

# Chapter 5

## Conflict, Commitment and Well-Being

Ritxar Arlegi and Miriam Teschl

### 5.1 Introduction

Many people smoke but would like to quit. They may attempt to do so “cold turkey”, i.e. by stopping smoking at once from 1 day to the next, by gradually cutting down or by doing more sport so that they experience more vividly the negative consequences of smoking for their bodies, which may give them a greater incentive to stop smoking. There are also many more strategies that people invoke to stop smoking, and they may even manage to do so, but after a time numerous people restart smoking and after a while they face the same decision problem once again. There are others who must decide whether they should donate some money to the latest earthquake relief fund or go and spend that money instead on something that they enjoy doing. Those same people who decided to pay into the relief fund last time may well now be observed to go to the cinema instead. The question is what can be said about these choices, especially in economic terms, what impact do they have on well-being, and what link is there between these two kinds of scenario.

Economics is usually concerned with consistency in choice because it is a major ingredient, for instance, in building the economic theory of the consumer. The basic element for analyzing an individual’s behavior in economics is a “preference”. According to standard economics, a preference is a binary relation that enables all the alternatives to be ranked from best to worst. An *all-things-considered* preference ordering is a single ranking of alternatives that takes account of all the different

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R. Arlegi (✉)

Economics Department, Public University of Navarre, Campus de Arrosadia,  
31006 Pamplona, Spain  
e-mail: rarlegi@unavarra.es

M. Teschl

Economics Department, University of Vienna, Oskar-Morgenstern-Platz 1,  
1090 Vienna, Austria  
e-mail: miriam.teschl@univie.ac.at

reasons or concerns that a person may have had for preferring one option over another. Unlike choices, preferences are not observable, but economic theory shows that if the choices of a person are observed to satisfy certain “consistency” conditions, then they can be interpreted as choices generated by an underlying binary relation of preferences. It is then said that those choices “reveal” a preference. For example, a well-known condition of consistency is the following: If a person chooses an action from a set of alternatives and this person is later faced with that same set of alternatives or a set that has been reduced for some reason, she should choose the same action again. Otherwise, the person would be said to be inconsistent and choose for example option  $x$  and not option  $y$ , which is also in the set and later  $y$  even though option  $x$  is also available. In such a case, there is no way to know which option is preferred, and therefore which option provides more welfare to the person.<sup>1</sup> In fact, economics takes preferences as the sole indicator of an individual’s welfare, and assumes that welfare is greater the higher-ranked is the alternative that she chooses according to her preferences.<sup>2</sup>

In this paper we argue that the underlying characteristic of both the decision problems described above is that people act inconsistently and therefore do not reveal a preference. What we propose is that such decision problems may be better described as a situation in which people are faced with competing motivations to do certain things and are unable to compare those motivations with one another and thus form an *all-things-considered*, binary preference relation able to rank all the alternatives. Rather, they experience internal conflict.

The other common characteristic of such decision problems is that one possible solution of the underlying motivation conflict is to engage in what are generally called self-control strategies or exercises of willpower. These terms mean that a person is torn between two or more different reasons for choosing one option over another. It is also usually assumed that one reason (e.g. long-term self-interest) should prevail over another (e.g. short-term interest), while in the heat of the moment people often choose the opposite option to what they “should” do. Our discussion of motivation conflict does not presuppose any superiority of one motivation over another. By “self-control strategies” we simply mean solution concepts that lead or help the individual to stick to one particular chosen option despite the difficulty of experiencing conflict and thus not having an all-things-considered preference ordering. One particular self-control strategy is “commitment”: There are at least two different discussions about commitment in economic literature which to date have not been related to each other. One was first advanced by Jon Elster as well as Thomas Schelling in particular, and is related to the idea of imposing self-binding constraints on choices, such that a person is less inclined to succumb to the temptation of smoking for example. The other is Amartya Sen’s idea of commitment,

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<sup>1</sup> This consistency condition is described in more detail in Sect. 5.2.

<sup>2</sup> In what follows, the words *welfare* and *well-being* are used interchangeably.

which implies a different form of rationality to the standard maximizing idea of choice. In particular, Sen's view of commitment drives a wedge between choice and welfare as they are usually considered in economics, i.e. the idea that a person will always choose her highest-ranked alternative according to her preference ranking. Commitment *à la Sen* therefore implies that a person may choose an action that is not necessarily conducive to their own personal well-being. For example, if the person decides to donate some money to a relief fund, she may benefit far less from that action than if she went to the cinema instead, but she goes ahead and donates anyway, then she would not be choosing her best option. However, what we show here is that if a person experiences motivation conflict and therefore does not have a single *best* option, commitment is a way of solving that conflict in the sense that a committed person will be able to stick to a particular option (or a particular sequence of options) despite motivation conflict and this will actually be better for her in terms of well-being. This is an insight from psychology which economics would do well to take on board, because so far economics has proved unable to evaluate the welfare of people engaging in inconsistent behavior or of people who do not choose their *best* option.

In order to show this, we first outline descriptively a theory of behavior that is able to account for inconsistencies in people's choices under the assumption that they experience competing motivations. As with any model or theory, it is not perfect, but it provides a related description of the real world, and the advantage of a model is to shed some light on particular issues in a more structured way and thus act as a starting point for understanding those real-world issues. Taking inconsistent behavior seriously also points to the fact that preference satisfaction cannot by itself be considered as the standard criterion for welfare evaluation. In this paper, we highlight the consequences for well-being in the context of motivation conflict and provide a reason why opportunities matter, that is, why it is important for a person to have the possibility of choosing between as many options as possible.

Section 5.2 introduces our model of choice under competing motivations. In Sect. 5.3, we present a way of solving motivation conflict which relies on endogenous motivation change. Section 5.4 gives a more detailed discussion of the consequences of internal conflict for well-being. Sections 5.5 and 5.6 discuss commitment *à la Elster and Schelling* and *à la Sen* respectively, and show the extent to which commitment as a self-control strategy may be solving motivation conflict. In particular, we show that a person is able to commit to a specific action as a result of committing to a particular motivation. Commitment also involves the formation of a preference in the sense that once a person has solved her internal conflict through commitment, she will act consistently from then onwards and always choose the same option. Section 5.7 discusses the consequences of commitment for well-being in more detail. Section 5.8 concludes and responds to some possible critiques that may be leveled at the ideas proposed.

## 5.2 Choice with Underlying Conflict of Motivations

The existence of an all-things-considered preference ordering presupposes that the economic agent has been able to compare the available options from different points of views or according to different reasons or motivations that she may have had to choose among those options. However, if the agent experiences different motivations, it may not always be possible that all options are comparable and the agent may be unable to make a clear-cut decision between different options.

As an example, assume that a person is torn between two competing motivations.<sup>3</sup> One is pleasure or satisfaction based, that is, the person is driven by her own immediate personal advantage. The other is goal-based, that is, the person has particular aims and goals that she would like to achieve or satisfy. These goals may be of a personal nature in the sense that they are purely person-related (e.g. becoming a medical doctor, learning a language, playing a sport, etc.), but may also be socially influenced (e.g. following particular social norms and rules). Suppose also that there are decision situations with which the person is confronted repeatedly and that on each occasion she has to make up her mind and decide what to do. For example, each morning the person will have to decide whether she gets up to do an hour of jogging before going to work or whether she sleeps in for another hour in her warm, cosy bed. Every day the person will have to decide whether she smokes less in order to conform to her goal to be a healthier person or whether she continues smoking a packet a day as she currently enjoys doing. When the person is invited to a party and offered her favorite cake, she will have to decide whether to take the largest piece or a smaller one, as politeness would dictate. We assume that the person evaluates the decision problem from the point of view of her currently chosen action. For example, when the person wakes up in the morning and needs to decide whether to go jogging or not, she will have in mind whether she went jogging yesterday. This will be her reference point or status quo, which will determine whether the two motivations will be more or less satisfied with respect to her reference point. The idea is similar to Kahneman and Tversky's (1979) concept of gains and losses with respect to a reference point. Moreover, it enables the whole theory to be articulated on the basis of the simple dichotomous question of whether or not an action fulfills a motivation. Given the status quo, distinctions can be drawn between four different types of actions: There will be actions that satisfy both motivations in the sense that there will be an improvement in terms of pleasure and goal-achievement (e.g. I enjoy eating vegetables, which helps achieving my goal of a healthy lifestyle). But there may also be actions which are worse in terms of both motivations. Finally, there may be actions that satisfy only one of the motivations, i.e. actions that are either better in terms of pleasure or better in terms of goal-achievement, but not in terms of both with respect to the status quo (e.g. getting up or not in the morning to do some exercise). If the person is confronted with the

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<sup>3</sup> For a formal treatment of such decision problems see Arlegi and Teschl (2012).

latter type of actions (i.e. only one of the motivations will be satisfied), then we say that the person is facing a conflictual choice.

Given the conflicting nature of the decision, it is clear that assuming indifference between two “competing” options would not solve the problem. The person is not indifferent between staying in bed and going jogging because those actions satisfy different motivations to different degrees. If the person were indifferent between two actions, then she would not experience any conflict.

It may, however, be assumed that the person is not going to choose an action that is worse in both motivations with respect to her current status quo. We call this assumption “Monotonicity with respect to the Status Quo” (MRSQ). For example, if one pack per day is the maximum number of cigarettes that a person enjoys smoking, but on the other hand she also intends to smoke less in order to become healthier, then she is not likely to start smoking two packs per day. Hence, not choosing an action that is inferior in terms of the satisfaction of both motivations than her current reference level can be considered to be a weak rationality requirement that we believe it is reasonable to impose on people’s choices.

When a person is faced with a conflictual choice, it is plausible to assume that on one occasion she chooses one option to satisfy one motivation, but will on another occasion chose another option to satisfy the other motivation more. The person is engaging in *choice reversal* and behaves inconsistently from the standard economic rationality point of view. This kind of choice reversal is dependent on the status quo: If the person went jogging, she wished she had stayed longer in bed. When she stayed longer in bed, she wished she had gone jogging. Such a situation may occur when, as Elster would put it, “the grass is always greener at the other side of the fence” (1989, p. 9). That is, people often wish to have (or have more of) what they currently do not have. Schelling (2006) remarks that many smokers have made several attempts to stop smoking, only to smoke again a few weeks or months later. This may count as a typical example of choice reversal.

What is interesting to observe is that choice reversal can only occur in the current context if the person is confronted with conflictual choices. If the person chooses a non-conflictual action, one that is an improvement in terms of both motivations, then given our minimal rationality condition MRSQ and the change in the status quo, she has no reason to revert to her previous situation, which would be worse in terms of the satisfaction of both motivations than her new status quo. We can therefore conclude that under our assumption of MRSQ, the kind of inconsistency that choice reversal implies is possible if and only if the person is faced with conflictual choices.

However, more general kinds of inconsistency may also be envisaged (which however include choice reversal). In standard economics, as mentioned in the introduction, it is usually assumed that a person acts consistently, which means that she is expected to choose the same option again under unchanged circumstances or when faced with a smaller set of options that still contains the option originally chosen. This consistency condition is known as “independence of irrelevant alternatives” or IIA. Imagine the following situation: A person is currently smoking too much for what she finds pleasant (say a pack of cigarettes per day) and too much to

come conveniently close to satisfying her goal of being a healthy person. The person wants to change this. Assume that the person is a little more rational than in the previous case, that is, she would not only not choose any option that is worse than her current status quo (MRSQ, as in the previous example), but would also not choose anything that is *dominated* in terms of the satisfaction of both motivations by some other available action (not necessarily the status quo). We call this condition “Domination” (DOM). That is, she would only choose undominated actions, e.g. she would not choose to smoke 15 cigarettes a day if she could experience greater pleasure *and* greater goal-satisfaction by only smoking 12 cigarettes a day. Given this new rationality requirement and the change in the status quo, the person will only be left with conflictual actions after her first choice (because if any non-conflictual actions remain after the first choice, then she must have acted irrationally in her first choice to the extent that she has chosen a dominated action). Imagine therefore that on the first day the person chooses the undominated action of “smoking 12 cigarettes” and that the next day the person has to decide again how much to smoke. The following day she is observed to smoke only 10 cigarettes instead of 12. This choice violates IIA because she could have chosen to smoke 10 cigarettes instead of 12 the first time also. This is because we know by the implications of DOM that “10” is not dominated by “12” and is therefore a possible choice. Smoking only 10 cigarettes, given that 12 cigarettes are the reference point, means that the person achieves greater goal-achievement at the cost of pleasure, that is, it is a conflictual decision. Analogous reasoning can be followed if the person is observed to have chosen to smoke 10 cigarettes one the first day, but on the following day smokes 12—the person would increase her pleasure at the cost of goal-achievement. She would again violate IIA and this necessarily happens because of the availability and choice of conflictual actions. Thus, as in the case of choice reversal, if we assume the rationality condition DOM then inconsistency (represented here as a violation of IIA) happens as a consequence of being faced with and choosing from a set of conflictual actions.

The question arises of whether the individual will ever resolve the conflict, or at least become consistent at some stage and stick to one particular choice (despite any underlying conflict) and thus reveal a preference in the economic sense of the word. The answer is yes to both questions, and we propose two different routes to it. The first considers endogenous motivation change; the second looks at “commitment”, an idea often raised in the context of preference change or other inconsistent behavior. There are at least two different discussions of “commitment” in the economic literature. One is related to the idea of self-binding constraints, i.e. limiting oneself to a restricted set of options in order to reduce or prevent preference change [in particular we discuss the view of Elster (2000) and Schelling (2006)]; the other sees commitment as a reason not to take actions on the basis of egoistic desires (Sen 1977). This form of commitment may be seen as limiting or preventing the prevalence of selfishness. As shown below, the idea of conflicting motivations sheds new light on both concepts of commitment.

### 5.3 Motivation Change

There is no reason to assume that motivations are given and stable. It is plausible to consider that motivations may change with the actions undertaken according to certain psychological principles. Given pleasure and goal motivations, the following motivation changes may be assumed: *Reinforcement* and *dissonance reduction*. Others may be imaginable, but let us first consider what happens with those two.<sup>4</sup> By *reinforcement* we mean that the pleasure changes with the intensity, frequency, or level with which the person carries out a particular action. The more sport the person does, the more she will come to like it; the less she does the more she will like doing less. The more the person reads, the more interesting she will find it, the less she reads, the more she will be satisfied by reading little.

*Dissonance reduction* arises if the person chooses an action that gives her a greater pleasure with respect to her status-quo, but which would be in opposition to her goal. For example, a person who aims to engage in exercise almost every day would actually enjoy doing exercise at a more moderate level. However, doing so would go against her self-image of being a slim, fit person. If she chooses to reduce how often she does exercise, the person will experience dissonance, which is a negative, oppressive feeling (Festinger 1957). To alleviate this state of mind, the person engages in dissonance reduction, which in our context means that she adapts her goal to conform better to the chosen action. For example, as a consequence of choosing to do exercise less often, which is against her goal, she will come to consider it less important to be slim and allow herself to put on a few more kilos than her previously wanted weight.

Given motivation change, it must now be seen what consequences such changes have on a person's choices. Assume again that the person is rational to the extent that DOM applies, that is, she will not choose an action that is worse in terms of both motivations than another action she could also choose. This assumption, combined with reinforcement and dissonance reduction, will have the effect of reducing the set of choosable or "admissible" actions. An action will become more enjoyable as the result of reinforcement. But the pleasantness of other actions will also change with reinforcement, which involves that certain actions that were acceptable under the previous status quo will now become unacceptable, i.e. dominated by other actions. For example, before becoming a regular exerciser the person considered *going only occasionally to the gym* to be acceptable because of the pleasure of staying longer in bed. But choosing to *go to the gym three times a week*, which brings the person closer to the goal of being a regular exerciser, triggers reinforcement in terms of pleasure, and *going to the gym only occasionally* becomes a dominated action that is no longer acceptable. In fact, by choosing to satisfy more a specific goal, the person makes actions closer to the goal more enjoyable, whilst actions further away from the goal lose their appeal and are no longer choosable without violating DOM. It is in this way that the set of choosable

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<sup>4</sup> The formal treatment of these questions is again based on Arlegi and Teschl (2012).

actions becomes smaller over time. In other words, when she approaches her goal, it is as if the “distance” between what the person most enjoys doing and what she most aims to do has been reduced. The rationality condition implies that the only undominated choices left are found within this reduced set of options.

If the person chooses a pleasant action that satisfies her goal less than the current status quo, then the action becomes more enjoyable because of reinforcement, but dissonance reduction will also adjust her goal “towards the chosen action”. Again, together with the rationality assumption of DOM, this means that fewer options will be left to choose from, as the set of admissible options that satisfy what the person enjoys and/or what the person aims to do is being reduced. It can now be seen that if the person chooses different actions over time, the set of admissible actions may eventually be reduced to such an extent that both pleasure and goal motivations point to the same best action. In this case, the person who chooses this action would stick to that action and not engage in any further inconsistencies: i.e. she would eventually reveal a preference.

To understand this better, consider the following example: A person smokes several cigarettes a day, but would really like to stop smoking altogether and be a very healthy person. If she gives enough importance to her goal-motivation, she may be able to gradually increase her goal-achievement by smoking fewer and fewer cigarettes a day. This represents inconsistent behavior, as discussed in the last section (violation of IIA). Over time, through reinforcement, she will eventually find it pleasurable to smoke less and less. That is, reinforcement will help to make the goal of non-smoking an enjoyable experience. Once she finds non-smoking to be a fully enjoyable action, she will not start smoking more again because that would be against the rationality assumption implied by DOM.

However, not everyone has that much willpower. Many people engage in a “two steps forward, one step back” tactic. That is, for some time they may be able to smoke less and find that more agreeable than they expected because of reinforcement, but they may then start smoking more, because they are still torn between the two motivations and experience greater pleasure from smoking more than from smoking less. This goes against the goal of stopping smoking, which triggers an unpleasant feeling of dissonance. To alleviate this feeling, they engage in dissonance reduction or goal-adaptation. For example, they may stop thinking that the best that they can do is to stop smoking altogether and start thinking that two cigarettes a day is healthy enough. Given our rationality assumption (DOM) and the change in motivations, such a sequence of actions will also reduce the admissible set of options and both pleasure and goal motivations may point to the same *best* option. In such a case, the person will stick to that choice and not engage in further inconsistencies, thus revealing a preference.

It can therefore be observed that inconsistent choices, together with the two psychological principles and assumed rationality (DOM), not only points to an underlying conflict but may also potentially resolve that conflict. How the conflict is resolved may influence the person’s well-being. In the second sequence of actions described above, the person experiences dissonance in addition to the conflictual choice and will engage in dissonance reduction by accommodating her goal to the



chosen action. In the first sequence of actions the person may eventually stop smoking, but in the second sequence of actions goal-accommodation will make this impossible. Downgrading one's goals may always be a particularly sensitive issue, but in certain cases it may help to improve a person's well-being. These issues are explored in more detail in the next section.

## 5.4 Conflict and Well-Being

As mentioned above, welfare or well-being in economics is primarily understood in terms of preference satisfaction. This means that the higher-ranked the alternative that a person chooses is, the greater her welfare is. Given that preferences are not directly observable but "revealed" through their choices, it is implicitly assumed that a person chooses what is best for her. Obviously, if a person acts inconsistently no preferences are revealed and hence nothing can be said about her welfare. That is why some economists prefer not to focus on preference satisfaction as a criterion for welfare, but on people's opportunities. The general idea is that the more alternatives a person has to choose from, the better off she will be. Robert Sugden (2004) for example argues that more opportunities will always be better as people will be free to choose what they want, even if such wants are inconsistent.

Our claim however is that neither the preference satisfaction account nor the opportunities account would consider the possibly negative experience of conflict as such. The experience of conflict is widely discussed in psychological literature. As Emmons and King (1988) summarize, in psychology conflict is generally seen as a necessary process for human development. The idea is that one must suffer, and thus experience conflict, in order to search for new answers and thus enter a new developmental stage (Turiel 1974, 1977). Conflict introduces change: changes in a person's beliefs, personal desires, and attachments to social norms and rules (Brim and Kagan 1980). But conflict also arises because of changes in circumstances and life tasks (Cantor et al. 1987). However Emmons and King (1988) note that "[c]onflict is not always a developmental or self-enhancing process", there is also ample evidence of the "[...] detrimental consequences of intrapsychic conflict" (p. 1040). People experience emotional stress, anxiety or depression if they go through competing personal and social values for example (e.g. Epstein 1982; Higgins 1987). More precise conflict situations have been studied, such as for example the conflict between school and leisure for pupils and students, and it has been shown that the simultaneous existence of several competing goals (academic goals versus social goals in this case) may distract young people to such an extent that they lose interest in academic activities as such, their grades worsen, and emotional stress and pressure increases (Hofer 2007, Kilian et al. 2012). This is especially the case if young people feel that they have had academic goals imposed on them, rather than when they are personally interested in academic values (Ratelle et al. 2005). To solve such conflicts it has been suggested, among other ideas, that goals should be realigned, i.e. re-evaluated. This may even include downgrading academic goals,

even though this may seem to be problematic in our social context. Another possibility is creating habitual behavior, such that each goal is allocated a particular amount of time. There is also, of course, the option of trying to make academic goals as pleasant and interesting as possible so that students feel more “intrinsically” drawn to achieving them (Hofer 2007). The “benefit of motivational conflicts”, as Hofer (2007, p. 31) says, is that they signal that the person’s well-being is in danger and that something has to be done.

What our research suggests is that simply observing choice behavior or measuring the extent of opportunities does not suffice to get a sense of the well-being of the person. In particular, inconsistent behavior cannot simply be classified as irrational and left there. What we show with our research is that inconsistent behavior acts as a signal of an underlying conflict and if psychological literature is followed this implies stress and ill-being. If inconsistent behavior persists, this should be taken seriously in any welfare evaluation. We also suggest that people may come to solve their conflict over time by taking actions. According to our assumptions, people’s motivations adapt in different ways (we consider reinforcement and dissonance reduction in particular) to their actions and experiences, and this may help them to find a solution to their conflict. Hence opportunities matter, as more options enable them to adapt and come to terms with their conflict on their own. However, solving a motivation conflict through dissonance reduction, i.e. goal-adaptation in our case, may not necessarily be the best solution possible for a person.

It must however be pointed out that, given our assumptions, there is no guarantee that the conflict will actually be resolved. We only assume a very limited form of rationality, namely that individuals will not choose options which are dominated by others that are more satisfying in terms of both motivations (DOM). In particular, we do not assume (in contrast to the argument set out in the next section) that the individual has any knowledge about the consequences of her actions, that is, about motivation change. In that sense the individual is rather myopic. She does not know that by engaging in inconsistencies, i.e. by acting, she may eventually solve the conflict and come to like what she aspires to do. The question therefore is whether greater knowledge of one’s own motivations and psychological features such as particular motivation changes provides a different way of resolving motivation conflict and thus forming a preference. This is discussed in the following two sections.

## **5.5 Commitment à La Elster and Schelling**

Preference change has been discussed a lot in the context of commitment. Jon Elster, one of the leading scholars on this and related questions, defines commitment (or precommitment as he calls it) as “an agent’s desire to create obstacles to

his or her future choice of some specific option or options” (Elster 2000, p. 5).<sup>5</sup> It is a particular rationality over time in the sense that “[a]t time 1 an individual wants to do A at time 2, but anticipates that when time 2 arrives he may or will do B unless prevented from doing so. In such cases, rational behaviour at time 1 may involve precautionary measures to prevent the choice of B at time 2, or at least to make that choice less likely” (ibid.). Commitment in this sense serves to overcome preference change, hyperbolic discounting (which results in preferences changing), but also to limit the influence of passion on decision-making. A spendthrift may commit to save money by opening a saving account that does not allow money to be withdrawn for a certain period of time. This limits the possibility of revising at time 2 a decision taken at time 1. A compulsive shopper may not want to own any credit cards, but only to spend the cash that she gets over the counter at her bank. A person who has difficulties getting up in the mornings may place her alarm clock at the other side of the room to force herself to get up instead of lying in and being late for work.

It is interesting to note that the need for commitment has been explained in various ways, but never explicitly on the basis of conflicting motivations. Elster’s discussion of passion as a reason for self-binding constraints may come closest to motivation conflict. He uses “[...] “passion” in an extended sense that covers not only the emotions proper such as anger, fear, love, shame, and the like, but also states such as drunkenness, sexual desire, cravings for addictive drugs, pain, and other “visceral” feelings.” (Elster 2000, p. 7). Passions can have different influences on decision-making: they may (1) distort or (2) cloud cognition, they may induce (3) weakness of will, and (4) myopia. To illustrate this he discusses the example of a person who goes to a party and decides that it is safe to drink two whiskeys but no more so as to be able to drive home safely, but then this person is observed to take a third whiskey. She may have done so because (1) she engages in self-deception and now thinks that it is safe to drive home even after three whiskeys, (2) her desire to drink a third whiskey crowds out all other considerations, (3) she acts against her better knowledge, that is, although she knows that it is better just to drink two whiskeys she chooses the inferior option of taking a third whiskey, or (4) she no longer sees the danger of driving home after drinking three whiskeys.

However, passions are not the only reason for preference change: there is also time-inconsistency due to hyperbolic discounting. In this case, nothing happens other than the passage of time. Hyperbolic discounting means that the person has a

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<sup>5</sup> Sometimes this definition may cause confusion. In fact, commitment, we think, is most commonly understood as “sticking to” or “being dedicated to” a cause, action, activity etc. and one way of doing this would be by imposing self-binding constraints. The definition by Elster cited above reads as if commitment was meant to be the desire to create obstacles with a view to sticking to a certain action or cause etc. The effect at the end is the same, but in the former case commitment is the result, while in the latter case it is the means to achieve a particular behavior. We think that commitment should not be restricted to be self-binding constraints (or the desire thereof) but to the fact that if a person is committed, she is engaged with carrying out a particular action, activity, etc.

strong preference for the present over any future, and a decision taken at time 1 may not be followed up at time 2 simply because the future has become the present. When the person is at the party, she now prefers three whiskeys to two, the number that she preferred before going to the party.<sup>6</sup>

Tom Schelling, another specialist in commitment, thinks that preference change could arise because “[t]wo or more values alternately replace each other; or an unchanging array of values are differentially accessible at different times, like different softwares that have different rules of search and comparison, access to different parts of the memory, different proclivities to exaggerate or to distort or to suppress” (Schelling 2006, p. 71). Thus while the person values soberness and responsible behavior before going to the party, at the party those values become less important or may even vanish and the person values the company of friends and the enjoyment of an excellent whiskey. Or the sight of whiskey changes the chemical environment of the brain and triggers a craving for more. “In common language,” Schelling says, “a person is not always his usual self; and without necessarily taking sides as between the self we consider more usual and the other one that occasionally gains command, we can say that it looks as if different selves took turns, each self wanting its own values to govern what the other self or selves will do by way of eating, drinking, getting tattooed, speaking its mind, or committing suicide.” (pp. 71–2).

The above-discussed example can of course easily be set in the context of motivation conflict. Suppose again that the motivations are pleasure and goal related: for one, the person likes being in the company of friends and drinking alcohol. However she also does not want to be a danger to herself and to others by driving under the influence of alcohol. But being at the party and deciding whether to drink one more whiskey or not precisely brings those motivations into conflict with each other. In such a situation, the question is whether the person sticks to her previous decision to have only two drinks or gives into her pleasure and has another.

Elster says that commitment requires a certain kind of rationality that foresees what he calls preference change such that one may engage in self-control techniques. Like Elster, we now also assume a more forward-looking rationality, or in other words, more self-knowledge. In our conflictual motivations context this means that the person has some understanding of the consequences of taking a particular action. That is, she knows that she will experience reinforcement and may in certain cases engage in dissonance reduction.<sup>7</sup>

Assume that going to the party and drinking two whiskeys is an action that satisfies both the pleasure of being with friends and the goal of being a prudent driver. But the person in question also knows (from previous experiences) that

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<sup>6</sup> Elster also discusses time-discounting for strategic reasons. For this latter phenomenon, interaction with others is necessary. We do not discuss this aspect here because we are only concerned with non-strategic individual decision-making.

<sup>7</sup> For a formal treatment of these questions see Arlegi and Teschl (2013).

when she is at the party, reinforcement will kick in and she will enjoy the company of her friends and the drinking of two glasses of whiskey more than she currently expects to. She can react to this in two possible ways. Either she gives priority to her goal or to her pleasure. We call giving priority to the goal “committing to the goal” and giving priority to the pleasure “committing to pleasure”. This must be differentiated from committing to a particular action because it may not necessarily imply the same thing. Committing to pleasure means the following: knowing the consequences of her actions, namely that she will experience even more pleasure when at the party through reinforcement, the person may reason that if she was ready to accept a certain level of pleasure before going to the party, she may well stick to that level of pleasure, and instead increase the satisfaction of her goal of being a prudent driver. That is, she could enjoy the party as much as she now thinks she will by actually drinking less, i.e. only one glass of whiskey.<sup>8</sup> The repetition of such decisions (the person may be invited to more parties) may make the person not drink whiskey at all, but still enjoy the party all the same (and eventually more and more over time). In this case the person is in fact inconsistent at first as she revises a previous decision, but commitment to pleasure triggers a form of *commitment process* at the end of which the person will have fully satisfied her goal of being a prudent driver, which she enjoys being, and will act consistently from then onwards. That is, at the end of the process, she will be committed to an action and will therefore reveal a preference in the economic sense.

On the other hand, if she commits to her goal, she sticks to her two glasses of whiskey in order to be a prudent driver and she can do so because she knows that she will enjoy the party more than she now thinks through reinforcement. That is, being less myopic and aware of the consequences of her actions actually enables the person to commit to a particular level of goal achievement. In this case the person acts consistently (she satisfies IIA) and reveals a particular preference from the very beginning, as in the case of commitment to an action à la Elster and Schelling. Even on future occasions, she will be able to stick to her goal and eventually come to enjoy it more and more through reinforcement.

The above-described cases of commitment may however not hold or hold differently if going to the party satisfies only one of the two types of motivation. Suppose first that going to the party and drinking (only) two glasses of whiskey is an action that satisfies the person’s goal of being a prudent driver but not her pleasure because she is usually a person who likes to drink a lot of whiskey. In such a case, only commitment to a goal makes sense. The person will be able to stick to her two glasses of whiskey because she comes to enjoy it more and more over time.

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<sup>8</sup> Given that the current action has become more pleasant through reinforcement, the importance of an action that at first seemed to be less pleasant increases. In some sense, the person who commits to pleasure accepts that an action becomes as enjoyable tomorrow as the action she had chosen today and this is what she prioritizes when she “commits to pleasure”. Therefore reinforcement as we discuss it here can be said to have the opposite effect to the “hedonic treadmill”.

The difference from the situation described above is that the very first choice is a conflictual action, satisfying only the goal motivation and not both motivations.

Finally, if the choice of drinking two glasses of whiskey is an action that satisfies the person's pleasure but not her goal, commitment may be more difficult to achieve. This is because in addition to reinforcement, dissonance reduction comes into the picture and the effect of these two motivation changes are not necessarily easy to determine for a person. Suppose the person has lived under a strict no-alcohol rule over the last few months despite, in principle, enjoying drinking and going to parties. Hence deciding to drink two glasses of whiskey is giving into pleasure against the person's goal. Reinforcement again means more pleasure for drinking two glasses, which would usually (as in the cases above) induce the person at least not to drink more, if not actually to drink less. But in this case the person also acts against her goal (i.e. she would satisfy it less than has been the case so far) and she will experience dissonance and thus adapt her goal to decrease the negative experience of it. She may for example say that it is OK to drink some alcohol, as it will not do any harm. She thus slips further away from her goal of abstinence. Given this situation, the person will be faced with three possibilities: the increased pleasure and the reduction of dissonance may actually induce the person to drink even more. She likes drinking and because she now sees no problem in drinking a little, given goal adaptation, she will succumb further to her pleasure of drinking alcohol and partying with her friends. In this case, commitment will not be possible: the combined effect of motivation change and the knowledge of it starts a "perverse" or opposite process and the person ends up at a quite extreme situation in which she drinks several whiskeys. Alternatively, the person may regain control over herself after the first "slip" of drinking alcohol and may commit to a certain level of pleasure, which would then trigger the commitment process towards her revised goal (given dissonance reduction), as in first case described above. Finally, she may stick with that level of goal-commitment and come to enjoy drinking two glasses of whiskey more and more over time given reinforcement.

To sum up, in the context of motivation conflict a person may commit not to a particular action, at least at first, but to a particular motivation. This means that commitment may not lead to consistent behavior from the very first choice onwards as in those cases described by Elster and Schelling, in which the person is committing to a particular action. In our case, the person is consistent from the very first choice onwards only if she commits to a particular satisfaction of her goal motivation (which may, however, not be the best goal satisfaction imaginable). In that case, the person will reveal her preference as she acts consistently from then onwards. Committing to a certain level of the goal also implies that one's enjoyment of that decision will increase over time through reinforcement, but there may be some conflict left if the person does not choose the "highest" possible goal satisfaction. Consistent behavior will not be possible at first if the person commits to a certain level of pleasure. However, commitment to pleasure triggers a form of commitment process towards full goal satisfaction: by accepting a certain level of enjoyment and through reinforcement, the person will also be able to increase her goal-satisfaction.

## 5.6 Commitment à La Sen

In the context of our choice theory under motivation conflict, it also makes sense to discuss the other notion of commitment as presented by Sen (1977). Commitment for Sen is a different form of rationality, which motivates behavior that is not generally explicable in terms of standard self-interested preference maximization rationality. To be more precise, Sen distinguishes between three types of behavior: purely egoistic behavior, which is when the individual only considers her own consumption; behaviour based on sympathy, which is when the individual is concerned about the well-being of other people to the extent that it furthers her own welfare; and finally behavior based on commitment, which is when the individual is pursuing a certain cause or goal, is acting out of a sense of duty, or is following a certain social norm, without any particular gain to herself. Thus, whereas “[...] behavior based on sympathy is in an important sense egoistic, for one is oneself pleased at others’ pleasure and pained at others’ pain, and the pursuit of one’s own utility may thus be helped by sympathetic action” (Sen 1977, p. 326), commitment is “non-egoistic”: “One way of defining commitment is in terms of a person choosing an act that he believes will yield a lower level of personal welfare to him than an alternative that is also available to him” (p. 326). Hence with commitment, the norm that a person follows or the duty that she carries out is a goal that the person wants to achieve without expecting any increase in (or at least without expecting to achieve the highest level of) well-being. Moreover, Sen (1985) claims that such a goal may not even be the person’s own goal, but possibly the goal of someone else (or that of society). As an example, he refers to a Prisoner’s Dilemma game: relaxing on one’s own goal of getting the best outcome for oneself will actually lead to a better outcome for both players.

Sen’s idea of commitment has caused, and indeed continues to cause, some puzzlement. Elster (2000) refers to this kind of rationality as a form of “magical thinking” (p. 85) and claims to be unable to understand how commitment may lead to cooperation in a one-shot Prisoner’s Dilemma game. Hausman (2012, p. 61) sees commitment as a purely psychological constraint and considers it to be paradoxical that such a constraint, imposed by the pure act of will, may help the individual not to choose certain options (in contrast to some objective barriers that make some choices impossible). Pettit (2005) wonders how is it possible for someone to act on a goal that is not hers. Pettit argues that while he would understand a “goal-modifying commitment”, which would mean that if the case arises, the person changes her preferences to take account of particular norms or other people’s goals, he cannot conceive of a “goal-displacing commitment”, i.e. exchanging one’s goals for those of others. In Pettit’s understanding, therefore, commitment does not prevent preference change as Elster and Schelling see it, but rather induces preference change and it is this change, it could be said, that prevents the individual from acting on her self-interested preferences.

The problem with Pettit’s view again is that “preferences” change. As explained in the introduction, we can only talk about preferences if people are consistent.

But if their preferences change then they are precisely not consistent. In fact, according to Sen, commitment is a behavior that does not reveal any preferences: It is a “counterpreferential” choice (Sen 1977, p. 328). This is not to say that the individual is irrational, as standard economics would assume. One would need to know the “external reference” (Sen 1993) of what the individual is trying to achieve in order to know why she behaves in the way that she does.

We can however interpret commitment à la Sen as a situation in which the individual has not been able to compare all options with each other and to make up her mind. That is, the person may be torn between two competing motivations, which may again be called pleasure-oriented (e.g. choosing the largest piece of cake) and goal-oriented motivations (e.g. choosing the second largest piece of cake). This means that we go along with Pettit by saying that a person cannot follow a goal outside of her own “privateness” (Sen 1985) or subjectivity other than by being obliged to do so. But we also go along with Sen in arguing that the goal that a person has set for her does not necessarily contribute to maximize her own (personal) pleasure or satisfaction. When the person at a party never chooses the largest piece of cake, even if it is her favourite one, then she clearly acts in a way that does not give her the greatest personal pleasure. She is also not choosing the largest piece of cake on the grounds that she prefers her friend to have it (which would be a case of sympathy): The goal is to be polite and to respect certain social norms.

Given the context of conflict between pleasure and goal motivations, commitment à la Sen can be interpreted as a particular form of commitment as discussed above. In fact, Sen’s understanding of commitment would mean in particular that priority is given to a person’s goal-motivation. As stated above, a person can commit to a goal in two different situations: in one, the action that the person chooses following her goal commitment satisfies her goal only, that is, the person is faced with a conflictual action because the action is not pleasant for the person. In this situation, committing to the goal is “costly” to the personal satisfaction or enjoyment of the individual, which is how Sen defines commitment. However, Sen does not exclude the possibility that commitment may lead to an action that both satisfies the goal and increases the personal satisfaction of the person. In our context, commitment to a goal is also possible when there is an action that satisfies both motivations, that is, when the person engages in a non-conflictual choice. Contrary to Sen though, in our framework, when people commit to their goal-motivation they stick to that particular action and will therefore act consistently from then onwards. That is, they reveal a preference. Commitment à la Sen, according to this argument, is therefore not a counterpreferential choice but one that leads to the formation of a preference. It can also be deduced from our analysis that if people commit to a particular level of the goal, then over time they will come to enjoy that level of goal-achievement more and more through reinforcement. Commitment à la Sen may be costly at the beginning, but doing it again and again makes it more enjoyable.



## 5.7 Commitment and Well-Being

Commitment as discussed by Elster and Schelling, does at first not seem to mean the same thing as when the term is used by Sen. In the first case, commitment means sticking to a particular action and taking tempting alternatives out of the range of choices. This kind of commitment sounds counterintuitive to an economist insofar as it assumes that it is *better* to take away options so that they cannot be chosen. The common economic understanding is that more options are always better. In Sen's case, the rationality behind commitment is different: it goes beyond self-interested utility maximization. However, it may be said that Sen's commitment refrains from choosing self-interested options. This becomes clear if we analyse Sen's commitment in the context of motivation conflict. Indeed, as we have seen, if the two discussions of commitment are set in the context of conflicting motivations they prove to be very similar in structure and solution. Yet those solutions presuppose that the person has a good self-knowledge to the extent that she knows about motivation change and its consequences. Our approach does not imply per se that it is necessary to remove tempting options in order to help to stick to a particular choice, although people may want to do so, especially when they commit to a goal, which would mean sticking to their choice from then onwards. However, commitment to pleasure necessarily involves a commitment process, which implies that a larger set of possible options is needed to undergo that process. Removing options from the set of choices may therefore have a damaging effect on commitment.

Commitment to a particular action is widely seen, in both economics and psychology, as something that solves a conflict and thus improves a person's welfare. The general view in the psychological literature on motivational conflict is that people should be helped to achieve their goal, as failing to do so may have dramatic negative consequences in terms of well-being for an individual. Such consequences may include obesity, not enough saving for retirement, becoming a drug addict or an alcoholic or failing to earn a high school diploma (Milkman et al. 2008). There is also an important line of research that explores how policy makers could increase the chances of people committing to their goal without restricting choice or opportunity (in contrast to the research that explores the possibility of different commitment devices, which would restrict choice). For example, Bazerman et al. (1998) show that when a particular motivational conflict between what the person "wants" to choose and what the person "should" choose exists in evaluation exercises, people tend to choose the "should" option in joint evaluations, but their "want" option in separate evaluations. This clearly indicates that the availability of more options actually helps the individual to focus on what she "should" do, or on her goal options, as we call it here. This brief discussion suggests that research into psychological conflict and its solution provides new insights into human behavior and well-being. We believe that taking this account would certainly enrich economic literature and its depiction of individuals.

## 5.8 Conclusion

This paper shows that, under particular assumptions, inconsistent behavior is the consequence of conflictual choices. These are choices that satisfy at least one but not all of the underlying motivations that an individual may have. When people engage in inconsistent behavior (e.g. choosing one option at one time but another option at another time even if the previous option is also available), economics is usually unable to characterize their well-being because the prevailing assumption is that people are able to form an *all-things-considered* preference ordering over all admissible options and choose the option that they consider best for them. However, if people are unable to compare all options with each other, e.g. because, as assumed here, of an underlying motivation conflict, there is no *best* alternative to be chosen. Psychological research however shows that internal conflicts can be a cause of much pain and illfare for individuals. Hence if internal conflict leads to inconsistent choices then, as we claim here, economics should start considering those choices seriously and not only as pure irrationalities, especially if it wants to be able to measure individual welfare.

We also show that internal conflict can be solved either by acting through endogenous motivation change (we considered reinforcement and dissonance reduction as examples), or through commitment. This raises the question of when commitment, seen as sticking to one action, is possible in the context of choice under competing motivations. Clearly, commitment may be achieved or at least its achievement can be helped if obstacles are imposed. However, we attempt to show that knowing about one's underlying motivation conflict in addition to knowing how motivations change with the choices made may also create an environment in which people achieve commitment. Commitment is therefore seen here as a "volitional" solution to motivation conflict. Commitment is also in this sense a way to improve one's well-being.

Critical thinkers may argue that our approach to commitment, whether it is commitment to a particular goal-achievement or to a particular level of pleasure, relies on the same magical thinking that Elster sees in Sen's analysis of commitment, simply because it is based on, as Hausman would say, the paradoxical idea that a person can constrain her set of options to a particular choice by an act of will. We can give three answers to this critique. One is that in our context the person who commits to a particular goal or pleasure forms a preference, but does not commit to act against a preference, as is the case in both the accounts of commitment referred to here (Elster/Schelling and Sen). In fact, following Hausman (2012), "preferences are total comparative evaluations, more like judgments than feelings" (p. 135, see also p. X). Commitment as we describe it is such a judgment: It is a conscious decision based on the fact that the person is aware of her motivation conflict and of the consequences of her actions and is thus helping to *form* a preference.

Second, as mentioned above, even if our commitment is a form of psychological process, comparable to an act of will, it does not exclude the fact that people may impose objective barriers in order to take or not to take certain actions.

For example, a person may join a sports club in order to have more incentive to get out of bed in the mornings before she goes to work. But even such an objective barrier does not abstract from the decision problem at the time when the person wakes up and has to decide whether to get out of bed or lie in for another hour. Also, in many cases there are no objective barriers to help take decisions. In following the social norm of politeness, there is no objective barrier that a person can impose on herself that helps her not to take the largest piece of cake. It is something that she has to decide by herself.

Finally, an act of will is obviously a form of self-control. There have been many experiments, starting with the Stanford marshmallow experiment conducted by Mischel et al. (1972), that have demonstrated that people, and in this particular case even 4 year old children, are capable of resisting the temptation of eating a cookie immediately without any objective barriers. It is also known from these experiments that those who are capable of greater self-control tend to have a greater intellectual aptitude. There are of course other psychological theories on self-regulation that discuss psychological and cognitive procedures that determine how to deal with intrapersonal conflict or other aversive subjective experiences (e.g. Bandura 1977; Carver and Scheier 1990). Self-control as an act of will is therefore an important aspect of people's life and in this paper we show when that act is more likely to occur. Therefore, it is not quite clear what is so magical or paradoxical about an act of will, especially if, as we propose here, there may be changes in motivations that help to strengthen the will.

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