CHAPTER 29

Social Rationality versus Rational Egoism

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THE CONCEPTION OF RATIONALITY

Rationality means many different things to many different people. Some use the term to indicate individuals' ability to exercise reason. Others use it to indicate that something is the result of reasoning or even of conscious calculation. Some use the term to indicate that purposes are being served, so that "rational action" is the same as purposeful action. Still others already presuppose purposeful action and use the term in the much more restrictive sense that individuals "act rationally" by choosing the best means available for achieving a given end. Again, others see rationality as a form of consistency between what is wanted and what is chosen: individuals rank the options open to them according to their ordered preferences and choose according to this ranking. Each of these meanings of rationality has been criticized as being too vague (for example, "exercise reason") or too narrow (for example, "consistency") to cover the wider intuitive reach of the term. I believe that these criticisms have a point. The very wish to come up with a simple definition of rationality is to stress what one considers to be the most essential feature of rationality among a number of other features of rationality that are not stated. There is no need to begin with such a restrictive strategy because even in its restrictive form, a definition of rationality is not enough to be used as a theory of action. As a heuristic device, it would serve its function better if it included a greater number of important elements associated with an intuitive understanding of rationality. For this reason, I would like to take a different approach. I use the term "rationality" to indicate a particular heuristic device for asking questions and searching for and evaluating answers concerning human behavior. At a later stage, more specifications can be added to come to a theory of action. The heuristic device I would like to propose consists of six assumptions about human beings that jointly indicate the meaning of the phrase "human beings are endowed with rationality." For such a heuristic, the search is for elements which jointly cover most people's intuition of rationality as applied to humans. In fact, the list should be such that a human being who is lacking one or more of the elements would be considered pathological to various degrees by a

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broad consensus. Often, psychological "biases" (for example, the hindsight bias) are used to indicate deviations from rationality. In the concept I will develop in this paper, this goes much too far. Biases can be part and parcel of human rationality; they may even have an as yet undiscovered evolutionary advantage. Freedom from cognitive biases thus should not be an element of rationality. What, then, should go into such a list? Of course, it has to include the pursuit of goals in the face of restrictions, but it should also include the fact that human beings form expectations and quite generally attempt to make action situations meaningful. When we have a closer look at goals, we see that it is useful to distinguish three components. First, people evaluate events; second, they are motivated to realize conditions which they evaluate more highly than other events; and third, they are resourceful in doing so. Putting these components of goal pursuit next to restrictions, expectations and the pursuit of meaning, we get a set of six basic elements which have become increasingly consensual among scholars who deal with human rationality and can be expressed by the acronym RREEMM.[1] A human being, irrespective of time and place, is endowed with rationality, which means that he or she is:

- Resourceful: given human beings are motivated to pursue a goal, they will search for and often find possibilities to realize a state they evaluate more positively than the one they are in; they can be inventive.
- Restricted: human beings are confronted with scarcity and chooses (consciously or not) among exclusive options; choice implies costs in terms of forgone opportunities.
- Expecting: human beings form expectations about past, present, and future events; they can learn.
- Evaluating: human beings attach value to past, present, and future states of the world.
- Motivated: human beings are motivated to achieve a condition which they value more highly than the one they are in. This can be seen as an operational goal that expresses a general striving across different situational goals. It implies possible substitution of one option for another when restrictions, expectations and/or evaluations change.
- Meaning: human beings, when confronted with an unstructured situation, will try to improve the structure of this situation by making it meaningful in terms of the other elements of RREEM. For example, when they experience an unexpected event, they will try to fit the event into the knowledge that generates their expectations or else search for appropriate changes in the knowledge, i.e., they will search for reasons for the occurrence of the unexpected event.

These assumptions are by no means trivial. They stress important aspects that scholars of human behavior should take into account. They stress intelligent effort, initiative, and ability to learn; they stress limited resources and the need to choose; at the same time, they stress that this choice is guided by information (expectations) that is "updated" through search and learning; and that the choice is meaningful: to move toward what the individual finds good (or better) and away from what the individual finds bad (or worse), attempting to make the best of the fact that resources are scarce and that what is optimal now may not be optimal the next time (substitution). They also indicate that individuals actively interpret the world and structure their experience when it is ambiguous. The assumption of resourcefulness implies that the

[1]See Lindenberg (1990), where I follow and expand a suggestion by Meckling (1976). Here I introduce two changes. I substitute "motivated" for "maximizing" because the term "maximizing" is too much associated with its use in either neoclassical theory or the theory of rational egoists. I add "meaning" (the last M) to the set rather than to keep it a separate assumption. The reason for this is that I believe that between 1990 and now this assumption on meaning (the definition of the situation) has become widespread enough to include it in the consensual set, even though many rational choice scholars make no explicit use of it.

process of substitution is not restricted to readily available options but includes search and investment behavior. When trying to explain human behavior, we are driven to look for (or reconstruct) the restrictions, the expectations, the evaluations and their possible changes. We also are guided to consider the possibility that actions are directed at changing given restrictions and reducing uncertainty (i.e., increasing structure).

Even though these assumptions go a long way as a heuristic device, they are more like an interrelated list of essential features of human functioning than a theory of action. Deviating from any of the six can be considered a deviation from "normal" human functioning, and thus as pathological. For example, a person who has goals but is not motivated to pursue any of them would be seen as seriously impaired. Similarly, if the person does not search for ways to achieve his goals or does not learn, there is presumably something wrong with him. Also, if he does not generate expectations, he is severely cognitively impaired. Somebody also would be severely impaired if he believed he were not confronted with scarcity, could not evaluate any states of the world, or would not attempt to make sense of the situation he is in. In the past, attempts to formulate rational choice theories have specified the operational goal (the general motivation assumption) as "utility maximization" and given this assumption priority over the other elements of RREEMM. Due to the special history of rational choice theories, priority was given not just to the specification of maximization but also to the requirement that this specification should allow deductive tractability (formalization). Simplifications that have to be made in further specifications of the RREEMM assumptions had to answer first and foremost to the requirements of deductive tractability, to begin with the meaning of maximization. In this way, we get different version of rational choice theories, depending on how RREEMM is further specified and how the simplifications affect each element of RREEMM. The ultimate purpose of this chapter is to present a specification of RREEMM that is particularly suited for sociological analyses. Other specifications of RREEMM will be presented as contrast and I begin with these contrasting specifications.

RATIONAL CONSUMERS AND RATIONAL EGOISTS

There are a number of elaborations of RREEMM the most well-known of which is the microeconomic consumer theory and the most important of which in present-day rational choice analyses is the theory of rational egoists.[2] Standard neoclassical consumer theory fills in RREEMM roughly as follows. (1) Resourcefulness: there is no need to make any specific assumptions on resourcefulness because the consumer is assumed to be completely informed about alternatives and prices (see number 3). (2) Restrictions: own income (in terms of money) and scarcity of consumer goods (reflected in monetary prices) jointly form the only relevant restriction. (3) Expectations: they are trivial due to the assumption of complete information on alternatives and prices. (4) Evaluation: ordered preferences on (material) consumer goods, governed by subjective rates of substitution between goods (which, in turn, are governed by decreasing marginal value). The category of goods over which preferences are defined (i.e., material consumer goods) is not itself subject to theorizing and often presented as a pragmatic limitation of the subject matter of consumer economics.[3] The actual preference ordering is

[2]This division is akin to but not completely identical to what Green and Shapiro (1994, pp. 17ff.), following Ferejohn, call "thin-rational" (microeconomic theory) versus "thick-rational" (theory of rational egoists).

[3]Frank (190, p. 54) observed that economists are quick to defer to psychologists, sociologists, and philosophers when

exogenous to the theory and filled in through the assumption that these orderings are revealed through action. In principle, there are no a priori restrictions on what might be revealed.[4] (5) Motivated: the operational goal of the individuals is to maximize their utility and they do so by ranking the options open to them according to their ordered preferences and choose according to this ranking. Technically, this implies that individuals will, for any pair of goods, choose quantities such that the ratio of marginal utilities of these goods is equal to their relative prices (i.e., to the ratio of prices of these goods). (6) Meaning: trivial, because the consumer is assumed to be at all times confronted with well-structured situations.

It is clear that the major simplifications emanate from the requirement of giving a deductively tractable meaning to "maximization." The beauty of this way of specifying RREEMM is that it yields a very simple theory, one that allows a very transparent and tractable body or interlinked propositions on consumption. However, its usefulness is small for most sociological problems in which interaction and interdependencies play an important role. For sociological applications, other specifications of RREEMM have been made. The most prominent of these is best known under the label of "theory of rational egoists." Because it is this theory against which the theory of social rationality will be developed below, it is useful to have a closer look at it.

The Theory of Rational Egoists

The idea that individuals are often selfish is probably of all times. Individuals have passions, such as pride, envy, greed, avarice, cupidity, and ambition. As Hirschman (1977) observed, the idea of self-seeking governed by reason (i.e., rational pursuit of self-interest) is different from this general assumption of selfishness and relatively more recent. "La Rochefoucauld dissolved the passions *and* almost all virtues into self-interest, and in England Hobbes carried out a similar reductionist enterprise" (Hirschman, 1977, p. 42). Self-interest became mainly associated with economic interests (love of gain). The positive moral flavor these interests had acquired in the 18th-century defense of capitalism carried over into neoclassical economics. According to Stigler (1965, p. 256), the concept of perfect competition received its complete formulation in Frank Knight's (1921) *Risk, Uncertainty and Profit.* The market with perfect competition, however, is only made possible by the "proper" behavior of all participants. Knight makes is quite explicit that "we exclude all preying of individuals upon each other. There must be no way of acquiring goods except through production and free exchange in the open market" (Knight, 1921, p. 78). He adds that this excludes "fraud or deceit, theft or brigandage." Opportunities for this kind of opportunistic behavior, if they are present, by assumption do not influence behavior.

This "morally bounded" conception of self-interest only changed when economists, game theorists, and sociologists started to focus on nonmarket phenomena, especially on the explanation of norms and governance structures for human transactions. It became clear that the moral fiction built into neoclassical economics was in the way of explaining the "proper" behavior that had simply been assumed. For example, Williamson (1985) criticized neoclassical theory for assuming away the importance of economic organization:

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asked what people really care abut: "As a practical matter, however, economists ... are content to assume the consumer's overriding objective is the consumption of goods, services, and leisure - in short, the pursuit of material self-interest."

[4]For example, Alchian and Allen (1974, pp. 24ff.) explicitly include the possibility of altruistic behavior in their definition of homo oeconomicus.

> Although neoclassical man confronts self-interested others across markets, this merely presumes that bargains are struck on terms that reflect original positions. But initial positions will be fully and candidly disclosed upon inquiry, state of the world declarations will be accurate, and execution is oath- or rule bound. (p. 49)

Instead, Williamson (1985) argues, what is needed is a more realistic view of human nature. This means self-interest seeking with guile, including the "calculated efforts to mislead, distort, disguise, obfuscate, or otherwise confuse" (p. 47). This explicit inclusion of strategically opportunistic behavior purposefully neglects attributes such as "kindness, sympathy, solidarity, and the like. Indeed to the extent that such factors are acknowledged, their costs, rather than their benefits, are emphasized" (Williamson, 1985, p. 391). Earlier on, Coleman (1964) had followed a similar track for the explanation of norms. He argued that sociologists usually take as their starting point social systems in which norms exists. In turn, these norms govern individual behavior. But that says nothing about why there are norms to begin with and how social order can emerge when there are no norms. For this reason, he argued for what he considered to be the opposite but possibly more fruitful error: to start with man wholly free, "unsocialized, entirely self-interested, not constrained by norms of a system, but only rationally calculating to further his own self interests" (Coleman 1964, p. 167). Coleman never abandoned this "fruitful error," also not in his magnum opus *Foundations of Social Theory* (1990). A similar stance had been taken by principal agent theory (Jensen & Meckling, 1976). Also, in the literature dealing with applications of "economic theory" to politics, "economic theory" is most often identified with the rational egoist version. The same can be said about game theory, especially when applied to the explanation of institutions (Raub & Weesie 2000).[5] Binmore (1994, p. 24) explicitly states that "greed and fear will suffice as motivations."

Not always, but quite generally, the theory of rational egoists also assumes "farsightedness." There is no exact (technical) meaning of this term, but it conveys the view that a theoretician does not have to worry about two interrelated adaptations of neoclassical theory: the explicit introduction of uncertainty and of time. First, when the highly simplifying assumption in neoclassical theory of complete information on prices and alternatives is withdrawn in favor of information as a scarce good or of the explicit possibility of uncertainty, then the assumption of farsightedness says "do not worry, nothing fundamentally damaging to the maximizing assumption is introduced by letting go the fiction of complete information." All that needs to be done is to factor peoples' ability to look ahead into the theory in a consistent way [say, by assuming a Baysian notion of expected utility maximization, or as Binmore (1994, p. 25) puts it, by taking it for granted that the individual "has beliefs that accurately reflect the information available to him"]. Second, in the neoclassical consumer theory, time is not explicitly considered. In this theory, the meaning of "period" in "quantity per period" is conveniently left open, except for concrete empirical analyses. But when time is of the essence, as in contracting theory, in the theory of futures markets, in investment theory, or the economic theory of crime (with anticipated punishment), periods must be more explicitly introduced, at least ordinally. For example, contracting theories generally deal with at least two time periods (*ex ante* and *ex post*) and human capital theory assumes maximization over a lifetime (or work life cycle). Farsightedness means that the maximization assumption does not need to be seriously reconsidered when time is explicitly introduced. Individuals' ability to anticipate and evaluate future events is such that it does not interfere with the

[5]In evolutionary game theory, the assumption about self-interest mainly has been applied not to the individual but to the gene or its cultural equivalent, the *meme*. In the context of this chapter, there is no room to follow these developments in any detail.

extension of periods. Of course, individuals discount future events, but that is either rational (say, following the interest rate) or at least harmless for the predictions (as long as no reversal of choice is involved[6]). Williamson, who had explicitly introduced the possibility that *ex post* events often cannot be anticipated, still maintained that

> but for farsightedness, transaction cost economics would be denied access to one of the most important "tricks" in the economist's bag, namely the assumption that economic actors have the ability to look ahead, discern problems and prospects, and factor these back into the organizational/ contractual design. (Williamson, 1993, p. 129)

In terms of RREEMM, the theory of rational egoists amounts to the following specifications: (1) Resourcefulness: individuals think of efficient solutions to their problems (this includes actively changing the given set of alternatives) and they learn efficiently from experience (see number 3). (2) Restrictions: a given set of alternatives with associated outcomes. (3) Expectations: many outcomes are uncertain but individuals estimate objective probabilities by and large correctly given the evidence available to them, at prices they are willing to pay for this evidence. Since individuals are farsighted, time has no influence on the way in which expectations are formed. (4) Evaluation: ordered preferences on goods that serve self-interest, governed by subjective rates of substitution between goods (which, in turn, are governed by value of a good diminishing with the quantity a person already has of that good). Farsightedness implies that time has no inherently distorting effects on evaluations (i.e., no effects that would lead to a preference reversal according to availability of goods over time). Evaluations are assumed not to be relative (with ordinal preferences) but absolute, so that expectations can influence evaluations in a systematic way (expected utility formed by weighting the utility of a good with the subjective probability of its occurrence). (5) Motivated: the operational goal of an individual is to maximize his or her expected utility across outcomes (which also presupposes ordered preferences and certain consistency requirements[7]). (6) Meaning: trivial, because the actor is at all times confronted with well-structured situations.

Notice that there are important differences between the *homo oeconomicus* of neoclassical economics and the theory of rational egoists regarding assumptions of preferences and regarding assumptions on uncertainty and time. Also, resourcefulness is a more important aspect in the theory of rational egoists than in the neoclassical consumer theory. Still, the two theories are often confused and confounded. Brennan (1990, p. 55) critically observes that economists (and, I might add, sociologists) often move unannounced back and forth between these two versions. When rational choice theory is attacked for assuming human beings to be much too egoistical, the answer often heard is that this theory does allow all sorts of preferences, including altruistic ones (as neoclassical theory in deed does). When rational choice theory is attacked for not coming up with any definite predictions because virtually all behavior can be "rationalized"[8] after the fact, the answer often is heard that the assumption of self-interest excludes assumptions on "soft" and "shifting" preferences (as is indeed the case in the theory of rational egoists) and that rational choice theory thus can come up in many

[6]See Parfit (1984).

[7]So-called Von Neuman-Morgenstern utility functions (see, for example, Harsanyi, 1977a).

[8]For example, in their critical review of rational choice theory in political science, Green and Shapiro (1994, p. 18) state against theories that allow all kinds of goals and preferences: "It will become clear, however, that what is gained by avoiding controversial assumptions about human nature can come at a considerable cost from the standpoint of measurement and empirical testing of rational choice theories." Later on in the book (p. 203), they find self-interest too restrictive "no doubt strategic calculation will be one [important variable, S.L.], but there will typically be many others, ranging from traditions of behavior, norms, and culture to differences among people's capacities and the contingencies of historical circumstances."

contexts with definite predictions. More recently, theories in which the egoism is shifted to another level, namely, to selfish genes, have gained in popularity. Selfish genes are compatible with some altruistic tendencies among their carriers. This has given legitimacy to the assumption that there are different types of individuals, some very selfish, some very cooperative, some in between. The theory of rational egoists has thus been pushed somewhat in the direction of *homo oeconomicus*.

Of course, the two versions of rational choice theory also have common elements. They are both specifications of RREEMM. More importantly, they share the view that maximization is the heart of rationality and should be kept as precise as possible in its operational meaning even if that necessitates highly unrealistic assumptions in the other elements of RREEMM. In other words, for both the neoclassical consumer theory and the theory of rational egoists, the maximization assumptions largely govern the way the other five assumptions are specified.

THE PRINCIPLE OF SUFFICIENT COMPLEXITY

There has been much criticism of both versions of rational choice theory. Much of it is directed against the very unrealistic simplifications made by both of them. "We find ourselves sharing an increasingly widespread concern that the rationality attributed to homo economicus is too simplistic or else simply wrong when applied to actors in many political and social situations" (Levi et al., 1990, p. 2). Rather than repeat the literature on this criticism here, I will concentrate on what I consider to be the core element that causes the problem. It lies in the logic of simplification itself.

Why not simply make the model assumptions less simplistic? The answer to this question by model builders generally has been that complex assumptions often may be closer to reality but they also reduce the power of a theory. There is a trade-off that is not necessarily worth the bargain. With complex assumptions, it is more difficult (if at all possible) to deduce testable hypotheses and it is more difficult to use the theory as a unified heuristic device to guide analyses and generate relevant research questions. The maxim for making assumptions in good model building in the social sciences should be "as simple as possible and as complex as necessary." The problem with knowing when a model is as simple as possible and as complex as necessary has led to the method of decreasing abstraction (see Lindenberg, 1992b). It long has been widely used in applications of rational choice theory. You start with highly simplified assumptions and then make the assumptions successively more realistic (i.e., less abstracting from reality). For example, one may start with the assumption of complete information and then introduce some version of uncertainty at a later step in the model development. The advantage of doing it this way is that the tractability of the successive versions of the model remains high. Simplifications are made explicit and it generally is clear which assumptions need to be replaced by more realistic ones when the model turns out to be too simple. The theory of rational egoists has been hailed as a useful worst case scenario (Schüßler, 1988) and as a "fruitful error" (Coleman, 1964). When these simplifications seem too simplistic, one can, for example, withdraw the assumptions that all human beings are egoistical and instead assume that there are different types of individuals. In the literature, we find especially the following three types: "individualistic" (the goal is to maximize one's individual payoff); "competitive" (the goal is to maximize the positive difference between one's own and other's payoff); and "cooperative" (the goal is to maximize joint payoffs) (Liebrand et al., 1986).

The method of decreasing abstraction is vital for theory formation. However, there is a hitch. The method works well if, at least for some initial steps, the quality of the explanation

increases with increasing complexity of an assumption. But where the method can go completely awry is when the simplifying assumption also assumes away what was to be explained. For example, if we want to explain institutions (all kinds of institutions) and we assume complete information, we cannot possibly explain institutions that deal with uncertainty. Our simplification has assumed away the phenomenon to be explained. For this very reason, the method of decreasing abstraction has to be accompanied by the principle of sufficient complexity. This principle states that the simplest model assumptions always should be realistic enough to allow a description of the phenomenon to be explained. Thus, if the explanandum contains uncertainty, the model may not exclude uncertainty by the simplifying assumption that individuals have complete information. This principle seems obvious enough, and yet it has considerable consequences. Basically it says that if human proclivities lead to interpersonal solutions for dealing with these proclivities, then these proclivities already must be represented in the simplest model assumptions. As we will see, the principle of sufficient complexity forces us to think differently about rationality as well, especially for sociological analyses, because these analyses very often directly confront a great variety of human proclivities and social attempts to deal with them.

THE THEORY OF SOCIAL RATIONALITY

To hold on to the idea that a deductively tractable concept of maximization is the heart of rationality might force us to make simplifications that violate the principle of sufficient complexity. At this point I reiterate the view that rationality should be seen as a collection of human characteristics, none of which is clearly more important than the other. When one takes this point of departure, assumptions concerning the operational goal will not dominate assumptions on, say, expectation, evaluation, and meaning. For example, there is no contrary-to-fact simplification that individuals are particularly farsighted, that they have well-ordered preferences, or that they are always confronted with well-structured situations simply for the sake of giving maximization a precise meaning.

A theory of social rationality would aim at the following: to elaborate RREEMM in such a way that we can see when, how, and to what extent the elements of RREEMM depend on the social context not just in the sense that other people constitute relevant restrictions and resources but also in the sense that social aspects may affect virtually all elements of RREEMM. In the remainder of the chapter, I will treat each element of RREEMM from this point of view. There is no normative definition of rational action (or choice) intended. Of course, there have been many contributions in the literature so far about deviations from (expected) utility maximization in the direction of "bounded rationality." Simon's "satisficing" may be the most famous of them. With regard to "expectations" and "meaning," Kahneman and Tversky's (1979) prospect theory in its various versions is widely known. There is no space to go into these contributions in this chapter. Instead, I will present the results of my own struggle with these and other contributions.

Resourcefulness

The role of resourcefulness is strongly influenced by the assumptions on other elements of RREEMM. As we have seen, in neoclassical consumer theory resourcefulness is made trivial by the assumption of complete information (which helps to give a precise meaning to maximization). Yet there are some versions of economics in which resourcefulness plays a

role. For example, in the so-called Austrian economics (especially Von Mises) human beings are seen in a sense to be entrepreneurs who create alternatives. That takes resourcefulness. In Becker's (1996) conception of household production, human beings are seen as producers of their own well-being, and as such, resourcefulness becomes more important, even though Becker does not particularly stress this point. In the theory of rational egoists, uncertainty leads to a more pronounced but still relatively modest role of resourcefulness. As we will see, in the theory of social rationality, the operational goal of human being is seen to be "to improve one's condition." It is this goal that gives resourcefulness a central place in the conception of rationality, including learning in the sense of an active improvement of one's knowledge. However, the theory also points to limitations with regard to resourcefulness that stem from framing effects. In framing, attention focuses on some aspects and other aspects are pushed into the background. Resourcefulness is therefore topical, depending on the frame. Thus, the assumption on high resourcefulness with regard to some goals is perfectly compatible with low resourcefulness with regard to other goals (those that are often in the background). More importantly, resourcefulness is least when the goal to improve one's condition itself is pushed into the background, as it is in a "normative" frame in which the major objective is "to act appropriately." These points will come back in the discussion of the other elements of RREEMM.

Restrictions

Restrictions refer mainly to the scarcity of resources and to the need to allocate these resources to certain alternatives to the exclusion of other alternatives. Restrictions thus refer both to what is possible and what is not possible. The heuristic importance of restrictions is that (together with assumptions about other elements of RREEMM) they indicate what kinds of alternative we should pay particular attention to. In neoclassical theory, it is the feasible set of consumer goods. Given money prices, money income determines what can and cannot be bought. Less frequently, we find time and effort explicitly considered in a manner analogous to money income (with given or assumed shadow prices). In the theory of rational egoists, budgets are rarely made explicit. Budgets find their way into the analysis by the assumption the researcher makes on the set of feasible alternatives from which the individual chooses. There is thus no particular attention to budgets. Self-interest assumptions find their way into the analysis by the heuristic steering they offer for the selection of relevant alternatives and their ordering, often in terms of the neutral concept "payoff." In the theory of social rationality, restrictions take on a somewhat different meaning because of the strong emphasis on production and improvement of one's condition. As we will see below, goals are ordered hierarchically in terms of production functions (i.e., in terms of interrelated chains of means–end relationships) and the major operational goal is improvement of one's condition. Thus, rather than point to the feasible set of consumer goods or discrete alternatives, the theory of social rationality draws attention to production possibilities and associated possibilities (or impossibilities) of improvement. For example, if deviant behavior of youths would have to be explained, one would compare the youths' nondeviant and deviant possibilities to produce physical and social well-being (including their temperament and social skills) and one would search for possible path dependencies of declining possibilities for "nondeviant" improvement of the youths' condition. Availability of norms, social networks, and group memberships belong just as much to the scarce resources as do temperament and social skills and the quality of the production functions themselves (i.e., their efficiency, precariousness, compatibility, etc.). This may seem like a dazzling variety of sorts of resources. However, the theories on

substantive and operational goals offer heuristic guidance on the search for the relevant menu of resources to be considered.[9]

Expectations: Social Sources and Content

Assumptions on expectations are trivial in the neoclassical theory due to the assumption of complete information. In the theory of rational egoists, there is uncertainty and expectations amount to various approximations to "objective" probabilities (depending on the information available to the individual). In most cases, the approximation is assumed to be sufficiently high in order not to worry about possible amounts, shapes, and sources of discrepancies between subjective and objective probabilities. In addition, farsightedness is strong enough to allow the introduction of long time periods without fundamental changes in the assumptions on the generation of expectations of preferences. An important question in the theory of rational egoists is how expectations relate to evaluations, namely, why would it be "rational" to consider probabilities at all and especially products of probabilities and utilities of outcomes. There is little concern with sources and content of expectations and thereby little concern for social influences on expectations.

In the theory of social rationality, the major point of attention is not the relation of expectations to evaluations but the generative processes of expectations.[10] Thus, sources and content (and their consequences) are most important because they show us the social influences at work. Five very different aspects are brought into play here. First, attentional processes called "framing" (i.e., goal-guided selective attention) make it likely that human beings are prone to give more attention to short-term outcomes than to long-term outcomes, especially when hedonic aspects are involved (see Loewenstein & Thaler, 1989; Loewenstein & Elster, 1992; Gattig, 2001). Thus, time cannot be introduced into the analysis without considering its effects on the selection of relevant aspects in decisions, and farsightedness can be severely restricted. If individuals can and do see far into the future, there thus is a strong presumption that one needs to look for (and will find) social arrangements that allow this farsightedness. For example, when a couple decides to have a child, it is impossible to consider all the ramifications into the distant future. However, due to standard trajectories of development, associated social arrangements of hospitals, child care, schooling, and so forth and due to social pressures to make corresponding private arrangements at standard junctions in time (such as applying for a kindergarten years ahead), people act seemingly with reasonable farsightedness. This is not a feat of their cognitive equipment but of their social environment.

Second, expectations are generated by experience, information, knowledge, theories, and ideologies. In daily life, interacting individuals are very much aware of the importance of situating the other so as to know something about his or her sources of expectations. For example, religious beliefs may lead to expectations about rewards or punishments in the hereafter for certain deeds. Contract partners may or may not be savvy with regard to what goes on in a particular industry. Managers may have read the newest hype in management technique and are now convinced that actions X will have consequences Y. People may have read about three cases of child molesters in one week in the newspapers and expect that their own child will be molested soon.

[9]For an example of this kind of analysis applied to revolutions see Lindendberg (1989b).

[10]The combination of expectations and evaluations is assumed to be as Kahneman and Tversky (1979) originally suggested: expectations are weights for evaluations. But there is no presumption that the weights fulfill all the axioms of probability theory.

Tacit knowledge and habits may be most difficult to trace in its impact on expectations (see Berry & Dienes, 1993; Reber, 1993). The heuristic guidance from neoclassical theory and the theory of rational egoists to pay attention to these sources of expectations are completely absent. In the theory of social rationality, there is no particularly sophisticated hypothesis about the sources of expectations, but it does push the commonsense idea that I need to find out about the relevant sources of expectations. In this spirit, Callon (1998) attempts to trace the influence of economics on the functioning of the market.

Third, the kind of information (including chunks of memory, knowledge, etc.) mobilized in any particular action situation depends not just on whether or not a person has that information but also on the frame that selects among the frame-relevant chunks of information. For example, when my goal right now is to feel better, I will mobilize mainly information about what actions are likely to improve my feeling. Information about the long-term effects of whatever I take to feel better will not be primed. For the same reason, the search for more information is likely to be highly selective according to the frame I am in. For this reason, it is fair to assume that expectations are generated in a frame-specific way (see also Kahneman & Tversky, 1979).

Fourth, in the theory of rational egoists, uncertainty is interpreted as a situation in which subjective probabilities must be assigned to outcomes. The possibility that the outcomes themselves are not known [what Knight (1921) called "fundamental uncertainty"] receives no serious consideration. From the point of view of formalization, this is understandable. However, the theory of social rationality does not have to give any priority to aspects of formalization and negate the relevance of fundamental uncertainty. For example, in complex contracting, many of the future contingencies cannot even be identified and therefore they cannot be factored into credible commitments *ex ante*. As Favereau (1997, p. 219) formulates poignantly: "the incompleteness of contracts is not the problem but (its acceptance is) the solution." The point is related to the principle of sufficient complexity discussed above. If there are important social situations in which people devise ways to deal with fundamental uncertainty, then the theory of action devised to explain these ways must allow fundamental uncertainty as well. Framing is likely to increase fundamental uncertainty in interactions in which the frames of interaction partners are not coordinated. For example, in organizations selective attention to aspects of joint problems may lead to an increase in actions that are unpredictable across subdivisions. Wittek (2000) even argues that periodic reorganization is necessary to decrease this kind of fundamental uncertainty in organizations.

Fifth, the generation of expectations often is socially orchestrated through joint categories and institutionalized rules (see Stinchcombe, 1986), creating "coorientation" (Scheff, 1967). This means that the expectations are locked in by the fact that they mesh. For example, the rule to drive on the right side of the road creates expectations about the other's behavior but also about the other's knowledge of the rule and about the other's expectations concerning me. Common categorizations create similar "cognitive interdependencies" (see Turner, 1991). In sum, the heuristics of a theory of social rationality should pay particular attention to sources of expectations and to framing and categorization effects, including fundamental uncertainty.

Evaluations: A Theory of Goals

In the neoclassical consumer theory, human goals are not theoretically specified and only pragmatically restricted to material consumer goods. In the theory of rational egoists, human

goals are specified by the vague concept "self-interest," by many taken to mean "material gain."

As we will see, both solutions are wanting. If no goals are specified, explanations are open to all sorts of ad hoc assumptions about preferences (including the stability assumption that is necessary for revealed preferences). If goals are identified with self-interest, one has an indication of the ballpark but not much more. This is sufficient in contexts in which self-interest is relatively clearly defined by an institutionally supported maximand, as in "profit maximization" or by fiat (as in game theory). In Western economies, "profit" of a firm is defined by rules and the notion of "payoff" in game theory is often left unspecified or arbitrarily identified with money. But in most real-life contexts, it is not so evident what self-interest is, since the concept covers very heterogeneous goals. For example, when workers' hourly pay increases, they might work more to earn "more money" or work less to buy "more leisure." What, then, would be their self-interested choice? Things get even more complicated when one gets into relational goods. For example, social relationships may be taken to be valued goods. Are joint payoffs then part of self-interest? If attention to opportunity costs is the major theoretical vehicle by which individuals choose among goals,[11] there must be a menu of self-interest goals from which they can choose and there must be a way for the individual to assess the compatibility or incompatibility of goals. This implies that instrumental relationships between goals also must be known. It comes down to the requirement that the researcher must know the ordered preferences (or goals) that pertain to so-called self-interest in order to deal with choice among self-interest goals. What is this menu of ordered goals? The theory of rational egoists has no such auxiliary theory on goals. The other side of the coin is that the vague term self-interest necessarily creates an equally vague opposite of altruistic behavior. The vagueness of altruistic behavior is just as serious as the vagueness of self-interested behavior. Another problem is that the operational goal of maximization is not discussed as a goal and therefore not related to the substantive goals.

Clearly, in order to use RREEMM in sociology, one needs a more refined theory of goals (evaluations) than that of the theory of rational egoists. There has been a considerable number of theories on human goals. However, for a social science using RREEMM, the usefulness of this kind of work is limited. For such a social science (as opposed to a behavioral science) it is essential that the influence of the environmental restrictions (especially the social environment) on behavior can be traced. Theories of human goals rarely say anything about the role of restrictions on goal selection and goal achievement. For the same reason, these theories generally do not deal with the possibilities of substitution.

Development of a RREEMM-compatible theory of human goals has greatly been aided by the work of Stigler and Becker (1977),[12] which introduces the important distinction between universal and instrumental goals. Universal goals are identical for all human beings and instrumental goals pertain to the means that lead to the ultimate goals. Instrumental goals are in fact constraints; they differ for different categories of people and they can change. Thus they

[11]Harsanyi is very explicit about this point. He maintains that the real progress in rational choice theory came from realizing that rational behavior could not be limited to choosing the most efficient means to a given end but that it had to include the choice of ends itself: "If I am choosing a given end ... then typically I have to give up many alternative ends. Giving up these alternative ends is the opportunity cost of pursuing this particular end. Thus, under this model, rational behavior consists in choosing one specific end, after careful consideration and in full awareness of the opportunity costs of this choice" (Harsanyi, 1977b, p. 319).

[12]More recently, Becker (1996) has put more emphasis on the influence of past consumption on today's preferences than on the hierarchy of goals. This new emphasis is quite compatible with a stronger emphasis on reference points and social comparisons which come in through the operational goal "to improve one's condition."

can be traced in an approach that emphasizes the impact of the action environment on the action (rather than the influence of preferences). Note that it is the combination of universal and instrumental goals that constitute the theoretical advantage. Technically speaking, there is only one utility function for all mankind but there are systematically different production functions for different kinds of people.[13] This conception also shifts the emphasis from consumption to production. Buying a particular good is now not an act of consumption but the purchase of a means of production, such as a CD for the production of music pleasure.

Stigler and Becker's (1977) approach may be called a "production function approach" and it leads to a hierarchy of goals. On top there is utility, below which are the universal goals, below which are means–end chains of instrumental goals. It also is clear that the hierarchy is not strict. Lower-order goals (such as money) may be instrumental for various higher-order goals.

As ingenious as Stigler and Becker's suggestion is, it has a serious drawback: the universal goals are not specified. This opens again the door to ad hoc theorizing. For example, goals can be arbitrarily assumed to be universal if one needs justification for particular instrumental goals or for particular substitutions. In the last 15 years, Becker's approach was further developed into what has been called the "theory of social production functions" (see Lindenberg, 1986; Lindenberg & Frey 1993; Ormel et al., 1999; Van Bruggen, 2001).

First, the top of the hierarchy—utility—has been replaced by "subjective well-being." The relevance of this move will become clearer shortly. Second, directly below the top, there are two general goals. The first major goal is physical well-being. It is this goal that drives the acquisition of many consumer goods, from buying bread to buying housing and medicine. By a silent assumption that effort brings about a reduction in physical well-being, economists at times introduce effort 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 well-being is not produced just by comfort but also by stimulation (see Scitovsky, 1976; Wippler, 1990). Even when stimulation is purely mental, it is here taken to be a means for physical well-being 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 well-being. As goals, they are both instrumental (for physical well-being) 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 of group within a culture.

The other major goal has been stressed over and over again by sociologists as the most important universal goal: social well-being, produced by some form of social approval. It was already quite clear to Adam Smith (1976) 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" (p. 116). Marshall (1920, pp. 14–17) reiterated the importance of social approval, as did Parsons (1937, pp. 162ff.) and Parsons and Shils (1951, p. 69). "The struggle to preserve or enhance feelings of self-worth or prestige marks all men who live above a bare subsistence level," state Krech et al. (1962, p. 96), and William Goode (1978, p. vii) maintains that "all people share the universal need to gain the respect or esteem of others.... The foundations of social life rest in part on the universal need for respect, esteem, approval and honor." This is but a small selection of voices who all point in the same direction.

[13]For people with identical production functions relative prices may differ.

As in the case of physical well-being, the direct instruments for reaching social well-being are themselves universal goals. The direct instruments have a long pedigree within sociology and are also corroborated by evolutionary arguments: (1) *Status*, behavioral confirmation, and affection.[14] Status refers to a relative ranking (mainly based on control over scarce resources). (2) *Behavioral confirmation* is the feeling of doing or having done "the right thing" in the eyes of relevant others (including yourself). "Doing the right thing" is not restricted to overt action but also covers covert actions such as thinking certain thoughts, agreeing with certain maxims, and adopting certain attitudes. The term "behavioral" thus points to aspects the individual can be held responsible for in the eye of relevant others (including oneself). (3) *Affection* is 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 he or she has or does). 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]

Still, lower-level goals are entirely dependent on the opportunities and restrictions an individual faces. There are again instruments for reaching the higher-level instruments, and so forth. 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 paying job, and for a particular job one may need a specific qualification. Goals thus are hierarchically structured, with the general human goals on top and with lower-level goals being tied to higher-level goals in production chains. Below the top (which is the same for everybody) there are many different sets of (nested) production functions each of which specifies the instrumental relationship between lower-order and higher-order goals for a particular category of people (see Fig. 29.1).

The sociologically important point is that the social production functions are affected by subjective judgments but they are not idiosyncratic. Rather they are social facts in Durkheim's (1950) sense of the word. For example, in our society, it was and partially still is true that by and large women can produce income either by working or by being tied to a male partner (for making a home), and women can produce social approval either by their own occupational status or by being tied to a male partner (they get behavioral confirmation for making a home and raising children and they participate in the occupational status of their partner). For men, the situation is different. They may get some behavioral confirmation from being tied to a female partner, but by and large they cannot produce income or status via their partner. When making a home and raising children yield less and less social well-being (especially behavioral confirmation), women will seek alternative means for the production of social well-being, for example by entering the labor market if they have not done so already for the sake of money (which may serve mainly physical well-being).[16]

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

[14]In the environment of evolutionary adaptation, inclusive fitness is likely to have been essentially served by (1) resource holding power (leading to status-striving), (2) reciprocal altruism (leading to a striving for behavior confirmation from relevant others), and (3) kin altruism (leading to a striving for affection from people to whom one is closely tied).

[15]Turner (2000) even argues that during evolutionary adaptation, rewiring of the hominid brain to gain control over emotions (especially anger and fear) and expanding the repertoire of emotions (to include complex emotions like guilt, shame, and pride) is likely to have had great advantages for inclusive fitness due to the effects of emotions on the ability to forge bonds of increased solidarity and thereby more stable local group structures.

[16]This analysis is worked out in more detail in Lindenberg (1991).

Top level Universal Goals	***Subjective Well-being***				
	Physical Well-being		*Social Well-being*		
Universal instrumental goals	*Stimulation/ Activation* (optimal level of arousal)	*Comfort* (absence of physiological needs and fears)	*Status* (control over scarce resources)	*Behavioral Confirmation* (approval for "doing the right things")	*Affection* (positive inputs from caring others)
Examples of activities and endowments (means of production for universal instrumental goals)	Physical and mental activities producing arousal; fantasy	Avoidance of fatigue; vitality	Excel in work or sports, life style, talent	Compliance with external and internal norms; conscience	Intimate ties, offering and receiving emotional support; empathy
Examples of resources + enhancing activities	physical and mental stamina; training	Food, health care eating	Education, unique skills schooling	Social kills, competence netwerking	Spouse, child listening

FIGURE 29.1. Top of the goal hierarchy with some examples of lower-order instrumental goals (activities, endowments, resources, and activities to get resources)

two forms). Substitutes and complements will show up as by-products of the construction of nested social production functions.

Motivation: Improving One's Condition

What about the operational goal (motivation)? Remember, for both the neoclassical theory and the theory of rational egoists, utility (or expected utility, respectively) maximization was the operational goal. The very concept of utility has a venerable tradition and great importance for dealing with both price and income effects and other important advantages (cf. Stigler, 1965). However, utility maximization as operational goal (i.e., as general motivator of action) can be separated from the concept of utility itself and the question here, then, is what is the assumed operational goal of the theory of social rationality? Do people maximize subjective well-being? Is subjective well-being just a stand-in for the concept of utility? Before answering this question, let us consider the special features of the top of the goal hierarchy. Physical and social well-being are not perfect substitutes and neither are they only universal instrumental goals for reaching the final goal of subjective well-being. Human beings must have both physical and social well-being, and within physical well-being they must have a

certain amount of both comfort and stimulation. Within social well-being, human beings must have some level of status, behavioral confirmation, and affection. For these reasons, substitution is only possible beyond these minimum levels (whatever they are). This makes the top three layers of the hierarchy very special: On each level, the goals are being pursued for their own sake (they are intrinsic), and goals of the second and third layer also are pursued as instruments for the goal(s) above them. Thus, layers two and three of the hierarchy consist of goals that are both intrinsic and instrumental. Here is the catch. If formalization were our main objective, we could find a (mathematical) way to still work with a single maximand (utility or subjective well-being) even though goals in layers two and three are both intrinsic and instrumental. However, as stated above, formalization is not our main objective. To the contrary, we would like to see where we get if we do not allow the requirements for formalization to dictate our simplifying assumptions. From the point of view of the process by which individuals pursue goals, it is entirely possible that the assumption of utility (or subjective well-being) maximization as operational goal does not fit very well.

Consider that the pursuit of a goal is a complex process in which the goal itself exerts a considerable influence on what aspects of the situation are important, what aspects are attended to, what knowledge and memory chunks are being mobilized, and so on. Would it then make a difference whether the goal pursued was identical in all situations (as in the assumption of utility maximization) or whether it was, say, status achievement in one situation and the achievement of stimulation in another?[17] Surely, it would make a difference, and somehow we have to deal with this difference. In addition, we have to deal with the double nature of the high-level goals as both intrinsic and instrumental. That is, whatever the operational goal we assume, it would have to accommodate both aspects.

Goal Pursuit. It is by now commonplace in cognitive psychology that individuals cannot attend to everything at the same time. Simon (1997, pp. 368ff) stressed this point long ago but to little avail with regard to rational choice theory. Attention must be selective, and what is being attended to is particularly important for determining the kind of action that is taken (see also Fazio, 1990). Different bits of knowledge are mobilized and different categories activated, with the result that the individual is more sensitive to some kind of information than to another, relies more or less on stereotypes, places more value on certain outcomes, and so forth. For example, individuals' negotiating behavior is affected by instructions that tell them to be cooperative or competitive (see Carnevale & Lawler, 1986). Individuals can be primed, that is, certain stored knowledge, categories, or attitudes can selectively become more easily accessible thereby influencing a person's information processing (see Higgins & Brendl, 1995). At the same time, aspects not belonging to the selected construct are inhibited, thus creating a double selective effect (see Bodenhousen & Macrae, 1998; Houghton & Tipper, 1996). Note that although these effects steer attention, they need not be conscious or work via prior intention. For example, a person in a situation in which others speak highly of the value of achievement can get "primed" to focus on achievement without being aware of it (Bargh, 1997).

Most important for influencing a person's cognitive activity and thereby the action that is based on such activity are goals (see Gollwitzer & Moskowitz, 1996). One prominent researcher in this field claimed recently that most cognitive activity is goal dependent (Kruglanski, 1996). Goals can be influenced by the situation but they cannot be conjured up at will. At any given moment you have them or you do not. One might try to change one's goals

[17]Notice that this questions is not identical to the discussion of maximization of "present aims" versus self-interest (Partfit, 1984).

over time but that takes a great deal of effort, if it works at all. One also might try to avoid situations that mobilize goals one does not want to have mobilized (such as staying away from the sight of food if you want to lose weight). Thus goals are only accessible to rational choice in a very limited sense.

These insights from cognitive psychology make the assumption that utility maximization is the operational goal very problematic (even as an "as if" assumption). What we are looking for is an operational goal that can be situationally tied to the goal at hand, the goal that actually governs the cognitive processes at that moment. Utility maximization, by contrast, either refers to the choice of alternatives according to the ranking of options open to the individual according to his or her ordered preferences (in the neoclassical model) or it goes directly to the feature the present goal shares with all other goals, namely, context-free utility (in the theory of rational egoists), and there is no way one can relate it directly to the specific goal at hand with its specific features of selection of aspects, of specific knowledge chunks, and so forth.

A strong candidate for an operational goal that does allow situational specification is the general desire to improve one's condition. For example, somebody's status position at the moment is X (or feels low) and he would like to improve it (or feel better concerning his status). The operational goal in action thus is always tied to the specification of the status quo or some reference point of the present goal. Such a goal implies that if an individual chooses from a given set of alternatives, he or she will choose the subjectively most optimal one, as assumed in neoclassical theory. Settling for an alternative below the optimal one would still allow the individual improvement of his condition in that very decision situation. But an improvement-related operational goal also addresses nongiven alternatives. The individual will search for possibilities to improve his or her condition regarding a particular goal achievement (cf. Lindenberg & Frey, 1993). The operational goal thus is also connected to assumptions about resourcefulness in RREEMM ("a human being will search for and often find possibilities to realize a state he or she evaluates more positively than the one he or she is in; he or she can learn and be inventive").

Substantively, the operational goal implies that relative gain is more important than absolute gain, and therefore reference points and social comparisons are crucial for the utility an individual derives from goal achievement. Utility thus is not something that inheres in what is achieved but derives from the comparison of what is achieved to the status quo ante of the concrete goal that was pursued. Improvement thus also may be the prevention of deterioration of the present condition, or limiting the loss that would materialize if you did nothing.

The goal to improve one's condition has long been recognized as a major operational goal. Adam Smith (1976) already had drawn our attention to "that great purpose of human life which we call bettering our condition."[18] His suggestion, however, did not survive the marginal revolution in the 19th century. Sociologists and social psychologists also long have been arguing for the importance of social comparison processes (for example, Durkheim, 1951; Sherif, 1966; Merton, 1957; Festinger, 1954; Helson, 1964). Their discussions, however, were outside the context of goal achievement. 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 & Tversky, 1979; Frank, 1992).[19] Despite this long pedigree, the idea has not yet led to any serious change in the operational goal in rational choice theory. One reason for this may be the fact that the idea was never developed

[18]*Theory of Moral Sentiments* (I.iii.2.1). We find a similar notion in *The Wealth of Nations* as a desire that "comes with us from the womb, and never leaves us till we go into the grave" (II.iii.28).

[19]Observe that this discussion should not be identified with the question whether the Weber–Fechner law of the "just noticeable difference" (cf. Sigler, 1965, pp. 109ff) should be used in utility theory.

in the context of research on goals and goal hierarchies. It is through the more recent research on the impact of goals on cognitive processes and through the research on goal hierarchies that the context of the discussion of operational goals takes on a new significance. The increasing interest in merging theories of emotion with theories of goal-directed action (cf. Turner, 2000), and quite generally an evolutionary perspective, is likely to support a rethinking of operational goals. Emotions such as anger, disappointment, sadness, regret, which exist side-by-side with emotions such as happiness and satisfaction, would seem to fit well an operational goal of "improving one's condition" and the problems associated with failing to reach it. Such an operational goal contains a reference point against which achievement is assessed, whereas utility maximization contains no such reference point. The latter is always achieved and would make no evolutionary sense of the human emotions engendered by failure. Seen in this light, the operational goal of "improving one's condition" will enjoy increasing attention from scholars of various disciplines who are interested in social rationality.

Meaning: Structuring the Situation

Neither neoclassical consumer theory nor the theory of rational egoists deal with cognitive processes. However, if one does consider cognitive processes, a serious question arises with regard to the mechanism by which an overarching goal may work. As will be discussed at some more detail in a moment, the influence of goals on cognitive processing is such that there is only one overriding goal at a time (although routines that do not require attention can go on simultaneously with the pursuit of the "present" goal). This focus on one goal can be easily reconciled with having the goal "to improve one's condition" be operational at the same time as the "present goal" that is being pursued. The latter is the specification of a means for the former. For example, I improve my condition by earning more money. What about other goals that may be present in the action situation, for example, because they are affected by the present goal? It is well-known that, say, the goal to earn money through work is likely to be affected by "hedonic" aspects of the job in addition to money, such as the risk to be injured or to get dirty, the status of the work, and so on (see Rosen, 1974). The question is how it is possible to stick to the notion that, situationally, individuals focus attention only on one goal, whereas the operational goal should apply situationally to many other goals as well. The answer should be looked for in the same process that creates the limitation of attention in the first place: framing. Framing is a process of structuring the action situation and in that sense it governs "meaning."

Framing. The theory of framing (Lindenberg, 1989a, 1993) combines some elements of Kahneman and Tversky's prospect theory (1979) with a theory on how the definition of an action situation (a "frame") affects the selection of knowledge chunks, beliefs, attention to certain situational aspects, recall of situational aspects, as well as the choice of action. The basic idea is quite simple. There are two types of behavior: automatic and controlled (see, for example, Bargh, 1984; Fazio, 1990). For example, while driving a car, it is possible to register and judge the movement of traffic, shift gears, and give directional signals, while at the same time carrying on a conversation about, say, Mozart's Don Gionvanni. The controlled action requires a scarce resource: attention. Attention is selective. Automatic encoding processes focus our attention, and thus create in any action situation an attended foreground and an unattended background. The focus of attention is strongly influenced by goals. A goal is a desired state of affairs. In the foreground, there is a goal that "frames" or defines the action situation in the sense that it mobilizes certain knowledge chunks and beliefs, furnishes the

criteria for the selection and ordering of alternatives, directs attention to certain attributes, and provides links to other action situations. Although the action situation is governed by a single goal, that does not mean that the "background" is unimportant. This background contains, among other things, goals that are potentially relevant in the situation, positively or negatively. For example, if one buys a new computer, the most salient goal might be to get the best computer below a certain price ceiling. But there also may be a goal concerning the pleasantness of design, another goal about having a computer better than one's colleague, and so forth. The crucial difference in the influence of goals on action thus is between direct and indirect. The background goals influence the frame indirectly in the sense that they increase or decrease the salience of the frame. Salience is a concept that acknowledges the possibility that other goals can distract from or intensify the pursuit of the major goals to varying degrees, depending on the direction and intensity of "externalities" of the goal pursued in the foreground on each of the background goals.

The salience of a frame strongly affects the distribution of choice probabilities over the alternative. For example, the nice design of a particular computer may decrease the likelihood that the "best" (but less attractive looking) computer will be bought. A very salient frame will lead to a very high probability that the "best" alternative for this frame is chosen because it increases the perceived difference between alternatives. Good reasons that might be embedded in chunks of memory and knowledge that are mobilized with the frame will, if present, increase the salience as well.[20] The lower the salience the more equal the choice probabilities over the various alternatives get (see Fig. 29.2). This indicates a "distraction" of the major goal by other goals in the background of the frame. For example, if you help a friend in need financially, then within the limits of your possibilities you may let yourself be guided mainly by what he needs. The opportunity costs for helping are not keenly perceived because they belong to goals in the background. As far as friendship norms are concerned, the high salience of "helping a friend in need" will lead to "optimal helping." However, if the friend keeps coming back for more, then the background goal of "improve your scarce resources" will become stronger and lower the salience of the frame "to help a friend in need" even if you are convinced that the friend's need is real. You may still help but you increasingly lower the amount (i.e., deviate more from the optimal amounts for friendship), and when you come into a situation where the salience of the frame approaches zero, i.e., when it gets close to a toss up whether you help or not, the frame is likely to switch to "improve your scarce resources." With the new frame, other alternatives come in with their own ordering, other knowledge chunks are being mobilized, and links to other kinds of situations come into view (see Fig. 29.3). You may regret not being able to see the friend as friend anymore when he turns up, but to see him only as a drain on your finances. But, like all constraints, the frame itself cannot be chosen at will, only influenced over time, for example, by trying to avoid situations that lower the salience of a particular frame.

The definition of a situation thus is governed by a situational goal that "frames" the situation. The frame also will heavily influence the kinds of beliefs that are being mobilized for the pursuit of the goal. For example, when my goal is "to help a friend in need," the beliefs that are mobilized along with this goal include beliefs about the general obligation to help a friend in need, about the legitimacy of asking a friend for help, and so on. If the frame is to "improve your scarce resources," then the beliefs that are mobilized include beliefs about the importance of guarding ones expenses, about the legitimacy of thinking of your own needs and financial worries, and so on. While all these beliefs are part of a person's repertoire of beliefs, the flashlight of framing shines only on some of them at any given point of time, which will

[20]A priori strength of the master frames, depicted in Fig. 29.2, will be explained later.

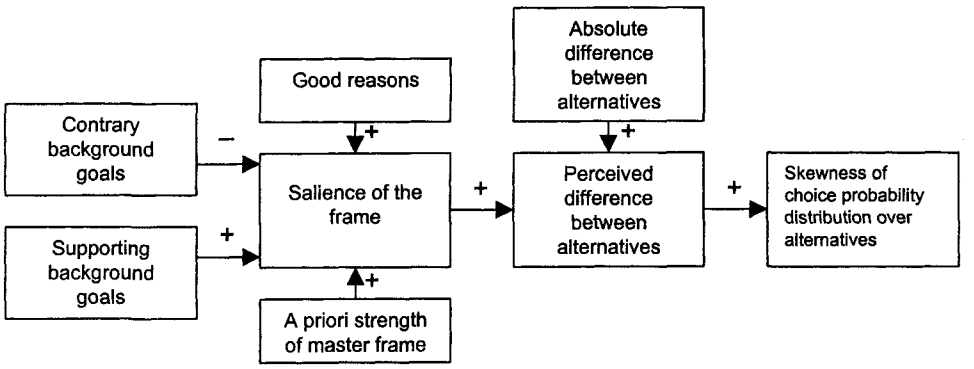

FIGURE 29.2 Simplified schema of framing effects on choice

create different weights for different beliefs at different times. This flashlight will not be equally selective for every goal. For example, Millar and Tesser (1989) found that in a context of instrumental action the focus on cognitive aspects of attitudes greatly increases the attitude–behavior correlation, whereas in a context of consummatory action (geared to feeling better) this correlation increases when the focus is on affective aspects of attitudes. The two contexts "pull out" different aspects of attitudes (see also Frisch, 1993).

In sum, the major direct influence on action comes from the frames, i.e., the selection of what is situationally relevant, of beliefs and attitudes and chunks of knowledge. This direct influence will be the stronger the more salient the frame. Other goals (i.e., those in the background) will play a role by influencing the salience of the frame. Their influence on action is indirect, and thus muted. When money plays a role only in the background, it will influence one's decisions much less than when it is part of frame itself. One can be penny-wise or pound-foolish, as the frame may be. In this way, the operational goal to improve one's condition cannot be linked just to the goal that is presently pursued (in the foreground) but at the same time also to many other goals (in the background). This point is very important because it describes the mechanism by which improvement with regard to the present goal is related to other higher-order goals. It is a "sluggish" relation in the sense that there is no direct way of thinking them through, no "calculation," only the indirect way via the influence on salience, and thus on choice probabilities. Still, the larger picture is not completely out of sight. Human beings thus are "sharp" in their goal pursuit only in a highly salient frame, less sharp in less salient frames, and quite fuzzy with regard to all the goals that happen not to be in the foreground. Depending on which one of these is chosen as an example of the way human beings pursue goals, one would come to very different conclusion about "rationality," not to speak about "maximizing."[21]

MASTER FRAMES

As described above, there is a goal hierarchy with subjective well-being at the top, physical and social well-being below the top, and so on. The operational goal for this hierarchy

[21]As argued earlier, this is one important reason why I reserve the term "rationality" for the set of human tendencies summarized in RREEMM rather than for the operational goal alone.

FIGURE 29.3 Schematic depiction of foreground (white) and background (black) goals in framing, with (from left to right) decreasing salience that leads to a frame switch.

of substantive goals (namely, to improve one's condition) can itself be seen as the top of a hierarchy, with chains of means for the achievement of the improvement below the top. This is useful because of framing effects. Let me briefly explain why.

There are many goals, big ones, small ones, abstract ones, concrete ones, and so forth. For example, one can have a goal of taking a walk, then there will be many smaller sub-goals such as putting on a coat, locking the door, lifting your feet from the ground step by step, and so on.[22] There is a confounding influence of automatic and controlled behavior with regard to goals. For example, if one's goal is to write a paper, then the frame will govern the activities (thinking, reading, writing, correcting); some of them will be automatic, others not. However, as one writes, automatic processes may increase the salience of a background goal (such as "getting something to eat") and lower the salience of the frame, leading to a frame switch. Thus, while some automatic processes are subject to the given goal, other automatic processes influence the goal selection itself.

I am most concerned here with high-level goals that are subject to automatic selection and that in turn govern the selection of lower-level goals. Such overarching goals may indirectly be influenced by willfully bringing oneself into a particular situation, just as sleep itself is not controlled by will but can be enticed by going to bed. High-level goals will influence the selective mobilization of beliefs and knowledge chunks for lower-level goals. One such higher-level goal (in the background) may affect the other (in the foreground) by increasing or decreasing its salience. We thus gain some ordering in overarching foreground and background goals. For this reason, it is useful to focus on higher-level frames that help us to manage the great variety of substantive goals people have with a small number of frames that count the most in terms of the meaning of the situation and behavioral and emotional consequences. What might the most important higher-level frames be?

The operational goal "to improve one's condition" is linked to classes of ways and means to actually improve one's condition, each with similar main features of selection in the framing process. We can divide the means roughly into two main classes. First, there are means to directly improve the state of goal achievement with regard to physical and social well-being. The general way to achieve this is to strive for an improvement in one's feeling (emotions). For example, if I feel hungry, I can improve my condition with regard to this feeling by eating. What all these means have in common in terms of framing is that they serve the high-level subgoal "to feel better." Second, there are means to improve one's condition with regard to the resources one has for reaching higher level goals. If I earn more money, I can use it to

[22]There are even considerations of optimality (i.e., good reasons) with regard to the level at which an action is identified. Vallacher and Wegner (1987) suggested an "action identification theory" in which there can be a mismatch between level of action identification and the difficulty of the task (difficult tasks should be identified on a low level, easy ones on a high, i.e., inclusive, level).

achieve more of the higher-level goals. This goal to improve one's resources will indirectly have consequences for the achievement of physical and social well-being but as a goal, it is very different from "feeling better." In a moment, both overarching goals will be dealt with in some more detail. Before I get to this, a third overarching goal has to be introduced that takes on a very special meaning: the goal to act appropriately. It is seemingly not directly linked to the operational goal to improve one's condition. As we will see, such a goal is the answer to a paradox: that improvement with regard to some goals (for example, behavioral confirmation and affection) can be achieved much better if it is the by-product of action rather than the intended result. The importance of this "twist" for the rule following and the role of morality can hardly be overestimated. Let me take up each of these overarching goals in turn.

Hedonic Frame

In a hedonic frame the goal is "to feel better." In other contexts such a frame has been called "consummatory." 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 also have been identified as the main dimensions of affect and moods (see Russell, 1983; Watson & Tellegen, 1985). They may be involved in almost everything people do. For example, one may feel as unpleasant going against a norm by offending other people, or failing to gain resources. The crucial question is whether feelings play a role in the foreground or only in the background. In the background, the goal "to feels better" only influences the salience of the reigning frame. For example, if the frame is "to improve your resources," specified in terms of improving income in your present job, then the choice alternatives are likely to be ordered by the way the wage rate is specified, say, as hours of work per week. The effort you put into these hours is not directly considered. It comes in only indirectly via the background by reducing your feeling of comfort with increasing hours of work. This in turn will lower the salience (i.e., the strength) of the frame and thereby increase the likelihood that the second or third best alternative will be chosen. You might work fewer hours because of it. This looks like the same result one would get from putting "leisure" and "income" into the same utility function, but it is not. There are two important differences. First, the effect of "feeling better" (in terms of comfort) on the decision to work a certain number of hours is much reduced when it comes from the background. In such situations, people have been known to work themselves into illness. Second, there is a difference with regard to the alternatives that are being considered and therefore a difference in the aspect on which improvement focuses. Had "decrease your feeling of discomfort" been in the foreground rather than "increase your income," then the choice alternatives would in all likelihood have been ordered according aspects regarding comfort, that is, aspects having to do with effort. The person would search for effort-related aspects of the job (given the present number of hours he works per week), i.e., for possibilities to get by with putting less effort into it, and choose the one with the least effort.

Thus, only when feelings become the center of attention, i.e., when the situational goal is directly focused on arousal and/or pleasantness or unpleasantness, do they determine the aspects selected for attention, the chunks of knowledge that are activated, and the criteria for judging the success of one's plan of action. Then "hedonic" is an appropriate label. The time horizon of this frame is short because the goal is by definition linked to the here and now (see Loewenstein, 1996).

There is a particular kind of event that has a high likelihood of triggering a hedonic frame: loss. Loss is not the same as negative gain. The asymmetry between losses and gains in terms of utility (when both are subjectively medium or large) seems to be well established (see Kahneman et al., 1991). Losses weigh heavier than gains. But there seems to be another difference involved than just one of utility. Gains are by and large less disruptive than losses, and thus are less likely to be accompanied by a strong hedonic response (i.e., by being both aroused and feeling good/bad).[23] For this reason actual or expected losses are more likely to trigger a hedonic frame than actual or expected gains.[24]

Gain Frame

The goal to improve one's resources includes two subvariants. First, the goal is the increase of resources held, such as increasing the amount of money one has. The other is to improve the efficiency of one's production function, such as searching for a better paying job in order to increase the productivity of working time in terms of money. Although there are important differences between these aspects, they may be taken together in one master frame with the name of "gain frame." Such a frame is most typical of what people generally associate with self-interest. Gain as a goal is here defined in terms of increasing one's scarce resources for producing higher-level goals, such as money, disposable time, knowledge, skills, decision power, social influence, and so forth,[25] or of improving the productivity of the given production functions. Often, but by no means always, these two aspects of gain will go together.

Again, the kinds of knowledge chunks, beliefs, attention to situational aspects, and so on that are being mobilized in a situation where gain is the frame are specific to the task, the more so the more salient the frame. Above, we had discussed the example of going for income or leisure in a job. Another example is helping. If somebody is asked for help, then a person in a gain frame will not mobilize beliefs about the general obligation to help or about the legitimacy of asking for help, but rather, say, beliefs about the possibilities of making a profit and the legitimacy of making the best of the situation for yourself. How can you earn something by helping, or how can you increase your influence by doing so? Is this person able to harm you later on if you do not help now? Would not helping frustrate other plans to advance your condition? In a gain frame, the situational aspects that draw one's attention are in answer to such questions. Below, we will see that helping looks very different in a "normative" frame.

Normative Frame

There has been much discussion about the question whether there is a "moral dimension" in human action (for example, Etzioni, 1988; Elster, 1991). In rational choice theory, the

[23]Emotions have been linked to the interruption of goal chains (see Mandler, 1984). Medium and large losses are associated with negative interruptions of goal sequences, whereas medium and large gains are either the result of goal sequences or are likely to be interruptions that advance you closer to a goal.

[24]Of course, at times gain can be disruptive of the status quo (in a positive and negative way) and then also be linked to a hedonic frame rather than a gain frame. For example, getting a driver's license is often associated with a significant change in status quo and thus possibly linked to a hedonic frame.

[25]Status can be a valuable resource for achieving other instrumental goals (such as money, access, etc.), and thus status is both an aspect of social well-being and a resource, more so than behavioral confirmation and affection. For this reason, the marginal utility of status is likely to decrease less with increasing status than the marginal utility of the other respects of social welfare.

controversy does not seem to be anymore whether there is something like a sense of obligation but how it is compatible with the theory of rational egoists. In the theory of social rationality, it is not a question of compatibility with self-interest but with the operational goal "to improve one's condition."

Does following obligations belong to a separate master frame, not subsumable under a hedonic or a gain frame? If so, where is the connection to improving one's condition? The argument I would like to introduce here has been elaborated elsewhere (Lindenberg, 1983, 1992a). 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 reasons).[26] 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/or affection) or some other advantage is less likely to get it than is a person who seemingly is intrinsically motivated to act morally and follow the norms. He 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, 1989a) and it is reinforced time and again during the life course: in the realm of morality and norms, it is genuine noninstrumental behavior that is rewarded. Whereas this is especially so for social approval and trust, it also holds for other advantages. In short, endowed with the ability to "internalize" social expectations and probably with the massive help of emotions like shame, guilt, and (fear of losing) love, children learn to develop a sense of obligation seemingly without any instrumental link to their other two master frames.

In terms of framing, we can say that individuals develop the ability to pursue the goal "to act appropriately" in such a way that other goals (especially the other two master frames) are pushed into the background and are thereby veiled (see Fig. 29.4). However, because of the simultaneous working of foreground and background goals, the social approval and other advantages achieved by norm conformity will have a positive effect on the salience of the normative frame. A friend asking for help is likely to trigger this overarching normative frame with the subgoal "to help a friend in need." Given the friendship norms, helping a friend in need is the appropriate thing to do and there is an appropriate range for the amount of help that the friend can legitimately ask. Within that range, the cost of helping is not sharply calculated because it belongs to a goal in the background (say, the goal "to improve one's scarce resources"). This veiled relation to any instrumental connection to the other master frames can explain why social scientists often have insisted that morality is nonutilitarian (value or

[26]Emotions such as guilt and shame probably play an important role in the ability to learn "to act appropriately" as a separate goal, strong enough to push many other goals into the background. But it is the central point of framing theory that the avoidance of the feelings of guilt and shame are not the driving motives in following norms and moral maxims. This may lead to an asymmetry in the role of shame before and after a deviant act. In a normative frame, shame is in the background and after a deviant act shame may be so strong that it creates a switch to a hedonic frame aimed at improving the depressed feeling and not at restoring what was normatively asked in the first lace. In his study of emotions, Elster (1999, pp. 153, 156) observed that "shame is weighted too little when anticipated and too much when experienced" and "in shame, the immediate impulse is to hide, to run away, to shrink—anything to avoid being seen."

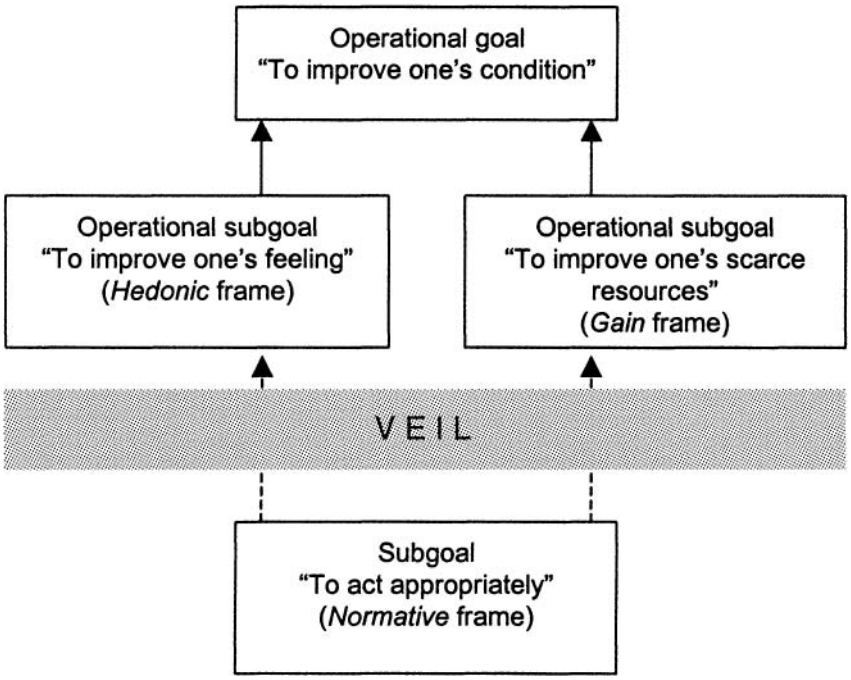

FIGURE 29.4. The three master frames in their relation to the main operational goal

axiologically rational, intrinsic, deontolocial), whereas even casual observation shows that conformity to norms is sensitive to rewards (especially social rewards).[27]

Ligthart (1995) could show this influence of norms on frames experimentally. In scenario experiments, he contrasted business transactions between, respectively, two friends, two acquaintances, and two strangers. The scenario is as follows. A customer comes into a secondhand bookshop and wants a book that is long out of print and not often seen in secondhand bookshops. He is willing to pay up to $65 for it. The owner of the shop does not have the book but promises to look for it. A week later he finds the book in a rummage sale for $35, a price the customer is, of course, not aware of. Question: what price will the bookseller ask of the customer? Notice that there is asymmetry of information and because of that the bookseller need not be concerned about the influence of the price he asks on future interactions as long as the price is seemingly still related to cost and not suspiciously close to the maximum offer. Standard rational choice theory would predict that he would ask the same price of a friend, an acquaintance and a stranger, namely, the highest possible price that is not outrightly suspicious, say between $60 and $65 dollars. Framing theory would predict that vis-à-vis "regular" customers (strangers and acquaintances), the bookseller is in a gain frame (i.e., he has to make a living off selling books). But when a close friend comes and asks for a favor, the bookseller would be in a normative frame and behave appropriately according to friendship norms (which generally exclude making a profit off a friend). The difference between acquaintance and stranger would show up in the strength of the salience of the gain frame: vis-

[27]Boudon (1996) is one prominent scholar who recently has reiterated a realm of noninstrumental rational action. However, he does not deal with the seeming paradox that this action is sensitive to rewards even through it is not oriented toward ulterior goals.

à-vis the acquaintance there are some relational concerns that lower the salience of the gain frame, while vis-à-vis the stranger, there are no such concerns (high salience). It is not appropriate to make profit off a friend; therefore the predicted price vis-à-vis the friend was cost price (thus $35). The predicted price vis-à-vis an acquaintance was a price that would split the difference (representing a compromise between profit making and relational concern). In the scenario, the customer was willing to pay $65 (which defines the upper limit for the price), the costs were $35 (which defines the lower limit of the price), the midpoint between these limits is $50, which then represents the "split-the-difference" price. Vis-à-vis the stranger, the bookseller is predicted to ask what the standard rational choice theory would predict for all three relations: the maximum nonsuspicious price, somewhere between $60 and $65. The results clearly rejected the predictions of the standard rational choice model for friend and acquaintance and favored the framing prediction: $40 was the average price asked of the friend, $52 of the acquaintance, and $57 of the stranger. These prices were statistically different from each other. A test of the appropriateness of prices vis-à-vis a friend and vis-à-vis an acquaintance corroborated the framing interpretation: cost price was considered the most appropriate price to ask of a friend and the split-the-difference price was considered the most appropriate price of an acquaintance (see Ligthart & Lindenberg, 1994).

There are aspects of instrumentality that can go along with following norms but they have nothing to do with the operational goal "to improve one's condition." For example, obligations may be embedded in public good arguments. Such "good reasons" may be mobilized with the frame along with other chunks of knowledge. They are likely to heighten the importance of conforming to the norm or moral maxim and thereby the salience of the normative frame. In this way, theories and ideologies can contribute to norm conformity and moral behavior. For example, the economist North (1981) argued that interconnected comprehensive views of the world (which he calls "ideologies") play an important role for human action, mainly through the link of ideology to legitimacy and fairness judgments and the role these two play in overcoming the free rider problem. For example, "if individuals believe in the value of political democracy they will vote as a matter of civic obligation" (North, 1981, p. 53), North, however, does not offer a mechanism how this acting out of obligation can exist side by side with self-interested behavior.

THE RELATIVE STRENGTH MASTER FRAMES

When we consider the three master frames we must ask about their relative strength. Is there an a priori difference in their salience, and thus in their ability to displace each other? In the literature, this question has been discussed for a long time (see Hirschman, 1977) in terms of ordering passions, interests, and reason, three categories that come somewhat close in meaning to the three master frames because "reason" included morality. The most prominent view before the 18th century was that passions have the upper hand when compared to reason. Spinoza recounts this view:

> All men certainly seek their advantage, but seldom as sound reason dictates; in most cases appetite is their only guide, and in their desires and judgments of what is beneficial they are carried away by their passions, which take no account of the future or of anything else.[28]

[28]Tractatus theologicopoliticus, Chapter V. Quoted after Hirschman (1977, p. 44).

According to Hirschman, it was in the 18th century that the concept of "interest" was introduced in the sense of a nonvolatile passion: the love of material gain, which is ruled by reason. It is this combination of a soft passion with reason that is supposed to subdue all volatile passions and in addition is socially acceptable by the fact that it serves the ends of society at large (see Myers, 1983). Over the years, the love of gain has evolved into the main meaning of the term "self-interest." The discussion of passions had more or less vanished from the intellectual agenda of economics.

What should we make of the relative strength of the master frames? The a priori strength of a frame should be related mainly to two aspects. First, the role emotions play in its salience; second, the relation it has to the operational goal ("to improve one's condition"). Remember that the subgoals of physical well-being and of social well-being operate via emotions. Emotions can be tied directly to the frame (via the foreground) or only indirectly (via the background). A direct tie should have a strong positive impact on the salience of the frame. Emotions that only operate from the background have a reduced influence on the salience. The same is true with the operational goal "to improve one's condition" (see Table 29.1). In the hedonic frame the goal is "to feel better," and therefore it is directly tied both to feelings and to the operational goal. It should therefore be a priorily a very strong frame. In the gain frame the goal is "to improve one's resources." Resources are instruments for improving the condition with regard to the emotionally charged subgoals of physical and social well-being. However, gain does not itself improve the condition of hedonic goals; it only increases the potential for doing so. Its tie to emotions is thus indirect, whereas the tie to the operational goal is direct. On one count, it is thus weaker than a hedonic frame. For the normative frame, both ties are indirect because the instrumentality of following norms and moral codes for the improvement of one's condition (regarding hedonic goals and also regarding gain) is pushed into the background. Thus the a priori relative strength of the three frames should be in that order: hedonic, gain, normative.

The theory of rational egoists takes self-interest as the strongest motive. It could mean either a hedonic or a gain frame, but from the tradition of the concept it is clear that self-interest in rational choice theory is associated with gain rather than with the hedonic frame. In fact, the theory of rational egoists does not cover hedonic motives, and thus also offers no clue under what conditions a gain frame may be more salient than a hedonic frame. At times, a hedonic frame can be brushed aside as "irrational," but mostly it is simply ignored. The theory of rational egoists also has trouble dealing with normative frames. The existence of obligations is acknowledged but remains troublesome. Two ways of dealing with obligations have become popular in rational choice analyses. First, the attempt to concentrate on situations in which seemingly normative behavior can be shown to be motivated by self-interest after all. Consider, for example, a quote from Gary Becker (1996): "We have trouble understanding the people who take good care of elderly parents even when *not forced by social norms or altruism* ..." (p. 128, emphasis added). The context is that he wants to show that helping also can be

TABLE 29.1. Dimensions of Relative a Priori Strength of Master Frames

Master frame	Tie to emotions	Tie to operational goal	A priori frame strength
Hedonic	Direct	Direct	+++
Gain	Indirect	Direct	++
Normative	Indirect	Indirect	+

seen as utility-maximizing behavior. The expression "forced" is indeed curious but it shows the recent acceptance of obligations as something to be taken seriously without having to be dealt with. Second, there is the logical solution that normative frames become salient when the gain to be had in a situation is negligible. This view has become well-known under the name of "low-cost decisions" (see Kirchgässner, 1992). Morality can reign when gain is too weak to compete. This solution is quite acceptable in terms of the a priori ordering of master frames, but it says nothing about the cases in which the normative frame is surprisingly strong. Such cases are generally excluded from the analysis when the theory of rational egoists is applied. For example, Olson (1965) tells us that rational choice makes self-interested people free riders, but he immediately adds that "the theory is not at all sufficient where philanthropic lobbies ... or religious lobbies are concerned" (p. 160). Presumably, philanthropic and religious zealots are strongly motivated but in a way that does not lead to free riding out of rational self-interest.

The a priori strength of salience would indeed boil down to a hierarchy of motive strength were it not for the fact that the salience of frames also is affected by goals in the background. The a priori strength of a frame may be considerably altered by "good reasons" in the foreground and by goals in the background of a frame. For example, the salience of a normative frame may be significantly stabilized by the fear of disapproval from self and others (which is a hedonic factor), by the fear of being fined (which is a gain factor), and also by, say, a public good argument (see Varese & Yaish, 2000). *There is, in short, no fixed hierarchy of salience strength once we consider framing effects.* For this reason, the strategy of rational choice scholars to focus on self-interested action and leave the rest to people who deal with exceptions and fine-tuning only works reasonably well if we confine our analysis to situations of high-salience gain frames (such as spot markets and other situations of strong competition). One also can lump hedonic and gain frames together as "selfish motivation" when dealing with low-evidence situations, in which we have little information (at first) on possible hidden supports of a normative frame (see Lindenberg, 1996). In the latter case, selfishness as the guiding motive then can be interpreted as a heuristic device in the face of uncertainty on factors that change the a priori hierarchy of frame salience.

One could even argue that in any society considerable effort is made to create hidden supports for a priori weak but socially important frames. In addition to the sanctions (i.e., gain aspects) associated with rules of law, societies are eager to have these rules be legitimate (i.e., supported by fear of disapproval, normative obligation, and judgment). Weber's (1961) thesis on the impact of religion on the development of capitalism can be interpreted as a case in point. Hume had already observed that institutionalized standards and expectations can pull the gain frame above the hedonic frame: "It is an infallible consequence of all industrious professions, to ... make the love of gain prevail over the love of pleasure."[29] But for many occupations he does not go far enough because they also imply training in honor codes and other normative obligations for practitioners, greatly lowering the probability that the professional judgment is made in a gain frame.

In the literature, an important point had been made about the ability of "extrinsic" motivation (especially the pursuit of money) to displace "intrinsic" motivation (see Frey, 1997). With the help of framing, we can see that it is not really a matter of axiological motivation but a matter of veiled instrumental connections. If I pay my son for doing his duty in and around the house (say, paying $5 for mowing the lawn), I intrude into the normatively defined situation with a gain frame. The next time I ask my son to simply do his duty and mow the lawn for nothing, the prior payment is likely to lower the salience of the normative frame

[29]Writings on Economics, quoted after Hirschman (1977, p. 66).

and thereby draw attention to the opportunity costs of the time it takes my son to mow the lawn. In all likelihood, there will be a frame switch. In an environment in which there is strong consensus on norms and obligations, the frame switch is difficult to reverse because easily measurable opportunity costs (measured in terms of money) outweigh vague and fuzzy opportunity costs (measured in terms of what he forgoes by not doing his duty). Money takes on a special significance in such environments because it allows a much more precise measurement of costs than most other goods.

We may conclude that social scientists need to trace the social and institutional mechanisms that change the a priori ordering of master frames. Even a gain frame takes careful social and institutional support. Of course, there are many market situations in which one can safely take a gain frame as given and not bother about other frames. However, in any more detailed analysis of markets in a particular industry, the theory of rational egoists will simply miss a large part of the story. For example, for the functioning of modern markets with incomplete contracts, "balancing" of gain and normative frames may be the essence of complex transactions. Trust problems cannot be solved just by lowering strategic opportunism with credible commitments; it also takes strong normative frames (see Lindenberg, 2000). The two solutions are bound to each other. Unless strategic opportunism is lowered by credible commitments, we cannot expect a normative frame to be strong enough to hold its own against a gain frame. Research on the social and institutional conditions of the relative strength of master frames would have ramifications far beyond the study of markets.

SUMMARY AND CONCLUSION

There is growing consensus about the key elements of human behavior that jointly define what is meant by the phrase "human beings are endowed with rationality." These elements have been summarized by the acronym RREEMM: Human beings are Resourceful (search and learn); Restricted (confronted with scarcity and choose); Expecting (generate expectations), Evaluating (have goals which lead to preferences); Motivated (are motivated to achieve a condition which they value more highly than the one they are in); Meaning (try to make action situations meaningful in terms of other elements of RREEM).

Of course, these elements are interrelated. The specification of one limits the degrees of freedom for specifying the others. By specifying each key element in such an interrelated way, one turns RREEMM into a theory of action. The most well-known specifications are the neoclassical consumer theory and the theory of rational egoists. Both specify RREEMM in such a way that the exigencies of formalization and deductive tractability largely dictate the simplifying assumptions. In both, the specification of motivation is taken to be the most important element of RREEMM, and the requirements for a precise meaning of "maximization" strongly influence the specifications of the rest. It has been argued in this chapter that these requirements lead to theories that are less useful in many sociologically interesting contexts, and that for these contexts the specification of RREEMM should not be made according to the exigencies of formalization. Worries about deductive tractability should come only after the substantive specifications on RREEMM have been made. As an example of what such a substantive specification would look like the theory of social rationality was presented. What are the differences?

In *neoclassical consumer theory*, the assumption on perfect information on goods and prices renders the elements "resourceful," "expecting," and "meaning" trivial. Preferences are assumed to be ordered whatever they may be. There thus is only a pragmatic "selection" of

goods (consumer goods) for study, without excluding any other goods over which preferences are defined. The assumption on restrictions also is pragmatic: it contains the relevant resources (budgets) available to acquire the priced goods over which preferences have been defined in any given study. With these specifications, "motivated" can be succinctly defined as maximization of utility by ranking the available options according to the ordered preferences and by choosing according to this ranking. This renders "rationality" mainly a matter of consistency.

In the *theory of rational egoists*, two key elements have been changed in comparison to the neoclassical consumer theory. First, the goods over which preferences are defined are narrowed down to goods that serve self-interest. Even though the meaning of self-interest is somewhat vague, it is still a considerable step away from the "open preference" assumption of neoclassical theory. The immediate consequence of this change is that restrictions are looked at in a different way. They are not seen as budgets to be optimally allocated over priced goods but as sets of discrete feasible alternatives with relevant outcomes. The researcher selects and orders the alternatives on the basis of assumptions made on self-interest (say, fear and greed in a prisoner's dilemma). Second, the assumption on perfect information is withdrawn and replaced by an assumption on uncertainty with regard to probabilities of occurrence. This change renders "resourcefulness" somewhat more important (because of search activity for uncertainty-reducing information) than in neoclassical theory and it changes the technical meaning of "maximization" to "maximizing expected utility."

Because these two theories seem so similar, they are often confused and confounded. Attacks against rational choice theory as assuming human beings to be much too egoistical are fought off by pointing to the open preference assumption. Conversely, attacks against the theory that it is so vague that it can only "predict" after the fact are countered with the definite predictions made on the basis of clear self-interest assumption.[30]

The *theory of social rationality* fills in RREEMM in quite a different way. The most critical key elements that are specified differently are the two elements on goals ("evaluating" and "motivated") and on "meaning." An explicit theory of substantive goals is introduced. It is based on the idea that human beings "produce" their own well-being and that the ultimate goals for which they strive are the same for mankind, whereas the means they use can be culture or subgroup specific. The means turn into "instrumental" goals if the individual does not have them but strives to acquire them. In this way, goals form a production hierarchy in which the most general goals (physical and social well-being) are on top and the more specific instrumental goals are below. Preferences for instrumental goals are not "tastes" but reflect social contexts, knowledge, and resources. They become the subject matter of genuine sociological analysis. In addition, processes of substitution can be traced, reflecting changes in relative production advantages (or costs).

The operational goal ("motivated") is assumed to be a general striving for the improvement of one's condition, not a general striving to choose the best given alternative. The difference is mainly twofold. First, the individual will search for possibilities to improve his or her condition regarding a particular goal achievement. This renders resourcefulness much more important than it is in either neoclassical theory or in the theory of rational egoists. Second, the operational goal implies that relative gain is more important than absolute gain, and therefore that reference points and social comparisons are crucial for the utility an individual derives from goal achievement, prominently the individual's own condition with regard to the foreground and background goals at the moment of choice.

[30]The possibility to shift selfishness up one level (to the genes) opens up possibilities for genuine cross-overs, in which the theory of rational egoists is applied to genes, whereas a menu of different kinds of preferences are assumed for human beings (including prosocial preferences).

Processes of selective attention lead to the structuring of situations in terms of goals. Thus, "meaning" in the sense of the definition of the situation is provided by the situationally strongest goal that "frames" the situation in terms of the relevant aspects and ordering of alternatives. However, the weaker but potentially relevant goals in the situation are still able to exert some influence from the background into which they have been pushed. They can increase or decrease the salience of the frame and thereby the degree to which the action is determined by the given ordering of alternatives. For example, the wish to improve one's resources may negatively affect the salience of the goal to help a friend without any direct weighing of costs against helping.

Because goals are so important for providing meaning to action situations, it is very important to know which major goals govern the definition (or structuring) of the situation. One can distinguish three master frames, one in which the major goal is "to improve one's feeling" (a hedonic frame), one in which the major goal is "to improve one's scarce resources" (a gain frame), and one in which the major goal is "to act appropriately" (a normative frame). Action emanating from a normative frame is what sociologists have usually called "acting out of a feeling of obligation." In such a frame (and only in this frame), the connection to "improving one's condition" is veiled. Therefore, actions are seemingly driven only by normative or moral concerns. The "gain frame" covers what is mostly assumed to be self-interest in the theory of rational egoists. The hedonic frame has been largely ignored by rational choice theorists. It is a different kind of "self-interest," tied to a short time horizon and feelings (i.e., emotions) as success criteria. Which frame wins out in any given action situation? One can argue that the hedonic frame is a priorily stronger than the gain frame, which in turn is a priorily stronger than the normative frame. The crucial question then is what social conditions are able to change this a priori ordering. In finding answers to these questions, one needs to consider social goals as well as social restrictions and social sources of expectations. It even takes favorable conditions to have a gain frame displace a hedonic frame. In general, then, the possibilities of producing physical and social well-being and the possibilities of improving this production belong to the most important bits of information for sociological analyses. The theory of social rationality thus leads to a very different heuristic guidance through the thicket of the social world, and that may make the (possibly temporary) reduction in deductive tractability worthwhile.

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