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# The Economics of Meaning

In this paper we draw attention to an important motive – the desire for *meaning* – that drive considerable human behavior and economic activity, but has been largely ignored by economists. We distinguish four interpretations of meaning that differ in the degree to which they are amenable to modeling using the standard economic tools of utility maximization. These four interpretations are, in decreasing order of their amenability to modeling in conventional terms: (1) meaning as a resolution of preferences; (2), meaning as an extension of oneself either socially or temporally; (3) meaning as an act of making sense of one's life; and (4) meaning as an assertion of free will. Drawing upon psychology and literature we analyze implications of these four interpretations of meaning for economics. JEL-code: D81

One of the ways in which behavioral economics – the application of insights from psychology to economics – has extended the scope of economic analysis has been by expanding the range of human motives taken into account to explain economic behavior. Neoclassical economic theory rests on an updated notion of the utility concept first proposed by Bentham, but only recently have economists begun to explore the full range of determinants of utility that Bentham enumerated over 200 years ago. For example, Loomes and Sugden (1982, 1987; Loomes,

1988) have explored the economic consequences of avoidance of regret and disappointment, both of which Bentham included in his short list of pains. Caplin and Leahy (1997) discuss implications that follow from the idea that people derive utility not only from immediate experiences, but also from anticipation – what Bentham called “pleasures and pains of expectation and imagination” (see, also, Loewenstein, 1987; Brunnermeier and Parker, 2002). And game theory has been similarly enriched by the expanded recognition of motives such as

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altruism, fairness and reciprocity, all closely related to what Bentham referred to as "pleasures of benevolence or good will" and "pains of enmity." Most recently, economists have been taking account of even more exotic motives such as ego (Koszegi, 2000; Prelec and Bodner, 2003) – the "pleasures of a good name," as Bentham expressed it – and identity (Akerlof and Kranton, 2000).

One important motive that was not recognized by Bentham (or at least not included in his list of pleasures and pains), and which has also not found its way into contemporary economics is *meaning*. Among those with an interest in understanding human behavior, economists are unusual in their neglect of meaning. Philosophers since Plato have viewed search for meaning as *the* activity which brings value to human life. And many psychologists (e.g., Bruner, 2002; Kegan, 1982) see meaning-making as the fundamental activity of human existence. Perhaps even more than among philosophers and psychologists, believers in the importance of meaning can be found in the ranks of writers, critics, and purveyors of literature. In literature, human experiences are organized and assembled to bring meaning to what would otherwise be inchoate experiences and events. Literature, therefore, may be the most important arena in which people express their desire for meaning and reveal different avenues toward attaining it. In writing this paper on the economics of meaning, therefore, we experimented with an unusual combination of collaborators: an economist, psychologist, and writer. When we explore the potential

role of meaning in economics, we therefore draw not only on psychological research, but also on ideas about meaning revealed in literature.

Economists should be interested in meaning not because others are, but because meaning has direct significance for economics. First and most obviously, considerable economic activity is devoted to meaning-making. Besides religion,<sup>1</sup> which is a huge source of economic activity, there are self-help books, insight therapies, various types of volunteer activities and a wide range of other activities including, for some, work, that offer meaning as at least one important benefit.

Second, meaning is important because it is an extremely important determinant of well-being. Without meaning, psychologists and philosophers argue, even the most prosperous existence isn't worth living. People need to feel they have a purpose in their life in order to function and feel well psychologically as well as physically (Emmons, 1996). And, the capacity to find meaning can attenuate even the most severe hardships (Taylor, 1983). Victor Frankl (1963) is especially associated with meaning as a result of his popular book *Man's Search for Meaning*. Frankl formulated a therapy based on the will to meaning in the 1930s that he was forced to personally put to test in German concentration camps. To Frankl it is people's innate will to find meaning, and not their striving for pleasure, power, or wealth, that is the strongest motivation for living. To the extent that economics is the science of promoting well-being with constrained

1. An early version of a paper by Ed Glaeser and Spencer Glendon on "The Demand for Religion" (1997) is indicative of the neglect of meaning by economists, and provides a stark illustration of the pitfalls of doing so. The authors investigate three theories of why people demand religion: (1) religion provides social connections, (2) it provides rewards after death or (3) it provides moral instruction. It seems somewhat striking that the possibility that religion may provide people with meaning is not considered.

resources, then, meaning should be part of the equation.

Third, as we attempt to demonstrate, an exploration of the role of meaning in economics can help to illuminate both some of the strengths and limitations of the assumptions incumbent in the economic interpretation of behavior as an attempt to maximize utility.

### Four interpretations of meaning

Although meaning is sometimes treated as a generic concept, we find it useful to distinguish between four different interpretations of the concept. The first one, we show, is quite amenable to analysis with the standard economic tool of utility maximization, but as one goes down the list, successive concepts of meaning pose an ever-greater challenge to the traditional economic model of human behavior. The four interpretations are:

- *Meaning as a resolution of uncertainty about preferences:* People are often uncertain about what they want from life. Finding meaning, in some cases, can entail learning about what one values or cares about.
- *Meaning as an extension of self either socially or temporally:* One's life can often seem insignificant and inconsequential when viewed in the context of the span of human (or even natural) history or of the vast numbers of people alive in the world. The quest for higher meaning may serve the function of expanding the self through time and across persons.
- *Meaning as an act of sense-making:* The brain is a sense-making organ, and one of its most important tasks is to make sense of the life of its owner. Such sense-making typically takes the form of a narrative – a "life story."
- *Meaning as an assertion of free will:* People

derive personal meaning from the act of making autonomic choices. Hence, meaning-making can involve the assertion of free will.

In the remainder of the paper, we elaborate on these four concepts of meaning and discuss their potential connection to economics.

### Meaning as a resolution of uncertainty about preferences

Standard economics, at least in its most stripped-down form, assumes that people come to the world with well-defined preferences then seek to satisfy those preferences maximally given the objective constraints that they face. The reality, of course, is somewhat different. As decision research on preference uncertainty (Payne, Bettman, and Johnson, 1992, 1993; Slovic 1995; Ariely, Loewenstein, and Prelec, 2003) recognizes, people do not always know what they want. Such lack of information is not at all surprising when it comes to things that one hasn't actually experienced – e.g., items on the menu of a restaurant one hasn't visited previously – but it can also extend to much larger aspects of life. The resolution of uncertainty about higher level preferences – about what's important in life – is without doubt one goal that people often want to attain when they say that they are seeking meaning.

Many self-help books and personal growth programs appear to be focused on meaning-making of this kind. For example, 'Lifespring' – one of a large number of popular programs that seems to be aimed precisely at resolving this type of uncertainty – promises to help enrollees discover "what is so vitally important to you...so that the choices in your life are truly aligned with your purposes." And among the best selling self-help books are titles such as "The life you were born to live: A guide to finding your life purpose", and "Finding

your own north star: Claiming the life you were meant to live.” Such self-help books can be seen as popularized offshoots of certain classic texts of literature and philosophy. The American Transcendentalists, for example, were fully focused on what it meant to live an honorable or meaningful life, and how dependent such a life was on finding one’s own path to walk. “You think me the child of circumstance; I make my circumstance,” wrote Emerson. Thoreau, who at the very least wrote like a man who knew what he wanted, remains popular today, and one reason for his popularity must rest in people’s hunger and appreciation for written enactments of other people resolving their preferences. Thoreau lived a life both of renunciation and appreciation. The great poet, Whitman, offers the same written resolution of preferences in his classic poem “Song of Myself” that celebrates his love of nature, culture, people, and his own self. It’s a poem where the poet’s passionate and varied preferences in this life are named specifically.

If having purposes and goals, and gaining a sense of what one “really” wants ultimately enhances happiness, then this kind of meaning-making is easily reconciled with utility maximization. Meaning-making can be interpreted as the act of reducing preference uncertainty, which, by providing insights into what brings utility, allows one to do a better job of maximizing it.<sup>2</sup>

### Meaning as an extension of self either socially or temporally

Another way in which people seek meaning, which points to an alternative interpretation

of the concept, is by seeking to put their lives into some kind of larger perspective. Viewed against the backdrop of human history or against the multitudes of people currently alive, one’s own life can easily seem inconsequential. To allay such feelings of inconsequentiality, people may seek to extend their own being either socially or temporally. The journalist and activist Dorothy Day was said to be successful because she had “a knack for situating herself and her story into a larger story.” Day herself wrote about watching the crisis of a serious San Francisco earthquake unfold, and how, while the crisis lasted, “people loved each other.” Certainly this “love” is the result of a sense of an expanded or extended self most easily experienced in times of shared jeopardy.

*Social Extension* involves ameliorating feelings of inconsequentiality by viewing oneself in a broader social context, such as a family, profession, nation or religion. By identifying oneself with some larger organization, one can, in effect, leverage one’s identity. An American can think, “I’m a citizen of the most powerful nation in the world,” a Moslem’s identity can include being a member of the most widespread religion, and a union member can view himself as part of a significant social movement. Indeed, nationalism, religious identification, and social class are all sources of identification that have had enormous consequences for human society.

As social identity theory highlights, people’s definitions of themselves as being part of a group – their social identities – have important implications for the behaviors of individuals as well as the functioning of

2. There is some question about whether people even have underlying preferences that they could potentially discover. Plott (1996) has been the most prominent advocate of the idea that people do have underlying preferences which they discover through experience and economic activity, but others (e.g., Ariely, Loewenstein and Prelec, 2003) have questioned whether this is in fact the case.

groups and organizations (Haslam, 2000). As demonstrated in minimal group studies (e.g., Tajfel et al., 1971; Turner, 1982), even when people are assigned to a group based on some irrelevant, arbitrary, criterion, such as their preference between the abstract painters Klee and Kandinsky, they come to powerfully identify with their group; they tend to view their group as superior to other groups on measurable, valued, dimensions, and are willing to contribute to their group to promote its competition with other groups. Other research has shown that it is possible to activate either people's personal or social identities. When people's personal identities are made salient to them, they are motivated to enhance themselves as individuals, but when their social identities are salient they are motivated less by personal gains and more by working for the collective interest of the group (Haslam, 2000). Hence, if people try to escape the perceived futility of their own personal existence by perceiving themselves as part of a larger social context, such a search for meaning through social extension can have important consequences for behavior.

*Temporal extension* is a second important means by which people combat feelings of inconsequentiality. The fact that we all have to die is an important source of feelings of insignificance and hence meaninglessness, perhaps particularly in Western societies, where people often want to avoid the very idea of it (Ariès, 1981). It has frequently been observed that when people are exposed to thoughts about dying, as in war, in the presence of a life threatening disease or in the death of a loved one, beliefs in a higher meaning and religiosity increase (Baumeister, 1991). One thing that is offered by religion is ideas and assurances about a life after death. In times of war, it has been noted that rates of suicide goes down – presumably because war gives people's lives meaning in terms of a

broader context, and also because it causes people to focus their attention outward rather than inward. "The rush of battle is a potent and often lethal addiction," writes Chris Hedges, in *War Is a Force That Gives Us Meaning*. War, he continues, "can give us what we long for in life."

In by far the most extensive and far-reaching line of research on effects of mortality salience, Greenberg, Solomon and Pyszczynski (1997) produced direct experimental evidence of a causal link between worries about mortality and seeking meaning through the extension of self. In tests of what they call "terror management theory" (the source of terror being recognition of one's own mortality), they show that reminding people of their own mortality causes people to embrace more strongly the beliefs and values of the groups to which they belong. Furthermore, when exposed to the threat of death, people show a greater appreciation for being a part of a broader social context with a past and a future, such as family (Taylor, 1983) or culture (Rosenblatt et al., 1989).

On the other hand, such beliefs and values, however, might be exactly what is transcended when mortality becomes more than an idea and closer to an actuality. In Flannery O'Connor's most famous story, "A Good Man Is Hard To Find", a dying middle class character recognizes her "white trash" murderer known only as "the misfit" as "one of her own." In the moments that precede her death, she extends herself by identifying not just with her own group, not just with her culture's set of beliefs, but rather with all of humanity. The murderer recognizes the woman's extension of self and comments, "She would have been a good woman if there'd been someone there to kill her all the time," a line famous not just for its humor but for its wise commentary on death's impact on character.

The woman's social extension ultimately transcends social category in this case, and the story can be read not as a tragedy but as a depiction of a woman who finally understands ultimate meaning of "better late than never".

The desire to extend oneself in time, like the desire to be part of a larger social entity, has momentous consequences for individual behavior and societal outcomes. Thus, for example, the desire for posterity is undoubtedly an important motive underlying religious beliefs. Most religions embody beliefs about life after death. In the US, more than 80% of adults believe that life continues in some way after death (Greeley and Hout, 1999).<sup>3</sup> Needless to say, religion has been a powerful force in human affairs. But, not only for religious people can the idea of life ending completely at death render the experience of living meaningless. This sense of meaninglessness often confronts even the most stubborn of atheists on their death-beds, which is why "death-bed conversions" are cliché.

The desire to extend oneself in time may also underlie the common obsession with fame. Fame has been described as a secular religion (Baumeister, 1991), and like beliefs in the afterlife, fame can provide at least the illusion that one will not be ignored and forgotten once one is dead. The idea that fame confers a type of immortality has been expressed in a wide range of contexts, from the song lyrics of Irene Cara, "Remember my name! Fame! I wanna live forever!," to the writings of William Shakespeare:

"Let fame, that all hunt after in their lives,  
Live registered upon our brazen tombs,  
And then grace us in the disgrace of death"

(The King, in *Love's Labor's Lost*, act 1, sc. 1, l. 1-7)

Closely related to fame is the desire to leave some kind of mark on history, a motivation that has almost certainly played an important role in the behavior of many politicians, business-leaders, writers, artists, and other public figures. It is even possible that much academic output is motivated by thoughts of posterity (over optimism may be another important ingredient). Similar motives may help to explain the prevalence of child-bearing in the face of evidence that children tend to decrease happiness (again, another possible explanation is people's over optimism that this pattern won't apply to them personally). A poignant example of a father's sense of defeat when his own sense of self cannot be expanded in time through his schizophrenic son can be read in "Drummond and Son" by Charles D'Ambrosio. The character Drummond has a powerful sense of carrying his own father into the future, and feels keenly that his son, due to mental illness, cannot extend his own sense of self through time; the son feels no link to posterity or to his ancestors.

The desperate desire for a few moments of fame or notoriety, which seem to have increased in the twentieth century with the rise of visual media, appears to have been a significant motive in the recent spate of "school shootings." In a television interview, one of the pre-Columbine school shooters was asked whether he regretted his actions. His response revealed that his big regret was that people had forgotten about him because Columbine had overshadowed him. It may

3. A March 1997 Yankelovich Partners survey of 1,018 adults in the United States found that 81% of Americans agreed with the question "Do you believe in the existence of heaven, where people live forever with God after they die?"



not be a coincidence that many of the school shootings involve adolescents (as opposed to, for example, college students). Adolescence is a time of life that is notoriously fraught with questions about meaning (Fry, 1998). Adolescence also seems to be a period in life in which a search for identity and fame are especially salient, and in which these motives often lead to self-destructive and shortsighted behavior.

To accommodate meaning as an expansion of the self through time and across persons, the standard framework of utility maximization would require some modification, although not a major renovation. Most easily, one could make utility a function of identity, as have, in fact, Akerlof and Kranton (2000). More drastically, one may 'extend time' (in the standard utility maximization problem) to include the generations before and after an individual's life and expand 'utility' to include abstract entities such as an individual's nation, religion, or social group.

### Meaning as an act of sense-making

Yet another way to interpret meaning is as the act of making sense of one's life as a whole. Without meaning of this kind, experiences, life and the world is perceived as chaotic. We want to make sense of our experiences for very much the same reasons that Graham Greene gave for why he decided to write an autobiography, which he believed was "much the same motive that has made me a novelist: a desire to reduce a chaos of experience to some sort of order...". A.S. Byatt takes this further when she writes of narration as "as much a part of human nature as breath and the circulation of blood," continuing more in line with the idea of meaning as an effort to achieve posterity: "Our stories are like genes, they keep part of us alive after the end of our story."

According to many psychologists (e.g.,

Bruner, 1990; Frankl, 1963; Kegan, 1982) meaning-making is the most fundamental of all human mental activities. As noted by Gilovich (1991), "We are predisposed to see order, pattern, and meaning in the world, and we find randomness, chaos, and meaninglessness unsatisfying. Human nature abhors a lack of predictability and the absence of meaning" (p. 9). People seem to need to make sense of their experiences and life in order to function and feel well (Baumeister and Vohs, 2002; McAdams et al., 1997), and the positive effects of meaning-making seem to be especially pronounced when it comes to coping with negative life events (Davis, Nolen-Hoeksema, and Larson, 1998).

Sense-making seems to be a critically important way that people deal with negative life outcomes. This is apparent in literature, where so many memoirs, indeed, focus on tragic, premature losses or "dysfunction." There is also substantial evidence that finding meaning in emotional or traumatic life events promotes health (e.g., Scheier and Carver, 2001; Ryff and Singer, 1998; Taylor and Brown, 1988). Some research supports the not-all-that-surprising conclusion that finding meaning in response to stressful life events is associated with better *psychological* health outcomes (e.g., Davis et al., 1998; Mendola et al., 1990; Tait and Silver, 1989). More surprisingly, at least two studies have found a positive connection between meaning-making and *physical* health outcomes. The first of these studies was an 8-year study of heart attack victims (Affleck et al., 1987). At both 7 weeks and 8 years following infarction, participants responded to the following questions: "Despite all the problems and worries which your illness has involved, do you see any possible benefits, gains or advantages in this experience? If so, what are they?" Almost 60% answered the first question in the affirmative at both time



points, with typical responses to the second question falling into categories such as "change in philosophy of life / values / religious views," "change in mode of life to increase enjoyment," and "learn value of healthy behavior" (Affleck et al., 1987:31). Results revealed that participants who cited benefits from their misfortune 7 weeks after the first myocardial infarction were less likely to have another attack and had lower levels of morbidity 8 years later. The second study examined the effects of finding meaning on the physical health outcomes of HIV-seropositive men who had recently experienced an AIDS-related bereavement (Bower et al., 1998). Participants were classified as having "discovered meaning" if they manifested a major shift in values, priorities, or perspectives in response to the bereavement in an open-ended interview. Statements indicative of finding meaning included, "I certainly appreciated more the friends that I have and became much closer with them" and "I would say that (his) death lit up my faith" (Bower et al., 1998:981). Whereas men who failed to discover meaning exhibited substantial drops in CD4 cell counts (a key immunological marker of HIV progression) over a 2-3 year follow-up period, those who managed to find meaning showed no reduction in CD4 cell counts over the same time period. Even more remarkably, the discovery of meaning was associated with a lower rate of AIDS-related mortality over a 4- to 9-year follow-up period.

More generally, sense-making seems to be a common and effective method by which people blunt diverse forms of setbacks and disappointments. In a recent paper on affective forecasting Wilson and Gilbert (2003) argue that people's inclination to make sense of their experiences is a way to temper emotional reactions. Making sense of affective experiences decreases the intensity and

duration of affect. In several studies Wilson and Gilbert show that for groups of subjects for whom it is made easier to make sense of an event, both positive and negative emotional reactions are weaker than for groups of subjects for whom it is made harder to make sense. For instance, in one study Gilbert et al. (1998) showed that students that were interviewed and rejected for a desirable job differed in their unhappiness depending on how easy it was to rationalize the rejection.

How do people make sense of the events of their lives? In part, they make up stories or 'scripts' (Bruner, 2002; Schank, 1990; Schank and Abelson, 1995). During the bombardment of Sarajevo in 1994 a group of theatre workers in Amsterdam commissioned tales from different European writers to be read aloud in theatres in Sarajevo and all over Europe, every Friday until the fighting ended. "This project," wrote A.S. Byatt, "pitted storytelling against destruction, imaginative life against real death." In virtually all cultures and historical periods, people have communicated their experiences and understandings of the world by telling stories. Schank and Abelson (1995) argue that virtually all human knowledge is based on stories about past experiences. Even if this is an overstatement, there is research showing the stories help people to integrate knowledge, such as demonstrations that subjects are much more successful in learning a list of words if they are instructed to make up a story using the words (Bower and Clark, 1969). Narrative-based representations of knowledge have also been shown to underlie some types of judgment and decision making (Wyer, Adaval, and Colcombe, 2002). For instance, studies by Pennington and Hastie (1986, 1992) demonstrated that information conveyed in the form of a narrative has a greater impact on jury decision-making than information conveyed in other formats. In

one study (Pennington and Hastie, 1992), participants read transcripts of a court trial, including testimonies of both prosecution witnesses and defense witnesses. These were either conveyed in the order provided by the witnesses (witness-order condition) or in the order it became relevant in the sequence of events leading to the crime (story-order condition). When participants read defense and prosecution testimonies from different conditions – e.g., the defense position in witness order and the prosecution position in story order – 73% of the participants favored the testimony conveyed in the story order in their verdicts.

The stories that people tell about themselves rarely follow the utilitarian theme "I was happy as much of the time as I possibly could have been given the opportunities that I faced." Rather, people spontaneously adopt classic narrative structures, such as, an innocent person is beset by crises and setbacks, but her struggles are finally crowned with happiness or, at least, wisdom (McAdams et al., 1997; Wilson and Ross; 2001). People tend to focus on and construct stories of experiences that revolve around specific common aspects of the experiences. According to Baumeister and Newman (1994) people tell stories that revolve around the extent to which the experiences of the person or persons that the story is about had a purpose, were justifiable, were carried out efficiently and increased or decreased self-worth. They further argue for a polarization in the sense that they don't make good stories if they are not towards the end continuum of those aspects of the experiences. That is, people tend to exaggerate the ups and downs, successes and failures of experiences. Experiences are either successes or breakdowns in achieving or fulfilling goals; actions are either morally right or wrong; situations are either highly controllable or out of control;

and experiences put oneself either in a good light or a bad light. Literature both complies with and complicates such rules of storytelling. While a good story or novel must have a distinct "conflict" and must attempt to make some kind of sense of that conflict in a given character's life, moral ambiguities in both situation and character are not only acceptable, but necessary, if literature is to be judged as "true." And yet certainly literature falls flat when nothing is at stake for a character's sense of self-worth, or when stories unfold without seeming purpose. Only in 'meta-fiction' do you find writers making arguments against narrative and "sense-making," and these arguments by now are a bit stale.

The propensity to make sense of experiences by telling stories has profound implications not only for happiness, but also for behavior. People don't just retrospectively reconstruct their lives; the stories they tell about themselves profoundly affect how they live. As Bruner (1987) expresses it, "eventually the culturally shaped cognitive and linguistic processes that guide the self-telling of life narratives achieve the power to structure perceptual experience, to organize memory, to segment and purpose-build the very 'events' of a life. In the end, we become the autobiographical narratives by which we 'tell about' our lives" (p. 15). The implications of this are profound; perhaps we should be more careful in choosing the stories we tell about ourselves. Story-telling matters because the types of actions and sequences of outcomes that make us happiest are unlikely to be the same as those that make for a good story. Perhaps the most dramatic example of this is serious mountaineering or polar exploration which tends to involve virtually unremitting misery (Loewenstein, 1999). At least one important benefit brought at the expense of this misery, however, is meaning. Staying home may be

the most fun and relaxing way to spend one's summer vacation, but enduring the miseries of altitude, fear, cold and hunger makes for a far better narrative. This may be one reason why people return again and again to such misery; the actual experience of misery itself fades and is usurped and transformed by the retrospective pleasures of having shaped it into a story to share with others, and with oneself.

As noted, good stories tend to follow certain natural trajectories. The high school basketball star makes for an interesting story, but not one that most people would like to tell about themselves. In contrast, a story that involves an eventual triumph over initial hardships and setbacks is one that is not only interesting but socially desirable. Story-telling, hence, introduces a 'path-dependence' to preferences, with some paths being more desirable than others, even, often, at the expense of the integral of total utility. The propensity for story-telling may well contribute to the recent finding that people tend to represent certain kinds of past affective experiences in terms of their most intense part (the peak) and their ending. According to Frederickson (2000) these moments carry more weight in retrospective judgments because they carry more personal meaning than other moments. Peaks provide personal meaning in the sense that it gives the individual information about ones resources or capacities of experiencing certain events or episodes. Ends give personal meaning in terms of certainty, that is, the certainty about what an experience contained.

On the face of it, one might conclude that the importance of story-telling is antithetical to economic accounts of utility maximization, but a more accurate assessment might be that story-telling can be construed as a case of intertemporal choice – early sacrifice made for a life enriched by meaning. On the other hand, it isn't clear if people are really gaining

happiness per se from such meaning, or whether meaning is an end in itself. Even if the quantity of pleasure would have been the same, people may prefer being happy on love than happy on pills. Or, as John Stuart Mill puts it "It is better to be Socrates dissatisfied than a fool satisfied." Consistent with utility-maximization theory, meaning may be seen as providing utility. However, it may not be a utility that is evaluated only in terms of amounts of pleasure and pain, but could even be a type of utility that is enhanced by the introduction of pain – albeit at the right moments.

### Meaning as an assertion of free will

A final interpretation of meaning involves the expression of free will. People want to believe that they have some control over their behavior and hence their destiny – they want to feel as if they are more than the sum of nerve firings happening in obscure parts of their brain. In line with this, one of the key assumptions in existential psychology is that people derive personal meaning from the individual decisions that they make (Frankl, 1963; Maddi, 1998). However, long before Newton uncovered the iron-clad regularity of physical laws, humans struggled with the knotty problem of free will. Are we free agents or preprogrammed by Nature or God?

Dostoyevsky articulated this dilemma in a scene from *Notes from the underground* in which his protagonist explicitly articulates to an assembled audience of scientists that there is one thing that is always left out in models of choice,

"But, after all, here is something amazing: why does it happen that all these statisticians, sages and lovers of humanity, when they calculate human advantages invariably leave one out?" (p. 19)

and a few pages later he declares what is missing

”One’s own free unfettered choice, one’s own fancy, however wild it may be... What man needs is simply independent choice, whatever that independence may cost and wherever it may lead.” (p. 23)

Echoing the same theme, the contemporary novelist don DeLillo asks in his novel *White Noise*, ”How do you know whether something is really what you want to do or just some kind of nerve impulse in the brain? Some minor little activity takes place somewhere in this unimportant place in one of the brain hemispheres and suddenly I want to go to Montana or I don’t want to go to Montana.”

The act of making autonomous choices generates utility. It was identified by J. S. Mill as ”one of the principal ingredients of human happiness” (1859/1974:172). Mill’s assertion has since been bolstered by diverse lines of research. For instance, studies find that one’s perceived autonomy and extent to which one sees one’s actions and life to be self determined is positively related to psychological and physiological well-being (e.g., Ryan and Deci, 2001). Efforts to achieve goals, and satisfaction with achieving those goals, are greater if those are intrinsically – i.e., internally – rather than extrinsically motivated (Deci, 1975). Hence, people appear to derive both meaning and utility from making autonomous choices.

On the face of it one might conclude, contrary to our initial assertion that this fourth motive is the most difficult of the four to assimilate to economics, that in fact it is the easiest. What contradiction could there be between utility maximization and the assertion of free will? The problem is, people do not only want to exercise their free will, but they want to *feel* that they are exercising

it, and utility maximization in and of itself provides few clues about the involvement of will. A hedonistic interpretation of human behavior leaves little room for the assertion of free will.

How, then, is it possible to *know* that one is exercising free will? The answer, according to Dostoyevsky is that one can only be certain one is exercising free will if one does precisely the opposite of what one wants to do – of what would make us well off:

”But I repeat for the hundredth time, there is one case, one only, when man may purposely, consciously, desire what is injurious for himself, what is stupid, very stupid – simply in order to have the right to desire for himself even what is very stupid and not to be bound by any obligation to desire what is only rational.” (p. 26)

Ironically, then, if we accept Dostoyevsky’s argument, the motive to make autonomous choices may actually contribute to self-destructive behavior. Of course, if we assume that people derive pleasure from the assertion of their free will, then voluntary misery might be assimilated into a model of utility maximization. But this paradox only reveals the skeleton in the closet: the concept of utility is irrefutable and, hence, vacuous.

## Conclusions

Economists have probably steered clear of meaning, not based on a denial of its importance, but from fear that modeling meaning, and its role in economic behavior, is likely to be difficult. In this paper, we argue that such fears are largely unjustified. Not only are most conceptions of meaning possible to model (indeed, some already have been – e.g., Akerlof and Kranton, 2000), but, we

believe, doing so can shed light on a wide range of behaviors that seem otherwise incompatible with standard theory. The significance of meaning-making extends far beyond such obvious activities as religion and self-help media; the search for meaning has consequences that extend into all domains of life, including virtually all domains of economic behavior.

Turning to the first motive we discussed, the attempt to resolve uncertainty about preferences drives a tremendous amount of behavior. There is a market for resolving preference uncertainty, which is discernible not only by the presence of self-help counseling on bookshelves and in media. People also pay to take personality tests and tests such as the Myers-Briggs test of occupational interests. And in magazines and on the web there are plenty of tests offered to find out your preferences for how your partner should look like and be, and even to help you discover if you truly love your partner. Even if these behaviors do not seem to be accord with the assumption in economics about stable and coherent preferences, if reducing uncertainty provide insights to what brings utility, then this interpretation of meaning-making is in line with the notion of utility maximization.

What needs to be added to standard economic views, however, are accounts of how and why people actively want to manipulate their own preferences, and how not only fulfillment of goals but also having and striving towards goals brings utility. Such accounts would, for instance, be likely to contribute to models of labor economics. For many people work – even in occupations that many academics would consider mundane – is not just a mean to an end, it is not only a job but a ‘career’ or a ‘calling’ (Baumeister, 1991; Wrzesniewski et al., 1997). Personal development is not something that people

engage in on their leisure time, people also strive for personal development and self-actualization through their work.

The desire to extend oneself either socially or temporally likewise has far-reaching consequences for individuals and society. For example, economists have a difficult time explaining common behaviors, such as voting, fighting in wars, and participation in outlawed political movements, that occur despite the existence of severe free-rider problems. Why do people expose themselves to the costs and risks associated with these activities when their individual participation is unlikely to make a difference. Part of the answer may be that synchronizing their own activities with those of larger collectives helps them to feel an integral part of those collectives, and hence decrease feelings of insignificance.

By enlarging the scope of “us” in the dichotomy between “us” and “them,” the social extension of self may change people’s behavior in significant ways. In social contexts, the choices we make may actually be more guided by what is appropriate to do and which rules to follow than by the utility of consequences (March, 1994; Messick, 1999). And our happiness as part of a collective may depend as much as the successes or failures of the collective rather than our own private successes and failures. For instance, we may find great pleasure in the successes for our favorite soccer or baseball team, the victories of our countrymen in the Olympics, the triumph of our supported presidential candidate, or the high rankings of our own university.

Meaning as an act of sense-making also has far reaching consequences for behavior. Consider the case of John D. Rockefeller who spent half his life making money, then, after recovering from a severe and life threatening disease, spent the rest of his life involved in philanthropy. While economics is well suited



to account for his behavior the first part of his life, the second part of his life seems to be more driven by meaning-making than money-making. Even if sense-making ultimately brings utility, there seems to be a demand for making sense of the world and one's life that is not that obviously related to pleasures and pains. For instance, when a public figure is murdered (as was recently the Swedish foreign minister) people spend an enormous amount of time reading and watching news about the event, presumably driven by a wish to make sense of what has happened. Likewise, it seems that the large industry for story telling that exists in literature and on the screen is not only driven by peoples' search for happiness but also by a wish to make sense of experiences and events that also have bearings on their own lives.

Finally, turning to the interpretation of meaning as an assertion of free will, is the potential contradiction between utility maximization and the assertion of free will utterly a philosophical query with no real relevance for human behavior and economics? People may not scrutinize in each and every situation whether they choose freely or not, but may still abhor the idea that they are not the head of their own decisions. This abhorrence is depicted by Naomi Klein who in her best-selling book "No Logo" describes a movement, especially among young people, that take action against how companies through their ubiquitous brands try to make people buy their products. And there are various other cases in which people rather seem to be driven by a wish to make autonomous choices than by maximizing utility, such as, youth rebellion and protest voting.

We have discussed four different interpretations of meaning that pose different, and more or less fundamental, challenges to standard economic models of human

behavior. Although the human quest for meaning is not captured in standard economic models, each of the different interpretations of meaning we discussed, with the possible exception of meaning as an exertion of free will, is in fact amenable to interpretation in economic terms. If economics do not take into account meaning, it runs the risk of missing something important in the understanding of human behavior. This suspicion we share with John Stuart Mill who in his autobiography asked himself: "Suppose that all your objects in life were realized; that all the changes in institutions and opinions you are looking forward to, could be completely effected at this very instant: would this be a great joy and happiness to you?" Recognizing that the answer was unambiguously negative, he reports that "my heart sank within me and the whole foundation on which my life was constructed fell down."

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