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Emotions and Economic Preference

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I. Introduction

In the concluding chapter of his book *Emotion: The Science of Sentiment* (Oxford University Press, 2001, also published as *Emotion: A Very Short Introduction*, 2003, to which this paper is referring) Dylan Evans has the following remarks about economics:

“On balance, a creature who lacked emotions would not just be less *intelligent* than we are; it would be less *rational* too. This suggests that we should take a rather different view of rationality than that proposed by logicians and economists. Economists define rationality in a rather technical way... [which] says nothing about where those preferences come from, nor whether it is rational to have some preferences rather than others. Indeed, the last question is, strictly speaking, meaningless for economists, since they define rationality in terms of satisfying preferences. There may be irrational *consumers* and irrational *purchases* (that is, those that could not be the result of a 'consistent' set of preferences), but there is no such thing in economics, as an irrational *preference* (or a rational one, for that matter; preferences just *are*).”¹

Evans finds that it is perfectly sensible to ask whether or not it is rational to have a certain

¹ Evans, Dylan. *Emotion: A Very Short Introduction*. Oxford University Press, 2003, p. 123

preference. He discusses the role of feelings with reference to Pascal according to whom the heart has its reason of which reason knows nothing. According to Evans the reasons of the heart are not the reasons of means-end reasoning and emotions are not just about how to achieve a given end, but also about what ends to pursue in the first place. In discussing this wider notion of rationality, he refers to Gigerenzer's "ecological rationality."² He also recommends the term "evolutionary rationality" because to him "our preferences are heavily influenced by our biological inheritance. If the heart has its reasons, this is because natural selection designed our emotions just as it designed our other mental faculties: to help us survive and reproduce as best we could in a dangerous and exciting world."³

The purpose of this paper is twofold: first, to draw attention to Evans's very interesting book and recommend it as a useful and thought-provoking reading for economists. Secondly, we wish to examine critically the viewpoint that: a) economists take too narrow a view of rationality and do not recognize the role of emotions as a component of rationality and b) do not address the question of whether preferences are rational or not, and instead take them as just given. We trace the relationship between economics and emotions showing some economic dimensions of emotional states. We illustrate them with examples of economic behavior based on emotional reactions.

Part I of the paper is introduction. Part II gives a brief summary of Evans's book. Part III analyzes the link between rationality and emotionality, considering Evans's criticism in

² Gigerenzer, Gerd, Peter M. Todd, and the ABC Research Group. *Simple Heuristics that Make us Smart*. Oxford University Press, 1999

³ Evans, Dylan. *Emotion*. p. 124

detail and referring to other scholars in the field.

II. The basic thrust of the book

Before examining Evans's views on economics, which have been quoted above, it would be useful to start by looking at the highlights of his arguments in his book. Evans points out that for many classical thinkers, including among others Adam Smith and David Hume, there was no contradiction between being rational and emotional. Evans stresses the importance that old philosophers attributed to emotions in individual and social existence. In particular, he stresses that Smith "did not just pioneer the 'dismal science' (economics); he also helped to pioneer the 'sentimental science' (the psychology of emotion)"⁴ For thinkers like Smith emotion and thought were not necessarily opposed and "it was rational to be emotional, and no science of the mind could be complete without also addressing the heart."⁵

Together with the theory of free trade and government David Hume discussed a variety of emotional issues. His "Treatise of Human Nature, Being an Attempt to Introduce the Experimental Method of Reasoning into Moral Subjects" includes treatment of understanding, passions and morals,⁶ while in his "Essays, Moral, Political and Literary" he describes the delicacy of taste and passion, impudence and modesty, love and marriage, and avarice.⁷ We concur with Evans's view that many of the old philosophers

⁴ Evans, Dylan. *Emotion*. p. xiii

⁵ Evans, Dylan. *Emotion*. p. xiii

⁶ Hume, David. *Treatise of Human Nature, Being an Attempt to Introduce the Experimental Method of Reasoning into Moral Subjects*. 1739-40

⁷ Hume, David. *Essays, Moral, Political and Literary*. Vol. I, 1740

were not only economists but psychologists as well and they considered reason and emotion together.

However, Romantics like Rousseau disagreed and thought of reason and emotion as fundamentally opposed, and this view became generally accepted. Rousseau also thought that emotion is better than reason in conducting one's life.

Evans aims in his book to argue against the Romantic view, and states his belief that “a creature without emotions would be less reasonable than us, but also ... there are times when it would be better to listen to the head than to the heart. Knowing when to follow our feelings and when to ignore them is a valuable talent that some have called emotional intelligence.”⁸ In other words, he takes the middle ground, and does not go quite as far as Hume did when he wrote that “Reason is, and ought only to be, the slave of the passions, and can never pretend to any other office than to serve and obey them.” Evans's position is, one might say, closer to Pascal, whose dictum he uses as the title for the Afterword of his book “The heart has its reasons of which reason knows nothing.”

This is clear from a few other brief quotes from Evans's book, with which we conclude this section:

“It would be stupid to deny that emotion can lead people to do things they later regret. The positive view of emotion does not hold that emotions are *always* useful. Rather, it maintains (*contra* the negative view of emotion) that the best recipe for success is a mixture of reason and emotion, not emotion alone... overall the benefits of having

⁸ Evans, Dylan. *Emotion*. p. page xiv

emotions far outweigh the drawbacks.”⁹

The most persuasive part of the book is where Evans presents the argument in terms of evolution and natural selection. He argues that emotions are necessary; otherwise “emotional creatures would never have evolved in the first place.”¹⁰ This seems an unanswerable argument for the value of emotions. As an example of the value of an emotion like guilt, he quotes the economist Robert Frank to the effect that it is actually advantageous to have the capacity for guilt, because people who are known to have a conscience are more likely to be trusted by others¹¹. And we know that underpinning the transactions of a modern economy is trust between the various participants. While Telser argues that people are honest only to the point where it pays them to be honest,¹² we believe that in a modern economy it pays more to be honest rather than dishonest in most situations.

III. Preferences in Economics

Having seen the key points of Evans’s argument, and in particular his argument of the evolutionary advantages of emotions, let us examine his criticism that economists have not considered at all the role of emotions in a proper definition of the rational behavior which underlies economic life. As mentioned at the start of the paper, Evans’s major call is for a more global view of rationality, an “evolutionary rationality” which will make it meaningful to consider what preferences are rational and what are not, instead of taking

⁹ Evans, Dylan. *Emotion*. p. 24

¹⁰ Evans, Dylan. *Emotion*. p. 25

¹¹ as quoted by Evans, Dylan. *Emotion*. p. 35

¹² Telser, L. G. A Theory of Self-Enforcing Agreements. *Journal of Law and Economics*, 1980, 24:1-22 p. 29

preferences as just “given” which is the standard approach in textbooks of economics.

It is true economic literature contains little on the role of emotions in economic decision making. Emotions are of a broader category; they stem from a larger set of mental processes in the human brain and are complicated to define. Jon Elster draws a parallel between emotions and beliefs and desires as emotions can just as well be conceived as “occurrent mental events or as dispositions for such events to occur.”¹³ Emotions drive human beings in their everyday behavior and, like Elster says, it is not possible to live without emotions. One state of mind, one feeling replaces another in an ongoing process. One moment we are happy, the next moment we are sad. We cannot be emotionless. A distinguishing feature of emotions is the intentional object about which they appear, be it anger, envy or love. They are connected to the cognitive processes of men who must realize a given situation before they react to it emotionally.

Emotions are the engines of human action directly or indirectly, consciously or subconsciously. In particular, they drive people’s economic decision making, and this analysis aims to study the relationship between emotions and economic behavior. Emotions, taken on their own, are perhaps more interesting for psychologists or psychiatrists. Emotions that have economic dimensions are of interest to economists and economic psychologists. Economics has properly used the concept of preferences and utility theory to express emotions, to try to illustrate something difficult to study and describe. At the same time, the economic science has not tried to address some fundamental questions such as what drives emotions and, ultimately, economic decision-

¹³ Elster, Jon. “Rationality and the Emotions,” *Economic Journal*, 106 (438): 1386-1397, 1996, p. 1387

making, what actually determines preferences and why are there preferences. What it comes down to is why there are feelings at all? Why are economic agents driven by feelings and how do those feelings determine one action or another?

It appears that economists do skirt the issue of what constitutes taste or a change in taste and Evans is right to criticize economists for not considering the question of whether some preferences can be classed as rational and others as irrational. Economists seem to leave definition of tastes and forces that change them to psychologists. Changes in taste shift the demand curve to the left or to the right, which remains unexplained by economists. Other noneconomic factors such as health concerns and the composition of the population can shift market demand curves. Economists just like business people are concerned with the effect that advertising has on people's preferences but to academics advertising is not a very pleasant topic as it is hard to incorporate it in theoretical models and virtually impossible to explain. The reason might be inscrutability at present of some aspects of the human mind. By the same token, demand can not only be altered with the help of persuasion and information as the instruments of advertising and promotion; those instruments can as well generate it. Firms can in fact create demand out of thin air or make non-existing products imperative for consumers (examples, mobile telephones).

Scholars like Mas-Collell, Whinston, and Green emphasize consistency of preference relations and provide formal models of revealed preferences but do not examine the origins of preference.

But there are some economists who have recognized and discussed the importance of these questions. For example, in their *Price Theory and Applications* Jack Hirshleifer and David Hirshleifer say: “The term “economic man” is frequently used in a derogatory sense, as an implicit criticism of economic reasoning. Because human beings are not always *rational* and not always *self-interested*, economics is, critics allege, built on incorrect foundations. However, for economists, rational and self-interested behavior are only working hypotheses. These assumptions are warranted only to the extent that they help us understand what actually happens in markets and other social interactions.”¹⁴

Further they are interested why people prefer some things to others, why some products satiate their desires more easily than others, why preferences depend on age, ethnicity and specific circumstances. We agree with them that “an economist who intends to apply the discipline should have some knowledge of the deeper forces determining preferences.”¹⁵ They believe that preferences are susceptible to explanation by factors such as the physical environment, for example hot or cold climate, as well as cultural surroundings and upbringing. “Biological considerations appear to be especially important in interpersonal interactions; for example, we have a strong preference for helping our own children before aiding nonrelatives.”¹⁶ Hirschleifer and Hirschleifer have at least recognized the problem and stressed its importance, which counts for something.

¹⁴ Hirshleifer, Jack and David Hirshleifer. *Price Theory and Applications*. Upper Saddle River, NJ, 1988, p. 7

¹⁵ Hirshleifer, Jack and David Hirshleifer. *Price Theory and Applications*. pp. 86-87

¹⁶ Hirshleifer, Jack and David Hirshleifer. *Price Theory and Applications*. p. 89

As already mentioned, Jon Elster also addresses the problem of rationality, the emotions and economics. In “Rationality and the Emotions” he remarks: “Emotions are a neglected topic and the neglect of economists is second to none... With one exception, all human satisfaction comes in the form of emotional experiences. The exception is the hedonic satisfaction produced by the senses... If one grants ... that emotional experiences are important sources of human satisfaction, we would expect economists to have thought about them a great deal... No economist to my knowledge has considered the emotions in their main role as providers of pleasure, happiness, satisfaction, or utility.”¹⁷

It is really puzzling that economists have ignored a major part of their subject matter. If economics is the study of the optimal allocation of scarce resources so that to satisfy the unlimited human needs and wants, it is unclear why economists busy themselves so much with issues related to resource allocation but not to human satisfaction. The answer would seem to lie in the fact that they have done the easier task, that of studying the general principles and modes of resource allocation. There they speak of optimal and suboptimal outcomes, efficiency and Pareto optimality, maximization and minimization. At the same time studying human satisfaction seems a lot more difficult to do and the most economics has done about human satisfaction is discover some highest utility curve that brings maximum utility to the consumer. Colander describes well how economic theory addresses the issue of tastes and preferences:

“One way in which economists integrate (this) into economics is by emphasizing that the analysis is conducted on the assumption of “given tastes”.... in reality, economists agree

¹⁷ Elster, Jon. Rationality and the Emotions. p. 1386

that often forces besides price and marginal utility play a role in determining what people demand. They fully recognize that a whole other analysis is necessary to supplement theirs – an analysis of what determines taste... Tastes are also important in explaining differences in consumption between countriesTo say we don't analyze tastes in the core of economic theory doesn't mean we don't take them into account.... A change in tastes makes the demand curve shift.”¹⁸

Technically economics has defined rationality as the maximization of one's expected utility. Dylan Evans interprets this to mean that a rational person is one who, given a certain set of preferences, will act in such a way as to satisfy as many of those preferences as possible.¹⁹ What determines the shape of utility curves, their differences for different people and the changes of people's tastes at different moments in time are questions that still remain unanswered by economics. Therefore, Elster properly concludes:” To put it crudely, *economists have totally neglected the most important part of their subject matter.*”²⁰ In particular he criticizes economists for not having studied emotional experiences sufficiently:

“We would expect them to have studied the ways in which people organize their life to maximize emotional satisfaction, to have identified sources of suboptimal emotion seeking behavior, and to have suggested ways of improving this behavior.”

Difficulty results as well from the complexity of human nature and the need for economists to cooperate with representatives of other fields, namely, psychology. The

¹⁸ Colander, D. Microeconomics. Boston: Irwin McGraw-Hill, 1998, page 195

¹⁹ Evans, Dylan. Emotion. p. 123

²⁰ Elster, Jon. Rationality and the Emotions. p. 1386. Italics in the original.

reason why psychology is relevant is that processes related to feelings are purely mental. While economists should not take over the tasks of psychologists, they could study feelings purely as a source of satisfaction and utility. But, most of all, they should seek the economic dimensions of changing emotional states. As emotional states are characterized by changes in hormonal levels and the autonomic nervous system, economists might as well have to work with medical doctors in analyzing human actions under various emotional states. Some emotions clearly have physiological manifestations – smiling, crying, blushing, getting pale, frowning, fainting, etc.

According to Elster another difficulty to the study of emotions is the lack of a measuring system or device. This contradicts economists' love for precision, numbers and metrics. Comparing different feelings is difficult; measuring their strength or "valence," as it is known, is even more difficult. An emotion is often treated by some as a quantitative, rather than a qualitative characteristic of a human being, and, hence, the difficulty of quantifying it. Elster does seem to recognize the lack of theories that demonstrate how emotions are triggered and transformed. Furthermore, it is even more difficult to determine how emotions are transformed into economic actions.

According to Elster people act rationally when they acquire optimal emotional dispositions. For example, when they want to maximize their positive emotional experiences, or when they behave as utility maximizers, one could conclude they act rationally. On the other hand, to the normal man it would seem absurd to think that people maximizing their negative emotional experiences (suiciders, masochists) act

rationally. But what they are doing may be rational to them. Some scholars argue that emotions drive rational behavior by stimulating decision-making or by providing information otherwise not available. They recognize that emotions can actually help us make the best decision. Very often decisions “guided by emotions *and* reason is better than what can be achieved by rational deliberation alone.”²¹

Elster rejects the proposition that emotions can be rational or irrational. For him they are not actions, therefore, they cannot be classified one way or another. He believes individuals cannot choose their feelings and therefore feelings are involuntary. However, one can argue with Elster that while human feelings are not real actions, they serve to promote certain actions and drive many economic decisions people make. Envy of the neighbor for his new car might be a good reason for us to buy a better one. Seeing our friends have a second child provokes us to follow their example. Hearing from Bob he has a better-paid job may be a stimulus for Jim to start looking for a new job that will increase his welfare, too. Expecting higher prices and, consequently a panic in the economic system, does lead to panic when people start stockpiling. As a result of their fear of inflation they actually cause inflation (“The only thing we have to fear is fear itself.”²²) but the last case helps us see how an emotion such as fear can actually determine human actions with an effect on the economic system. We do not necessarily have to study the rationality of human feelings, but the rationality of the actions they provoke.

²¹ Elster, Jon. Emotions and Economic Theory. *Journal of Economics Literature*, Vol. 36, No. 1 (March, 1998), pp. 47-74, p. 59. Italics in the original.

²² Roosevelt, F.D. Inaugural Address, 1933

What actually drives charity – altruism, pity, empathy, the need for respect or love from others, or guilt? Could it be that two or even three feelings drive one and the same action – say, that of giving? What drives a famous billionaire into giving? Which of all these? Elster maintains that certain feelings could be steered, so one could actually shape his character into positive thinking and enhance positive emotions. On the one hand, emotions are not controllable, on the other, we can train ourselves to be positive thinkers and dismiss thoughts based on negative emotions. It turns out some emotions can be the options of our rational choice, where we block some to go on with others.

People could block not only negative, but also positive emotions if they believe that that is more rational. In his analysis of marriage Gary Becker appoints to the fact that high-income individuals are looking for partners from the same income group. They do not necessarily believe that they will find their perfect match in that group but motives other than love and attraction provoke that type of behavior. Perhaps this leads many to believe that their behavior is rational, rather than emotional in the sense that they are not driven by love, which they may truly have for a non-member of their income group. Becker actually says that they even avoid interacting with people from outside of their group for fear that they might actually fall in love with that person. To them the choice would be one of “adverse selection.” Thus rationality is often seen as the opposite of emotionality. However, we do not feel that way. Although those people are not driven by love in their marriage decision, they are still driven by feelings. Their greed and love for material things, where they do not have to share their income with a poor person, prevails over the love for someone who is a better match. Deeply in themselves such people perhaps

realize the dominance of one feeling over another. For them one feeling is more rational to feel than another.

Elster recognizes that certain emotions can be suppressed or regulated by social norms. What then is the role of society in economic behavior based on emotions? Collander seems to think that society can influence people's tastes²³. Society can inhibit spontaneous actions arising from feelings. Greed in economically efficient agents may be counterbalanced by generosity or intolerance for greediness in society. Such social values may restrict pursuit of economic profits. Furthermore, collectivist societies nurture caring for others, shared wealth and equity more than individualist. In contrast to western societies based on individual success, free market, competition and private property, eastern societies founded on collectivist values and rules have in the past shown preference for common ownership, centralized resource allocation and social fairness. Society can inhibit some emotions (greed, fear) but trigger some others (national pride). The feelings that can be triggered may be both positive and negative (national pride, xenophobia).

Various scholars discuss parents-children relations in the context of rationality theory. Economists have gone as far as saying that parents have children for selfish reasons in their drive to be taken care of when they become old. They demonstrate to their children good care for their own parents so that they see a good example. Thus rational behavior, rather than true emotions seem to be the driving force before the family as the basic

²³ Colander, D. Microeconomics. p. 195

social cell that regenerates and expands humanity. We disagree with such views. While rational or material motives of that type may be present in family planning we do not believe they are leading. Emotions such as love, embedded in human individuals by nature, seem to be the real driving force. Parents, generally care for their children because they love them and children look after their aged parents not only or just because of obligation. They do it because they love them. Love has evolved in the human species as part of the evolutionary process and is subconscious or even unintentional. Emotion, rather than materialism, seems to be the answer to the family enigma and the question why people create families. To prove this we only need to think of cases where children do not form families of their own but diligently care for their helpless parents. They do not have to give example to anyone but still they care. On the contrary, individuals who have children may be utterly uncaring about their parents who may desperately need their attention.

Evolutionary theory demonstrates that love can be rational not only in family relationships. It can be rational, without people knowing it, when they fall in love. In the context of intimacy love may actually be quite rational, opposite to common “beliefs.” Dylan Evans does a thorough job explaining why and how love is “programmed” in human beings by nature. Therefore, it would turn out to be more rational than other options human behavior might opt for. In particular, evolutionary theory says that humans fall in love with people that best match their genes, i.e. genes that are missing in them but that would create a good variety in their pool of genes. Variety and a rich genetic pool predetermine the chance for survival, health and long life of a species.

Biology seems to drive much of our senses and our falling in love may be the product of millions of years of evolution, i.e. the product of Mother Nature. Going against nature, thus, may be more irrational than rational. To put it differently, love at first sight, opposite to common beliefs, may not be so irrational. By falling in love with a person, we perhaps find our best match and someone who will carry on our genes through time. Of course, love from first sight may not be enough. Survival of the species would also depend on someone caring, reliable and trustworthy in the long run. Feelings such as attachment, respect and tolerance may turn out to play a stronger role than love at some point. A most rational individual would then probably be one that looks for both – strong love paired with a sense of belonging, attachment and seriousness. As it turns out, “not only there are passions within reason, but there are reasons within passion.”²⁴

Subjectivity in relation to emotions, and hitherto to actions provoked by them, stems from the specificity of beliefs involved in emotions. As long as a person believes in something, he feels in a particular way. Emotions are triggered by beliefs and they distinguish humans from animals, who are said to form beliefs only about existing objects. As the authors work with students from Eastern Europe, they have had a chance to observe that very often some of the most brilliant students have a sense of inferiority, low self-esteem and poor performance. Modesty is generally nurtured throughout the region and is a general social norm. Thus our best students have the tendency to undermine, underestimate their achievements. Amazingly, students with the lowest self-esteem are often the best achievers in the academic field. Success, therefore, often comes as a surprise to them, especially when they compete on a global scale with students from

²⁴ Evans, Dylan. *Emotion*. p. 121

other parts of the world. They are excellent but oftentimes they believe they are not: their belief drives them to feel unsatisfied and unhappy with their work. We think the opposite is also true – a self-provoked illusion of someone's great capabilities and overestimation of oneself. With emotions it turns out one is what one believes he is, not what he actually is.

The effect of some feelings may be ambiguous – could envy be good when it is noble and productive? Or is it only destructive? How does one feeling work in the economic system? Love for profits and risk may be good when the bold gets a reward for his boldness. In relation to this is Evans's opinion that "being overconfident may be more rational than being realistic since some prizes only go to the bold." But is the person rational when the same feeling, greed, leads him into an abyss? Greed can be terribly misleading for entrepreneurs when in the chase of profits they incur more and more sunk costs believing they will recuperate their losses in the future. Greed may be as destructive when a person overestimates a project's revenue so much as to undertake an excessively high risk. Do speculators loving the adrenaline of risk make more money or less money than risk-averse people? We see that the same feeling can lead to two utterly different outcomes.

As we said earlier, Elster strongly deplores the fact that economists have ignored the role of emotions. However, he does not just stop with hand wringing. He asks the question whether economists could contribute to the study of emotions in addition to what psychologists, physiologists and evolutionary biologists already do. His answer is quite

hopeful. He says that some work by scholars of Buddhism has shown that “the tools of mathematical economics are capable of generating non-obvious and non-trivial insights into the nature of character planning and life planning.”²⁵ He describes the work he cites as showing how Buddhism can be used as a theory to maximize utility or minimize suffering, for taking decisions on the optimal allocation of that most precious of all resources, time. Elster says that these are essentially about hedonistic life rather than emotional life, but he suggests that maybe questions such as how people choose between alternative responses to emotional distress, and whether cost-benefit analysis could be applied in such cases, may be worth investigating. While he leaves it as an open question whether “economists can make direct contributions to the study of constraints on life planning and character planning,”²⁶ he concludes that emotions are a challenge to economists.

Elster also points out behavioral economics has borrowed mainly from cognitive psychology because cognitive psychologists addressed themselves to the issues of interest to economists, whereas emotion theorists did not concern themselves at all with economics.

In his paper “Emotions and Economic Theory” Elster distinguishes between six categories of feelings: social (anger, admiration), counterfactual (regret), prospective (fear, hope), retrospective (happiness, grief), possessive (envy) and other (love, disgust,

²⁵ Elster, Jon. *Rationality and the Emotions*, p. 1395

²⁶ Elster, Jon. *Rationality and the Emotions*, p. 1396

surprise, interest). Emotions can be pleasant, valuable or useful (love, admiration, pride) as well as destructive, unpleasant or harmful (hatred, envy, jealousy, fear).

The importance of emotions to the human race is crucial. They “enable social species to coordinate their behavior, to respond to emergencies, to prioritize goals, to prepare for appropriate actions, and to make progress towards... even though individuals have only limited abilities to cogitate.”²⁷ We make some decisions based on emotions where procrastination would be fatal. Elster refers to psychological research²⁸ of mentally distressed people who are emotionally deprived and, therefore, unable to make decisions. While some of them are pretty rationally thinking and their logic is quite well structured, their decision-making apparatus seems to be hampered. Damasio concludes that their defective decision making capacity is due to their lack of emotion. Furthermore, Damasio seems to go along with Evans’s idea that emotion is actually rational by claiming: “Reduction in emotion may constitute an ... important source of irrational behavior.”²⁹ Following that he concludes “The power of reason and the experience of emotion decline together.”³⁰

Elster concludes that the more urgent task is “to understand how emotions interact with other motivations to produce behavior.” According to him the role of emotions cannot be reduced solely to rational choice. We agree with Elster that interactions between emotions and other characteristics of the human being should be studied in modeling

²⁷ Elster, *Emotions and Economic Theory*, p. 60

²⁸ Damasio, Antonio. *Descartes’ Error*. New York. Putnam, 1994, as quoted by Elster, p. 61

²⁹ Damasio, Antonio. *Descartes’ Error*. p. 53: italics in original, as quoted by Elster, p. 62

³⁰ Damasio, Antonio. *Descartes’ Error*. p. 54, as quoted by Elster, p. 62

human behavior and, in particular, how feelings relate to human beliefs, desires, cognition, skills, experience, etc.

Conclusions:

Economists have overlooked the role of emotions in the study of the economic system. Issues like resource allocation and optimal choice seem to be of greater interest to them. It is true that John Maynard Keynes said that much of the success of the economy depends on the animal spirits of the entrepreneur as well as rational decisions.³¹ We are interested in the role that emotions play in the economic system both at the individual and group level. Questions to ask include why there are emotions, what drives emotions, how emotions relate to other aspects of human behavior and in particular economic actions. Throughout this paper we have tried to provide examples of emotions as engines of economic behavior. We conclude that emotional human beings are rational, which might be traced back to the evolutionary history of the human race. Incorporation of this broader rationality should bring greater depth into economic analysis. Rationality does not consist solely of logical processes, nor solely of emotional reactions. It is a judicious mix of the two.

References:

1. Colander, D. *Microeconomics*. Boston: Irwin McGraw-Hill, 1998
2. Damasio, Antonio. *Descartes' Error*. New York. Putnam, 1994

³¹ Keynes, J.M. *General Theory of Employment, Interest and Money*. New York: Macmillan, 1973 [1936]), pp. 161-162

3. Elster, Jon. Emotions and Economic Theory. *Journal of Economics Literature*, Vol. 36, No. 1 (March, 1998), pp. 47-74
4. Elster, Jon. Rationality and the Emotions. *Economic Journal*, 106 (438): 1386-1397, 1996
5. Evans, Dylan. *Emotion: A Very Short Introduction*. Oxford University Press, 2003, p. 123
6. Gigerenzer, Gerd, Peter M. Todd, and the ABC Research Group. *Simple Heuristics that Make us Smart*. Oxford University Press, 1999
7. Hirshleifer, Jack and David Hirshleifer. *Price Theory and Applications*. Upper Saddle River, NJ, 1988
8. Hume, David. *Treatise of Human Nature, Being an Attempt to Introduce the Experimental Method of Reasoning into Moral Subjects*. 1739-40
9. Hume, David. *Essays, Moral, Political and Literary*. Vol. I, 1740
10. Keynes, J.M. *General Theory of Employment, Interest and Money*. New York: Macmillan, 1973 [1936])
11. Roosevelt, F.D. Inaugural Address, 1933
12. Telser, L. G. A Theory of Self-Enforcing Agreements. *Journal of Law and Economics*, 1980, 24:1-22