

Intrinsic Motivation in a New Light

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I. INTRODUCTION

Economics is solidly based on the workings of incentives. Extra rewards will increase and extra costs will decrease the frequency of a particular type of behavior. In sociology, Weber had pointed to a kind of behavior that was presumably not steered by incentives: value-rational behavior, found in religions and strong reasoned convictions. Because of an increasing rationalization of the world, Weber saw this kind of value-rational behavior slowly displaced by what he called goal-rational (*zweckrational*) behavior. Though often a popular topic of discussion, the displacement of value-rational by goal-rational behavior had never led to a viable research program within sociology. Instead, it was psychologists who had discovered a related issue of ‘intrinsic’ versus ‘extrinsic’ motivation. For intrinsically motivated behavior, there is no apparent reward but the behavior itself. The psychologists had been able to forge a booming program over many years. On this basis, Frey (1997) reintroduced the issue back into the social sciences which, in turn, drew attention to the work of these psychologists. Within psychology, the research by Deci (1971) and Lepper et al. (1973) was a pioneering stab at behaviorist theory by pointing to situations in which rewards decrease rather than increase the frequency of behavior. This work had spawned a thriving research paradigm (Deci and Ryan 1985)¹ and a host of studies. Briefly, the findings converge to the following. Expected tangible rewards tend to reduce intrinsic motivation whereas praise and other posi-

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1. In fact, there is a family of research paradigms with divergent and partially overlapping theories of why rewards could displace intrinsic motivation. Examples of such paradigms are Deci and Ryan’s Cognitive Evaluation Theory (CET) (see Deci and Ryan 1985); Lepper’s overjustification theory (see Lepper et al. 1973); and Harackiewicz and Sonson’s goal theory (see Harackiewicz and Sonson 1991). CET has had the largest effect outside psychology and will therefore be taken here as the main paradigm.

tive verbal feedback tend to increase it. Should this mean that if we want people to be intrinsically motivated they should not be rewarded with, say, money? If this were so, we would indeed have a program diametrically opposed to the economic program that is based on material incentives and possibly closer to a sociological program in which social rewards play a much more prominent role. Are the theories and findings strong enough to warrant strong conclusions in this respect?

II. WHY WE NEED A FRESH LOOK AT INTRINSIC MOTIVATION

With all due respect for the achievements of this research paradigm, there are signs of exhaustion. Recent overviews and meta-analyses, as well the debates in the literature (see Cameron and Pierce 1994, Tang and Hall 1995, Ryan and Deci 1996, Cameron and Pierce 1996, Lepper, Keavey, and Drake 1996, Eisenberger and Cameron 1996, Deci, Koestner, and Ryan 1999) begin to be repetitive and/or deal with ever increasing minutiae. The major operational definition of intrinsic motivation (*viz.* the freely chosen continuation of an activity in 'free time', measured in seconds) had been very important to bring unity to this field of inquiry. However, concerns with the ecological validity of this measure have been washed out by the sheer frequency with which it was applied. As a result, the very distinction between the inherently 'noble' connotations of intrinsic motivation and obsessive and addictive behavior has been left unexamined. Imagine a mother who would boast to her neighbor about the intrinsic motivation of her twelve-year old son who stays in the local game hall for hours each day playing pinball. This could have been a New Yorker cartoon. Yet, 'free choice' continuation of playing pinball has been seriously used to measure intrinsic motivation (see Harackiewicz and Elliot 1993). Other activities used to measure intrinsic motivation (computer games, puzzles, etc.) are not much different. Related to this point is the uncertain role of *enjoyment*. Enjoyment or 'fun' derived from an activity is actually at the heart of the conceptualization of intrinsic motivation for most authors (see Deci and Ryan 1985, p. 28f.). The contrast (*i.e.*, extrinsic motivation) is doing an activity with a feeling of being pressured, tension, anxiety, just in order to get a desired result. At the same time, Deci and Ryan conceptualize intrinsic motivation as coming from organismic needs for competence and self-determination. The ironic result is that Deci and Ryan are forced to exclude enjoyment that seemingly does not clearly derive from the satisfaction of these two needs. In this way they cut the phenomenon to be just small enough to fit their explanation,

which creates much confusion (Deci and Ryan 1985, p. 83)². These concerns might be reason enough for a fresh look.

But there are other concerns. The old front against which this kind of research was originally developed (drive theories of motivation and stimulus-response theories) has become stale. Today, there is a great number of other developments, in cognitive psychology, in economics and in sociology, that could yield new and interesting challenges. For example, Frey has made considerable use of psychological research on intrinsic motivation for the development of his 'economic' theory of intrinsic motivation. He has subsequently applied the theory to a great number of institutional contexts, including tax systems (Frey 1997). In this context, intrinsic motivation has acquired the meaning of being motivated to do something without being forced by commands and without being (non-routinely) paid to do it. This prominently includes *feelings of obligation* (for example, tax morale) in the category of intrinsic motivation, quite contrary to the reigning definition of intrinsic motivation as 'self-determined' choice.

'When self-determined, one acts out of choice rather than obligation or coercion' (Deci and Ryan 1985, p. 38).

The psychologists do not show any sign of serious curiosity about what may be meant by 'self-determined choice' and do not address issues of moral (i.e., standard- or principle-induced) behavior versus reward-induced behavior (see Lindenberg 1983). For Deci and Ryan, the self seemingly always knows what it is that satisfies the needs for competence and self-determination. There could not possibly be a conflict between realizing values and enjoyment. Frey has pragmatically chosen to ignore these difficulties but this restricts his own work as well.

Related to this point, there is a third reason to take a fresh look. In order to work with the concept of intrinsic motivation in applied contexts in any meaningful way, one has to stretch it far beyond the boundaries that the narrow theoretical discussion has imposed on the concept. In this sense, Frey is right to break out of the narrow confines of what Deci and Ryan's *Cognitive Evaluation Theory* (CET) has made of intrinsic motivation. Even Deci and Ryan seem to begin to realize their self-made confinement. In their book of 1985 it is clear that intrinsic motivation is meant to cover basically much of human motivation, that to deal with basic human *psychological* needs was to deal with the ins and

2. For example, Deci and Ryan exclude reward-induced enjoyment (see Deci and Ryan 1985, p. 83), a point justly criticized by their adversaries Eisenberger et al. 1999, p. 685).

outs of intrinsic motivation (Deci and Ryan 1985, p. vii f.). Recently, however, the authors observed that

‘most of the activities people do are not, strictly speaking, intrinsically motivated. This is especially the case after early childhood, as the freedom to be intrinsically motivated becomes increasingly curtailed by social demands and roles that require the individual to assume responsibility for nonintrinsically interesting tasks’ (Ryan and Deci 2000, p. 60).

As a consequence, these scholars have greatly increased their attention to various forms of extrinsic behavior, because these forms approximate to various degrees the realization of psychological needs.

Where to begin with a fresh look? The field of inquiry seems at present to be stuck with two very incomplete theories. First, there is a more or less implicit theory of the workings of *rewards as mechanisms that steer the ‘orientation’ or definition of the situation*. Because this theory is not brought into the open, it cannot be explicitly discussed, improved, connected to other on-going cognitive theories in this area. Second, in CET (Deci and Ryan) there is a more or less implicit *theory of subjective wellbeing*. In this theory, only two ‘needs’ are being considered: the need to be competent and the need for self-determination. There is no consideration of the possible interaction of these needs with other needs, and no consideration of general conditions for the production of wellbeing. This has the advantage of focussing entirely on two needs deemed centrally important, but it has the disadvantage of creating a distorted view of ‘all other things’ as disturbances for the ‘true’ sources of subjective wellbeing.

‘When people are free from the intrusion (sic!) of drives and emotions, they seek situations that interest them and require the use of their creativity and resourcefulness. They seek challenges that are suited to their competencies, that are neither too easy nor too difficult’ (Deci and Ryan 1985, p. 32).

III. HOW DO REWARDS STEER ORIENTATION?

People

‘vary not only in *level* of motivation (i.e., how much motivation), but also in the *orientation* of that motivation (i.e., what type of motivation). Orientation of motivation concerns the underlying attitudes and goals that give rise to action – that is, it concerns the *why* of actions’ (Ryan and Deci 2000, p. 54).

Thus, one of the basic mechanisms that supposedly steers the workings of rewards on motivation is cognitive. ‘The effects of rewards necessitate a differentiated analysis of how the rewards are likely to be interpreted by the recipi-

ents' (Deci et al. 1999, p. 658). In this sense, the research is embedded in a psychological tradition that was prepared by Lewin but began to take flight with scholars like Festinger, Heider, Schachter, Jones, and Kelley.

In the literature, we find two different but related rudimentary cognitive explanations of how rewards affect motivation. They cannot be assigned to particular authors because they are both used by most of them³. One explanation runs via processes of attribution. Situational aspects determine whether one attributes one's own action to oneself or to an external cause. In the former case, one will be intrinsically motivated (say, activity is 'play'), in the latter extrinsically (say, activity is 'work'). The crucial point is what reason the person perceives for his or her own action. For example, being paid for an activity would be likely to make the person attribute getting the payment as the reason for his or her activity, drawing attention away from enjoyment as a possible reason. Another explanation (Deci and Ryan 1985, p. 90) is that situational information will lead to the experience of the situation as controlling or as informational about one's competence. In the former case, a reward will lead to extrinsic motivation, in the latter case to intrinsic motivation. For example, the feedback 'excellent, you should keep up the good work' will be experienced as controlling whereas the feedback 'compared to most of my subjects, you are doing really well' will be interpreted as informational about one's own activity. The two explanations can be linked in the sense that the experience of control is accompanied by the attribution of one's actions to an external cause. Yet, with over twenty-five years of research, these explanations have not been worked out or studied in any detail. Deci and Ryan seem to be aware of this. In their thorough overview of the research that has been done, they conclude that

'as with CET, the attributional approach has not been well examined in terms of specific mediational processes' (Deci et al. 1999, p. 653 f.).

1. A Theory of Framing

On the basis of more recent work in cognitive psychology, one can say that processes of attribution and of controlling experience only deal with some of the relevant aspects that affect the 'orientation' of motivation. What is missing is the explicit consideration of the influence of goals⁴. This link of goals to ac-

3. According to lore in the field, the first (attribution) explanation is used by Lepper and his group whereas the second (self-determination) one is used by Deci and Ryan. In practice, we find both groups of researcher use both explanation.
4. Goals can be considered the most important influence on a person's cognitive activity and thereby on the action that is based on such activity (see Gollwitzer and Moskowitz 1996, Kruglanski 1996).

tion via selective cognitive processes has been worked out by Lindenberg (1989, 1993a) and will be briefly presented.

In any situation, a number of goals can possibly be active. Goals seem to steer selective cognitive processes in such a way that they compete for the privilege of being on center stage⁵, i.e., use scarce cognitive resources, such as access to memory, attention etc. The goal that wins out in this competition strongly influences the *frame* within which the *selective cognitive processes* take place: certain aspects are being considered in more detail, certain categories and stereo-types are activated, certain heuristics for goal achievement, certain knowledge chunks and attitudes are being mobilized, the individual becomes particularly sensitive to certain kinds of information; certain options are selected as choice alternatives; and the alternatives will be ordered in terms of their relative contribution to goal realization⁶. For example, it has been shown that individuals' negotiating behavior is affected by the goal that is given to them in the instructions ('be cooperative' or 'be competitive', see Carnevale and Lawler 1986).

The frame also reduces the salience of the other goals which are relegated to the background⁷. However, and this is quite crucial, the goals that did not 'make it' are not discarded. Rather, they are still active in the 'background' and, depending on their strength and compatibility with the 'main' goal, weaken or strengthen the grip the frame has on the scarce cognitive resources⁸.

Example. Let us look at an example in some more detail. Say that in a task situation, the relevant goals are 'to make as much money as possible' and 'to have fun'. For the sake of the argument, let us assume that the goal 'to make as much money as possible' wins. This creates a specific *frame* in which those aspects of the situation that are relevant for making money become salient, the heuristics for the determination of options (in terms of the amount of money that can be made) are chosen and the alternatives are ordered accordingly. The attitudes that are mobilized are specific to those aspects of the task that have to do with making money.

5. This process is akin to the model of the activation of brain cells by Desimone (his 'biased competition model', see Kastner, De Weerd, Desimone, and Ungerleider 1998).
6. In part, this process works via *priming*, that is, certain stored knowledge, categories, or attitudes can selectively become more easily accessible thereby influencing a person's information processing (see Higgins and Brendl 1995). Note that although these effects steer attention, they need not be conscious or work via prior intention.
7. Aspects not belonging to the frame are inhibited, thus creating a double selective effect (see Bodenhausen and Macrae 1998 and Houghton and Tipper 1996).
8. Theories on attribution processes are too little concerned with these aspects of the interrelation of goals in order to be able to even consider the effect of more than one goal at a time.

The goal in the foreground and the frame it triggers is, however, not the whole story. There are many ways in which alternatives can be chosen and ordered in such a way that they go from large to small amounts of money. It is the background goal 'to have fun' that plays an important role here. A crucial question is whether the goal 'to make as much money as possible' is or is not compatible with having fun. If it is not, the background goal will influence the selection of alternatives in such a way that the alternatives that are ordered in terms of decreasing amounts of money will simultaneously be ordered according to an increasing amount of fun. The relative strength of the goal in the foreground and the background goal is then expressed in terms of the skewness of the probability distribution of choices over the alternatives. By definition, the background goal is weaker than the foreground goal (otherwise the positions of the goals would have been reversed). If the foreground goal is much stronger than the background goal (which could happen if there is much money to be earned or if there is not much fun to be had in this situation), the top alternative will be chosen with a probability close to unity. The more the relative strengths of the goals approach equality, the more *equal* the distribution of the choice probabilities over the alternatives, i.e., the less monetary rewards have an impact on behavior.

Note that there is a definite framing effect, even when the frame is weak. First, the cognitive processes center around making money, and second, 'to have fun' is in the background and it is weakened by the frame. Thus, it is not possible that in such a frame the individual will either go all out for the money or go all out for the fun, depending on the net utility of each alternative, as Subjectively Expected Utility theory would have it. In such a money frame, the incompatible goal 'to have fun' simply dampens the impact of money on behavior to various degrees. Ironically, it is *because* the low degree of enjoyment derived from the task that monetary incentives don't work well. The wish for enjoyment increases the probability that alternatives with poor earning quality are chosen. If pressed to describe the task in terms of intrinsic and extrinsic motivation, the individual would probably describe it as extrinsically motivated, even though the external rewards fail to have much effect on his or her activity.

In case the background goal 'to have fun' is reasonably compatible with making money, it will increase the strength of the money frame, thereby *increasing* the impact that money has on steering selective cognitive processes and behavior. Because the compatibility is not total, the individual will at times choose alternatives that are only second best in terms of making money. But, ironically, it is *because* (not in spite of) the person's enjoyment of the activity that he or she would perform it generally the less, the smaller the contingent monetary reward. By just observing the behavior, we cannot infer that the indi-

vidual ‘must’ see the own behavior as extrinsically motivated, feeling pressured or coerced to go for the money⁹. If interests can be properly aligned, any CEO would like his or her personnel to be motivated in this way. The claim that whenever wages are used to motivate people ‘they will surely (sic!) be experienced controllingly and will undermine intrinsic motivation’¹⁰ is dubious at best. As we just saw, one cannot use the payment elasticity of effort as proof that the activity must be less enjoyable than it would be without remuneration.

Sustainability. On the basis of the CET theory of intrinsic motivation one cannot not identify the crucial point in this context which is *sustainability*. Given a money frame, the individual heuristics are geared towards making money and he or she is most sensitive to information that has to do with making money. *Adaptations* over time in the activities that have to do with making money will thus follow the logic of the goal ‘to make as much money as possible’ so that the compatibility with the background goal ‘to have fun’ are likely to gradually erode, leading to a decline in the payment elasticity of effort *and* a decline in having fun doing the job. In this sense, extrinsic (payment-based) and intrinsic (enjoyment-based) motivation (if I may use these terms in their intuitive meaning here) decline together. For the company in our example the question would not be to forego payment as a device for motivating workers but to periodically attempt to align the goals of money and enjoyment, including such possibilities as identification with the company (Lawler III 2000). For reasons of space, I will not go into the various permutations in which ‘having fun’ is a stronger goal than ‘making as much money as possible’. But even without elaboration, it is clear that the sustainability of a focus on the job with enjoyment is even smaller than when the strengths of the goals was the reverse, and no CEO would be better off with this balance of goals. A useful theory of intrinsic motivation would have to be able to address such issues of sustainability.

Framing theory allows one to consider various goals at the same time and distinguish their impact on behavior depending on frame and compatibility of frame and background goals. Later I will come back to issues of obligation, competence, self-determination and sustainability. First, I will deal with the question of needs and goals.

9. In some intuitive way of using the term, one could even say that in this case the individual is ‘free choice’ (i.e., intrinsically) motivated to earn money. In their new recognition of the finer distinctions, Ryan and Deci (2000, p. 61) would call this situation extrinsic but also ‘somewhat internally’ motivated.

10. Deci and Ryan 1985, p. 300.

2. *A Theory of Goals*

Deci and Ryan have made it quite clear that their theory is first and foremost a theory of the satisfaction of two basic psychological needs: self-determination and competence (Deci and Ryan 1985, p. vii). Ultimately, they are interested in human wellbeing. The problem is that they do not present a full-fledged theory of needs so that the link of self-determination and competence to other needs remains unexplored which creates, among other things, the difficulty of dealing with enjoyment and obligation. In the following, I will briefly sketch a theory of human goals that has been developed over the last fifteen years, the *theory of social production functions*¹¹ (hereafter called SPF theory), and I will subsequently relate this theory to the issues at hand.

There are two hierarchies of goals. One is a hierarchy of *substantive* goals, with 'subjective wellbeing' at the top. The other hierarchy contains the *operational* goals, with 'to improve one's condition' at the top. Operational goals are concerned with changes in the achievement of substantive goals. For both hierarchies, the basic idea is that human beings produce their own wellbeing within the possibilities they can find. They are resourceful about it, search for new possibilities, are able to learn and substitute one means to reach a goal by another if that means is deemed 'better' in some as yet unspecified way. Both hierarchies are structures of functionally related means and ends. Therefore, one can speak technically of a hierarchy of 'production functions'. These functions are 'social' in the sense that they are heavily influenced by the social environment, as we will see. This explains the name 'social production function theory'. The quality of a production function is the better the more effective and efficient the means are 'producing' a unit of realization of the goal. The hierarchy is not strict because a means on the lower level may be productive for a number of higher-level goals. For example, money can be used to realize a great number of higher level goals¹². I will speak of 'means' or 'resources' when a person uses a means of production, and of 'instrumental goal' if the person would like to realize a means he does not have. Thus money can be a means if one spends it or an instrumental goal if one would like to make it. Let me briefly introduce each hierarchy in order.

1. The Hierarchy of Substantive Goals

The hierarchy of substantive goals has a top of three layers with goals that are presumed general and universal. Below this top, instrumental goals are specific

11. See Lindenberg (1986, 2001), Lindenberg and Frey (1993), Ormel et al. (1999).

12. Thus the mathematical structure of such a hierarchy is a semi-lattice.

to cultures, groups, individuals. The further down one gets in the hierarchy, the more idiosyncratic the goals are. The universal goals consist of three layers. At the top of the hierarchy there is 'subjective wellbeing'. Directly below the top, there are two general goals that jointly produce subjective wellbeing: physical and social wellbeing¹³. It is *physical wellbeing* that is generally associated with a feeling produced by 'drive reduction' (against which Deci and Ryan have set psychological needs). Its dimensions become clear if we look at the instruments for realizing physical wellbeing. One such universal instrument is *comfort*, i.e., being free of noxious stimuli such as pain, hunger, fatigue. By an often implicit assumption that effort brings about a reduction in physical wellbeing, economists at times introduce effort as a reduction in comfort and thus as cost, an important assumption, not just for labor market theory. There are, however, good reasons to assume that this identification of effort as cost is too restrictive. Human beings seem to prefer a certain level of activation above which effort is a cost and below which it is a benefit (see Hebb 1958). Thus, physical wellbeing is not just produced by comfort but also by *stimulation* (see Scitovsky 1976 and Wippler 1990). Even when stimulation is purely mental, it is here taken to be a means for physical wellbeing because of the importance of the level of activation. Comfort and stimulation can be seen as the major arguments in the production function of physical wellbeing. As goals, they are instrumental (for physical wellbeing) and universal (i.e., the same for all mankind). Instrumental goals on a yet lower level (such as an armchair for comfort or a scary movie for stimulation) are more specific to a particular culture or group within a culture.

The other major goal has been stressed over and over again by sociologists as the most important universal goal: *social wellbeing*, produced by some form of social approval. It was already quite clear to Adam Smith that

'nature, when she formed man for society, endowed him with an original desire to please, and an original aversion to offend his brethren. She taught him to feel pleasure in their favourable, and pain in their unfavourable regard' (Smith 1759/1976, p. 116).

Many other social scientists have identified social wellbeing (through various forms of social approval) as a major universal goal and I will not review them here. As in the case of physical wellbeing, the direct instruments for reaching

13. For a comparison of this approach with the well-known approach by Maslow, see Lindenberg (1996). Psychological wellbeing is not a separate category here for three reasons. First, subjective wellbeing can be taken as psychological wellbeing produced by physical and social wellbeing. Second, psychological resources (such as coping ability) play a role, like other resources, in the production of physical and social wellbeing. Third, emotions such as anxiety, joy, guilt etc. are associated with the (failure) of achievement of subgoals of physical and social wellbeing.

social wellbeing are themselves universal goals. The direct instruments have a long pedigree within sociology and are also corroborated by evolutionary arguments: Status, behavioral confirmation, and affection. *Status* refers to a relative ranking (mainly based on control over scarce resources); *behavioral confirmation* is the feeling of doing or having done 'the right thing' in the eyes of relevant others. 'Doing the right thing' is not restricted to overt action but also covers covert actions such as thinking certain thoughts, agreeing with certain maxims, adopting certain attitudes. The term 'behavioral' thus points to aspects the individual can be held responsible for in the eye of relevant others. The clearer the standards or norms for appropriate action or performance, the more important this source of social approval will be. An important point is that *the self* also gives or withholds behavioral confirmation for overt and covert actions of the individual. The person him- or herself is thus a prominent figure among the relevant others. This basic insight from symbolic interactionism has been stressed already by Adam Smith with his concept of the impartial observer. The third form of social approval is *affection*, the feeling of love and caring between people in a close relationship and the feeling of being accepted with regard to what one *is* (as opposed to what one has or does). There are also good evolutionary reasons for these three forms of social approval. In the environment of evolutionary adaptation, inclusive fitness is likely to have been essentially served by (a) resource holding power (leading to status-striving), (b) reciprocal altruism (leading to a striving for behavior confirmation from relevant others), and (c) kin altruism (leading to a striving for affection from people to whom one is closely tied)¹⁴.

There is no presumption that physical and social wellbeing and their direct instruments of production are completely substitutable. For example, up to a certain level, everybody needs affection. In this sense, comfort, stimulation, status, behavioral confirmation and affection are basic needs. Yet, above the (unspecified) threshold, substitution can take place. Then it is more appropriate to speak of wants that are governed by relative prices of production¹⁵.

14. All three universal instrumental goals are themselves emotional states or tied to emotional states, such as pride and dominance for status, guilt and shame for behavioral confirmation, and love and compassion for affection.
15. As in microeconomics, the theory assumes that substitution follows 'closeness' traded against price. For example, an individual will first try to substitute one instrument for reaching status by another, less expensive, instrument for reaching status. If this cannot be had, he or she will search for possibilities to substitute the production of behavioral confirmation for the production of status, then affection, and only then cross over to substitute the production of social wellbeing by more intense production of physical wellbeing.

Still lower level goals are entirely dependent on the opportunities and restrictions an individual faces. Resources (such as money, skills and competencies) allow certain production functions within the legal, social and cultural restrictions. For example, for both comfort and stimulation, virtually every adult in our society needs money (in order to buy material goods, rest, amusement etc.). In order to earn money, one may need a paid job, and for a particular job one may need a specific qualification.

The sociologically important point is that the social production functions are affected by subjective judgements but they are not idiosyncratic. Rather they are social facts in Durkheim's sense of the word. For example, in our society, status is to a large extent produced by having an occupation, and different occupations are more or less productive of status.

The heuristics for identifying goals is thus driven by a guided search for systematic production possibilities for social wellbeing (in its three forms) and physical wellbeing (in its two forms).

2. The Hierarchy of Operational Goals

At the top of the hierarchy of operational goals is the goal 'to improve one's condition'. This goal is chosen instead of 'maximization of utility (or subjective wellbeing)' for two reasons. First, there is convincing evidence that human beings judge their position according to a reference point that in many instances is the own status quo and/or a reference group¹⁶. And, related to this point, human beings will search for and often find possibilities to realize a state they evaluate more positively than the one they are in; they can learn and be inventive regarding this search (see Lindenberg and Frey 1993). Second, because the top of the hierarchy of substantive goals allows only limited substitutability, the operational goal cannot refer only to subjective wellbeing (or utility). Within the range in which substitution is not possible, the operational goal must also refer to physical and to social wellbeing and to each of the general instruments for reaching them. Only above a particular threshold is subjective wellbeing what one would call a 'maximand' in neoclassical price theory. Thus, to im-

16. Adam Smith had already drawn our attention to 'that great purpose of human life which we call bettering our condition', a desire that 'comes with us from the womb, and never leaves us till we go into the grave' (Theory of Moral Sentiments I.iii.2.1; Wealth of Nations II. iii.28). Sociologists and social psychologists have also long been arguing for the importance of social comparison processes (for example, Durkheim 1951, Festinger 1954, Sherif 1966, Merton 1957, Helson 1964). Within the context of utility theory, more recent contributions have pushed in the same direction, arguing for relative rather than absolute conceptions of utility (for example, Scitovsky 1976, Kahneman and Tversky 1979, Kapteyn and Wansbeek 1982, Frank 1992).

prove one's condition captures better than 'maximization' the psychological dynamics of the operational goal even though, for trivial cases, the two will lead to the same result.

Below this top goal, there is a number of general and universal instruments for improving one's condition and, below them, the means to realize these instruments. They are (i) ways to improve the quality of one's production functions; (ii) ways to improve the way one feels; (iii) the goal to act appropriately. Since all three are highly relevant for the discussion of intrinsic motivation, I will describe them succinctly in order.

The improvement of the quality of one's production functions. The quality of one's production functions is of great influence on one's condition regarding the level of achievement of all higher-level goal. Therefore, the improvement of the quality of one's production functions is an important instrument for overall improvement. On the level below, this goal leads to a number of instruments. First there are the *substitution and search* processes mentioned above and also *investment behavior* (say, investing in skills and competencies, and, in general the goal to increase one's resources). In the face of threats to production functions, the same goal leads to attempts to guard and protect existing production functions against deterioration. Second, there is the *reduction of the incompatibility* of production functions. Contradictory production functions lower results for higher level goals. An obvious example is the possible loss of affection by the partner when more time is put into the job. It seems that this could be covered by the previous goal (leading to substitution). However, the directed attempt at achieving compatible production functions is especially relevant for the ranges of high-level goals that are not substitutable and therefore deserve a separate place. In some traditions of social psychology, one would call the same process concern with one's identity.

The third goal is the converse of the second. It is the goal to improve efficiency and synergetic effects that can be achieved by *multifunctional* means. Such means are generally more efficient, *ceteris paribus*, than separate means for each higher-level goal. For example, money is a very efficient means because it allows one to realize a great variety of higher level goals with it. But there are also synergetic effects. For example, a 'good' intimate relationship with a partner is almost defined by multifunctionality. From her point of view (and vice-versa from his point of view): He is not boring (stimulation), he offers care and a good sexual relationship (comfort), he respects the other (status), he agrees with the overt and covert actions of the other (behavioral confirmation) and he loves the other (affection). In addition, he is generally supportive of the other's attempts to improve her condition by supporting her search and investment behavior, her identity concerns, and her longing for mul-

tifunctional contexts of interaction¹⁷. This view is corroborated by a recent study in which a SPF-based measurement for wellbeing was tested on a representative sample of the Dutch population. It turned out, as predicted, that personal relationships are (a) the most multifunctional sources of wellbeing and (b) the single most important contributor to wellbeing (see Nieboer et al. 2001).

The improvement of one's feelings. When one puts effort into improving one's production functions, one is concerned with longer-term effects on the highest-order goals. In sharp contrast to this kind of improvement is the goal to improve one's feeling, *here and now*¹⁸. The time perspective for this goal is thus very short-term. Feelings are attached to the five high order goals stimulation, comfort, status, behavioral confirmation, and affection. In order to 'feel better' one needs to improve one's conditions with regard to at least one of them and preferably more than one at the same time. A frame triggered by the goal 'to feel better' can conveniently be called a *hedonic* frame.

The goal to act appropriately. This goal is curious because it *seemingly* has no connection to the improvement of one's condition. I would like to argue that this seeming lack of a connection is essential for the production of social wellbeing in general and for behavioral confirmation in particular. In order to see the connection, we have to briefly look at the workings of norms. Norms are ubiquitous. They exist in every group. However, they require special attention with regard to what makes people follow norms. For the functioning of norms, it is essential that norm conformity does not rely exclusively on sanctions because the monitoring capacity of the group is never sufficient for that. Thus, it is important that people also keep to the norms when they are not observed. If it is obvious that a person only follows the norms in order to avoid negative and invite positive sanctions, he cannot be trusted to follow the norms when nobody watches. For this reason, wherever there are children, there is a regulatory interest by adults in them learning early on to consider doing what is 'right' as a value of its own (even though that behavior is stabilized by social approval and disapproval and by common good type good reasoning). In this way, trust and trustworthiness become attached to the *ability to have no seemingly ulterior motives* when behaving morally or following norms. A person who obviously conforms to norms in order to get social approval (behavioral confirmation and/

17. With slight alternations one can say the same thing about what we ideally mean by 'community'.

18. The goal 'to feel better' may involve opposite tendencies: to increase/decrease arousal (i.e., seek stimulation, say, through engaging in a risky activity, or avoid a stimulation overdose) and increase pleasantness/decrease unpleasantness (i.e., seek improved feelings regarding comfort, status, behavioral confirmation and affection). These two dimensions have also been identified as the main dimensions of affect and moods (see Russell 1983, Watson and Tellegen 1985).

or affection) or some other advantage is less likely to get it than a person who seemingly is 'intrinsically' motivated to act morally and follow the norms. The latter can expect much social approval and trust, for the same reason that adults attempted to make children learn the 'intrinsic' value of appropriate behavior in the first place. This lesson has been called the 'by-product paradox of social goods' (Lindenberg 1989) and it is reinforced time and again during the life course: in the realm of morality and norms, it is 'genuinely' non-instrumental behavior that is rewarded. Whereas this is especially so for social approval and trust, it also holds for other advantages.

With the help of framing, one can explain how this seeming paradox can work. The frame pertains to the goal 'to act appropriately' whereas the compatible goals in the background pertain to social wellbeing. Goals in the background do not define the action situation, and in this way it is possible that, subjectively and intersubjectively, there is no ulterior goal when such a *normative frame* is dominant. Yet, without this support from the background goals, the frame would weaken with time and give way to another kind of frame (say, one related to the increase of one's resources or to the improvement of one's feelings). Behavioral confirmation for one's action is essential to keep up the behavior that is supposedly independent of this reward¹⁹.

IV. INTRINSIC MOTIVATION RECONSIDERED

We now are able to address the question how the theory of framing and SPF theory are connected to intrinsic motivation. First, because enjoyment is so central to the discussion of intrinsic behavior, we have to deal with its conceptualization in the light of the two theories. After that, we have to deal with obligation.

1. Enjoyment

Enjoyment can be conceptualized as an emotion tied to improvement of one's condition (especially direct improvement). The broader-based the improvement (i.e., the more multifunctional the activity), the higher the enjoyment. There-

19. This veiled relation to any instrumental connection to the other frames can explain why social scientists have often insisted that morality is non-utilitarian (value or axiologically rational, intrinsic, deontological), whereas even casual observation shows that conformity to norms is sensitive to rewards (especially social rewards).

fore the central hypothesis on enjoyment-based intrinsic motivation is that *a person will be the more likely to engage in an activity for any length of time without any tangible reward, the more multifunctional the activity is.*

Enjoyment as an emotion is likely to react very strongly to the degree of self-approval. If an activity is multifunctional to a high degree but the person cannot approve of him- or herself performing this action (say, due to a feeling of incompetence), enjoyment for this activity and thus the likelihood of its being performed for any length of time will be much lower than if the person could approve. Among the various functions of an activity, behavioral confirmation from the person him- or herself will thus have a relative strong weight for whether or not the activity is enjoyed.

Research results are generally in agreement with these hypotheses. Activities are performed the longer without any tangible reward (i.e., in the experimental 'free choice' period) the more they are enjoyable, that is the more they are simultaneously (i) stimulating ('interesting')²⁰, (ii) providing comfort (absence of pressure from others), (iii) providing behavioral confirmation by self ('free choice' and 'feeling of competence'), (iv) providing behavioral confirmation by others (positive feedback from others, explicit at first, then imagined during free time), (v) providing status (information on performance relative to others, explicit at first, then imagined during free time), (vi) allowing improvement of nontangible resources (such as skills and competencies) *without reduction in any of the other functions*²¹. In every point, the experimental results summarized in the recent meta analyses (see Cameron and Pierce 1994, Tang and Hall 1995, Eisenberger and Cameron 1996, Deci et al. 1999) confirm this hypothesis.

Enjoyment (and thus length of 'free choice activity') will be relatively lower if any of these functions is lowered. In the literature, not all are systematically researched but some are. For example, behavioral confirmation is lowered by negative performance feedback (first explicitly, then imagined during free time); and status is lowered when the other presumes the right to give directives or orders ('you should do this...'). Deci and Ryan call the latter 'controlling

20. Terms between brackets are terms frequently used in the literature and in meaning close to the concept used in the SPF theory.

21. The effects of feedback on the motivation in the free-choice period require that the individual transfers behavioral confirmation to the free-choice period. The reaction of the 'other' has to be imagined during this period. It is possible that children, better trained in making transfers of negative feedback, do not make this transfer as easily as adults who have more experience with reading and transferring positive signals. This would explain the puzzling result that positive feedback has not worked as well with children as it did with college students (see Deci et al. 1999).

feedback'. The distinction between 'informational' versus 'controlling' feedback used by Deci and Ryan is theoretically not very satisfying because it presupposes that the individual is interested in information on his or her competence (and not in being controlled) but then it also presupposes that the individual wants only positive information. Why? A person interested in an honest assessment of his or her competence would also be interested to hear what is wrong. However, the person is not interested in information *per se* but in behavioral confirmation, except in special learning situations that do not resemble 'free choice' situations. It is thus theoretically much clearer to analyze these effects in terms of behavioral confirmation and status. The analysis also allows a clear distinction between enjoyment- and addiction-based behavior. *Addiction-based* behavior is much less multifunctional than enjoyment based behavior. In the latter, behavioral confirmation by the self (and probably by others as well) is low whereas it is high in the former. This hypothesis can be easily tested.

The role of tangible rewards. In general, the experimental findings are that tangible rewards (money or tokens) reduce the amount of time spent on free-choice activities. However, there are at least two effects that need to be disentangled. One effect is that *expected* tangible rewards affect the frame. The other effect is that expected tangible rewards create or fail to create standards for behavioral confirmation by self and others. First the framing effect. As argued above, a frame influences the information attended to, the processing of information, the alternatives, and the choice probabilities. When tangible rewards come after the fact (i.e., unexpectedly) they do no influence the frame. This fits well with the empirical findings. When tangible rewards are expected and strong enough to win out against other goals (a matter of successful experimental manipulation), they will create what may be called a *gain frame*, i.e., a frame linked to the goal to improve one's (tangible) resources. Compare this to a hedonic frame in which the goal 'to feel better' is central. According to framing theory, a gain frame will curtail attention to aspects of enjoyment and focus attention to aspects of gain, so that a given activity looks less enjoyable when seen from a gain frame than from a hedonic frame. In addition, tangible rewards (especially contingent rewards) can introduce *units* of account (points, cents, dollars) which create problems of scale compatibility with background goals, thereby weakening the possible impact of these goals. Enjoyment cannot be as easily 'felt' in terms of a metric unit of account as the tangible rewards. The strengths of the attention and scale compatibility effects depend very much on the strength and compatibility of the background goals, as we have seen earlier. The experimental arrangements in the literature known to me do not vary this strength in any systematic way. In order to really test the impact of expected

tangible results, one would have to run them against various strength of enjoyment (multifunctionality) and compatibility. High compatibility of activities directed at gain and at enjoyment reduces the negative effects of selective attention and scale compatibility. Tangible rewards combined with high compatibility of enjoyment might thus turn out to add to the multifunctionality of the activity (and thus to the enjoyment) rather than subtract from it.

The second effect of expected tangible rewards interacts with behavioral confirmation. Ryan and Deci have come up with a classification of contingencies. There are task-noncontingent rewards (say, the subject is paid for coming to the lab); engagement- and completion-contingent rewards (i.e., rewards for engaging in and for completing a task); and performance-contingent rewards. The effects of these rewards can be analyzed in terms of the framing and SPF theories. First, task-noncontingent rewards will have no effect because they do not affect the framing of the task. Engagement- and completion-contingent rewards will have a framing effect (creating a gain frame) and thus reduce attention to aspects pertaining to enjoyment. However, they fail to provide criteria or norms for (real and imagined) behavioral confirmation by self and others. One is just told that one gets money for engaging in the task or for completing it but it does not matter how one engages in it or how one completes it. As a result, the contingent rewards do not contribute to the possibility to get behavioral confirmation and thus they do not counteract the negative framing effect. Enjoyment is predicted (or rather postdicted) to be lower than if no contingent reward had been offered.

The story is different for performance-contingent rewards. Here we get the framing effect (lowering enjoyment) but we also get an added bonus: the rewards are connected to (relatively) clear standards of performance thus allowing a stronger effect of behavioral confirmation from self and from (imagined) others. This positive effect counteracts the negative framing effect and the result depends on the relative strengths of the two effects.

What does the empirical evidence say? The evidence is quite clear on the effects of task-noncontingent rewards, and the engagement- and completion-contingent rewards and it fully supports the analysis just given. With regard to performance-contingent rewards, there is considerable controversy in the literature. Cameron and Pierce (1994) and Eisenberger and Cameron (1996) report mixed results in their meta-analysis, whereas Deci et al. (1999) come to the conclusion that performance-contingent rewards do significantly undermine intrinsic motivation. When we have a closer look, we see that things are not so clear. Eisenberger and Cameron, and Cameron and Pierce remove outliers to come to their conclusion, and Deci et al. base their conclusion on a rather complicated reasoning on the possibility that less than maximum rewards provides negative competence feedback. Why this confusion? In all likelihood, there is

confusion because the effects are mixed due to different weights of the framing versus the behavioral confirmation effect, which would support the interpretation given above. Ryan and Deci (1996) themselves supply some evidence for this. They argued (and show evidence for it) that when performance-contingent rewards are administered in an 'autonomy-supportive' style, they will enhance intrinsic motivation. 'Autonomy-supportive style' meant that there was an extra emphasis on behavioral confirmation in the experiment, pulling the positive effect of behavioral confirmation on intrinsic motivation above the negative framing effect. I maintain that this creates a much clearer analysis of what is going on here (and with the other effects) than CET or attribution based explanations, not to speak of behavioral explanations. Crowding out effects of enjoyment-based intrinsic motivation by tangible rewards (gain frame) is much less straight forward than Deci and Ryan would make us believe.

Deci and Ryan's theory of needs contained three kinds of needs: competence, self-determination, and interpersonal relatedness. In their 1985 book, Deci and Ryan explicitly do not go into interpersonal relatedness and in later publications they bring in the 'interpersonal context' in order distinguish between informational and autonomy-supporting context versus controlling contexts (both related to competence and self-determination). One can argue that the advantage of SPF cum framing theory is that it is much more precise about the interpersonal context and the different rewards and signals that go with it than CET. Not only does it provide consistent interpretations of experimental results, it also clearly provides an agenda for new research in which framing and goal effects are explicitly taken into account. In this agenda, interpersonal relatedness (i.e., social wellbeing) would play the central role for enjoyment-based intrinsic motivation.

2. *Obligations*

When people act on the basis of a principle, they do not pursue an external reward. In this sense, Weber had introduced his 'value-rational' type of behavior and Boudon (1996) had recently revived this idea. The intuitive meaning of intrinsic motivation does not just cover behavior based on enjoyment. It also covers behavior based on the feeling that one must follow a particular rule, norm of principle, and Frey (1997) had used the term also in this way. Deci and Ryan probably excluded such obligation-based behavior because the idea of self-determination did not allow the rule of principles.

From a framing point of view, obligation-based behavior can be explained by the goal, acquired through socialization, to act appropriately. Other than in

theories of internalization, there is no assumption here that internalization creates norm-conforming personalities. What is trained in socialization is the ability to make the goal 'to act appropriately' in social contexts strong enough so that it would trigger a normative frame. Such a frame is precarious and can be pushed aside by, say, a hedonic or a gain frame. No stable personality shields the person from such a take-over. One could even argue that there is something like an *a priori* strength of these three frames based on the link to emotions and to the goal 'to improve one's condition'. The closer a frame is to both of these, the stronger it is, *ceteris paribus*. This yields the order of *a priori* strengths of hedonic > gain > normative frame because the hedonic frame is closest to the emotions and just as directly tied to the goal 'to improve one's condition' as the gain frame. The normative frame is the most precarious because it is only indirectly tied to both emotions and the goal to improve one's conditions. If this is correct, then a normative frame can only remain stable if hedonic and gain-related goals in the background are very weak or quite compatible with the normative frame. In daily life, these effects are well known. Hungry people cannot be made to keep respecting property rights for long. In contracting, grossly misaligned interests will create legitimate mistrust among the contractors because these interests will be stronger than the promises. Only credible commitments that align the interests sufficiently will create the possibility for trust that the other will keep to the agreements. Similarly, conflict-of-interest rules for judges are based on this *a priori* order of strength of frames.

Thus, from a framing point of view, a normative frame needs special circumstances to be stable. In small, tightly knit groups, this is achieved by banning interaction for gain inside the group and by providing norm-compatible multifunctional hedonic goals in the background. The result is strong solidarity and a strong sense of community. However, the cost is high, because the operational goal to improve one's condition is banned doubly. On the one hand, the hegemony of the normative frame veils the connection to improvement (and therefore curtails search and investment activities); on the other hand, the ban on gain-related activities inside the group minimizes improvement of personal resources. The term 'intrinsic motivation' and the presumably positive connotations that go along with it, hide these kinds of issues. They should be analyzed from the point of view of sustainability and this is the last point to which we will briefly turn.

3. Sustainability

As mentioned in the beginning, the going conceptions of intrinsic motivation (and especially the operational definitions referring to free choice activity) all

ignore the issue of sustainability. There are at least two issues. Would we like to sustain intrinsic motivation over time? If so, how could one do it? Should it be restricted to episodes? How could that be achieved? Should there be a mix of different kinds of motivation over time?

One can argue that whether one takes intrinsic motivation to be enjoyment-based or obligation-based, it would be undesirable to have people be intrinsically motivated all the time. This claim comes from both SPF and framing theory. Because frames have such a strong influence on what we attend to, what alternatives we perceive and what choices we make, it would be a disaster for modern societies to have people stuck in any one frame. Different contexts need different frames or mixes of frames. For example, for leisure activities, a hedonic frame would work best, especially it is would be kept relationally viable by obligation-based goals in the background. For civic behavior (regarding tax paying, voting, participating in the production of local public goods etc.) a normative frame would probably work best, especially if it is sustained by enjoyment as a compatible background goal.

Within organizations and work contexts, it would be undesirable to have people in a (weak or strong) hedonic frame because that would lead to cumulative incompatibility with the less enjoyable aspects of the task. It would be equally undesirable to have people in a strong gain frame because they will have much difficulty in cooperating. Also, a strong normative frame would be undesirable because people's behavior would be very inflexible. What is needed is a succession of normative and gain frames, each lowered in strength by the other. This creates what has been called 'weak solidarity' that works with relational signals (see Lindenberg 1998). Each of these frames would ideally be sustained by multifunctionality of goals in the background. Thus, it is argued that, for the context of work, obligation-based intrinsic motivation is more important than enjoyment-based intrinsic motivation, and that the former can best be sustained by activities that allow enjoyment as a compatible *background* goal. Good relational signals are probably the most important means for this to be achieved. To this purpose, work organizations have a number of tools (see Lindenberg 1993b). For example, hierarchies have to be functionally legitimated and for that individual members have to be well informed about the functioning of the entire organization. Functionally legitimated hierarchies minimize the negative status effect of getting orders. Orders are then followed not because of a command or controlling behavior but because something needs to be done and the person who gives the orders presumably knows best what needs to be done. Also, given that people are often very myopic, complex jobs must not just be organized such that the individual has a high degree of autonomy (as argued by Deci and Ryan 1985) but also in such a way that he or she is helped

in dealing with problems that arise from this autonomy. For example, the individual may be helped to keep enjoyment-based intrinsic motivation from taking over obligation-based intrinsic motivation. Functionally legitimate deadlines play an important *positive* role in this context even though they reduce the individual's self-determination. In this kind of analysis, it is important that financial schemes (such as bonus systems, tournaments, seniority and promotion rules) and technological changes do not interfere in the relational signals between employer and employee and among employees (see Wittek 1999 and Mühlau 2000 for elaborations and empirical studies). Good relational signals do affirm the need for physical *and* social wellbeing and the various improvement goals. In that sense, they convey part of the load of Deci and Ryan's emphasis on self-determination. However, the relational aspect is central here and it is worked out in much more detail than in CET and this allows a more balanced view of the role the two forms of intrinsic motivation might play in the context of interaction.

V. CONCLUSION

Intrinsic motivation has acquired an important place in the research agenda of psychologists. On this basis it has also become an important issue in the social sciences, especially through the work of Frey (1997). I argue that by now the research agenda on intrinsic motivation in psychology has become somewhat stale. No important new results come out of it, and the old results are very limited in applicability in the social sciences. For this reason, a fresh look at intrinsic motivation is suggested. The issues that should be addressed are the conceptualization of enjoyment; the place of obligation-based behavior; the re-interpretation of puzzling results; and the question of what kind of motivation should be sustained over time.

For this fresh look, two theories are introduced. First, a framing theory, and second a theory of goals. The cognitive part of Deci and Ryan's Cognitive Evaluation Theory (CET) is highly incomplete and so is the attribution theory used by many authors in the field. We need to be able to trace the simultaneous effects of various goals on motivation. The framing theory presented in this paper is such a theory and it argues that goals strongly influence selective cognitive processing. Goals compete for the privilege of being the main influence of cognitive processes and the strongest will win, triggering a 'frame' that influences what information will be attended to, how it will be processed, what alternatives are being considered, and how alternatives are chosen. For the consideration of intrinsic motivation, it is important that the goals that did not win con-

tinue to exercise some influence from the background. For example, to make money may be the goal connected to the frame, and to enjoy oneself may be a goal in the background. It is quite important to know how compatible this background goal is with the frame. To simply assume that either money or enjoyment will dominate the activity without also looking at the role of the goals in the background leads to wrong conclusions about motivation.

In the literature, the theory of intrinsic motivation has also been presented as if it were a theory of psychological needs and of wellbeing. However, in these respects, the theory by Deci and Ryan is too incomplete to allow the consideration of the gambit of needs and human goals. A more complex theory was presented here (the so-called ‘theory of social production functions’). It postulates two goal hierarchies. One consists of substantive goals (physical and social wellbeing and the instruments to reach them). The other consists of operational goals (the goal to improve one’s condition and the instruments to reach it). Three basic frames are distinguished: a *hedonic* frame (linked to the goal ‘to feel better’), a *normative* frame (linked to the goal to act appropriately) and a *gain* frame (linked to the goal to improve one’s resources). It was argued that there are two kinds of intrinsic motivation. One is enjoyment-based and the other is obligation-based.

It is argued that *enjoyment* of an activity is related to hedonic goals and is achieved by multifunctionality of that activity, meaning that that activity is instrumental in achieving physical and social wellbeing, and allowing improvement in one’s condition. The more multifunctional an activity (i.e., the more it serves both physical and social wellbeing and improvement goals), the more it is enjoyable and thus the stronger the intrinsic motivation to perform it for any length of time. Negative status signals (‘controlling behavior’) and negative behavioral confirmation (negative performance feedback) will lower multifunctionality and thus enjoyment-based intrinsic motivation. Empirical findings support this interpretation.

Expected tangible rewards can trigger a gain frame that focuses the individual on gain-related aspects, drawing attention away from enjoyment-related aspects. Such rewards will therefore lower enjoyment-based intrinsic motivation. This effect may be weakened or even reversed when tangible rewards are linked to clear norms and standards because then behavioral confirmation by self and others is greatly facilitated. Again, empirical findings support this interpretation.

Acting on the basis of *obligation* is intuitively also a form of intrinsically motivated behavior even though Deci and Ryan exclude it. It is argued that this kind of behavior emanates from a normative frame that is difficult to hold up against the onslaught of hedonic or gain frames. Small, tight-knit groups can

stabilize a normative frame at the expense of banning gainful activity inside the group and of being very inflexible. But then, what kind of motivation would we like to sustain? The implicit claim in the literature that intrinsic motivation should be spread and sustained is rejected in favor of a view that different contexts ask for different frames and mixes of frames. For the context of work, the paper argues for a ‘weak solidarity’ view in which relatively weak normative and gain frames take turns, each one stabilized by multiple hedonic goals in the *background*. In order to do this, relational aspects are central and much more important than the question whether an activity can be sustained in the absence of external rewards. The research on intrinsic motivation should thus be more integrated in explicit relational aspects pertaining to physical and social well-being and the goals to improve one’s condition.

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