CHAPTER 22 SELECTING THE BEST APPROACH

When we consider the technically best manner of achieving or maintaining the fulfillment of a need, we may have choices among multiple means at every juncture of a pursuit. We can only choose intelligently among these if we secure an overview over them and assess and compare their requirements and consequences. This fielding of our possibilities may call for a highly developed understanding of how types of resources and particularized objects or events can be allocated to form helpful processes in achieving certain objectives. Because we aspire to attain specific objectives, our investigations would have to begin with an assessment of the state to which we aspire, the conditions of what we want. The next step would be to assess our current state of affairs. These two assessments display us the distance we have to span. They form the rift between relative unhappiness and happiness that we are trying to mend. They define our agenda of what we must accomplish.

The next step is to locate means and sequences that may be the most useful in fulfilling that mission. Our search may initially focus on known, available objects and events that can fill the deficiency. If such objects and events are missing or they do not adequately fulfill the desired function, we might search for means that currently fill or previously filled similar discrepancies. The similarity of a situation presented to other situations in our experience or in the experiences of others may enable us to rely on the application or modification of established insights. It may permit us to concentrate on a reduced number of dissimilarities that we must address. To adapt the components of similar functions to the functionality we seek to fulfill, we may have to add or to subtract components, substitute prevailing components with other components, modify existing components, or modify the qualitative or quantitative correlation of components. To the extent we do not comprehend effects of these allocations, we would have to experiment to find a solution. Our efforts to establish the sought function may be assisted by comparing our situation to a similar situation. Still, a positive result from exploring similarity is not guaranteed. Speculation regarding common elements may turn out to have been misplaced. Dissimilarities may resist our grasp and render similarities of less or no use.

If we have no knowledge that can inspire speculation based on similarity, the range of possible means would appear to be even more open-ended. In the absence of our recognition of similar functions or components, our attempts of curing the discrepancy between our current situation and our objectives would seem to become increasingly

unguided. The faint chance of attaining usable results and the cost of random experimentation compel us to adopt a systematic empiric approach of direct analysis and synthesis. Here as well, we derive guidance for the assembly of a sequence from our knowledge of the starting point and of the end point of the entire sequence or of intervening gaps in a sequence. Objectives we pursue become objectives either because they have been instinctively set or because we deem them to be valuable means in fulfilling instinctive objectives. These entries in our awareness should provide us orientation to narrow our research from both sides. Our capability to picture or ascertain a result usually offers the opportunity to analyze it into components. These, in turn, might be analyzed into subcomponents and so on until we arrive at elements that we can locate or synthesize. We may concentrate on synthesizing these or other components of the same type to a result of the type we analyzed. We may also build relevant knowledge from the ground up. We may analyze our starting position, objects or events that surround that starting position, or objects or events that surround components of the type we detect from analyzing our starting position. The discovered components or subcomponents may exhibit commonalities with higher stages that may enable us to connect to them. We may further connect stages in a sequence by adding components we notice missing at these stages but detect in the ultimate result or a higher stage leading to it. Conversely, we might subtract from lower stages components that are absent in the result or from a higher antecedent stage.

Compared to tracing a sequence through the analysis of the result, research regarding the starting position has a lesser likelihood of success because we operate from a position of deficiency that lacks the positive definition and record of accomplishment of a result. Its main utility appears to consist in creating an understanding of the starting position with which the analysis of the result or of antecedent higher stages can join. We may build knowledge to prepare for the event that the analysis of an end point or of an intervening stage yields coinciding components. But even if we cannot associate the starting position, its components, or components connected to it with any components of higher stages, we will in most cases have instinctive awareness or be able to deduct from experiences that deficiencies of starting positions can be resolved in a certain type of manner. This gives us concepts of intermediary steps whose proximity to our starting position and each other may make our exploration more manageable. Depending on our ability to identify intermediary steps, we may manage to approach the problem of finding an appropriate sequence not merely from ultimate but from multiple intermediate start and end points as well.

Once we have opened one pathway that can connect a position of deficiency to fulfillment for a need, we can branch out by modifications to starting, intermediary, or ultimate positions and see whether and how well we can connect them by engaging in strategies that are similar to how we fashioned the original sequence. Such modifications would be inspired by a lack of effectiveness or efficiency we experience in the sequence we first discovered or because we are confronted by different internal or external circumstances. The fund of the sequences we have derived from our collection of impressions about our traits bears witness to such modifications. Its ordering according to indications of an ideal will give us notions of principal effectiveness.

To find the best manner of reaching satisfaction of a need, we must cast our mind to find all paths that might be reasonable alternative strategies for its fulfillment. In this effort, we may initially ignore the availability of resources in our contemplations. Such an approach seems to be beneficial because it expands our consideration to means beyond those we currently possess to include those we might be able to find or produce. A broad approach that is unperturbed by issues of availability may assist us to harness opportunities. Then again, the variety of alternatives may threaten to overwhelm us. There may not only be competing paths but also competing means and substrategies in the same path. Each of these means and substrategies may enable another step that may establish a departure for any length in a sequence. We will have to determine the degree of fulfillment each variant can bring to a need and compare that result with the result of the alternatives. We may try to diminish the number of options we entertain by adjusting our considerations to strategies whose means are or can be made available. Nevertheless, we often continue to face difficulties in determining the best approach or only the feasibility of a sequence before we engage in it. We may not know all the required means or what means might be available. Even where we deem all ingredients to be in place, we may incur interference. We may not be aware of possible causes of interference, its probability, its consequences, or its strength relative to our ability to overcome it. We may not recognize the necessary investment of resources. In addition, we may have insufficient information and anticipatory faculties to ascertain the relative amounts of happiness and unhappiness we will garner along the way from advancements and sacrifices, respectively, or from ultimately succeeding or failing. Even if everything proceeds as planned, we may not know how much happiness or unhappiness our actions will cause. We may not know all the factors that will cause us pain or pleasure or the intensity, type, or duration of the pain or pleasure. We may have to fill

deficiencies in predictability with probability assessments, or we may not even be able to assign probabilities. These uncertainties make useful selections, let alone determining the best avenue difficult. All such unknowns might befall us in different constellations in different alternatives of pursuits and objectives. Consequently, it may not be possible for us to firmly grasp the relative merit of alternative courses of action. We may have to embark into a relative unknown and adjust our path according to what we experience and can project as it gains contour. This uncertainty may make us wonder whether we have chosen the best manner of pursuit for our needs. Yet, even if we subsequently resolve that we can or might fare better with a different strategy, our options at that time may be limited. Switching or even adjusting strategies may become impossible or unreasonable as we proceed. The resources we have invested in the steps we have already taken to pursue an inferior strategy may not or not wholly, effectively, or efficiently be usable in a reformed or new strategy. These losses upon change would count against any benefit we can reach in the pursuit of an alternative. The increment of happiness to be gained from a better-suited alternative may not warrant deserting our investment in an inferior pursuit.

The complexity of such assessments and reassessments can easily overtax our planning and coordination abilities. It threatens to render successful determinations of what constitutes the best way to pursue our happiness illusory. Our difficulties in devising rational strategies that will, will better, or will best serve our happiness may further make us more susceptible to contrary emotions because they leave our council of traits without capable advice. This may make room for unbalanced impulses to intrude and to sway or dominate our pursuit of happiness. Our emotional traits may already enter negotiations by our council of traits with unbalanced demands, even if these should be entirely within their unreconciled best interest. But a trait that is not secure with regard to its unreconciled best interest may make misplaced demands. The lack of adequate pursuit that results from its lack of insight may render such demands progressively desperate as the pain of deficiency compounds. Together with their deficient insights, the wariness by traits of one another's lack of insight and increasingly aggressive stance may lead them to abstain from rational argument. Instead, they may resort to a contest that is governed by threats and the application of force or by manipulation. Such a state may be ruled by the most ruthless traits that may also be the most unreasonably deformed. A confrontation by impulses that are not originally reconciled may be necessary to question settled avenues and to give our council of traits the opportunity to regulate these if they impede optimized overall fulfillment. Still, such impulses must ultimately be reconciled within our council of traits. Because that depends on rational considerations and arguments, our council of traits cannot work properly if these considerations have not been adequately developed. To avoid being ruled by the whim and destructive interchange of our impulses, we must assure the competence by our council of traits to determine the overall best pursuits for our happiness. This requires each trait to competently argue from a position of knowledge about what constitutes that trait's best interest. We must thus become able to assess the utility of means and objectives in the pursuit of each need in theory and practice.

Initially, it would be reasonable to regard a solution as the best for the fulfillment of a need if it can give us the farthest-reaching success. In a world of abundance where everything works as planned, that would appear to be a simple enough concept for success. Only, in an environment where potential solutions are afflicted with uncertainty, the means that has the potential of advancing our cause the most may not be the same that most reliably advances our purpose. If we look for the best means, we have to consider the interrelation of these two parameters. Deciding which of these characteristics serves our happiness more if they diverge may be difficult. While our happiness might be advanced more by one alternative, this solution may carry a higher risk of not succeeding or falling short. Even if an alternative solution may have a greater likelihood of coming about, it may not carry as far in advancing our cause. We may be fortunate enough to not having to decide between these two aspects of success. We may discover strategies that merge the highest probability of reliability with the farthestreaching potential. However, these two parameters do not often coincide. The potentially farthest-reaching strategy may frequently also be the newest and most experimental. Because it is an unsettled strategy, it carries with it a heightened risk of deficient reliability. The most reliable strategy is usually one whose success has been perfected and repeatedly confirmed. But that may likely mean that it does not represent the latest development. Hence, the greatest advancement and reliability potentials tend to reside on opposing ends in the spectrum of our selections concerning possible means. Advancement potential and risk often move together. Nevertheless, there are sufficient exceptions and fluctuations in this phenomenon to prevent us from establishing a steady function between these variables. We cannot conclude that the probability of success exists in an automatic inverse relation to the advancement level, or delineate to which extent that relation occurs. The parameters determining reliability and advancement potential may be sufficiently independent to keep their relationship unpredictable.

We will then have to find a way to pick the best solution in an environment where the direction and ratio between reliability and advancement potential may vary. Where they diverge, we have to decide which of these parameters is more important. We have to engage in a risk-benefit assessment, an exploration of our strategies' effectiveness. Such an effectiveness assessment may be complicated by a multitude of possible solutions, each likely to possess different reliability and advancement potential. We can quickly dismiss strategies that incur unnecessary risk to attain the possibility of reaching a higher target. Risk is obviously unnecessary if we reach an objective with lesser exposure. We may also exclude strategies that, despite being reliable, cannot assist us in reaching required or adequate degrees of advancement. Advancement is obviously adequate if it suffices to attain our objective. Yet, beyond such outer boundaries defining unnecessary risk and adequate degrees of advancement, considerations of effectiveness involve assessments that appear to defy definition. Within that range, the urgency of a need seems to contend with often complex considerations regarding the implications of different choices on our immediate and our more extended happiness. We are attempting to make a selection that has the greatest potential of satisfying a need to a desired standard without incurring risk that would untenably damage fulfillment.

To empower us in our selection among alternatives, we have to assess for every alternative the advancement potential and probability of succeeding. For every alternative, we must weigh the potential rewards against the risk of failure or falling short. We must contemplate how indispensable the farthest-reaching result is. We must weigh how much the success promised by a less risky but also less far-reaching alternative meets our objectives. Moreover, we must consider the nature and severity of the consequences of failing or falling short. We have to assess what degree and amount of failure of fulfillment we can bear to take. To select correctly, we may have to undertake additional inquiries. We may ask whether the objective we are pursuing permits us to build up to it by securing intervals or requires us to bridge the entire distance at once. We may find out whether we are restricted to one attempt or can try again. We may scrutinize whether we can or we must heighten the reliability or advancement potential of means before we apply them. Beyond that, we may consider whether we should explore additional alternatives before we act. These examinations may involve their own risk-benefit assessments. Depending on these factors, there may be better- and best-adapted alternatives. Our definition of a most effective pursuit may be a compromise. Reality may force us to reduce our ideal from a best imaginable to a best practicable pursuit.

At the end of such effectiveness deliberations, we will have developed an understanding of the relative value of alternatives for our purposes. But this determination cannot be the end of our considerations. In a strict risk-benefit assessment, we presume that we have or will have the means to pursue each particular alternative. Yet, in an environment of limited and possibly insufficient resources, we must also consider the resources that potential choices demand. If we cannot expect to gain the resources for engaging in a pursuit, it does not pose a viable alternative. Even if the resources we need are obtainable, we may be hampered by having to hold off on a pursuit until we have obtained the necessary resources. Then again, the purpose of pursuits is often not the mere sequential application of means we already possess or are certain to receive in time. Most of our pursuits involve the finding, creation, acquisition, or transmutation of resources. We may have to work to obtain such resources as part of our pursuits. In many pursuits, we cannot be certain whether we will possess the necessary resources at the time we require them. Nor can we be certain how our resources will fare when and after they are applied. Accordingly, we must consider the risk of not obtaining and of losing resources. Each means constitutes a subordinated objective to which we must apply a risk-benefit analysis. Together, these considerations rise to equate the risk-benefit assessment we make with regard to a need. Once we have defined the steps of advancement we require or expect in a sequence of pursuit, our attention focuses on the risk aspect of our pursuits.

However, this does not constitute the entirety of our consideration regarding resources. Even if our pursuits involve the finding, creation, acquisition, or transmutation of resources, we have to be able to rely on the availability of capable resources for such processing by our traits at some point. This dependence exposes traits to risk. The risk of not being able to obtain means incentivizes us to manage that risk. If a trait cannot completely control the risk of available resources for its processes, it must under conditions of actual or potential scarcity lower its exposure through an economical use of a resource when that resource is available. This allows the building of reserves that can bridge periods when it might not be available. A similar concern may be directed at immediate risk. A trait may have to manage resources carefully to satisfy a current need. It may have to assess whether and how often it can repeat the pursuit of a need if pursuits are insecure. Economy may determine whether it can run several consecutive or parallel sequences for the fulfillment of the same objective to improve present success or can secure fulfillment for recurrences of a need. In addition, a trait may be concerned about the use of resources by other needs.

While economical application and saving of resources are in the interest of other needs because these measures protect resources that they might be able to use, preservation may also be important in relation to the requirements of a single need. The dependence of needs on the fulfillment of other needs makes the fulfillment of those needs essential or at least helpful for their pursuits. We manufacture a significant portion of the conditions that allow the pursuit of needs through other needs. Our principal objectives of individual and collective survival and thriving require us to keep the cycles of resources that define the mutuality of our existential needs active and to optimize their effectiveness and efficiency. But even nonexistential traits will likely require a support structure of other traits. This forces traits to minimize negative influences on the pursuit of many other traits and to actively support the pursuit of those traits. By conceding resources to supporting traits, traits reduce the risk of nonfulfillment for needs issued by those traits and indirectly for their own needs. Thus, here again, considerations regarding resources include an assessment of risk. The cycle that is supported by an attribution of resources to other traits illustrates that distinctions between objectives and means in our pursuits are situational. Even if we focus on the fulfillment of particular needs at a time, benefits become resources to the extent pursuits deliver resources for other needs. As a consequence, risk considerations regarding benefits become risk considerations for resources. These risk considerations join risk considerations that we apply to the finding, creation, acquisition, or transmutation of means and that we apply to the preservation and application of resources once they are secured.

Still, the correspondence of resources and benefits in our cycles of needs and our recognition of benefits as resources in sequences do not permit us to merge these two categories or to treat them as identical in their relation to risk. Although the benefits of a pursuit may become resources for another pursuit, their character transforms during that pursuit as they transition to another benefit. By using benefits as resources to advance to another benefit, we subject them to various risks and to interferences and decay that may be inherently necessary to generate the intended result, or these may be coincidentally experienced because of deficiencies or interferences by surrounding circumstances. Benefits that were derived in previous pursuits may not continue intact after achieving that pursuit. As resources, they may be entirely or partly lost, preserved, or incorporated into the result. Because the beginning and end state of resources may vary broadly, we have to treat them as separate when we compare alternatives. In such comparisons, we will want to find out how much the resources we invest in a

pursuit advance our happiness. That is in part represented in the benefit we achieve but also by the detriments that we incur in generating this benefit, our cost. We compare the benefit we derive to our cost. In similarity to benefits, the resources we must invest and costs may be hard to predict. The resources we invest are subjected to a risk of loss. That risk may in some cases rather directly translate into a loss of benefit. However, in many pursuits, the dissimilar manners in which resources may be affected require separate risk assessments. The relationship between the risk of loss of resources and the possible extent of such loss describes the cost exposure in a pursuit. We may call the relationship that measures cost exposure the risk-cost factor. We may combine this factor with the risk-benefit factor into a formula that assesses the efficiency of alternatives. If we want to be precise, we may call this combination the risk-cost-risk-benefit factor. It represents the relationship between cost and benefit, modulated by the probability of both. For convenience and recognition of common usage, we may call it the cost-benefit factor. We will not use the term productivity in discussing the relationship of risk, cost, and benefit other than in its nonspecific meaning of utility because the term might be confused to describe efficiency or effectiveness or another, undefined concept.

In an environment of actual or potential scarcity, efficiency inquiries are necessary in choosing the best strategy. Limits of resources impose relentless parameters on our existence. On the other hand, we have indispensable minimal existential requirements. Securing these and expanding from them until all the requirements for our individual and collective survival and thriving have been met impose a deliberate regime on us in the attribution of resources. Even if we possess otherwise sufficient resources and the cost of resources we can accumulate may not matter much to us, the finality of time within which we must reach fulfillment as well as the finality of our life exert efficiency pressures we must heed. An inquiry regarding the effectiveness of a pursuit only cares about the result and its probability. Efficiency focuses on the connection between loss and benefit and on the probabilities of this relationship. Arguably, a measurement of efficiency includes inescapably a measurement of effectiveness. Nevertheless, to optimize our pursuits, selecting the most efficient pursuits is not sufficient to optimize the fulfillment of a need. Since we undertake our pursuits to fulfill our needs, our pursuits must be primarily guided by the results we must reach to fulfill our needs. Only in as far as that capacity is established by a pursuit can we proceed to consider its effectiveness and efficiency. We may therefore initiate our comparison of alternatives by mapping their pursuit under exclusion of all risk and cost and judging

their acceptability. Once we have excluded obviously ineffective alternatives, we may succeed narrowing a group of alternatives further by investigating the risk of not achieving acceptable results. We may be able to exclude pursuits that involve unacceptable risks of nonfulfillment or falling short. We may additionally narrow the number of viable alternatives if we exclude pursuits whose costs even under ideal circumstances would exact unacceptable sacrifice. Only after we apply these criteria is it necessary to engage in more complex considerations of the correlation among cost and benefit and their respective risks. If we require a particular grade of achievement, we select the most efficient alternative that meets our need. If our requirement of fulfillment allows for a range of effectiveness, we engage in a relative cost-benefit assessment that compares capable alternatives regarding their relative efficiency. Our exploration of both settings is facilitated if we prepare and rank risk-cost and risk-benefit factors separately corresponding to their desirability before we join them. Because we seek to optimize the fulfillment of a need, the initial ranking of pursuits in their desirability must occur according to their risk-benefit factors. We would then apply risk-cost factors to see whether our prior assessment of their ranking changes due to cost considerations. To make discrepancies visible, we would list our ranking of risk-cost and risk-benefit factors in columns adjacent to each other and connect the entries that relate to the same alternative by differently colored lines. This will alert us to discrepancies and allow us to consider the preparation of a ranking of alternatives under combined criteria. Arriving at such a combined ranking may necessitate intense comparisons because the entries are usually marked by extremes. Higher benefits ordinarily carry a higher risk of failure, a higher cost, and a higher risk of loss. These extremes may combine to rankings that are less contrasting than their risk-benefit or risk-cost components might indicate. We may increase the exactitude of the factors in this comparison chart if we can sample multiple incidents of the same pursuit and assemble averages. Still, the correlation of risk-benefit and risk-cost factors in this manner is cumbersome and does not allow a succinct assessment of efficiency differences.

Our ability to compare alternatives in spite of the disparity of their factors can be improved if we state the relationships of factors in quantifiable terms and incorporate them into a formula. To state the probability of success, we would have to know how many attempts out of a total number succeed in producing a defined benefit. We would state the number of cases in which risk has not precluded success as the numerator and the total number of pursuits as the denominator. We would then multiply the resulting ratio with the desired benefit of

a pursuit. The result would be the risk-benefit quotient for this pursuit that indicates its average benefit. We could similarly calculate our cost exposure for a pursuit by adding the cost incurred in all attempts to reach a particular benefit and dividing that cost by the number of attempts. This is the risk-cost quotient that indicates average cost. We would then divide the risk-benefit quotient by the risk-cost quotient. We thus possess a formula to represent and calculate the relationship of a benefit, cost, and pertinent risks for a particular pursuit. We may designate this the cost-benefit quotient. A pursuit becomes more efficient with a higher cost-benefit quotient. Comparing cost-benefit quotients for alternative strategies permits us to assess and compare them in quantifiable terms. Although this formula is focused on the pursuit of a defined benefit, it can be adjusted to situations with variable benefit. Under such conditions, we would determine the benefit factor in the risk-benefit quotient by adding the total benefits incurred in successful pursuits of the same kind and dividing the result by the number of pursuits. We would compare the average benefits of a type of pursuit to the average cost. Any risks that come to bear in either category would have found expression in these averages. But these combined results are only of partial importance for forming actionable insights. They would improve our understanding regarding the distribution of risks, losses, and benefits among alternative sequences. However, they would not give us insight regarding the constituent forces, the steps or passages that shape the sequences whose efficiency we review. To comprehend, improve, and optimize our pursuits, we have to understand the relationship of risks, costs, and benefits for their steps and their larger parts. We must determine where the particularly riskladen, costly, or beneficial points in a pursuit lie. To enable that judgment, we can calculate a cost-benefit quotient for steps or portions of a strategy by applying the same methods we applied to the entirety of a pursuit. Such smaller increments supply versatility to our efforts by rendering insights about elements interchangeable among pursuits.

Without risk, the movements of cost and benefit in a sequence would be simple to follow. The involvement of risk in both the accrual of cost as well the accrual of benefit seems to significantly complicate our assessments. The risk of reaching the benefits in a pursuit seems to be most easily understood. Because steps or sections in sequences of pursuit rely on predecessors, the risks of each appear to compound. To calculate the likelihood that we will reach a benefit that is further removed in a sequence, we multiply the probability of success for each step or section. To compare alternatives for arriving at its benefit, we multiply that risk quotient with the benefit we are trying to reach. For

consolidated pursuits, the probability of benefits follows the same pattern. The analysis only separates at the point probability is multiplied with different benefits. Still, a linear movement only describes a part of our pursuits. To the extent developments combine, we have to multiply the probabilities of deriving their ingredients and multiply the result with the probability attached to the step that combines them.

A risk assessment concerning cost seems to be even more complex. Cost is in part directed by the benefit its expenditure supports. It may also vary depending on the manner in which we pursue that benefit. This manner is in large part directed by smaller benefits in subordinated steps that are required to build larger benefits. The benefit of each step seems to define the cost involved in its pursuit. Moreover, each benefit resulting from a step represents a cost in the succeeding step. This pattern seems to continue to the extent the fulfillment of a need serves as the basis for the fulfillment of other needs. Benefits and costs seem to be identical in our pursuits, only temporarily separated by the point in the sequence at which we observe them as means or objectives. This might convince us to conclude that the risk of loss in a step is the same as the risk of failing or of falling short in reaching its benefit. However, that is not necessarily accurate. Risks affecting costs also affect our ability to attain benefits. After all, costs relate to the resources that we need to reach our objectives. But risks related to costs may not equal risks for reaching our benefits, and risks that reflect on our inability to reach a benefit may not correspondingly reflect on our resources. The reason is that the risk of reaching a benefit is a matter of technical concern regarding achievement while the risk involved in cost is a matter that addresses our concern about the loss of resources. That risk moves differently although resources constitute the achievements of former pursuits. Resources may be completely or partly preserved or may be entirely consumed in successful as well as in unsuccessful pursuits. To the extent pursuits are not successful, they might waste resources. Even if a resource is transferred into a benefit, it must be registered as a loss. Not to do this would mean to count resources twice, once at the beginning of a step or section and again at its end in form of the benefit into which it has merged. Further, even successful pursuits may not transfer the entirety of a resource they consume into a benefit but may lose some of the resources as waste. In addition, the cost of benefits may exceed the resources necessary for their pursuit because that pursuit may inflict damage beyond its participating resources. It may harm the future production or use of the same type or different types of resources. Cost and the risk of cost may then be independent from benefits and the risks involved in reaching benefits.

To assess the cost exposure of a sequence, we would have to ascertain for each of its steps or its sections the product of the possible amount of cost with the likelihood of its occurrence. In this respect, the probability of cost behaves like the probability of discrete benefits in a sequence. Yet, in contrast to benefits during a pursuit, the costs incurred in each step or section do not necessarily build on each other. Therefore, they may not compound or otherwise influence one another. We cannot calculate the probability of final costs by multiplying the probability of cost at each stage unless we can be certain that elements of cost directly build on each other. Apart from such a sequential structuring, the probability of cost is as unstructured as the ways in which resources may be lost in a pursuit. The ways in which the accomplishment of a benefit in a sequence might be impeded may be numerous and unstructured as well. However, there is a difference in that these problems disturb a series of linked processes that each serve as the basis for another process. This dependence causes a risk in reaching a prior step to combine with the risk of a subsequent step. Because costs are not necessarily linked in a way in which one event of cost would be based on the occurrence of a prior event of cost, the risk for the occurrence of one event of cost does not necessarily translate into a higher risk of loss for another. The partly unrelated character of costs may prevent us from calculating an overall probability of cost or a unified statement of cost. We may have to retain categories of cost and the risk of their occurrence separately. Benefits require this only to the extent our pursuits result in positive results that are of a different kind than the objective of a pursuit. In that case, the probability of these positive effects would have to be calculated separately as well.

The calculation of risk with regard to the benefit and cost of sequences is further complicated because the same step might be affected by a combination of multiple independent general and specific risk factors. To achieve a correct understanding of risk, we would have to understand each risk factor separately and investigate how risk factors relate to other risk factors. The complexity is additionally increased by the number of variants and more fundamentally alternative sequences we must consider to render an informed decision on what constitutes the best pathway of pursuit. Our undertaking to comprehensively appraise costs, benefits, and their probabilities is ultimately hindered by our inability or unwillingness to ascertain pertinent facts. We may not have the variety and clarity of direct or indirect experiences to render useful assessments of possible risk, cost, and benefit or their interrelation for a particular step, let alone for all its alternatives. Our expectations of how these factors will perform may not be well-grounded. In

many situations, risk factors, costs, and benefits may not be clearly divided to permit their separate assessment and they may develop from the correlation of a multiplicity of factors that are subject to variation. Even without risk, we would be faced with multiple components that could combine to a broad variety of results. The necessity of repeated and of varied efforts to establish our bearing for predicting or forming models for pursuits might involve such costs that it might endanger or defeat the purpose of improving efficiency and impede the effectiveness of our conduct. We may not have the inclination to let probabilities and averages come to pass or to gather, record, or share data. The supplementation of our experiences with the experiences of other individuals may not sufficiently raise our insight. To be instructive, previous constellations would have to resemble a setting we face in their material aspects. Even if we have or can obtain sufficient information to undertake assessments, the exertions of comparative assessments in which any of the four aspects of the cost-benefit factor may be different in every step of every alternative may overburden our capabilities. The challenges to act and react in our pursuits may translate into an overwhelming complexity and number of variations to be considered. We may not possess the luxury of systematic and comprehensive constructing, considering, and testing of models. We may not be able to delay our pursuits or keep them at low levels until we have better clarity. Even if we could succeed limiting our costs, we may refuse to live our life in such a complicated, calculating, all-absorbing manner.

We may therefore constrain sophisticated cost-benefit calculations to distinct areas in which we deem it advantageous or necessary to employ such methods. Beyond that, we may be given to apply costbenefit assessments inconsistently or superficially. We may undertake rough, intuitive cost-benefit assessments and gauge the probability of factors on the basis of anecdotal experiences or preponderances of occurrences that we believe to bear sufficient similarity. Our inability or unwillingness to apply systematic assessments may prompt us to plan and adjust our pursuits based on nonpertinent, unreliable, nonrepresentative, erroneous, or fraudulent information or even in defiance of useful information. This may make improving our pursuits an arduous undertaking that is littered with painful experiences. Even if we avoid the complications of cost-benefit calculations, life might seem too unpredictable and too difficult and costly. Such frustrations may inspire us to curb our pursuits to modes that involve no risk and cost or only display them at low levels. In return for such safety, we may be willing to live with low levels of benefits. Such safety requires that our council of traits can come to an arrangement among our traits in which they

comprehensively abide by its restrictions. But that may be difficult to achieve because a lack of rational assistance delivers us to the unbridled interchange of our impulses. If rational processes are not offering lucidity regarding available choices, their effectiveness, and their efficiency, the reconciliation mechanisms of our council of traits that rely on such processes will not work correctly. While some traits may underassert themselves due to confusion and may hence become susceptible to domination or to influence, other traits may overassert themselves and use that confusion to dominate and influence other traits. Detrimental traits or detrimental aspects of traits may use this opportunity to insert themselves into our decision making. Yet there might also be confusion, and attempts to take advantage of it, among constructive traits. With diminished rational support, our traits may refer to instinctive indicators and associated experiences that our emotional mind has collected and connected. We may let our choices be influenced by our emotional attachment to means that we deem helpful or more helpful and by our aversion against means that we deem unhelpful, adverse, or less helpful due to emotional prejudices that would not hold up under rational inspection. These dispositions, our desires, our deprivation or fear of deprivation, as well as competition among our traits may cloud our judgment. We may be caught in a battle for domination by impulses that point in different directions without connecting, comparing, or compromising their strategies by much more than manipulations or coercions. In their interaction, traits may attempt to offensively and defensively obstruct, encumber, or mislead perceptive and the remaining rational functions to their advantage. Our insecurity and these interactions may expose us to error. They may also allow external interests to take advantage of us for their purposes similar to the ways in which traits might try to dominate other traits internally.

Arguably, our error should be limited even if our perceptive and rational facilities are stultified because pursuits that do not reach fulfillment or are less suited for it will eventually disprove their applicability. However, this presumes as one possibility that traits would be sufficiently flexible and astute to correct themselves. That may not be the case, particularly if rational reflection is subdued. The other alternative would be that negative effects on other traits might incentivize these to exert corrective pressure even in the absence of much nonemotional assistance. But such mechanisms may be slow to understand and flawed in their reactions with the reduction of rational assistance. The weakening of our decisional processes exposes us to missing and false determinations about the feasibility, effectiveness, and efficiency of a pursuit or even the presence of factual foundations. If plausible al-

ternate causes for insufficient fulfillment are set forth, we might not know whether emotions blinded us or other factors caused our lack of achievement. Errors in our pursuits might further be hidden because they might represent warranted responses to incorrect suggestions of fact. Our emotions may conceive, accept, or imply circumstances that may not exist or not be presented in their proper meaning, context, or intensity. Such mistakes may affect us regardless of whether we act directly on impulses, involve them in semblances of reconciliation, and even if we try to carry out cost-benefit assessments because we rely on inadequate and misleading information and rational facilitation.

Unbound by a rational evaluation of how great the benefits of a pursuit are, we may succumb to unrealistic and even to irrational exaggerations or understatements founded on the intensity of our urges. Moreover, depending on their satisfaction status, or even as a permanent stance, traits may propose or be open to suggestions about their absolute and relative importance and the benefits of particular manners of pursuit. Emotional attitudes may similarly influence or be influenced regarding costs. They may suggest that the cost of pursuits is higher or lower than perceptions or rational calculation would imply, that we can or cannot afford or should or should not incur such cost, or that we will or will not sustain certain types of costs. We should be able to determine the legitimacy of costs in derivation from whether and how well they advance us toward benefits and the relative value of these benefits. If a need is fulfilled and there are no existent requirements to procure for its future fulfillment, incurring costs for its pursuit may be illegitimate. Similarly, we may devalue incurring costs as we become secure in being able to reach fulfillment. But we may also possess deeper-seated dispositions regarding the investment of means that overshadow assessments whether the expenditure of cost is warranted by the benefit we expect to achieve. We may have genetic and develop acquired traits and less established attitudes about cost from experiences how difficult it has been for us to locate, generate, or keep resources. Because each item of cost can be viewed as a benefit resulting from a previous endeavor, we might consider the cost at which we acquired a means in the course of a subsequent investment of it. We might even consider the potential cost imposed by the risk in a former pursuit. Cost and risk in a previous phase may merge to weigh in on a subsequent consideration. We may value means in proportion to the cost and risk at which they came about rather than the effect they can have in creating a benefit. This may be reasonable as far as such a valuation apprises us of potential difficulties in creating or finding similar means for future pursuits. The replacement cost of resources may

rightfully affect cost-benefit calculations. Yet, if that replacement cost is lower than the cost we incurred in obtaining a resource, our emotional attachment to that higher value may skew our cost-benefit assessment. Our pursuits might further be disturbed if we attach sentimental value to means that does not correspond with their utility.

Our emotional evaluation of cost and benefit and the ratio between these two factors may influence whether we engage in a certain pursuit and with how much motivation we pursue it. In addition, our emotional attitudes toward expected benefits and costs may considerably influence the risk we are prepared to incur, together with a more general willingness or aversion to incur risk. Similar to our evaluation of cost and benefit, our risk readiness or aversion may depend on the fulfillment status of our needs and our interpretations of experiences that have not matured into traits. But we can also observe risk readiness or aversion as a general character trait that affects a number or even all of our pursuits. It seems to be a specific trait that modulates other traits. The resulting outlook toward risk may be a momentous and often determining factor in guiding our behavior and its results.

When we examine our enduring attitudes toward risk, we may observe that our personality focuses on particular parameters of risk as compatible. Operations outside our comfort zone would be against its instructions. Our personality will motivate us to learn the skills related to operating within the risk margins it sets. If we have low risk tolerance, the skills necessary to succeed at higher risk exposure levels in excess of our customary limits are not likely to be targeted by us as worthwhile for the pursuit of our happiness. In consequence, we may be inexperienced with the skills required to be successful at risk levels that exceed our comfort zone. This reinforces our customary risk limitations. We may find the uncertainty in regions past our comfort zone bewildering and distressing. Similar emotions may be prompted in reverse if our mental traits have a fundamental affinity for elevated risk. We may find more controlled procedures boring, frustrating, and unfulfilling. Our skills and our willingness to operate in more controlled circumstances may remain underdeveloped. Skills that are helpful or required to cope with higher-risk environments may not be transferable to more controlled environments. Similarly, skills that are helpful or required to cope in lower-risk environments may not be transferable to less controlled environments. In either situation, the pursuit of our wishes in a manner that is incompatible with our risk familiarity may render us less successful. Even if we could succeed in a manner of pursuit outside our range of preference, we might still be unhappy because such engagement runs contrary to a defining aspect of our personality. Such manners of pursuit might not or not sufficiently fulfill us. To the extent our risk affinity or aversion is a function of our traits, it might be detectable in many if not all our wishes and needs. If we are risk-averse, our needs and wishes reflect objectives whose fulfillment is more within our control sphere. If we embrace risk, our needs and wishes are likely to reflect objectives that carry us toward or even beyond the edge of control. Depending on our personality, we may be driven to an existence of more or less safely achievable objectives. Our attitude toward risk would then be more than an issue of technical details in our strategy. It would be a fundamental approach concerning our happiness that might deeply reflect on the level of happiness we pursue or can achieve. It appears to be a characteristic that could lastingly affect our individual and collective survival and thriving.

Our emotional preferences with regard to risk in our pursuits may not allow us a choice among the full scope of controlled and riskoriented strategies. Our avenues of pursuit may be narrowed to strategies that are compatible with our risk attitude even if other strategies would seem technically better suited for the fulfillment of a particular objective. Accordingly, it appears that our general risk aversion or affinity could interfere with the improvement and optimization of our happiness. Such a conclusion may not seem warranted from the viewpoint of the individual displaying a particular risk aversion or affinity. That person's attitude creates conditions under which pursuits that do not comply with the risk parameters set by that person's traits cannot cause or at least cannot maximize that person's happiness. As long as that individual is able to fulfill needs within the narrowed conditions of control or risk, such fulfillment may be perceived as ideal. However, even by our individual standards, the particularities of risk aversion or affinity may make it harder to fulfill our needs. Particularly an inability to be satisfied with controlled strategies for the fulfillment of needs may render it more difficult to fulfill our needs under nonexigent circumstances. With higher risk desires, their fulfillment is progressively out of our control. That the contentment of these needs is not as predictable may intensify the thrill of satisfaction if these needs are fulfilled. Yet, if they continue unfulfilled, we suffer damage and pain. Depending on how strong our risk affinity is, we might not be able to satisfy some of our needs or might not be able to satisfy them sufficiently or regularly. Our risk affinity regarding one need may affect the pursuit of other needs. We may not mind that effect because our risk affinity may pertain to such needs as well. Nevertheless, the insistence on higher risk may leave affected needs with less common ground to still maintain fulfillment within their margin of satisfaction. Moreover, not all traits may necessarily comply with our general dispositions for risk attraction or aversion. Because our needs may demand particular benefits for their fulfillment, we might adjust our readiness to incur risk permanently or as required. Although our general risk disposition may influence whether we pursue our ideal or the best possible contentment, the requirements of affected traits may persevere. If a need cannot be or cannot be sufficiently satisfied within low risk parameters, the resulting deprivation might drive risk-averse personalities to venture into more risk-laden pursuits. Reverse conditions may inspire risk-friendly personalities to cut back concerning the risk exposure of their pursuits. The requirements of needs may compel us to overcome our attitudes toward risk. This may cause disagreement with the trait that defines our risk attitude. However, the likely supremacy of other needs, particularly of existential needs, may impose on us that we endure the resulting discomfort. To the extent our risk trait is acquired, we may be able to adjust and possibly vary it to harmonize with demands recurrently imposed by our needs. Many of the dynamics and consequences for risk also apply very similarly to our attitudes regarding cost and benefit. In fact, the three factors are as engaged in complex interactions in our attitudes as they are in objective reality.

We may conclude from all of this that our ability to undertake effectiveness and efficiency assessments may be burdensome and significantly challenged by a number of internal and external factors. Yet we must face these challenges and surmount them because effectiveness and efficiency assessments are necessary if we want to make our pursuits more successful, secure, and economical. They are indispensable for us to ascertain passable, better, or the best configurations for the pursuit of a need. Although many assessments may be difficult or even impossible, we must evaluate as much as we can under these criteria, maybe even under use of informational or computational assistance. Constructive instincts already mimic such calculations and our constructive thinking already appears to employ them without being fully conscious of them. These features may carry us a long way. But unreflected or superficially reflected assessments may also expose us to avoidable error. If we want to improve our happiness, we must gain additional clarity about the effectiveness and efficiency of our options.

In our cost-benefit assessments so far, we have mostly focused on one need at a time. To bring them to their full utility for the efforts of our council of traits in maximizing the totality of our pursuits, we have to learn to reconcile our assessments for single traits into a cost-benefit assessment for an overall best result. The next chapter discusses how we can achieve reconciliation among our multiple needs.