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consumer behaviour**

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Towards an alternative paradigm of consumer behavior¹

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Abstract

This paper explores Scitovsky's contribution to behavioral economics and examines in particular the changes his theory based on the findings of human brain psychophysicists has brought to choice theory. The evidence here gathered points out how Scitovsky was making his suggestions for an alternative to the rationalist-based theory of choice model as far back in the early 1970s. The same evidence singles out Scitovsky as one of the most influential forerunners of a successful program of psychologically-based economic research which has only recently been acknowledged as a promising field for further investigation.

Keywords: Scitovsky, behavioral economics, arousal, comfort, pleasure, satisfaction, rational-choice theory

J.E.L. classification: A12, B59, D11

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Introduction

Economic literature widely recognises that the first neoclassical economists were also part psychologists (Bruni and Sugden 2007). Political economists had previously shown they were not able to use scientific methodology on the theory of work value, in spite of all the late nineteenth century positivist pressure exerted in the various domains of science. However, some particularly eclectic economists like William S. Jevons (1871) and Francis Y. Edgeworth (1881) stood out in the way they were beginning to look with interest at the theories and instruments of psychophysics, given that this type of psychological theorization answered both the positivist need for scientific rigour and the economic one for utility measurement. Psychophysics identified scientific laws by turning to John Stuart Mill's concrete deductive method (1862)[1843], which constructed theories by means of the deduction of a series of empirical regularities. Furthermore, Mill's method was based on assumptions about the nature of pleasure and pain which were broadly compatible with the period's Benthamite-derived assumptions about economics.

Jevons, in particular, found it appropriate to use Fechner's "just noticeable change" unit of sensation (1964)[1860] as the method for measuring the magnitude of (dis)utility.

Among the neoclassical economists of the second generation, Vilfredo Pareto also held that psychology was an indispensable resource for economics (Pareto 1971 [1909], Ch. 2, §1), though he also maintained that psychological instruments were not sufficiently precise, and therefore scientific enough for a discipline which boasted of being scientific (ivi, Ch. 4, §33). Despite being a steadfast believer in the excellence of Mill's concrete deductive method, he thought that the rules of economics had to be based on the firmly-established empirical propositions of mechanical physics rather than introspections of "any metaphysical entity" (ivi, Ch. 3, §36b). Pareto himself had already previously affirmed that measuring utility was not necessary for the ends of economic calculations: «reconnaitre qu'une quantité existe et la mesurer sont deux problèmes différents» (Pareto 1966 [1898], p. 106). He felt it was enough to know if the pleasure deriving from some specific goods was more or less than the pleasure deriving from others (ordinal measurement of utility). This expedient allowed the utility of goods to be perceived no longer on the basis of interior sensations which could not be measured accurately, but on preferences observable in consumer choices. This allowed Pareto to come to the conclusion that at "once the individual has revealed his/her preferences, he can disappear"², in that he has already furnished all that is necessary for understanding how he will behave (the famous Paretian turn).

² Pareto (1906), Ch. 3, §57.

The premises for elaborating a theory of choice based on a rational-choice model had been put into place. The economists of the next generation, however, realized they were faced by an apparently undefeatable obstacle: they were aware that sensations could precede behavior, but they also knew that sensations could only be ascertained by behavior.

In 1938, in artificially equalizing unrevealed preferences to revealed ones, Paul Samuelson in his “A Note on the Pure Theory of Consumer’s Behavior” completed the sea-change initiated by Pareto. Assuming that people behave in a fully rational way, economists started to validate a criterion of formal rationality which allowed them to avoid the phenomenon of the intransitivity of preferences by making the theory checkable by means of the process of falsification (once people have shown they prefer A to B, they therefore should not choose B).

Thus, after the shift initiated by Pareto’s reformulation completed by Samuelson’s axiomatization, neoclassical economics eliminated for good the psychological concepts widely used by the first neoclassicals (Bruni and Sugden 2007). Either not being able or not desiring to delve into the intricate logic of human motivation, traditional economists then chose to circumscribe their sphere of enquiry to revealed preferences, making axioms and limiting themselves to registering as “anomalies” any individual behavior that did not fit in with rationality-based models.

The last, ground-breaking event took place when George J. Stigler and Gary Becker (1977) extended the economic approach of rational individual choice and applied it to generality of the human behavior.

Scitovsky’s criticism of the neoclassical model of the theory of choice belongs precisely to this context. He argues that rational-choice modelling allows the formulation of a most elegant theory of choice, which proves however useless as a model for the behavior of *homo æconomicus*, because “[as neoclassical economists] improved their models, making them more rigorous, more quantitative, and more elegant, they gradually simplified and whittled down these psychological underpinnings to almost vanishing point» (Scitovsky 1986 [1985], p. 166). To Scitovsky this approach is to be contrasted with what he takes to be the “scientific approach”:³ “to observe behaviour—different people’s behaviour in similar situations and the same person’s behaviour in different situations—in order to find, contained in those observations, the regularities, the common elements, the seeming contradictions and the resolution of those contradictions which then become foundations of a theory to explain behaviour” (Scitovsky 1992a, p. vii-viii).

³ «I consider that approach [to regard preferences as revealed by consumer behavior] unscientific, and I am trying in this book [*The Joyless Economy*] to lay the ground for something both humbler and better» (Scitovsky 1992a, p. xiii).

1. “Psychologizing by Economists”⁴

Scitovsky’s solution is to suggest going back to psychology for the same reason for which more than a century earlier Jevons had turned to psychophysics, i.e. to elaborate a choice theory which could be deemed more “scientific”. In particular he finds fruitful the theories of behavioral psychologists:

«[I] use behavioral psychology to fill in gaps in the economist’s understanding of consumer behavior ... to analyze the pressures that influence his behavior and the direction in which they push him» (Scitovsky 1973, pp. 225-6).

The principal mistake he feels all neoclassical economists had made in trying to fit psychological findings into economic theory was to collocate their theories in the framework of behaviorism.⁵ In order to have a fuller understanding of the reasons for his critique, it is necessary to explore some of the main concepts of behaviorism.

As Scitovsky finely argues, the mainstay of behaviorist psychology, the principle of *drive* weds perfectly the perspective of neoclassical economists, who hold that the greater the utility, the greater the pleasure it produces or discomfort it removes (the hedonic principle of utility).

Sometimes defined by scientific literature as “a behavior tendency towards an incentive (Warden, 1931), or a “power that pushed an organism into action” (Woodworth, 1938) or “motivating state” (Miller and Dollard, 1941), up to the point of being assimilated *tout court* into the more general notion of “motivation” (Hull, 1943), the principle of drive is collocated at the basis of a deductive-axiomatic theory of behavior, founded on the postulates linked to mechanistic concept of behavior associated with the “stimulus-response” scheme (Novarese and Rizzello, 2004). Behaviorist psychology, in fact, considers biological necessities (hunger, thirst, cold) on the level of drives, which press the organism into behaving in order to eliminate the need and restore a state of inner equilibrium which is presumed to be static (homeostasis). The psychological theory of the drive, therefore, postulates human behavior just like that of an animal, nothing more than the outer result – therefore revealed - of an inner activation of the organism aroused essentially by the necessity to eliminate discomfort. The psychologists going into the

⁴ The title and contents of the present paragraph refer to the ideas in the article that Scitovsky wrote in 1985, entitled “Psychologizing by Economists”, later (1986) published in Alan J. e Heather W. MacFadyen (eds), *Economic Psychology: Intersections in Theory and Application* (pp. 165-80). North-Holland: Elsevier Science Publishers B.V.

⁵ For a convincing argument on the key points binding psychophysics to behaviorism, see Baars (1986).

theory of drive, came to the conclusion that the individual reacts to stimuli coming from the outer environment with given and predetermined responses (Watson, 1913).⁶

As Jevons had already noted independently, “this power of anticipation must have a large influence in Economics” (1871, p. 40). The pleasant sensation that arises from the restoration of inner equilibrium (homeostasis) can be said to correspond to what is also called “satisfaction” in economics. Scitovsky too recognizes that the behaviorist psychology theory of the drive, collocated in the Stimulus-Response framework and based on the reduction of discomfort, is very useful for working out economic previsions of production and consumption. Nevertheless he also stresses that the reduction of discomfort (i.e. the satiation principle) “is only half of the story” (Scitovsky 1974, p. 10), in that behaviorism does not contemplate the equally probable opposite case, in which the organism feels the need to increase too bland a stimulus, as happens in cases of fighting off boredom (par. 3):⁷

«[...] and unfortunately, it is this lopsided psychological theory that seems to have been at the origin of the economist’s theorizing. *For the notion that specific needs raise arousal level and that this motivates people to satisfy such needs and so lower arousal fits in very well with the economist’s utility function*» (ibidem; *my italics*).

After the pioneer work carried out by Hebb (1955), Heron (1957) and Berlyne (1960, 1963) psychologists were quick to abandon a behaviorist vision. Economists, however, have gone on considering exclusively the needs that lead to a reduction of the stimulus in that such a theory fits in well with their decreasing marginal utility theory, completely ignoring the issue of pleasantly stimulating sensations. According to Scitovsky instead, the study of which needs increase the levels of the stimulus and the biological mechanism regulating it (the *arousal* mechanism), is a question of considerable importance. As motivational psychologists have in fact shown, the consumption of goods procuring an increase in the level of arousal procures a satisfaction equal, if not higher, than what is felt consuming goods leading to a reduction. For Scitovsky, neglecting this important source of satisfaction has been the major mistake committed by economists.

⁶ James Watson, the psychologist who founded behaviorism, holds very clearly that its aim is to predict and control behavior, psychology as the behaviorist views it is a purely objective experimental branch of natural science. Its theoretical goal is the *prediction* and *control* of behavior» (Watson 1913, p. 158; *my italics*).

⁷ «From the economist’s point of view, *arousal reduction* or *drive reduction* is especially important, because almost all of man’s economic activities, consumption as well as production, fall into this category. No wonder the economist’s model of consumer behavior also come closest to that half of the psychologist’s theory. But very different and quite alien to economics and the economist’s way of thinking is the other half of the psychologist’s theory of motivation of behavior, which deals with the *raising of too low arousal*» (Scitovsky 1992a, p. 30; *my italics*).

2. The arousal theory

Moruzzi and Magoun (1949), the first researchers to conduct experiments of the stimulation of a mesocephalic structure known as the “Ascendent Reticular Activation System”, defined the mechanism of arousal as a “state of activation characterized by specific electro-cephalographic responses associated with modification in the behavior as in subjective experience”.

The neuro-anatomic seat of the arousal system is localized in the area which goes from the eyeball to the thalamus, called the “ascendent reticular formation”. The primary function of this nervous centre is to send to the cerebral cortex impulses which serve to reduce or if necessary increase the state of alertness of the organism. When it is scarcely stimulated (as in sleep or coma), the reticular formation sends the cerebral cortex a minimum quantity of impulses, in order to maintain the subject’s state of alertness at a very low level. In this state the subject is unable to respond to solicitations originating inside or outside his/her organism. When the subject is in a situation which arouses tension or tiredness, the reticular formation is strongly stimulated, “bombarding” with stimulations the entire cerebral cortex (Hebb 1955, p. 250), and provoking in the case of excessive stimulation, sequences of inadequate behaviour.⁸

Briefly, arousal could be described as “the brain’s heart”. As the heart is the main organ responsible for the circulation of blood, receiving peripheral venous blood and supplying with arterial blood the tissues of the whole body, so the arousal is the system responsible for the collection, selection and distribution of the information sent around by the peripheral neural impulses.⁹ In the same way, just as the heart pumps blood as long as the organism is alive, so the arousal system is in constant activity (even during sleep cerebral activity is very intense, often a sign of dreaming). Still today motivational psychology sets up the functioning of the arousal on the basis of the original theory of the aesthetic psychologist Daniel Berlyne who saw arousal as a neurophysiological process whose intensity varies along a continuum, with the lower pole given by a state of slumber or coma and upper pole by a state of maximum excitement.¹⁰ The differing intensity of reaction to a determined outer stimulus is explained by the tone of the arousal that the individual registers in a given moment in the day. A moderate level of arousal

⁸ In *The Joyless Economy*, Scitovsky describes arousal more succinctly as “level of excitement” (Scitovsky 1992a, p. 288).

⁹ As Scitovsky also notes, the phenomenon of death is no longer associated in the medical field not with the heart but the brain stopping activity (ivi, p. 18).

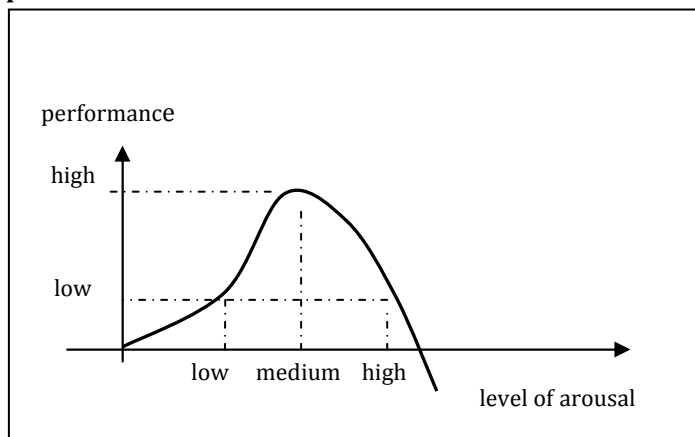
¹⁰ Scitovsky too emphasizes that the arousal system is constantly active: «[t]he level of arousal ... depends on the stimulation the central nervous system receives from outside, through the senses (exteroceptive stimulation), from the muscles and internal organs of the organism (enteroceptive stimulation), and from within the brain itself (cerebral stimulation); but it never sinks to zero as long as the organism is alive» (1992a, p. 18).

¹⁰ Cf. *Encyclopedia of Psychology* (2000), entry “arousal”, with Berlyne (1963 [1962] p. 149).

corresponds to a relaxed state, a fairly higher level corresponds to a pleasurable level of excitement, a very high level can indicate euphoria, as well as anger or panic.

The motivational theory of the arousal elaborated by Berlyne (1960) and founded on introspections belonging to the psychophysicist Wilhem Wundt (1874) sees the organism in a state of constant activation aiming at maintaining not a homeostatic, but a dynamic equilibrium. When the excitement level is too high, the arousal system send impulses to the brain which are translated into actions lowering it (e.g. I eat to reduce the hunger stimulus; I lower the volume of the music). When the excitement level is too low, the arousal system sends impulses to the brain which are then translated into actions to increase it. Generally such actions coincide with pleasantly stimulating activities, set in place for recreational reasons like for example doing a hobby or sport, reading a book, taking part in a pleasant conversation. Experts (Hebb, 1955; Berlyne, 1962) have observed that a level of moderate arousal is the most gratifying. Sensations of pain and pleasure intervene as “regulators” of the emotion, so that the state of excitement is kept at an intermediate level (Fig. 1).

Figure 1. The inverted “U” relationship between the level of arousal and the individual’s performance.



Key. The graph show the inverted “U” relationship that Scitovsky (1992a) identifies between the level of arousal of the organism and the individual’s performance. With too low or too high levels of arousal, performance is poor. The best performance comes when the arousal level is kept at an intermediate level.

Arousal psychologists have validated the thesis that the excitement system does not work in only one direction, from sensations to emotions (I cry out because I have burnt myself), but also in the opposite sense, with the translation of emotions into sensations (I sweat cold out of fear). This brought them to hypothesize a multidimensional activation system).¹¹

¹¹ Cf. Rolls (2001, pp. 4444-9).

Psychologists had for some time already shown that the reduction of a stimulus, whether it be pleasant (as for example with a strong emotion) or unpleasant (as in answer to a discomfort) leads to a sensation of comfort which, if it initially gives relief, then bores and with time ends by doing harm. The pioneer experiment carried out in 1957 by Heron on boredom (quoted in Scitovsky 1992a, p. 54) shows paradoxically that the absence of pain, i.e. comfort, leads to pain in the terms of boredom; the defence mechanism excogitated by the human organism against boredom is alienation. As, in fact Scitovsky remarks, the point that registers the maximum comfort according to the economic theory of pleasure-utility – corresponds to biological homeostasis, or the point “O”, where the individual feels neither pain nor pleasure (Fig. 2).

« ... but the opposite [to the ‘unstimulated condition’] it’s true, because the *process* of satisfying a need is pleasurable in itself» (Scitovsky 1992a, p. 64; *my italics*).

The way arousal functions shows, therefore, that the organism is not inert and neither does it limit itself to reacting to internal or external drives, as the Stimulus-Response Principle, but it organizes itself to modify its surrounding environment spontaneously by means of autonomously determined actions.

«[The] observation of animals and people ... indicates that much time and energy is taken up by brief, self-contained, often repetitive acts which are their own reason, ... *autonomously motivated*, and not ... small contributions to some remote, critically important aim» (Berlyne 1963[1962], pp. 4-6; in Scitovsky 1992a, p. 17; *my italics*).

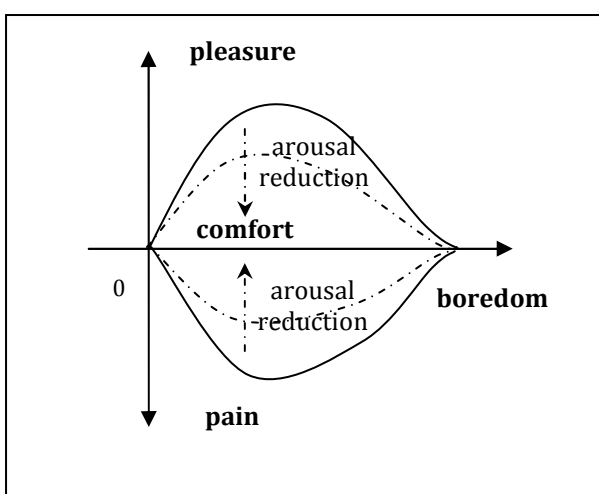
For the ends of our enquiry, we can briefly conclude that in the first case (the elaboration of sensations into emotions) the arousal system functions as a server (physiological activation) while in the second (translation of emotions into sensations) it functions as provider (psychological activation) in a network in a state of constant interconnection with the environment.

How the arousal mechanism functions opens up important questions of an economic nature. According to Scitovsky the autonomous activation of arousal (psychological) shows that *the human being is not induced to action by simple drives, but desires even when he/she has no needs*. Economists meet autonomous activation in all those activities taking place only for the pleasure of doing them (autonomously motivated), like recreational activities. However, Scitovsky finds that such activities do not really comply with traditional economic theory, which is based on the satisfaction of markedly physiological

needs, the objects and products of the industrial age, like eating or making a heavy job less tiring.¹²

On the basis of such observations, he concludes that an economy centred exclusively on the reduction of the arousal level, or the elimination of discomfort through the satisfaction of a need, does not increase but on the contrary reduces individual well-being. This is also held true of social, (as will be later shown par. 4), because it does not take into consideration pleasantly stimulating activities as alternative but equally primary sources of satisfaction.¹³

Figure 2. The effect of arousal reduction on personal well-being.



Key. In the graph pleasure and pain are placed at each end of a monodimensional scale, in the same way as Edgeworth's hedonimeter. If traditional economists consider needs and products aiming at arousal reduction, the effect will be to feel comfort, or the sensation felt when tension is relaxed. As shown by psychologists, that determines a homeostatic situation which initially sets off a sensation of comfort and with time produces boredom. The overall effect will therefore be a decrease and not an increase in well-being.

3. The difference between pleasure and comfort

Thanks to his studies on the arousal theory, Scitovsky manages to operate a clear and substantial distinction between pleasure and comfort which distances him conceptually from the hedonistic-utilitarian perspective. Though pleasure and comfort are both sources of satisfaction, Scitovsky sees them as having a different nature. Once the individual feels comfort in not being disturbed by any need (i.e. no pain, no hunger or cold), Scitovsky identifies a stative position (biological homeostasis). Since pleasure is instead the sensation felt after a change in the excitement level either due to an increase or decrease (stimulation or relaxation) in the level of excitement, Scitovsky identifies pleasure with change.

¹² The subject in matter of *The Joyless Economy* is the consumer behavior of the average American household. Scitovsky's critics against the American lifestyle needs to be traced back to the historic period in which it has been put forward, that is, in the 70ies of the past century. The critics remains valid once we recognize that the present day consumers are hungry for restless stimulating novelties.

¹³ See, Di Giovanazzo (2008).

«Put more simply, comfort and discomfort have to do with the speed, pleasure with the acceleration and deceleration of one's emotion» (ivi, p. 61).

Comfort/ pleasure, discomfort/ pain are not therefore synonyms and neither do they have the same origin. Comfort and dis-comfort have to do with the intensity of emotion, while pleasure and pain depend on an increase or decrease in intensity. What furnishes pleasure is therefore the change in the arousal level and not the level as such. This shows that physical pleasure and mental pain or vice-versa can be felt at the same moment.¹⁴

Following such discoveries, in open contrast with formulation of traditional economics, which still collocate pain and pleasure on a monodimensional scale of values (e.g. Edgeworth's hedonimeter), Scitovsky concludes that since pleasure and comfort are ontologically different, they cannot be measured on a single scale of values:

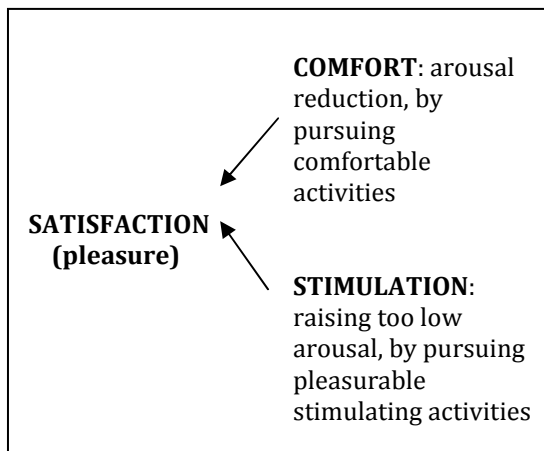
«in accepting that hypothesis [arousal mechanism], we must abandon the old-fashioned notion that pain and pleasure are the negative and positive segments of a one-dimensional scale, something like a hedonic gauge, calibrated from utter misery to supreme bliss, on which a person's hedonic state registers the higher the better off he is» (ivi, p. 61).

As a further development of arousal theory, Scitovsky also notes that an increase in excitement is a pleasant sensation at a contained level of excitement while high levels result in unpleasant feelings. Vice-versa a reduction in excitement results in a pleasant sensation (Fig. 3). An intermediate level of arousal is therefore the most gratifying.

Replacing satisfaction with utility (Fig. 4), it follows that utility is greatest when pleasure/comfort is at medium level. What emerges becomes very important for economic theory: consumer satisfaction does not therefore coincide with the maximization of utility.

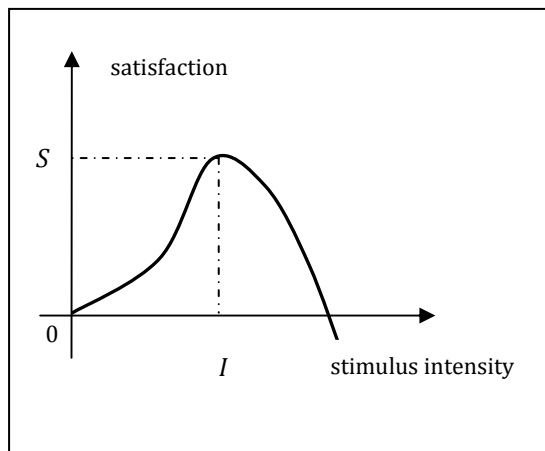
¹⁴ «The existence of separate pleasure and aversion systems confirms our introspective feeling that pleasure is something different from and more than the absence of pain and discomfort; it also explains why we occasionally feel pain and pleasure at the same time» (ivi, pp. 59-60; *my italics*).

FIGURE 3. Scitovsky's conceptual distinction between comfort and pleasure



Key. The diagram is a graphic representation of Scitovsky's conceptual distinction between comfort and pleasure (1992a, Ch. 4). It indicates comfort and stimulation as equally probable sources of satisfaction.

FIGURE 4. Personal re-elaboration of Wundt's graph according to Scitovsky's interpretation of the arousal theory



Key. The graph indicates that the satisfaction level is highest when the intensity of the stimulus is placed at intermediary level.

4. Towards an alternative paradigm of consumer behavior

The importance that pleasantly stimulating activities have as sources of satisfaction beyond those of comfort, induce Scitovsky to theorize next to physiological needs, mental and physical exercise (the need for stimuli) and socio-psychological needs (social desires) like the desire to live together (sociality) and undertake interpersonal relationships.¹⁵ Scitovsky calls these products addressing satisfying physiological needs “defensive goods” (the most widespread is the electric household appliance) in that in that they function essentially to remove discomfort. He calls creative goods those satisfying the need for creativity, including relational activities (Fig. 5).¹⁶

On the basis of his research, Scitovsky notes that though appetitive desires, social desires and the need for stimuli are needs with different ontological natures, they are all primary and innate in human beings («all of them are urgent and essential needs but different one from another»; Scitovsky 1992b, p. 254). Furthermore, since comfort is stative, while pleasure depends on change, he observes that the two sources of satisfaction are not simply ontologically different, but mutually exclusive “the continuous maintenance of comfort would eliminate pleasure because with arousal continuously at its optimum level, there

¹⁵ Scitovsky (1992a, p. 79; see also, 1986 [1985], p. 168).

¹⁶ For a formalized representation of the distinction between the types of activities within the conventional choice setting, see Pugno (2007).

would be no change in arousal toward the optimum” (id. 1992a, p. 71). He therefore identifies a trade-off:

«we must choose between pleasure at some sacrifice of comfort» (ibidem).

Pleasure is obtainable only at the price of less comfort, and comfort at the price of less pleasure. Faced by such a reality, Scitovsky privileges the consumption of creative goods over defensive ones.¹⁷ First of all because the satisfaction felt on consuming them is independent and neither does it rely on a situation of previous discomfort, but on the realization of personal intrinsic motives:

«pleasure arises *instead* from all those activities that generate positive satisfaction through the delectation of the senses, and the exercise and enrichment of ones faculties, from taste sensation to intellectual constructs» (ivi, p. 60; *my italics*).

In the second place because differently from defensive goods, most creative goods also possess the same characteristics as defensive ones. A ready example is offered by fast food and ready-to-eat food, clearly defensive goods as opposed to the art of cooking, creative goods which satisfy a physiological need (food) but at the same time satisfy the need for creativity and relations felt by those who do the cooking or sit at the table (ivi, p. 183).

According to Scitovsky, inexpert consumers faced by this trade-off are more likely to maximize comfort for two reasons: resources and time.

Regarding resources, Scitovsky notes that most people prefer the consumption of defensive goods to creative ones because of the greater initial investment, quantifiable in terms of the psychic and physical energy needed for the fruition and enjoyment of creative goods (activation costs). Just think, for example, of the physical and intellectual effort needed by training for a marathon, or a playing chess in a tournament. The consumption of defensive goods, instead does not present similar costs on entry, in that it does not call for any particular skill for fruition or consumption. Watching TV for example is a relaxing physically undemanding activity that does not require the investment of substantial intellectual resources (ivi, Ch. 8). The excessive consumption of defensive goods produces collateral effects that emerge only long-term. Given their advantages in terms of costs, they can arrive at crowding out the consumption of creative goods. Once a life of ease has been reached, however, it is difficult to turn back. In the moment in which a consumer

¹⁷ For an elegant explanation of Scitovsky’s argument in favour of creative consumption, see Marina Bianchi (2003).

notices the negative effects deriving from an excess of ease and comfort, consumption has already become a habit, which is difficult to lose, given the effects of addiction.¹⁸

Such a neuro-psychological trap – as also pointed out by Amartya Sen (1996) – has far-reaching implications not only for the idea of the use of rationality in predicting and explaining behavior, but also for the importance of freedom to change preferences and, most importantly, the freedom to change our mind.

In the terms of individual costs, such life style choices lead to a drastic reduction in creative activities and seriously affect the individual's general satisfaction. Once individual consumption choices are inserted in the logic of group dynamics, with a drive coming from a continual process of imitation and distinction, these very choices carry equally heavy costs for the whole of society.¹⁹ If in fact the reference group (Scitovsky's *Establishment*, p. 211), shows a clear preference for the production and consumption of defensive goods, individuals from other social classes will make the same choices in an attempt to stand apart from the mass and be accepted by the reference group. Scitovsky observes however that while the spill-over effect of the consumption of creative goods is such as to generate important positive external effects "stimulation is, typically, a non-exclusive or shared source of satisfaction. By contrast, comforts and want satisfaction usually lack these spill-over effect" (ivi, p. 86), the crowd out effect of the consumption of defensive goods does not stop at damaging personal health and environment. It also damages social relationships.

On the same argument, the TV is again a paradigmatic case in that it illustrates both the addictive potentialities of comfort and the crowding-out effect that addiction produces on creative goods. According to Scitovsky's data (ivi, p. 164) the interviewees in a survey promoted by the US Department of Commerce, refer to watching television not out of interest but because they do not know how to "use their time differently".²⁰

As far as time is concerned, Scitovsky holds that a consumer tends to choose comfort goods for a lack of time. Self-evaluation questionnaires and the data furnished by statistics on American consumer choices indicate that modern society is falling sick with

¹⁸ To explain the addiction effect, Scitovsky turns to Hebb's 1955 "adaptive modulation of a synaptic answer". For Hebb neural connections are not fixed, but time variable and modifiable through experience. He hypothesized that the connection between two neurons is strengthened whenever it is used. A much used connection will therefore be stronger than a little used one. Excessive repeated connections reduce the receptive elasticity of the neural structure, leading to the loss of the mental elasticity need to create new cellular clusters.

¹⁹ Scitovsky's thought on the role of consumer goods in group dynamics is ideally very close to that of Thorstein Veblen (1899) and George Simmel (1900). Nowadays psychologists and sociologists explain these dynamics with the metaphor of the treadmill (Brickman and Campbell, 1971) and the phenomenon known as "keeping up with the Jones" or in its more modern version as "street cred", children's need to look good with branded clothing.

²⁰ More recently, Bruni and Stanca (2008) identified a direct relationship between an excess of television and a reduction of relational activities.

chronophagy (lit. being devoured by time).²¹ He also commentates with a certain irony on the condition of modern man:

«in our society of *The Harried Leisure Class*, whose high hourly earnings make their time so precious that they cannot afford the time it takes to enjoy life and are forced to eat their meals on the run, cut short the foreplay in lovemaking, attend abbreviated religious services, buy books to glance at, not to read, and have no time to look at the beauty spots of the world to which their conferences take them» (ivi, p. 163).

This data too has been confirmed by the research carried out into psycho-sociological of time pressure (Rosa, 2003).

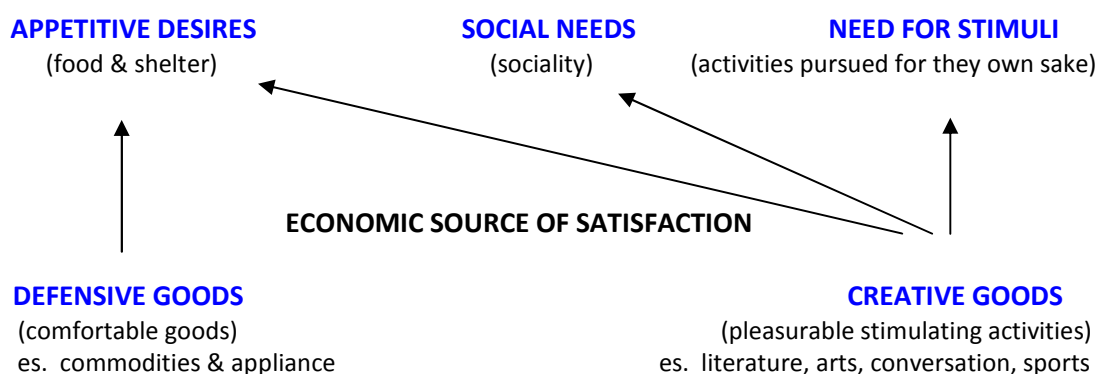
Scitovsky summarizes in this way the causes of consumer dissatisfaction in the economy of abundance. When “comfort is the absence of both pain and pleasure” and “too much comfort may preclude pleasure”, he concludes that though consumers are replete, they are still unsatisfied because they “overindulge in comfort” (ivi, pp. 62-63).

The justness of such an observation has been recently confirmed by a recent study on the relation between self-control, well-being and satisfaction. Just like Scitovsky, Alois Stutzer (2007) also attributes the causes of suboptimal consumer choices to insufficient self-control. Though the individual is aware of all the health hazards in eating certain products, he/she may still opt for the immediate gratification and goes ahead with consumption.

Since «most rewarding activities require a skill for their exercise and enjoyment» (Scitovsky 1995, p. 236), Scitovsky opts for the “generalist” solution and advice the consumer to possess broad culture in terms of knowledge and experience (consumption skills). Given the unquestioned technological advantages of a society which is becoming more and more specialized and sophisticated, an interesting proposal to smooth the conflict is given by Bianchi (1998) who suggests a creative consumption of defensive goods.

²¹ The sociologist Hartmut Rosa (2003) uses the term “Chronophagy” for the illness “devouring” modern man’s living time: «[...] the history of modernity seem to be characterized by a wide-ranging speed-up of all kinds of technical, economic, social and cultural process and by a picking up of all the general pace of life» (p. 3).

Figure 5. Psychophysiological needs and consumer goods.



Key. The diagram illustrates the three kinds of need identified by Scitovsky (appetitive desires, social desires, the need for stimuli) and goods that the modern economy supplies for their needs (*defensive* and *creative goods*). As shown by the arrows, defensive goods only satisfy the need for comfort while *creative goods* also possess certain aspects of defensive goods, and manage to satisfy all three categories of needs at the same time.

Scitovsky's theory is particularly illuminating for economists and psychologist dealing with consumption because, besides solving the paradox of consumer dissatisfaction in the economy of abundance, it raises a series of useful arguments for verifying traditional economic theory on choices.

In the first place, the problem of comfort addiction on one side and the traps of consumerism on the other, often inducing consumers to choose goods that give them no satisfaction. This puts into question a theory of choices based on the criterion of revealed preferences.

Secondly, the psychological theory of arousal has shown that the model of *homo oeconomicus* sponsored by neoclassical economists is a poor representation of human behavior.

Lastly, if as the theory of arousal shows through recreational activities, people often do not act to feel pleasure, but pleasure because they act, it follows that pleasure is not the cause of action, but its effect. In other terms, satisfaction does not come so much from the result of a process as much as from the process itself. Hence it can be deduced that an economic theory like the neoclassical one based exclusively on a utilitarian viewpoint is partial and incomplete.

5. The Scitovsky contribution to behavioral economics

In *The structure of scientific revolutions* (1962), Thomas S. Khun observes that when "a normal problem, one that ought to be solvable by known rules and procedures, resists the

reiterated onslaught of the ablest members of the group within whose competence it falls”, “an anomaly that cannot, despite repeated effort, be aligned with professional expectation” and have such pervasive influence that they ultimately serve to “subvert the existing tradition of scientific practice (p. 6). He also notes that normal science²² often suppresses basic ground-breaking innovations because they subvert its basic research programs. Since the decision to abandon an obsolete scientific theory requires the wide-scale destruction of existing paradigms and methodologies, the emergence of new theories is normally preceded by a period of profound uncertainty. The assimilation of new theories calls for the reconstruction of preceding theorization and a fresh evaluation of previously observed facts in an intrinsically revolutionary way which is rarely brought to a conclusion by an individual, and certainly never in a short space of time.

Tibor Scitovsky’s contribution belongs to a period of transition for economics similar to the one described by Khun. While neoclassical economic theorization was shored up by pillars which were beginning to crumble with the experiments of Kahneman e Tversky (1979), a further erosion was being operated by the progress of other alternative theories. When it was first published in *The Joyless Economy* his theory of choice was panned by many critics, partly because of its psychological approach, partly because it attacked many of the basic principles of traditional economy.

«*The Joyless Economy* was a revolutionary book, but that was the problem with it» (J. Friedman and A. McCabe, 1996, p. 471);

«It was the middle of 1970s. Growing conservatism in social thought (following the radical 1960s) was being accompanied by some hardening of methodological inertia in economics» (A. Sen, 1996, p. 481).

«When the first edition of Tibor Scitovsky’s *The Joyless Economy* articulated this message in 1976, most economists simply were not ready for it» (R. Frank, Foreword to *The Joyless Economy*, revised edition, 1992, p. iii).

According to the economist Shlomo Maital (1988), all the hostility to the first edition was because:

«winning the race requires skill at both leaps and steps. In science, as in horse race, it is the leaps that arouse the crowd. In economics, attempted leaps are overly scarce. Tibor Scitovsky’s book, *The Joyless Economy*, is one of the most interesting, significant, and original of such attempts» (Maital, 1988, p. 1).

²² For “normal” Khun means science validated in a given historical context.

For Scitovsky's merits to be fully recognized, time had to pass, as Kuhn had foreseen.

At the Round Table organized to celebrate the twentieth anniversary of *The Joyless Economy*, the contents of which published in a special number of *Critical Review*, one of the many merits recognized in Scitovsky was that of having re-opened the dialogue between economics and psychology, so brusquely cut off by Pareto and having presented new issues.

Thirty-five years after Scitovsky made his observations, economists have once again become interested in the determinants of subjective well-being, the role personality traits, habit and adaptation play and other effects under which simple maximization rules are violated (Kahneman and Sugden, 2005; Kahneman and Thaler, 2006; Frey and Stutzer, 2008). Scitovsky's name is now listed among the outliers of behavioral economics (Angner and Loewenstein, 2007; Frey and Stutzer, 2008) and cited as forerunner of the happiness studies in economics (Frey and Stutzer, 2002; Bianchi, 2003, 2004; Pugno, 2004).

6. Conclusions

This paper hopes to have illustrated how Scitovsky's way of using psychology to explain the dynamics behind choice place him among the behavioral economists involved in elaborating more realistic theories of choice than the rationally-based one.

Scitovsky's work plays a pivotal role in both economic theory and methodology. With psychology, in fact, he not only shows that 1) the revealed preference principle is a myopic indicator for satisfaction and that 2) satisfaction does not coincide with the utility maximization, either if given by the consumption of defensive goods or creative ones, but with the consumer's capability to temper between the two. He also calls attention to the theoretical validity and practical usefulness of the concrete deductive method, a methodology which today is the core argument of experimental economics.

By his part, Daniel Kahneman (et al., 2005; 2006) acknowledges Scitovsky's great attempt to increase the explanatory and predictive power of economic theory by providing it with more psychologically plausible foundations. A further step of this research shall be to ascertain if with his findings on motivational psychology Scitovsky has paved the way to the new field of studies hereafter launched by Kahneman and colleagues or, more likely, if he has open the path for a parallel issue in behavioral economics.

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