresponds to the usual notion of utility from consumption, and a new type of utility, 'diagnostic utility', which stems from an

'estimate of one's disposition' (p. 2).

If one knew one's own disposition, diagnostic utility would be fixed and would have few implications for behavior. But people are, in fact, unsure of their own dispositions³. To resolve this uncertainty in a manner favorable to themselves – that is, to boost their own diagnostic utility – people attempt to signal to themselves that they have desirable attributes by taking actions that they believe are consistent with those attributes. Thus, for example, people give to charity in part so that they can perceive themselves as generous.

As Bodner and Prelec (1996) discuss, however, such attempts at self-signaling are inherently problematic because the recognition that our actions are motivated by self-signaling should, logically, undermine the signaling value of those actions. Thus, for example, the diagnostic utility benefit derived from giving to charity should be undermined by the awareness that we are doing it for that reason.

Part of the appeal of mountaineering is that it avoids this problem to a great extent. One aspect of self-signaling that remains undeveloped is the idea that different situations provide differential scope for self-signaling. The daily commute, for example, may provide some opportunities for revealing oneself to be an inconsiderate jerk, but few opportunities for revealing truly exceptional qualities.

'In ordinary situations',

Lansing (1959, p. 13) writes,

'Shackleton's tremendous capacity for boldness and daring found almost nothing worthy of its pulling power; he was a Percheron draft horse harnessed to a child's wagon cart. But in the Antarctic – here was a burden which challenged every atom of his strength'.

3. This is undoubtedly part of the reason for the popularity of self-administered personality tests, such as those in magazines, self-help books, and now on the World Wide Web.

The same point can be seen in Potterfield's (1996, p. 103) description of Colby Coombs as

'a gifted mountaineer and ice climber. But ... you don't really find out about him until things get hard - until he's at altitude, or climbing in bad weather high on the mountain'.

It can also be seen in Beck Weathers's account of the motives of the helicopter pilot who rescued him on Everest in an unprecedented high-altitude flight. The pilot, Weathers said, believed that he

'had a brave heart but he had never been sufficiently tested to know whether this is true'.

Mountaineering provides an ideal venue for self-signaling because it is largely impossible to 'fake it'. As the polar explorer Robert Scott noted in his Antarctic diary (cited in Cherry-Gerrard 1922, p. lxiii),

'I do not think there can be any life quite so demonstrative of character as that we had on these expeditions ... Here the outward show is nothing ... Pretence is useless'.

From observing people in daily life it is completely impossible to predict how they will act under the duress of mountaineering. Indeed, I believe, people cannot predict how they themselves will behave. Some people who appear tough in daily life fall to pieces at the first hardship encountered on a mountain; others - seeming 'wimps' - discover, and reveal to those around them, unrecognized reserves of strength in the face of harsh conditions. Recognizing that mountaineering has such self-signaling value, Roberts (1968, p. 282) comments that

'mountaineers have claimed that the only discovery one can make by climbing is that of oneself'.

though, he ponders,

'there must be easier ways'.

In fact, there may not be easier ways; mountaineering reveals character only because it is not easy⁴. A big part of the purpose of a trip is to test one's own mettle, and pain and discomfort provide the grist for such tests. This desire for a harsh test of one's own fortitude, along with poor memory for misery, may help

4. Milan Kundera (1998) argues that friendship, like self-signaling, requires adversity: 'How is friendship born?' Jean Marc asks Chantal. 'Certainly as an alliance against adversity', he continues. But 'maybe there's no longer a vital need for such alliance'. 'There will always be enemies', rejoins Chantal. 'Yes, but they're invisible and anonymous. Bureaucracies, laws', responds Jean-Marc. 'Friendship can no longer be proved by some exploit'. He concludes, 'We go through our lives without great perils, but also without friendship'.

to explain why the most miserable trips often produce the best memories; pain and discomfort are, to some degree, the *point* of the trip.

IV. GOAL COMPLETION

Fame, self-esteem, and the desire for mastery may bring people to the mountains, but other forces keep them at it when conditions get miserable. One such force is the almost obsessive human need to fulfill self-set goals. This compulsion seems to be particularly refined in mountaineers, and especially in successful ones - at least as long as they survive. Thus, for example, after dislocating his shoulder and almost dying in an accident on K2 - the second highest mountain in the world and one of the most technically difficult - Scott Fischer went on to climb the peak. Potterfield (1997, p. 129) writes that

'most people in his situation probably would have bagged it and gone home. But Fischer possessed an almost irrational drive to get to the top of the mountains he climbed'.

Fischer may have been lucky on K2; as documented in Jon Krakauer's best-seller *Into Thin Air*, his need for completion did him in on Everest a few years later.

The intensity of the drive for goal completion is evident not only in mountaineers' Herculean efforts to make the peak, but also in the torment they experience when they fail. Doug Hansen, who died on Everest in 1996 after summiting at 4 pm (two hours after the prespecified turn-back time), had attempted to climb the mountain one year earlier, coming within 300 vertical feet of the summit when he had to turn back. According to Beck Weathers (1998), his earlier failure

'had come to possess him, take hold of his life, and control his every waking moment. And he came back this year vowing that under no circumstance was he going to allow himself to be turned around again'.

Mike Stroud, in his account of the first unassisted 900-mile crossing of Antarctica, displayed a similar obsession:

'To the vast majority of people who had heard that we had crossed the Antarctic, going on to finish the ice-shelf would seem pointless, but we were not the vast majority of people. We knew in our hearts, or at least I did in mine, that we had not completed what we set out to do. For me it would probably be difficult to live with, and much more so since a possibility remained that it was still achievable'.

David Roberts (1968, p. 332), in his epic tale of the first ascent of the west rib of Alaska's Mount Huntington, lamented that an unstable cornice prevented his

team from standing on top of the highest point of the peak. He reassured himself, however, that he had achieved his goal because, as he precisely noted, 'our heads stood higher' than the peak.

The motive to complete goals may result partly from self-signaling. Repeated deviations from one's plans – particularly when those plans call for some type of virtuous behavior – signal undesirable traits such as a weak will and impulsiveness. I suspect, however, that more than self-signaling is involved, in part because the need for goal completion *feels* so visceral. Krakauer (1997, p. 234), for example, refers to a 'summit fever' that consumes mountaineers when they are within striking distance of the peak.

The urge to complete a goal is important for decision making because it is an antidote to time-inconsistent behavior. Time inconsistency occurs when one makes plans for the future, then systematically departs from them. As Strotz (1955) pointed out, any time discount function other than the exponential (with a constant rate of time discounting) implies that behavior will be time-inconsistent. In fact, empirical studies of time discounting have revealed that time discounting is not exponential, but hyperbolic (see, e.g., Ainslie 1975). Interpreted loosely, this means that people place disproportionate weight on immediate pleasures and pains relative to those that are delayed even only slightly. Hyperbolic time discounting has been used to explain why people often resolve to start dieting, save money, or quit smoking beginning *tomorrow*, but fail to execute their plans when tomorrow becomes today.

Hyperbolic time discounting predicts, however, that people will be *consistently* time inconsistent – that they will display the same impulsive pattern frequently and in all domains of behavior – but that is by no means the case. Many people have self-control problems in a few specific domains of behavior but, for the most part, exhibit a high degree of time consistency in their daily behavior. The need for goal completion may help to explain why hyperbolic time discounters typically behave in a time-consistent fashion. Most people are uncomfortable with deviations from their own plans, whether they call for climbing a mountain, jogging five miles, or eschewing dessert after dinner.

In a clever study, Christensen-Szalanski (1984) asked women whether they wanted anesthesia during childbirth. Most said that they did not, but changed their minds when they went into labor. It would be easy to imagine that mountaineers would exhibit a similar pattern – discount future discomfort when planning a climb, but 'bag it' when the discomfort is actually experienced. Successful mountaineers, as Potterfield's description of Scott Fischer hints, may be a self-selected group for whom the completion drive is particularly strong.

Goal completion is, however, not only an antidote to time inconsistency, but also a source of it. The visceral need to complete a self-determined goal often

takes on a life of its own and becomes divorced from changing material incentives. Once a mountaineer has set his sights on a peak, the goal of making the summit becomes detached from rational calculations about the cost of achieving the goal. Mountaineers are well aware of the difficulty of relinquishing their summit ambitions even when abandonment of the goal is strongly merited. At the beginning of the day on which an assault on the peak takes place, most climbers – knowing of the hazards posed by 'summit fever' – designate a turn-back time, typically around mid-day, that will permit a return to the tent site before nightfall. When the appointed time arrives, however, and the day still seems young, many find it difficult or impossible to adhere to their earlier resolution. The failure to adhere to self-established turn-back times has led to innumerable deaths in the mountains, including seven mountaineers on Everest in 1996.

A strange aspect of goal completion, from a decision-making perspective, is why people set goals in the first place and why they subsequently adhere to them when they no longer make sense. Given that people choose their own goals, one might think they would find it easy to abandon them. Any theory of rational goal setting will need to explain not only what purpose goals serve, but also why, if the goals represent the output of a rational calculation, people don't drop them when they become patently counterproductive.

My own suspicion is that the drive toward goal establishment and goal completion is 'hard-wired'. Humans, like most animals and even plants, are maintained by complex arrays of homeostatic mechanisms that keep the body's systems in equilibrium. Many of the miseries of mountaineering, such as hunger, thirst, and pain, are manifestations of homeostatic mechanisms that motivate people to do what they need to do to survive, such as taking in calories (hunger) and liquids (thirst) and avoiding tissue damage (pain). Although we think of ourselves as eating because we are hungry, this account of eating begins in the middle of the causal chain. We become hungry when our brain receives information from the body that it interprets as signals that our body needs food, and, when we are hungry, food seems more appealing, through a process that Cabanac (1979) calls 'alioesthesia'⁵. Even frostbite, one of the major banes of

5. Mountaineers, and even more so polar explorers, suffer from almost constant hunger (except at high altitudes, where people lose their appetites and starve even faster) which produces an obsession with food. The diary entry of one member of Shackleton's crew commented that 'it is scandalous – all we seem to live for and think of now is food'. Mike Stroud wrote that his partner, Ran, 'in his diary ... wrote of food and little else. Day after day, he would expand a massively imaginative menu he planned to sit down and eat with Ginny when he got back to his farm on Exmoor' (1993, p. 152). The constant hunger not only makes people obsessed with food, but changes one's tastes dramatically. Before leaving on the climb that killed Colby Coombs's two partners and broke his neck (among other body parts), 'the three climbers had made a big pot of

mountaineering, results from the body's attempt to maintain core body temperature at the expense of extremities. The visceral need for goal completion, then, may be simply another manifestation of the organism's tendency to deal with problems – in this case the problem of executing motivated actions – homeostatically. As proposed in Miller, Gallanter and Pribram's (1960) classic *Plans and the Structure of Behavior*, most human volitional behavior takes the same form of goal setting and goal seeking. The only difference between the visceral need for goal completion and visceral feeling of hunger is that the former goal state is, in some sense, self-chosen⁶.

Another anomalous feature of the drive for goal completion is the striking disparity between the motivation to complete a goal and the weakness of the satisfaction that typically results from doing so. As Roberts (1968, p. 312) writes,

'climbing is defined by a purposed completion, the summit; yet the best of it is never that final victory'.

Joe Simpson (1993, p. 101) wrote that, after a major climb in the French Alps,

'It was strange to be filled so soon with a sense of anti-climax, now that it was finished. All the glory with which I had invested the route had vanished the moment I had climbed it'.

In decision-theoretic accounts of motivation, it is usually assumed that one's motivation to achieve a goal bears some relationship to the pleasure one will derive from achieving it (see Heath, Larrick and Wu 1998), but this does not seem to be the case for mountaineering. The discrepancy between desire and satisfaction is also characteristic of other motives such as curiosity (see Loewenstein 1994, p. 86), envy, and some forms of drug addiction (Berridge 1995).

spaghetti, but they had not consumed it all'. When Colby stumbled into base camp days after the accident, the pot 'was buried in the snow next to the tent. Colby dug up the old spaghetti. He was so hungry he didn't bother to start the stove. He ate hungrily and fast. To Colby, the congealed spaghetti was delicious, one of the best meals he had ever eaten'.

6. Goal-driven behavior may increase efficiency by focussing scarce cognitive and physical capabilities on specific problems. The pitfall of such focussing is that the individual could be oblivious to unexpected dangers. Thus, for example, a cave-person who focused all his mental energy on making an arrowhead might be oblivious to the approach of a hungry bear. Simon (1967) and more recently Armony et al. (1995, 1997) and DeBecker (1997), speculate that emotions such as fear serve as interrupt mechanisms to refocus attention and motivation to unexpected environmental threats. The drive for goal completion and fear, therefore, may perform antagonistic functions.

V. MASTERY

In a once-influential, though by now largely forgotten, article, Robert White (1959) argued that humans are powerfully motivated by the desire to master their environments, a tendency that he dubbed 'effectance' motivation and that Bentham referred to as 'pleasures of skill'. It is generally pleasant to engage in an activity you are good at, no matter how useless it might be. By the same token, it is typically aversive to do something you are incompetent at, no matter how instrumental the activity.

Part of the reason for why mountaineers climb mountains is that they *can* do it – they are good at it. Writing of a brief pleasurable period of climbing, lamentably cut short by his partner's fatal plunge over a 5,000-foot cliff, Roberts (1968, pp. 308–309) relates,

'At times like those, the mind does not wander, nor does it really think, except to make the almost automatic judgments of route, piton, and rope the climbing calls for ... The touch and strain of ice and rock under my hands (send) pleasure as well as blood surging through my veins'.

Simpson (1993, p. 119) remarks (somewhat unrealistically, given his own uniquely gruesome history of accidents) that

'there is a perverse delight in putting oneself in a potentially dangerous situation, knowing that your experience and skill make you quite safe'.

The concept of mastery actually blends together a number of more specific motives. It is almost certainly associated with self-esteem or 'self-recommendation', and it also often involves a feeling of total absorption in an activity – that is, 'flow' (Csikszentmihalyi 1991) – and an easing of the burdens and complexities of everyday life. Potterfield (1996, p. 173) refers to mountaineering as

'the best foil I've found for the onerous realistics of the twentieth century'.

Simpson (1993, p. 276) writes that the climber

'steps out of the living world of anxiety into a world where there is no room, no time, for ... distractions. All that concerns him is surviving the present. Any thoughts of gas bills and mortgages, loved ones and enemies, evaporate under the absolute necessity for concentration on the task in hand. He leads a separate life of uncomplicated black and white decisions – *stay warm, feed yourself, be careful, take proper rest, look after yourself and your partner, be aware*'.

And Lansing (1959, p. 22) writes that Shackleton, within a few hours of leaving the last outpost of civilization on his way to Antarctica, felt that

'life had been reduced from a highly complex existence, with a thousand petty problems, to one of the barest simplicity in which only one real task remained – the achievement of his goal'.

Perhaps most important, however, mastery involves a feeling of control over one's environment. Control is, in and of itself, powerfully reinforcing (Langer 1975), and the absence of control is commensurately aversive (Brehm 1966). Kornetsky et al. found that rats who self-administered alcohol had lower thresholds for brain stimulation reward (suggesting greater ability to obtain pleasure from the environment) than yoked rats who received the same alcohol at identical times but had no control over its intake. Perceived control also seems to render aversive stimuli more tolerable. Seligman and Maier (1967), for example, found that dogs who were given shocks that they could terminate by making body motions got fewer ulcers than 'yoked' dogs who received identical, but uncontrollable, sequences of shock. Glass and Singer (1972), found that the debilitating effects of an uncontrollable loud noise on performance of a cognitive task was virtually eliminated when subjects believed that they could terminate the noise by pressing a button.

Perceived control also seems to reduce fear, even when probabilities and consequences are held constant. Mineka et al. (1984), for example, found that the effectiveness of fear conditioning in rats was cut in half when a bell that could be terminated by lever-press preceded electric shock, holding constant the actual shock intensity and duration. In an experiment with humans, Sanderson et al. (1988) administered a known panic-provoking agent (5.5% carbon dioxide, CD) to panic-prone patients. Half of the participants were told that they could reduce the concentration of carbon dioxide by turning a dial when a light was illuminated. This group reported fewer and less severe panic symptoms, had fewer catastrophic thoughts, and reported less distress, even though the dial was actually inoperative.

The dislike of uncontrolled risks can be seen in mountaineers, who draw a sharp distinction between 'objective risks', which include events that are completely uncontrollable and unavoidable, such as falling rocks and collapsing seracs (ice towers), and risks that can be mitigated by skill or caution. Whereas they are relatively unperturbed by hazards that are seen as potentially controllable, however severe, mountaineers do fear objective risks. As Roberts (1968, p. 225) comments,

'When the risks depend solely on chance, not skill, the mountaineer enjoys them as little as anyone'.

Perhaps because they have an illusion of control, mountaineers tend to be remarkably unfazed by the astronomical risks they face. It is as if, at the level of

fear, the risks have no reality. The feeling of control, however, often disappears after a serious accident, at which point fear enters the picture. As Potterfield (1996, p. 234) notes,

'the terror of a bad fall... never really goes away'.

In the same way that people may require a near-death experience to truly recognize their own mortality, it often takes an accident for a mountaineer to appreciate the danger of mountaineering at the level of experiencing fear. The ironic consequence is that mountaineers often 'discover' fear *after* an accident, when they are in a position of safety. Maurice Herzog (1952, p. 264), for example, after becoming lost, snowblind, and severely frostbitten on his descent from Annapurna, did not report experiencing fear during the ordeal. Days later, however, when he was in a safe position being carted out of the mountain region on the back of a porter, he was

'haunted by anxiety and a shameful fear'.

and later

'I no longer had the strength to fight my fears, and I knew now what fear really was. Lachenal (his climbing partner) also was petrified by fright' (p. 271).

Similarly, after Shackleton's ship was trapped in polar ice and then splintered and sunk by it, the crew drifted on the ice for *nearly a year* and then endured a harrowing trip across icy, stormy, seas in life-boats to an island – their first land after 497 days. As the boats were being pulled to safety, Lansing reports, a member of the crew named Rickenson suddenly turned pale, and a minute later collapsed of a heart attack (Lansing 1959).

VI. MEANING

Just as people aren't certain about *who* they are (and so attempt to signal, both to themselves and to others that they have desirable traits), many people also don't have a good understanding of what they want out of life and what they value. One commonly vaunted benefit of mountaineering and wilderness travel is that it offers a new perspective on life.

The cost of such perspective, however, tends to be high. Simple discomfort rarely produces new insights into life, or a greater appreciation of it; that typically requires a near-death experience. Reminiscent of the Joni Mitchell song, 'You don't know what you've got till it's gone', it requires an impending loss of

one's life to appreciate what one is about to lose. As Joe Simpson (1993, p. 119) wrote of his near-death in an avalanche,

'Maybe for the first time I learned in the avalanche exactly what it was to be alive, how precious, and how fragile. There was so much to be lost from a moment's careless mistake but so much more to be gained by knowing the value of life'.

Meaning-making may also be enhanced by the loss of body parts. The first man to climb an 8,000-meter peak, Maurice Herzog, lost several fingers and parts of his feet to gangrene. But he gained an appreciation for

'the deep significance of existence of which till then I had been unaware'.

The ordeal, he reported,

'has given me the assurance and serenity of a man who has fulfilled himself. It has given me the rare joy of loving that which I used to despise. A new and splendid life has opened out before me' (1952, p. 12).

Beck Weathers (1998), who in 1996 was abandoned overnight in a blizzard on Mount Everest and lost his hands and much of his face, reports that 'I traded my hands for my family and my future, and it is a bargain I readily accept'⁷.

Adherents of rational expectations assume that new information or insights should be unpredictable. They may be disturbed to learn that such changes in perspective are actually quite predictable. Almost invariably, they involve an enhanced appreciation of human relationships and a demotion of professional and material ambitions. Peter Potterfield (1996, p. 233), who suffered a bone-shattering fall during an ascent of Chimney Rock in the Cascades and then barely survived an excruciating 24-hour wait for rescue, reported that

'the air time on Chimney Rock changed the way I thought about everything, including marriage'.

Beck Weathers stated that when he gained consciousness after his exposed night on Everest,

'I saw my own future and I didn't like it... The relentless pursuit of success and goals and ambition without balance was pushing out of my life that which was most precious to me... In the final analysis that which matters, really the only thing that matters, are the people you hold in your heart and the people who hold you in theirs'.

7. One may suspect that there is an element of cognitive dissonance in the common discovery of a self-insight 'silver lining' following the loss of body parts.

Roberts (1968, p. 234) comments,

'Nobody on his death bed ever said, 'I wish I had spent more time at the office''.

These shifts in perspective raise some important issues for decision theory. First, what is it about almost dying that produces such shifts in perspectives? Second, why are the insights gained almost always the same; why don't some people come to recognize that they should apply themselves more assiduously to achieving professional ambitions before leaving the earth? And finally, are these new priorities more valid than the old ones they replace?

One reason why nearly dying may be important is that dying is an emotional experience (if one has time to think about it). Beck Weathers, for example, reports that when he realized he was going to die he did not experience the terror that he would have expected, but rather

'an enormous, encompassing, sense of melancholy'.

If emotions provide an important input into decision making, as much recent work suggests (e.g., Damasio 1994, Zajonc 1980, 1984), then this input is about as powerful as one could imagine receiving.

Damasio (1994), in his provocative book *Descartes' Error*, argues that emotions are crucial in decision making because they provide a crude but quick and automatic summary of the costs and benefits associated with alternative courses of action. In support of this idea, he cites the behavioral impact of certain types of frontal lobe brain lesions that have no measurable effect on cognition but that block emotional reactions associated with mental imagery, which he labels 'somatic markers'. Consistent with the idea that emotions are critical in decision making, people with such frontal lesions are pathologically indecisive and can spend hours making the most trivial decision – such as whether to schedule the next doctor's appointment for 10 or 11 am on the following day. Timothy Wilson, Jonathan Schooler, and colleagues (Wilson and Schooler 1991, Wilson et al. 1993), reached a similar conclusion in their work on 'verbal overshadowing' of emotion. Their studies show that people who verbalized pros and cons made worse decisions because doing so prevents them from gaining access to their 'gut reactions' to the alternatives.

How can somatic markers help to explain near-death shifts in priorities? If emotional reactions that are subtle enough to be overshadowed by verbalizing are important inputs into decision making, think about how much more influential the feelings that accompany the prospect of imminent death must be. The prospect of death produces a powerful form of attention focussing; it is as if the brain realizes that it has limited computation time left, and spends it thinking about things that are important. Later, in a process akin to the notion of 'flash-

bulb memories' (Brown and Kulik 1977), whatever one thought about during this period is retained in memory and infused with significance.

It is also possible that these changes in values are illusory. Perhaps the people who report changes of perspective had recognized the importance of family all along but had put off acting on this awareness. Ted O'Donoghue and Matthew Rabin (forthcoming) have developed a theoretical account of procrastination that seems to be particularly applicable to this situation. The model applies to situations in which people have the opportunity to take an action that would expose them to an immediate small cost but produce a delayed larger benefit. The critical feature of their model is that people recognize that a particular action is worth taking, but naively anticipate that they will take the action in the future, which helps them to rationalize why they do not have to do it today. When the future becomes the present, however, the same logic applies once again. An important prediction of the model is that if people were given one last opportunity to take the action they would do so; procrastination is encouraged by awareness that there will be future opportunities to take the action, coupled with a naive prediction of one's own future behavior in the absence of such deadlines.

O'Donoghue and Rabin's theory could explain why perspective change, whether real or illusory, requires a near-death experience. Perhaps most people actually recognize the importance of family, and plan to spend time with them in the future, but are distracted from doing so by the immediate lure of career ambitions, mountains, or golf. The effect of almost losing your life is to make you realize that if you don't spend time with your family *now* you may not have a chance to do so in the future. Today may in fact be your last opportunity to go out to dinner with your spouse, call your parents, or take your child to the zoo. As Potter commented,

'After Chimney Rock, there was a strong sense that life is uncertain, highly so' (1996, p. 233).

The procrastination account of perspective shifts could explain why the insights gained are always the same. What we gain, it suggests, is not actually a greater appreciation for the importance of human relationships, but an awareness that if we continue to defer investing in personal relationships we may well depart from the world having missed our opportunity to do so.

Are post-near-death priorities more valid than pre-near-death priorities? If neglect of friends and family is due to procrastination, the answer may be yes. But if it is due to somatic markers, the answer is likely to be no. Being close to death is a relatively unusual state. Just as the insights gained during an LSD trip are inherently suspect, it is questionable whether the pre-death perspective provides a clear view of one's 'true' values. Whether the newly found priorities sur-

vive the complexities of real life, therefore, is open to question. During the worst moments of his Antarctic bid, Mike Stroud lamented his detachment from his children and vowed, on his return, to become a model father and to cease his quest for 'firsts'. In the epilogue to his book, however, he reports that he never quite got around to building the doll house that he had resolved to construct for his daughter and that, within weeks of his return to daily life, the *wanderlust* had him in its grip once again.

VII. CONCLUDING COMMENTS

Behavioral economics – the application of psychological insights to economic problems – has gained increasing acceptance among mainstream economists. Nevertheless, some holdouts in the profession persist in the desire to strip economics of underlying psychology. The point that they fail to understand is that psychology and economics are inextricably linked. Utility maximization, which lies at the heart of neoclassical economics, is a *psychological* theory of behavior. It states that human behavior can be explained as an attempt to achieve a certain goal, whether it be happiness (in the Benthamite account) or satisfaction of preferences (from the ordinal utility perspective). The ordinal utility/revealed preference approach does not divorce economics from psychology, but builds economics up from a hollow foundation. The issue is not whether economics will be based on psychology or not, but whether it will be grounded in good psychology or bad psychology.

Recent developments in the field of behavioral economics have substantially enriched the utility concept and increased the explanatory power of utility maximization, in many cases with changes that are highly tractable. Ironically, as I pointed out in the introduction, many of these advances involve a rediscovery of insights that were present at the very birth of the utility concept. These advances in formulating utility – in elaborating on the specific character of *economic man* – however, have run up against the inherent limitations of trying to model human behavior purely as a function of consumption.

Economists since Bentham's time have periodically paid tribute to the importance of non-consumption-related motives. Adam Smith (cited in Offer 1997, p. 451), for example, not only recognized the importance of the desire for regard (Bentham's pleasures of a good name, and self-recommendation), but believed that the drive for material improvement (i.e., for consumption) was actually *derivative of* the desire for such regard:

'What is the end of avarice and ambition, of the pursuit of wealth, of power, and preheminance? ... To be observed, to be attended to, to be taken notice of with sympathy, complacency, and approbation, are all the advantages which we can propose to derive from it'.

Alfred Marshall (1898), in a passage in his *Principles of Economics*, attributed great importance to what could be interpreted as a mastery motive:

'A large part of the demand for the highly skilled professional services and the best work of the mechanical artisan arises from the delight people have in the training of their faculties and in exercising them'.

And Keynes (1936), in *The General Theory of Employment, Interest and Money* argued:

'If human nature felt no ... satisfaction (profit apart) in constructing a factory, a railway, a mine or a farm, there might not be much investment as a result of cold calculation... Enterprise only pretends to itself to be mainly motivated by the statement in its own prospectus... *Only a little more than an expedition to the South Pole is it based on an exact calculation of benefits to come*' (emphasis added).

But despite the occasional display of appreciation for non-consumption-related motives by psychologically astute economists, there have been very few attempts to integrate such motives into a systematic analysis of economic behavior.

Consumption has great advantages as an input into utility. It is measurable, and it generally enters monotonically into the utility function. Consumption also bears a simple, logical relationship to other important economic variables, such as income, wealth, prices, wages, and labor supply. None of this is true of the desire to impress, self-signaling, goal completion, mastery and meaning-seeking.

Self-signaling is probably the easiest non-consumption motive to model and, of the four nonconsumption motives I discuss, has received the most attention from economists and decision theorists. Significant advances have already been made in modeling people's desire for the respect and admiration of *others* (e.g., Duesenberry 1952, Frank 1985, Bernheim 1994), and in measuring its impact on economic behavior (e.g., Chao and Schor 1998). *Self-esteem* has also received limited attention from economists (e.g., Khalil 1996, Lea and Webley 1997), although there has been inadequate attention to the problems raised by Bodner and Prelec (1996). Despite some advances, therefore, we remain a long way off from understanding, let alone formally modeling, the determinants of self-esteem and its role in behavior.

The need for goal completion remains similarly unintegrated into decision theory. One specific aspect of goal completion – the effect of externally set goals on effort and performance – has received considerable attention from ex-

perimental psychologists (e.g., Locke and Latham 1990), and more recently decision theorists (Heath, Larrick and Wu 1998). However, other important issues remain largely unaddressed. Thus, currently we have little understanding of why people set goals for themselves, of the amount of control that people have over their own goals, and, to the degree that people do have control over their own goals, whether goal-setting can be described as the outcome of a decision that weighs the costs and benefits of alternative goals. We are also far from possessing satisfactory explanations for the two anomalous properties of goals that are salient in the mountaineering literature: the difficulty of relinquishing counterproductive self-set goals, and the disparity between the power of the motivation to achieve goals and (lack of) pleasure experienced when goals are achieved.

The mastery motive similarly remains largely unaddressed by decision theory, although again there are fragments of research that could be built upon. Heath and Tversky (1991), for example, show that people prefer to bet on their own judgment over an equiprobable chance event when they consider themselves knowledgeable, but not otherwise. It seems that mountaineers are not the only people who like to exert control in domains in which they feel competent. Loewenstein and Issacharoff (1994) show that people's valuations of objects depends on how the objects were obtained, a phenomenon we label 'source-dependence'. When people feel that they earned an object, as a result of their performance on a task, they are much less willing to give up the object (i.e., they state higher selling prices) than when they received the same object as a gift. This research suggests that mastery is not only desirable in and of itself, but also has secondary effects on preferences.

Of the four nonconsumption motives, meaning is certainly the furthest from being integrated into economics or decision theory. That economists are leery of introducing anything that resembles meaning into their models is apparent in a recent paper by Ed Glaeser and Spencer Glendon – two economists who are quite open to psychology – on 'The Demand for Religion' (1997). The authors investigate three theories about why people 'demand' religion: (1) religion provides social connections, (2) it provides rewards after death or (3) it provides moral instruction. Notable for its absence from the paper is any mention of the possibility that religion may provide people with some type of meaning. The reluctance to introduce meaning-seeking as a motive in economic models is perfectly understandable. Until we have a much better understanding of its determinants and consequences, meaning will continue to elude formalization in decision-theoretic terms.

Each of these non-consumption motives poses severe challenges to would-be modelers. Thus, there may be good reasons for halting progress short of the con-

sumption barrier. The decision about whether to model non-consumption-related motives should not, however, depend only on tractability, but also on the *importance* of these motives for economic behavior. If they are critical for daily economic behavior, as I have attempted to show is true for mountaineering, then there is no excuse for not trying to model them, at least. The question, then, is whether mountaineers and mountaineering are unusual in the degree to which they are motivated by non-consumption-related motives. The answer, I believe, is that they are not. Although these non-consumption motives may be more important in mountaineering than in other activities, and better developed in mountaineers than other people, the same motives can also be seen in most people's daily behavior.

Consider, for example, academia – a domain with which most readers of this paper will have personal familiarity. Self- and other-signaling may well be one of the most important motives driving academic achievement and is probably much more important for understanding decisions to enter the profession, choices between jobs, and the persistence of work effort following tenure (even in institutions with rigid pay scales) than are pecuniary motives such as salary. Academics care about how other academics perceive them, and many are powerfully driven by the desire to maintain self-esteem. Many academics have faced a choice between a low-paying job at a high-prestige university or a high-paying job at a low-prestige university; my own casual observation is that few have opted for the latter. Although it could be argued that academics, too, are an unrepresentative group, it would be easy to make a similar case for almost any profession. Self-signaling may also help to explain the prevalence of another common but anomalous activity that has had momentous consequences for human history and which bears a resemblance to mountaineering in its distinctively negative consumption aspect. I'm referring to the willingness and even eagerness of generations of insecure young men to risk 'the ultimate sacrifice' in battle.

Goal completion is also important in academia in part because academic accomplishments, such as getting a PhD, landing a job, getting tenure, and publishing articles, tend to be naturally discrete (though academia is by no means unique in this respect). Academics can become extraordinarily obsessed with achieving these goals. Indeed, many academics require elaborate self-control strategies to take a break from their work, such as booking expensive, non-refundable vacations. On the face of it, such a pattern is strange because we usually think of people as requiring self-control to work rather than play.

Mastery is also a vastly underappreciated motive, especially prominent among academics. Three categories of activities are highly valued in the social sciences, and perhaps other academic domains: research, teaching, and grants-

manship. Many people enter the profession with some degree of talent in all three areas but a slight comparative advantage in one. As time passes, however, many academics tend to specialize excessively in one area. Good teachers, for example, find teaching highly rewarding and, instead of cutting back on preparation time to further develop areas of comparative weakness, respond to the students' accolades by allocating even more time to teaching. This response increases their success at teaching at the expense of other activities and lures them into even more lopsided use of their time. It is probably not a coincidence that winning a teaching award is frequently a leading indicator of denial of tenure.

Finally, I have no idea if academics are unusual in their search for meaning in life. Like the rest of the population, academics are no strangers to self-help books, religion, and psychotherapy. I have noticed, however, that an amazing profusion of academics (particularly in the humanities) are writing memoirs, including some who have not lived particularly exciting or unusual lives. My guess is that memoirs give expression to people's need to make meaning out of the sequence of events that compose their lives. Jerome Bruner (1998) argues that, whether or not they record it on paper, people naturally construct autobiographical accounts of their lives that put their lives into context and invest them with meaning.

Is it possible to incorporate non-consumption-related motives into formal models of economic behavior? I am not at all sure. But the chances of it happening will certainly be improved if a competent economic modeler, perhaps to signal her modeling acumen to the world or to herself, sets such a goal for herself.

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SUMMARY

I argue that four sources of utility that have rarely been incorporated into economic analyses – self-signaling (self-esteem), goal completion, mastery, and meaning – constitute extremely important motives in human behavior. I illustrate the importance of these motives by drawing upon the mountaineering literature. After showing that mountaineering can not possibly be understood as a consumption experience – i.e., an experience that directly yields sensory or mental pleasure – I argue that it can be explained, at least in part, on the basis of these four motives. Moreover, the importance of these motives is not limited to mountaineering, but extends to many if not most economic and noneconomic activities.

ZUSAMMENFASSUNG

Ich argumentiere, dass vier Nutzenkomponenten, die kaum in ökonomische Analysen einbezogen wurden – 'Selbst-Signalisierung' (Selbstwertgefühl), Zielerreichung, Aufgabenbewältigung und Sinn – extrem wichtige Motive für menschliches Verhalten darstellen. Ich illustriere die Bedeutung dieser Motive, indem ich mich auf die Literatur über Bergsteigen beziehe. Nachdem ich gezeigt habe, dass das Besteigen von Bergen unmöglich als Konsumerfahrung verstanden werden kann – d.h. als Erfahrung, die direkt sinnliches oder geistiges Vergnügen bereitet – argumentiere ich, dass es, zumindest zum Teil, auf der Basis der vier Motive erklärt werden kann. Die Bedeutung dieser Motive ist nicht auf Bergsteigen beschränkt, sondern lässt sich auf die meisten, wenn nicht alle, wirtschaftlichen und nicht-wirtschaftlichen Tätigkeiten übertragen.

RÉSUMÉ

Je soutiens que quatre sources utilitaires rarement incorporées dans les analyses économiques (l'estime de soi, l'achèvement des buts, la maîtrise et la signification) constituent des motivations extrêmement importantes dans le comportement humain. J'illustre l'importance de ces motifs par des exemples tirés de la documentation sur l'alpinisme. Après avoir montré qu'il est impossible de comprendre l'alpinisme comme une expérience de consommation – c-à-d. une expérience qui produit un plaisir des sens ou un plaisir mental – je maintiens qu'on peut l'expliquer, au moins en partie, sur la base de ces motivations. En outre, leur importance n'est pas limitée à l'alpinisme, mais s'étend à un grand nombre, sinon à la plupart, des activités économiques et non économiques.