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**Abstract Ernst E. Boesch went beyond the limited conceptualization of thinking about the future in terms of expectancy judgments prevalent in empirical psychology during the past 50 years. He explicitly focused on fantasies and analyzed their main source called 'fantasm'. Based on the theory of thinking about the future (Oettingen, 1996, 1997a), it is demonstrated how important it is when predicting motivation and action to differentiate between expectancy judgments and free fantasies. Thinking about the future in terms of positive expectancy judgments fosters motivation and action, whereas positiveness in spontaneous fantasies about the future are a clear drawback. However, this detrimental effect can be stopped if free positive fantasies are mentally contrasted with reflections on the contradictory negative reality. Given these circumstances, free fantasies are turned into binding goals which motivate goal striving. The presented findings have intriguing implications for Boesch's action-theoretical ideas as much as Boesch's suggestion to link action theory with cultural psychology has important consequences for the present theorizing. It is speculated that cultures may be characterized in terms of future-oriented thinking and it is analyzed how these differences have an impact on various cultural phenomena discussed by Boesch.**

**Key Words action, expectation, fantasy, goal, optimism, self-regulatory thought, thinking about the future**

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## **Culture and Future Thought**

**'The Person who is aware of the past knows about the future!' This slogan captures how psychological research of the past 50 years conceived of thinking about the future. Under the influence of the neobehaviorist Edward Chase Tolman, empirical research has conceptualized and operationalized thinking about the future as judgments-on how likely it is that certain future events will occur. Such expectancy judgments are held to reflect a person's performance history. As the behavior of the past has always been a powerful predictor of the respective behavior in the future, it comes as no surprise that expectancy judgments, to this date, are one of the most powerful cognitive variables predicting a person's motivation**

and action. Moreover, as expectations can be precisely and easily assessed via paper and pencil procedures, they gained enormous popularity in various areas of psychology.

### **Boesch's Foreseeing the Future of Research on Thinking about the Future**

In the 1970s, with the increasing popularity of such influential theories on expectancy judgments as the reformulation of the learned helplessness theory (Abramson, Seligman, & Teasdale, 1978) and the social cognitive theories of Bandura (1977) and Mischel (1973), Ernst E. Boesch thought about a whole array of concepts pertaining to a person's anticipation of the future. Being a student of Piaget and educated as a psychoanalytic therapist, he even considered fantasies and their potentially underlying construct *fantasm*, which in empirical research bore the stigma of the psychoanalytic tradition. In the following, I want to sketch Boesch's central action-theoretical concepts addressing the topic of anticipating the future, and then briefly outline how these concepts reappeared in mainstream psychology of the 1980s and 1990s verifying Boesch's earlier contentions.

#### **Ego-Potential**

A central concept in Boesch's writings is *Ich-Gefühl* or ego-potential. By assigning a crucial importance to a flattering, positive evaluation of one's potential, Boesch foresaw the development of empirical psychology in the 1980s, when the causes and consequences of positive thinking in terms of expectations became a major field of interest. Irrespective of whether these expectations are operationalized as self-efficacy expectations (i.e. expectations on whether one can perform a certain behavior in its relevant context), as outcome expectations (i.e. as expectation of whether this behavior will lead to the desired outcome) or as generalized expectations (i.e. as expectations of whether a certain outcome will occur), an increasing amount of evidence holds that optimistic expectations promote persistence, effort and actual success in various life domains, for instance, in the interpersonal, academic and health domain (for a summary, see Bandura, 1997; Oettingen, 1997a; Seligman, 1991; Taylor & Brown, 1988, 1994).

Boesch's conceptualization of *Ich-Gefühl* or ego-potential, despite being broader in scope (also encompassing self-esteem and a generalized sense of control), shares many features with the concept of expectation. Like efficacy expectation, ego-potential pertains to estimates of whether a person has access to the relevant means in a given situation. Like expectation (whether efficacy expectation, outcome expectation or general expectation), ego-potential is a subjective estimate of one's own potential and does not necessarily

depict objective facts. Like expectation, ego-potential is said to reflect a person's past experience. Accordingly, Boesch holds that the ego-potential varies with reality and does not have to be a defense mechanism in the sense that it compensates for past failure or perceived threat. This is similar to notions of expectancy judgments.

Boesch's conceptualization of ego-potential illustrates, then, that his theorizing was neither narrowed down by the neo-behaviorist tradition nor blindfolded by psychoanalytic or humanistic dogmas, despite the fact that these three approaches governed much of the psychological theorizing of his time.

#### Goals, Aspirations and Standards

Boesch also talked about goals, aspirations, and standards at a time when these concepts were not yet popular. Within the past 10 years empirical research on these concepts has experienced an upsurge, whereby the findings again have largely confirmed Boesch's postulates. Boesch (1976) defines goals in the following way:

Unsere Handlungen sind gerichtet. Das, was sie zu verwirklichen streben, nennen wir das Ziel - ob es nun naheliegend und körperlich sei, wie das Stillen des Hungers, oder so weit entfernt und objektiv wie der Bau eines Hauses, oder so schwer faßbar wie eine geistige Erleuchtung. (p. 21)

Whether a person then actually pursues a goal is said to depend on the subjective valence of the goal and its feasibility. Thus Boesch's writings are in concordance with the expectancy value models of the neobehaviorist tradition (Atkinson, 1964; Heckhausen, 1991; Tolman, 1932/1967) and of the modern theorizing on goals (e.g. Locke & Latham, 1990), which both stress the importance of the estimated values and expectations of success when predicting goal setting (for a summary, see Gollwitzer & Moskowitz, 1996).

When it comes to how a person moves towards his or her goal, Boesch takes both a motivational and a cognitive approach. He specifies a person's goal as something attractive that pulls the person towards goal completion. And if a given standard is reached, a person's ego-potential is strengthened. But Boesch also spells out purely cognitive processes. In line with the ideas of Miller, Galanter and Pribram (1960) he refers to the mechanisms of the negative feedback loop, where the goal specifies a fixed performance standard which is compared to the actual accomplishment. In case of divergence, action towards reaching the goal is executed. The function of regula-

tory processes is to adjust the actual state of affairs (*Ist-Wert*) to the imaginary standard (or ideal, reference-value, *Soll-Wert*) and to stop action after this *Soll-Wert* or standard is attained. Standards are seen as organized in a hierarchical way with superordinate (e.g. furnishing a home) and subordinate (e.g. hanging pictures on the wall) goals so that the negative outcome of a higher-order goal triggers a lower-order goal pursuit. Finally, a given discrepancy is reduced most effectively when a person possesses a strong respective ego-potential.

Boesch's emphasis that the experience of discrepancies between *Soll* and *Ist-Wert* is at the basis of goal-directed actions corresponds to both Carver and Scheier's (1990) and Bandura's (1991) recent discrepancy reduction models and the findings they have generated. Carver and Scheier correspond to Boesch's cognitive theorizing in their hierarchical cybernetic approach, whereas Bandura, in postulating positive and negative self-evaluations as an important factor motivating a person to reach his or her set standards, speaks for Boesch's motivational perspective. Thus Boesch combined in one integrative model cognitive and motivational approaches that in recent research have reappeared in separate, individual theories of standard or goal pursuit.

### Fantasms

What, then, is a fantasm? Boesch defines the term 'fantasm' from both a cognitive and a motivational perspective. On a basic level fantasms, or fantasy themes, are *cognitive* tools to produce respective situationspecific fantasies. Fantasms determine the meaning of a specific fantasy in a given place and time. For example, a boy can express his hero-fantasm in specific fantasies of being a bus-driver, superman, pirate or-later in his development-in being the winner of a chessgame, spelling-bee or ski race. Fantasms are action schemas of a 'subjective-functional' kind, that is, they refer to the relation between the self and the environment. Thus they bear strong similarities with the modern notion of self-schemas. Markus (1977) holds that selfschemas are cognitive generalizations about the self that organize and guide the processing of self-related information. She distinguishes individuals with schemas in a certain domain (e.g. body weight schematics) from those without such schemas (aschematics), and finds that whether a person is schematic or aschematic has important implications for the processing of the respective self-related and other-related information. These results are in line with Boesch's hypotheses

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that fantasms (or self-schemas) are effective tools when it comes to structuring and processing the stimuli presented by the environment.

Fantasms can refer to any self-important theme, that is, to love and hate, to giving and receiving support, to threatening and being threatened, and even to themes such as putting order in one's life. Boesch also talks about ego-fantasms which do not focus on the self in the present, but refer to action schemas of the self as projected into the future. We see a similar line of thought in Markus's later work where she introduced the concept of possible selves referring to schemas pertaining to the future state of the self (Markus & Nurius, 1986). This possible self was meant to enrich the then prevalent notion of the self by dynamic aspects. It may capture the future in terms of goals, expectations, hopes, fears, motives and desires. The concept of possible selves is therefore an overarching umbrella for diverse ways of thinking about the future, which, however, as shall be demonstrated later, have very distinct and even opposite effects on motivation and action.

#### **Fantasies**

Fantasms specify fantasies in a given situation and, at the same time, they are influenced by concrete single fantasies. According to Boesch, fantasies are mental images that depict either aspects of the present reality or anticipations of the future. Fantasies, however, have some additional qualities. They embellish mental images or blacken them, and they create events and scenarios which have never happened before. Fantasies, in the sense used by Boesch, may color or substitute for the real situation (e.g. imagining eating sweet cherries when only sour grapes are available) or they may color the mental images of real situations (e.g. imagining oneself going on a permanently sunny vacation). Fantasies arise spontaneously and serve the purpose of mentally exploring various possibilities of actions and action outcomes. Like a person's ego-potential, they are supposed to be based on past performance and thus do not necessarily belong to the realm of irrationality. They may pertain to the self, but can also be of a purely technical nature.

#### **The Emergence of Goals**

How do fantasies relate to action? Boesch uses fantasies interchangeably with goals, standards and aspirations. At first sight, then, the question of whether fantasies of positive valence stimulate action should be answered with a clear 'yes'. Boesch (1980), however, speculates that fantasies might

facilitate action *and* hinder it: '*das fantasierende Durchspielen von Befriedigungen [kann] die Handlungsbereitschaft ansteigen, möglicherweise aber auch sinken lassen*' (p. 113).

Do positive fantasies about the future stimulate or hinder motivation and action? In other words, can spontaneous positive thinking about the future hamper motivation and thereby reduce successful performances? In our research program on thinking about the future we set out to answer this question.

#### Expectations vs Fantasies

Boesch reasoned that both the ego-potential and fantasies are based on past experience. While we certainly concede that the ego-potential and free fantasies contain elements of past experience, we would argue that only expectancy judgments are anchored in past reality. Fantasies, on the other hand, are free from factual constraints. William James (1890/1950, Vol. 2) described the related difference between beliefs and mental images: 'Everyone knows the difference between imagining a thing and believing in its existence, between supposing a proposition and acquiescing in its truth' (p. 283).

Following this reflection by William James, we distinguish between two kinds of thinking about the future: *expectancy judgments*, which are based on past facts and extrapolate them to the future, and *free fantasies*, which paint future events in front of the mind's eye independent of their actual probability of occurrence. Accordingly, positive expectations are judgments that desired future events will occur in the future with a high probability of success, whereas positive fantasies are mere thoughts and mental images about the desired future events themselves. The importance of the distinction between expectations and free fantasies were immediately apparent if they had a differential relation to motivation and action. Therefore we tested the following hypotheses: As positive expectations reflect a successful performance history regarding the future outcome in question, respective engagement should also pay off in the future. In comparison to negative expectations, positive expectations should therefore lead to more motivation and action. The relation to motivation and action should be quite different for positive fantasies. As positive fantasies allow (independent of reality) one to feign having reached the future success and to consume its imagined consequences, which can be colored more beamingly and be more enjoyable than reality would ever permit, positive fantasies should reduce a person's motivation to attain the desired successes in actuality. Moreover, the effortless reaching of success in front

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of the mental eye should conceal the necessity to act and therefore the laborious and troublesome path of implementing the fantasy in real life can easily be overlooked. Accordingly, no action plans for how to achieve the positive fantasies should be formed and no precautions for possibly upcoming hindrances should be taken, which should further reduce one's chances of successful performance. In summary, whereas positive expectations should promote successful performance, positive fantasies should be a clear hindrance.

To test this hypothesis we conducted a series of correlational studies in various life domains that have an impact on a person's successful development (i.e. health, interpersonal relations, academic achievement and professional success). In all of the studies expectations and free fantasies are measured long (up to four years) before the actual performance is observed. One study from the health domain and one from the professional career domain shall be described in more detail.

#### Health Domain

Participants of our first study on weight loss (Oettingen & Wadden, 1991) were obese women (of average weight of 106 kg) who had enrolled in a weight reduction program. To assess patients' weight-related expectations, we asked them (before treatment) how much weight they wanted to lose in the program. Afterwards they were to indicate how likely they thought it was that they would actually attain the specified weight loss. To assess patients' weight-related fantasies, each subject had to vividly imagine herself as the main figure in four weight- and temptation-related scenarios. Two stories were designed to elicit fantasies about the subject's weight loss, while the other two stories pertained to situations with tempting foods. Each story had an open ending that subjects were asked to complete in writing by describing the thoughts and mental images that occurred to them. Immediately after writing down their stream of thoughts, subjects rated the positiveness of their fantasies as well as their imagined body shape. One and two years later we assessed subjects' weight loss in the clinic.

Both expectations and fantasies predicted weight loss, albeit in the opposite direction. After one year, patients with high expectations lost about 12 kilograms more than those with negative expectations, and patients with positive fantasies lost about 11 kilograms less than those with negative fantasies. After two years, the respective differences were 15 and 12 kilograms (see Figure 1). The observed results stayed unchanged when subjects' weight loss aspirations (in kg) and the expected value of lo-

sing the aspired weight were covaried. Apparently, indulging in positive fantasies about future attainments such as getting a slim body and resisting food temptations hinder the actual attainment of weight loss.

The results support Boesch's suspicion that the mere imagining of

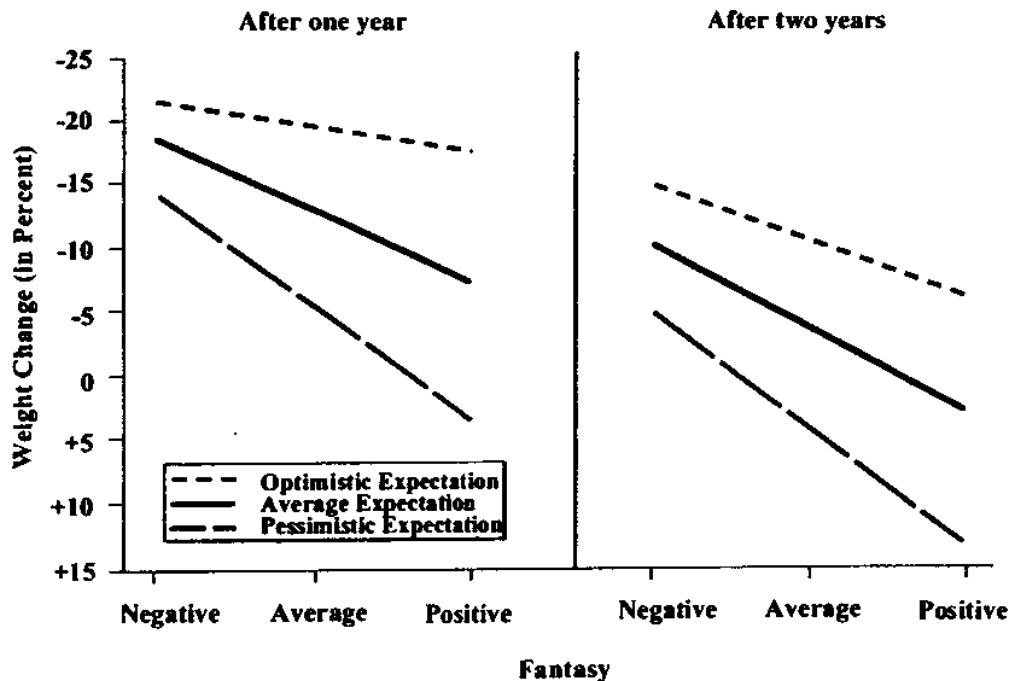


Figure 1. Percent weight change after one and two years as a function of negative, average and positive fantasies and pessimistic, average and optimistic expectations (from Oettingen, 1997a)

successful action outcomes can gratify people so that the implementation of actual action is hampered. Indeed, a closer look at the patients' individual fantasies revealed that subjects with positive fantasies day-dreamed that weight loss occurs without much effort. For example, one subject who rated her fantasies as very positive imagined herself in a bathing suit being critically mustered by her friends: 'I'll be shining!' Another patient saw herself declining an offer of brownies without any effort. She even indulged herself in images of gaining additional willpower through her successful rejection of the sweet temptation: 'I will be stronger after resisting the temptation.' Subjects with negative fantasies, however, spontaneously created food- and weight-related problems in front of their mind's eye and simulated solutions, thus preparing themselves for upcoming hindrances and unforeseen obstacles. These findings of an opposite relation between expectations vs fantasies and success were con-

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ceptually replicated in a second study pertaining to the health domain, in which children suffering from chronic asthma and gastrointestinal disease participated (see Oettingen, 1996,1997a).

#### Professional Career Domain

Our hypotheses did not pertain to the health domain only. Therefore we tried to gain further evidence that speaks to the harmful effects of mere fantasizing-this time in the professional domain, where success is critical for life-span development. German students who were completing their university studies and ready to enter the job market participated in a study on the transition into work life. First, subjects were asked to report about their expectations of finding a job in their field, and then they had to spontaneously generate positive and negative fantasies related to the upcoming transition into work life (see Oettingen, 1996, 1997a). Finally, they were to indicate how often they recently had experienced such positive and negative fantasies, respectively. From these reports we constructed an index that captured the relative frequency of their job-related positive and negative fantasies. Two years later, subjects were contacted again and asked how many jobs they had been offered and how high their present salary was. Again, positive expectations facilitated success as assessed by both variables, whereas positive fantasies were a clear hindrance. This pattern of results stayed unchanged after the expected value of getting a job was statistically controlled for.

The reported findings of an opposite relation of expectations and fantasies to successful performance further emerged in studies pertaining to the domain of academic achievement and interpersonal relationships, where success was assessed by comparatively high course grades and starting a romantic relationship, respectively (see Oettingen, 1996, 1997a).

#### Summary

Indulging in positive fantasies had negative consequences for achieving the fantasies in reality. Accordingly, the literature on the positive effects of positive thinking, which still enjoys great popularity, has to be revised: positive thinking helps in terms of expectations, but certainly not in terms of fantasies. Our studies reveal that indulging in positive thinking hampers the mastery of tasks that impose on an individual during his or her life-course. It hindered the mastery of health problems and of crucial life-transitions.

These findings should discourage those who want to quickly promote people's motivation by making them think positively. An easy way to make

make people think positively is to have them indulge in positive fantasies. However, this is detrimental to motivation and action. The difficult and cumbersome way to make people think positively is to strengthen their expectations. Because expectations are based on past experience, to change expectations means to alter performance histories (see, e.g., Bandura, 1997). But these efforts pay off, as high expectations promote motivation and action.

Boesch's suspicions about the effects of fantasizing on action outcomes are supported by our findings. He could see demotivating and motivating effects of fantasies of positive valence. What, then, however, is the prerequisite that will make positive fantasies about the future lose their consumptive qualities and turn them into a motivating force? The answer is that we have to transform free positive fantasies into binding goals, since goals have been shown to motivate action and successful performance. In the following section, the questions of how fantasies are transformed into goals is analyzed in detail.

#### Turning Free Fantasies into Binding Goals

In the studies presented, subjects with positive fantasies were absorbed with their pleasant daydreams and thus failed to consider any hardships on the way to fantasy fulfilment. In the study on professional success, for example, subjects with positive fantasies reported to have sent out fewer job applications than subjects with negative fantasies; at the same time, they reported to have refrained from making commitments that potentially would conflict with starting the desired job and from having already prepared themselves for changes in their private relationships that would result from accepting the fantasized job offer. It seems that subjects generating positive fantasies took their successes for granted. They presumptuously perceived themselves as already having obtained the desired outcome, and thus failed to confront the adverse reality that needs to be overcome if success is actually to be attained.

It appears that positive fantasies about the future need to be stripped of their consumptive qualities and anchored in reality in order to be turned into binding goals. If positive fantasies are mentally contrasted with reflections about the negative reality that stands in the way of fantasy fulfilment, a person should finally feel a need to act. Positive fantasies are now experienced as something to be achieved in real life and thus should no longer allow indulgence and premature consumption. Whereas positive fantasies give action the necessary direction, reflections on the negative reality point to the necessity to act and provide clues on how to implement

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the fantasies in real life. In other words, mentally contrasting the positive fantasies with reflections on the negative reality should turn free fantasies into binding action goals.

However, for binding goals to emerge, a further prerequisite has to be fulfilled. When people start to experience a positive fantasy as something to be realized and the negative reality as something to be changed, the respective probabilities of success should become an issue. Only if subjective expectations of success are high and people see a reasonable chance to reach their desired fantasies in real life should they commit themselves to the respective action goals. If the subjective probabilities are low, people should actively avoid such a commitment and disengage from their fantasies.

To the contrary, a person who only revels in positive fantasies without contrasting them with reflections on the negative reality should not experience a need to act and therefore should not consider subjective probabilities of success when acting. As a consequence, such a person should not intensively strive for the goal when expectations are high, and should not evince decided disengagement when expectations are low. As compared to the individual who mentally contrasts fantasy and reality, there should be no difference in his or her engagement no matter whether probabilities of success are high or low. Similarly, a person who only dwells on the negative reality should also refrain from setting goals, because positive fantasies cannot give acting the necessary direction and therefore reality is not experienced as something to be changed. Accordingly, subjective probabilities of success should again not be an issue to be considered, and engagement in any of the respective behaviors should not reflect the strength of expectations. In other words, both people who only dream and people who only worry should not set themselves action goals according to their subjective probabilities of success. When relevant opportunities arise, people are merely pulled by their positive fantasies or pushed by their worries about the negative reality. Therefore a middle level of engagement with respect to relevant actions (i.e. to change reality in the direction of fantasy fulfilment) should be observed, and this irrespective of the level of subjective probabilities of success.

In a series of experiments, these ideas on the emergence of goals were tested. In each of the studies, a fantasy-reality contrast condition was established and compared to both a 'positive fantasy-only group' and a 'negative reality-only group'. The fantasy-only group was established by inducing subjects to excessively fantasize about a desired positive future. The reality-only group was created by requesting subjects to intensely

ruminate about aspects of the present negative reality that stand in the way of fantasy fulfilment. In the fantasy-reality contrast condition, subjects were encouraged to face the contradiction between the desired future and the experienced present reality. In all studies, subjects' readiness to implement their positive fantasies about the future in real life was assessed. This was done immediately after the experimental *manipulations* and again some time later (up to two weeks) to provide subjects with ample opportunities to initiate relevant actions. Finally, in our experiments we took care that the fantasies generated by subjects always covered a different life domain and pertained to outcomes which could be reached only by what Boesch calls *actions of large complexity*, meaning that a positive outcome would need effortful steps and detailed planning. The first of these experimental studies shall be exemplified next.

#### Interpersonal Relations

Female students were asked to name the interpersonal matter that was presently most important to them (i.e. subjects mentioned matters such as settling a conflict with their partner, getting to know somebody, etc.) and to judge the likelihood that it would result in a happy ending (see Oettingen, 1996, 1997a). Then they were asked to list positive aspects of the happy ending (students mentioned, e.g., feelings of being cared for, being needed) and negative aspects of the present reality that stand in the way (e.g. being impulsive, being shy). In the fantasy-reality contrast group subjects had to select two aspects of both, the happy ending and the negative reality. To achieve a fantasy-reality contrast, subjects were asked to alternate between generating *spontaneous* thoughts and images for positive aspects of wish fulfilment and negative aspects of reality, beginning with a positive aspect. Thus two positive and two negative aspects had to be reflected on intermittently.

In the fantasy-only group, subjects had to pick four positive aspects of wish fulfilment and indulge in respective fantasies; in the reality-only group, subjects had to pick four negative aspects of reality and ruminate about them. Immediately afterwards subjects of all conditions were asked by use of a presumed mood questionnaire how energized and active they felt. Two weeks later subjects were asked when they had started to initiate actions designed to realize their fantasies.

Subjects felt most energized and initiated actions the earliest in the fantasy-reality contrast group, given that subjects held high expectations of success; in case of low expectations subjects in this group felt the least energized and initiated actions most sluggishly. On both of these dependent variables the other two groups, the fantasy-only and the reality-

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only group, fared in between. This was true regardless of whether subjects were holding low or high expectations. The results of various additional statistical analyses confidently ruled out that this pattern of data might simply be a consequence of a differential change in the *level* of expectations or expected values caused by the three different mental manipulations employed.

The present findings were conceptually replicated in two further experiments using different experimental paradigms and further relevant dependent variables (Oettingen, 1996, 1997a). The first replication study pertained to fantasies not stemming from an ongoing fantasm, that is, to fantasies about getting to know an attractive stranger. The second experiment was conducted with female doctoral students and pertained to the fantasm of integrating divergent ways of life, that is, combining work and family life.

#### Summary

In all three experiments subjects with high expectations in the fantasy-reality contrast group showed immediate and long-term responses that are commonly found with people who have already set themselves goals. Subjects felt energized, they felt committed to attaining the desired outcomes, they planned the implementation of these outcomes, and initiated relevant actions without delay (see Oettingen, 1996, 1997a). Apparently, the mental contrasting of positive fantasies about the future with reflections on the negative reality makes people with high expectations turn their fantasies into goals. This mental contrasting thus qualifies as a self-regulatory tool for the transformation of a person's free fantasies into binding goals.

The mental contrasting procedure seems to work for different kinds of fantasies: for those which a person has maintained for quite a while (see the first experiment on interpersonal relationships), for those that arise out of a specific situation (see the second experiment on infatuation), and for complex fantasies which entail aspects of seemingly conflicting life themes (see the third experiment on combining work and family life).

#### Implications for Boesch's Theorizing on Thinking about the Future

The results of our experimental studies give an answer to Boesch's question raised above: *'wie kommt es, daß der eine sich mit dem Träumen von Handlungen begnügt, während der andere sie zu verwirklichen sucht?'* (Boesch, 1976, p. 24). Fantasies in the form of free thoughts and images to be indulged in work as a substitute for action. When mentally contrasted with reflections on the negative reality, however,

fantasies are potentially transformed into binding goals which lead to a heightened readiness to act. One has to keep in mind that it is only for people with high expectations of success that the contrasting procedure leads to goal emergence. For people with low expectations, pronounced passivity and disengagement result.

Interestingly, intensifying the indulgence in positive fantasies does not trigger fantasy fulfilment as Boesch had hoped. Rather, by being mentally contrasted with reflections on the negative reality, positive fantasies produce effective engagement-given that expectations of success are high. Similarly, intensifying depressive ruminations does not induce effective disengagement as is hoped for by Klinger and others in more recent writings (Klinger, 1977; see also Pyszczynski & Greenberg, 1992). Rather, positive fantasies have to be interspersed into depressive ruminations to establish a mental contrast, and, given that expectations of success are low, effective disengagement is triggered.

#### The Rise and Fall of Free Fantasies

Boesch holds that whenever a person is faced with situations that promise neither enjoyment nor an approval of a person's ego-potential, he or she tends to flee into positive compensatory fantasies. Positive reveries in the sense of '*die Zukunft verspricht, was der Alltag versagt*' (Boesch, 1976, p. 108) are effectively destroyed by mentally contrasting them with reflections on the respective negative reality. In everyday life negative reality will have to be quite unambiguous to make a person give up on his or her positive reveries, as is the case in blunt face-to-face feedback from others, but also with approaching deadlines, as Boesch has outlined in his writings on time distances. The mental contrasting of one's positive fantasies with reflections on the negative reality should be experienced as aversive and thus to be avoided as much as possible as it forces people to either effortfully engage in or painfully disengage from reaching their fantasies (depending on whether they have high or low expectations of success). It comes as no surprise that rationalizations which allow people to keep on fantasizing are plentiful. Examples are downward comparisons (Wills, 1981), self-defensive attributions after failure (Bradley, 1978), consumption of alcohol and other self-awareness-reducing and self-inflation-inducing drugs (Hull & Young, 1983), dehumanization of people with bad news (Bandura, Underwood, & Fromm, 1975), denying responsibility for bad outcomes (Diener, 1977), cheap excuses (Snyder & Higgins, 1988) and strategic self-handicapping (Berglas & Jones, 1978).

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Free Fantasies and Avoidance Goals

As mentioned in the first part of this article, Boesch stresses that fantasies can vary in their content. One of the contents that is of great interest to Boesch is the fantasy of being threatened. In the experiments presented above the contrasting procedure was employed to positive fantasies that were put in relation to reflections on the negative reality (e.g. solving an interpersonal affair), thus promoting approach goals. Would the contrasting procedure employed to negative, threatening fantasies about the future that are then put in relation to positive aspects of the reality foster the emergence of avoidance goals (e.g. to stay away from a threat, such as dangerous places or bad habits)? In other words, is the contrasting procedure also applicable to negative fantasies about the future, and would it then promote goals that specify the avoidance of the respective threats? Again, the crucial prerequisite for goals to emerge has to be kept in mind. One has to assure that people have high expectations of success, which should this time relate to the likelihood of avoiding the unwanted future outcome. Accordingly, one would have to teach efficient ways of avoiding the threatening future (e.g. regimens to avoid alcohol, drugs, aggressive behaviors) before one induces people to contrast their negative fantasies about the future with reflections on the positive reality.

Free Fantasies and Ego-Potential

Boesch assumes that next to compensatory positive fantasies, extensive self-reflections can also be of use to protect one's ego-potential. Our findings support this assumption. In cases of bleak probabilities of success, extensively reflecting on one's present reality helps people to ignore their weaknesses as much as positive fantasizing. Thus indulging in positive fantasies as well as ruminating on the negative reality should be a powerful strategy to maintain a positive ego-potential-at least in the short run.

Protecting one's ego-potential by habitually fantasizing or ruminating, however, should have negative consequences in the long run. First, by neither fully engaging with nor disengaging from fantasy fulfilment a person should be plagued by much unfinished business. Second, being irrational in the sense that one actively engages in light of bad chances and stays passive in light of good chances leads to exceeding or wasting one's personal resources, respectively. Such over- and underachievement should hinder a person adjusting his or her means to the situation at hand, which, according to Boesch, stands in the way of successful goal attainment and thus should eventually also diminish a person's subjective ego-potential.

Free Fantasies and Life-Span Development

**Habitual fantasizing and ruminating should endanger life-span development not only from a subjective, but also from a more objective, outside point of view. As outlined by the model of *selective optimization with compensation* (P. Baltes & M. Baltes, 1989, 1990; P. Baltes, M. Baltes, Freund, & Lang, 1995; Freund & P. Baltes, 1996; Marsiske, Lang, P. Baltes, & M. Baltes, 1995), the process of selection with subsequent optimization and compensation plays a crucial role in promoting successful development over the lifespan. Selection preserves the limited situational resources and organismic reserves by guaranteeing that development (e.g. goal achievement, see Marsiske et al., 1995) happens only in a few select life domains. Subsequent optimization and compensation pertains to the refinement and to the repair (or replacement) of the means selected to achieve the chosen goals, respectively. A person wrapped up in positive fantasies or negative ruminations by being neither fully engaged nor disengaged will neither select (i.e. fail to show the necessary readiness to act) nor be in a position to optimize and compensate (i.e. fail to show the necessary commitment and planning). Habitual fantasizing and ruminating should, therefore, be a risk factor for life-span development (see Oettingen, 19976).**

Free Fantasies and Interpersonal Relationships

**Habitual indulgence in positive fantasies should particularly harm interpersonal relationships, because ignoring reality means disregarding the actions and needs of the other person. Positive fantasies (e.g. the youngster who admires his or her flame) or negative ruminations about interaction partners (e.g. the husband who complains about his wife) could be disrupted by pointing to the negative reality or the positive fantasy, respectively, so that the other person will be treated with respect. That this happens infrequently may be due to the following phenomenon observed by Boesch. Fantasms of any content are nourished by frequent respective fantasies. People who habitually indulge in positive fantasies of a certain theme (e.g. finding a partner, becoming a hero, losing weight) should therefore have rather large *Konnotationsnetze* in the sense that many, even only marginally related cues in the environment will be interpreted as relating to the fantasm. This in turn should again foster the emergence of the respective fantasies. Eventually, this vicious cycle might lead people to be wrapped up in their fantasy worlds, and by effectively avoiding having their reveries disrupted by reflections on the negative reality, they might more and more disregard their expectancy judgments when acting and eventually lose access to any rational acting at all.**

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When Are Free Fantasies Beneficial?

Pointing at the possible perils of indulging in positive fantasies about the future does not mean that such indulging is maladaptive altogether. First, as we have pointed out, fantasies are the basis of goals and goal striving. Second, they provide much short-term pleasure, can stop depressive episodes, and—as Boesch pointed out, Singer reported (for a summary, see Singer, 1975), and our findings show—facilitate patient waiting for better times to come. Therefore, a person faced with uncontrollable life threats might benefit from indulging in positive fantasies. For example, in hopeless situations that a person can neither master nor leave (such as terminal cancer or HIV-infection), positive fantasies about the future without contrasting them with reflections on the negative reality should have more positive than negative consequences (see Oettingen, 1997a, 1997b). In any case, indulging in positive fantasies about the future (e.g. to survive) should leave the person's commitment to life untouched despite a pessimistic expectancy of success.

### **Fantasies about the Future across Cultures**

No matter whether assimilative and accommodative processes occur in fantasy (imaginativ) or action (praxisch), they will change people's environment by affecting their fantasms. Even if the actual, tangible environment stays the same, after fantasizing, ruminating or mental contrasting, people's interpretation of their environment will be different. This implies that the environment not only affects whether people indulge in positive fantasies, ruminate about the negative reality or contrast their positive fantasies with reflections on the negative reality, but that these three types of self-regulatory thought in turn have an impact on the environment. A similar argument may be made with respect to the importance of culture. Culture functions as both a source for and an effect of fantasizing, ruminating and mental contrasting.

Boesch's work influenced this final section of the paper in two ways. First, I shall follow his suggestions and take an action-theoretical approach to explore cultural phenomena (Boesch, 1980, 1991), and, second, I admittedly have been tainted by his passion for speculation. Proceeding from the findings presented above, I will speculate about culture as a source and as a consequence of different types of selfregulatory thought.

### **The Impact of Culture on Self-Regulatory Thought**

Cultural factors, such as myths, should be relevant to the contents of a

person's fantasies as well as to the strength of his or her expectations of success. However, I want to go much further and argue that cultural factors have an impact not only on the content of fantasies, but also on the way in which fantasies are treated in the mind's eye. That is, cultures should differ in terms of which self-regulatory thought they foster (i.e. indulging in fantasies about the future vs ruminating about reality vs mentally contrasting fantasy with reality). This perspective no longer differentiates cultures according to the *values* which people of different cultures adhere to, such as collectivist vs individualist values, values of large vs small power distance, or of strong vs weak uncertainty avoidance (see, e.g., Hofstede, 1991; Triandis, 1995).

The differentiation of cultures along the dimension of self-regulatory thought is based on the assumption that cultures should differ in terms of the role subjective expectations play in guiding action. Cultures adhering to norm-oriented rituals should favor self-regulatory thought in terms of indulging in fantasies about the future or ruminating on the present reality, whereas cultures adhering less to norm-oriented rituals should foster self-regulatory thought in terms of mental contrasting. This is how I arrived at this assumption.

Norm-Orientation: Strong vs Weak

Boesch argues that in traditional societies myths favoring norm oriented serve as the basis for action. He sees two reasons for this: first, norm-oriented rituals provide the necessary *assurance for action* and they lay down the *boundaries for action*; second, they convey normative commitments which determine the *direction of action*. However, Boesch (1982) sees myths which favor normative commitments fading in modern societies: '*Unsere Mythen dagegen, wie wissenschaftlich sie auch klingen, sind weitgehend Ideologien ohne normative Verbindlichkeit*' (p. 233).

What, then, provides the basis for action in modern societies? Here no norm-oriented rituals provide assurance and boundaries as well as the direction for acting (by laying down who relates to whom, when, where and how). I want to suggest that in modern societies *expectations* took over the function of traditional rituals. First, by reflecting an individual's personal history, expectations succeed in providing the necessary assurance to act and show the boundaries of acting. Second, in their function of fixing free fantasies into binding goals, expectations manage to determine the direction to act.

Accordingly, expectations should have little importance in guiding action in traditional cultures with myths favoring norm-oriented rituals. In modern societies, where myths discourage norm-oriented rituals and en-

courage the person's own shaping of his or her environment as well as personal responsibility for one's life course, expectations based on a person's history gain a pivotal role in guiding action.

If in cultures with myths fostering norm-oriented rituals, expectations do not need to guide action, there is also no need to contrast positive fantasies about the future with reflections on the negative reality. Hence, indulging in positive fantasies about the future can flourish. This should have an additional stabilizing function for the cultural environment because indulging in positive fantasies helps to overcome the experience of normative constraint in the present by providing hope for a better future. Even in light of pessimistic expectations, it will make people 'stay in the field'. Ignoring probabilities of success is also facilitated by ruminative dwelling on the negative reality. In sum, then, cultures that hold myths which favor norm-oriented rituals should encourage indulging in positive fantasies about the future and allow extensive ruminations about the dreary present.

To the contrary, in cultures where traditional norms fade, selfregulatory thought in terms of mentally contrasting positive fantasies with reflections on the negative reality should become more prominent, because expectations have to take the place of norm-oriented rituals and secure as well as guide people's actions. Mental contrasting should thus be the prevalent form of self-regulatory thought in modern societies (see Figure 2).

**Time Perspective**

		Long-term	Short-term
Norm-orientation	strong	<b>Indulgence in fantasy or rumination on reality</b>	<b>Mental Simulation</b>
	weak	<b>Mental Contrasting</b>	<b>No Preferences</b>

Figure 2. Cultural background and self-regulatory thought

Time Perspective: Long vs Short

So far we have asserted that cultures with myths favoring norm-orientation should foster indulgence in positive fantasies and negative ruminations, whereas societies with myths that favor individual life planning should promote mental contrasting. However, all of what has been said should only apply to cultures which adhere to long-term time perspectives, that is, to cultures with myths that pertain to promising future end-states. After all, our research findings speak to fantasies which reach far into the future and their implementation requires complex action. However, there are plenty of cultures with myths that possess a short-term time perspective. The end-state is predominantly sought in the here and now. Boesch (1997) describes such a short-term time perspective when discussing the *haiku*, a poem of three lines, which he interprets as expressing the time-perspective typical for the Japanese culture: *'Das Haiku repräsentiert somit einfach ein Handeln, das kaum mehr Zukunft braucht-es setzt sich sein Ziel im jetzt'* (p. 361).

The Japanese *haiku* being itself short in form and present-oriented in content is said to express the Japanese focus on the here and now. This speculation is nicely corroborated by recent findings of Azuma and Mashima (personal communication, February 1996). In a comparative study students in Japan and the United States were asked what they had been thinking about during the previous week. Whereas students in Japan reported to have contemplated the next steps in their daily pursuits (e.g. how I will cook tonight for my girlfriend), American students described thoughts about long-term projects (e.g. my future as a medical doctor). Moreover, there is a large body of literature on the interdependent vs independent self in Japan vs the United States, which supports another of Boesch's interpretations of the Japanese culture, namely that in Japan normative interactions with the other person and the group are more important than the development of personal identity (see, e.g., Kitayama, Markus, & Matsumoto, 1995; Markus & Kitayama, 1991). Generally speaking, Japan can be taken as an example of a culture that is characterized not only by a short-term time perspective but also by norm-oriented rules.

For cultures fostering normative rituals and a focus on the here and now, then, we would argue that neither mental contrasting (i.e. normative rituals determine action) nor positive fantasies about the future (i.e. the focus is on the present) should be the prevalent form of a person's self-regulatory thinking. Rather, mental simulations of how to implement specific tasks in the here and now assigned by the normative regulations should be the predominant way of thinking that motivates action (i.e. self-regulatory thought; see Figure 2).

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Finally, are there societies without norm-oriented rituals and a short-term time perspective? Cultures in which the traditional norm-oriented rules and the respective social structures have been destroyed and people have to care for immediately pressing existential needs might qualify. However, which of the three kinds of self-regulatory thought predominate in such societies? Mental simulations in which a person plans to serve his or her immediate needs most effectively, such as dressing, eating and sleeping, might be the dominant form of self-regulatory thought. But maybe positive fantasies about a better immediate future leading to passive and patient suffering may also be favored. There might simply be *no preference* for any type of self-regulatory thought.

#### Summary

Sociocultural contexts can be differentiated by the use of two variables with two levels each, namely norm-oriented rituals present or absent and time-perspective long-term or short-term. For each of these four types of cultures different styles of self-regulatory thought have been identified (see Figure 2). Certainly, all different types of thinking about the future should be present in all types of cultures. However, the different sociocultural contexts outlined above should selectively favor specific types of self-regulatory thinking which then would be observed comparatively more frequently in the people of the respective cultures.

#### The Impact of Self-Regulatory Thought on Culture

The three different types of self-regulatory thought should also reflect back on the cultural environment. In the following, I would like to speculate on how people in cultures characterized by different self-regulatory thought might fare with selected aspects of their daily pursuit (e.g. with time, failure, foreigners, religion and emotions) and consider how this might influence their cultural background.

#### Time

Time should be no big issue for the person in *cultures of fantasy*, because the imagined future is distant in his or her life or even located thereafter. Moreover, because people have no binding goals to fulfill (let alone have to reach them in a fixed time period), it should not matter whether a person does something fast or slowly, on time or later. Also, whether a person has to wait for a short or long time should not be of much concern. Finally, free fantasies help to experience waiting time as passing by quickly, so that the waiting person is equipped with an effective means to deal with impatience.

Quite to the contrary, in *cultures of mental contrasting*, where fantasies are turned into binding goals, time is an extremely precious good. As Boesch pointed out, time can be considered a means to reach the aspired-to standard or even be taken as the standard itself. Accordingly, being late would signal that a person does not possess the means to reach her aspired goals and making someone wait would imply stealing the means to reach his aspirations from him. People in cultures of mental contrasting should therefore be extremely wary about their time and should take the usage of time as reflecting on one's self. This should lead to a smooth daily pursuit on a technical level, but might cause losses on the emotional level, because time violations might be equated with failure. This further implies that time can be used as an instrument of power (e.g. an employer keeps his or her employees waiting).

In *cultures of mental simulation* time should be perceived as a means to accomplish the assigned tasks. Deadlines are kept and punctuality is demanded as in cultures of mental *contrasting*. At the same time, however, time does not reflect back on a person's self. Therefore, we would expect a smooth dealing with the clock both on a technical level as well as on an emotional level.

#### Failure

In *cultures of fantasy* failure should not be acknowledged as failure. By using the rationalization strategies mentioned above, positive fantasies about the future can be maintained. Moreover, if the strategies of rationalization are shared by the group, the refusal to accept failure obtains a social reality and thus becomes even more difficult to refute. Under these circumstances, positive fantasies are very easily maintained even in the face of blatant disasters. Reality has to be extremely upfront (e.g., the loss of World War II) to be accepted as something that stands in the way of the glaring positive fantasy. Then, however, it might be too late to prevent harsh reactions from other countries or from nature, and many cultural products and features might already have been destroyed.

In *cultures of mental contrasting*, on the other hand, failure should be accepted as such and should readily lead to increased engagement or disengagement, depending on the subjective probabilities of future success. Thus failure implies either renewed engagement or a new starting-point for creating alternative fantasies about the future. Despite possible depressive affect in the short run, accepting failures allows for maximal flexibility in the long run as it guarantees that people (or countries) do not select life-paths (or long-term pursuits) that are beyond their means. Thus in cultures of mental contrasting, people should act comparatively more

flexibly in failure-prone times, such as during economic depressions or natural catastrophes.

In *cultures of mental simulation* failure should be interpreted as informative feedback with respect to achieving the group-assigned task servicing the higher-order group goal. It should therefore first lead to increased effort (see Bandura, 1991). Only when a person feels responsible for the fact that the goal of the group has not been reached should the negative public emotion of shame arise and passivity set in. One might even speculate that in cultures of mental simulation the hierarchicality of goals exists not within the person, but within the social system of the group. The goal of the group stands above and the person is supposed to only mentally simulate how to achieve the very next step leading to the group goal. Accordingly, the person can only fail on a single task, but not on reaching the end- state itself.

It should be added that for societies with weak norm-orientation and short-term time perspective showing no preferences in their selfregulatory thought, mental contrasting should lead up to the fastest change (in terms of optimizing individual development), because it implies the acceptance of failure. This would lead to the selection of the most promising projects, and energy and resources will not be wasted for non-promising ones (see P. Baltes, 1987; P. Baltes & M. Baltes, 1989; Marsiske et al., 1995).

#### Foreign influences

Because the mental contrasting of positive fantasies with reflections about the negative reality potentially reveals that the desired end-state might not be reachable after all, *cultures of fantasy* should avoid foreign influences. If they are confronted with them, they either should idealize them and thus fit them into their positive fantasies, or take them as an aspect of the negative reality, and thus integrate them in their ruminations. In both cases, however, foreign influences will only be accepted either as part of fantasy life or as part of the dreary reality, but not as a reality which stands in the way of fantasy fulfilment. For foreigners to get in contact with individuals socialized in cultures of fantasy it is advisable, then, to 'accommodate' to the culture by sharing the culture's myths and its people's fantasms and fantasies. These considerations imply that people in cultures of fantasy will not integrate foreign influences into their actions and thus should range on the more conservative side when it comes to renew their cultural environment.

Quite to the contrary, *cultures of mental contrasting* should not be threatened by foreign influences, because they are used to focus on the

factual reality. Foreign influences might give rise to new fantasies (e.g. about new philosophies of life, new foods) and to reflections on a new reality that stands in the way of fantasy fulfilment (e.g. foreign brands as a barrier for selling home-made brands). Accordingly, foreign influences work as stimulation and challenge, respectively. Cultures of mental contrasting should be tolerant to the idiosyncracies of foreigners and try to incorporate them into developments pointing to new and unforeseen directions.

*Cultures of mental simulation*, finally, should take foreign influences simply as a means to fulfill the norm-assigned tasks in the here and now. For example, foreign inventions are taken to boost one's own industry, foreign tourists to show off one's own cultural products, or foreign fashions to make one's own appearance more attractive. This consideration implies that foreign influences which do not directly serve the tasks assigned by the norms of the culture will not be tolerated. In short, modern in their means, but traditional in their ends, such cultures manage to stay modern and traditional at the same time.

What are the implications of these ideas for negotiating conflicts between cultures of different self-regulatory thought? To attain compromises between cultures should be relatively easy for cultures of mental contrasting and mental simulation, but more difficult for cultures of fantasy. Cultures of mental contrasting should be most successful as peace-maker: when the contrasted fantasies pertain to reaching an agreement and the respective expectations guide action, the likelihood that all of the factual interests of the various parties are considered should be relatively high.

#### Religion

People in *cultures of fantasy* should strongly and consistently adhere to their religion, because this nourishes the fantasies of a radiant future state. Only if future fantasies are contrasted with reflections on the negative reality might they destroy fantasies of a future paradise, because the mental contrasting procedure makes a person realize that the probabilities of this future coming true (e.g. whether it be religious or political) are at best not determinable. This then will shy the person away from further adhering to religious rituals and eventually will destroy the myths of the respective religion. In *cultures of mental contrasting*, therefore, by being pointed at the indeterminable expectations of the paradise in the far future, religious people should ultimately become agnostic.

This should be quite different in *cultures of mental simulation*. Religion does not receive its attraction by promising salvation in the far future, but

by supporting the here and now. This consideration might explain why Japanese people can adhere to various religious beliefs, which sometimes bewilders visitors from western countries. All praying can be in the service of life in the here and now, regardless of the god to which a person prays.

Longing

Only very recently Boesch put together a collection of papers about the phenomenon of longing: *Die Sehnsucht*. Boesch describes *Sehnsucht* as a state of 'optimal syntony', the harmonic accord between inside and outside. He writes: '*Diese "optimale Syntonie", den harmonischen Einklang von Innen und Aussen, streben wir permanent an*' (Boesch, 1997, p. 23). In free fantasies this perfect harmony between the person and his or her environment can be conjured up easily, repeatedly and consistently over extended periods of time. In actuality such a harmony is characteristically short-lived and occurs only very infrequently. It appears then that fantasies are very suitable for producing stable feelings of radiant harmony.

Especially in *cultures that foster positive fantasies*, an imaginary harmony may be upheld for quite some time. Sharon Brehm points to this phenomenon by describing Teresa of Avila's lifelong feelings of longing for God. The ultimate in the soul's progress toward God is: 'Being received by God in permanent union' (Brehm, 1988, p. 243).

In *cultures that promote mental contrasting*, any fantasies of harmony should be contrasted quickly with reflections on the negative reality. Thereby it should become obvious that experiences of harmony cannot be attained ad lib but necessitate much care and effort. Moreover, it should also become apparent that such states, if achieved at all, are of a transitory quality (Boesch, 1997).

Finally, in *cultures that further mental simulation*, harmony needs to happen in the here and now, and, therefore, people should again experience no doubt that harmony implies effort (e.g. for interpersonal harmony one has to forgo personal interests and consider carefully the needs of others) and that any states of syntony (between oneself and the other) are gone more readily than achieved.

Experiences of harmony are fleeting by their very nature. Boesch describes them as having to be created over and over again. According to Boesch, whether a person takes on this perpetuating pursuit of harmony makes the whole difference between living a happy or an unhappy life: '*Ob eine Sehnsucht passiv auf Erfüllung wartet oder sie aktiv selbst gestaltet, kann aber über Glück oder Unglück entscheiden*' (Boesch, 1997, p.

29). If so, people in cultures of positive fantasy may forgo their happiness by not trying to attain harmony in the here and now. Being fanatically wrapped up in fantasies about a perfectly harmonious future state should deprive a person's life of the vitality that is associated with the active pursuit of harmony.

## Conclusion

Boesch's action theory stimulated this paper throughout. First, recent action-theoretical viewpoints were traced back to the concepts spelled out in Boesch's action theory. Second, the theory on thinking about the future (Oettingen, 1996, 1997a) differentiating between expectancy judgments and fantasies was then reviewed to shed light on Boesch's question of whether fantasies help or hurt motivation and action. Findings about how expectations and fantasies differ as well as work together in affecting action reveal that positive fantasies about the future suppress motivation and action, but when transformed into binding goals through being contrasted with reflections on the respective negative reality, they effectively promote them. Third, some implications of these findings for Boesch's theorizing on action such as the rise and fall of free fantasies or the emergence of avoidance goals were explored. Boesch's efforts to employ his action theory for the analysis of culture animated me to relate the presented findings to cultural phenomena. Fourth, this led to a model of cultural differences in selfregulatory thinking that yielded predictions pertaining to various cultural phenomena with which Boesch is concerned, such as dealing with time, failure, foreign influences, religion and the phenomenon of longing.

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## **Biography**

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