CHAPTER 37 COINCIDENCE

Individual and collective methods of reconciliation may infuse us with a sense of empowerment because they allow us to actively shape and improve our happiness. But chances are that even the most advanced individual and cooperative planning and activity cannot control all the events in our environment according to our wishes. There will continue to be occurrences that elude our individual or collective influence. Apart from absolute boundaries that limit what is possible, we are limited in our capacity to undertake what is possible. The genetic and acquired features of our body, including our mind, impose on us limitations regarding what we can achieve. Our knowledge and intelligence, our tangible capabilities, our efforts can only reach so far. Our technological development can only yield so much and can only be advanced so much at a time. Our coordination with other humans may decisively improve our chances. Yet our collective capabilities remain limited because they are being built from the sum of limited individual capabilities, even if these enhance one another. In addition, our coordination with other humans is limited because the activities of others cannot focus exclusively on our concerns. Other humans pursue the satisfaction of their own needs. Beyond that, our efforts as humans are surrounded by independent circumstances that we can only partly influence. Nonhuman life forms are controlled by their own sets of needs. Nonliving objects and processes possess a distinct nature and dynamics. Humans can try to maximize their capabilities in interaction with and possible counteraction to these independent factors. We can, and we frequently must, influence or control objects and events, including other humans, to accommodate our ambitions. However, these might not find satisfactory implementation due to independent factors. Our management of the world, including of ourselves and of our immediate environment, is noticeably limited despite our best efforts.

That we cannot take complete command of circumstances does not mean that we could not use or react to them. It does not necessarily mean that their occurrences and effects are entirely unpredictable or that we could not understand how these circumstances come about and develop. We might have some command to contain, channel, or apportion them. We may have even more ability to position ourselves and conditions that we can control with respect to them. We may escape or moderate exposure of us or our environment to uncontrollable phenomena or instrumentalize them. We may then have some control on how uncontrollable circumstances affect us and our interests.

In many instances, we encounter blended conditions of circumstances beyond and within our control. We come upon circumstances that partly permit or require our management and partly allow or require the management of our self and of aspects that are within our control with regard to them. Sometimes, preexisting circumstances already offer capable means that we can immediately use. In that case, the only control features necessary would be superficial management in their application. The reasons for such a comfortable setting can be several. Circumstances might coincide with our needs, they might adjust to our needs, or we or humankind might have adjusted to them. The history of humanity has been largely characterized by the dictate of uncontrollable circumstances and our adjustment to them as a matter of genetic development. Even to the extent our ancestors achieved control over themselves or their circumstances, much of it was limited to genetic instinct. It steered us to find and use resources and to avoid dangers in our surroundings. Since then, our capacities have advanced and they might still be advancing. With the development of our mind and of our applied capacities, we have become less likely to face situations in which we do not have any influence on our circumstances or our positioning. We have increased our capacity of creating means by gaining the ability to identify, separate, and allocate resources.

But the development of manufactured means has also made it more necessary that we exert control over our world and ourselves in that development and the implementation of its results. By trying to improve our supply of means and their utility through artificial measures, we might disturb natural settings. To the extent we continue to depend on such settings, our development might wreak negative consequences for us and our species. As our use of naturally occurring resources intensifies, we must intensify our care so we will not damage ourselves directly or negatively influence the continued availability of naturally occurring resources for our and humanity's future pursuits. If our use involves aspects of consumption or of dispersion, we necessarily damage resources or make them less available. To guarantee future availability of such resources, we might have to engage in various strategies. We might have to locate additional resources. Where that is not possible, we may have to pace our use and eventually find alternative resources. If resources are renewable, we might control our use to permit them to regenerate on their own. If the demands of our use exceed that capacity, we may have to involve ourselves in their regeneration. We may have to protect or enhance their sources to safeguard their continuing availability. We may further have to construct artificial mechanisms to reconstitute resources after our use for reuse.

Our uses and involvement in creating and maintaining remedial control over us and our environment often overshadow the coincidental, preexisting alignment of such resources and of their capacities. Our focus on managing resources may make it appear as if we created our means or at least as if we were in absolute control of them. However, as we examine our pursuits closely, it becomes manifest that we cannot maintain this claim. By their existence, these resources already create much of what we need. We merely find them and reveal, concentrate, and connect their nature through separation and allocation. All our resources are already present in their position, substance, and the laws by which they abide. We are merely untying and assembling them to where they serve us better. With advancing technological capabilities, we may promote our dominion over resources. We may discover different qualities and quantities of them. We may analyze them into various stages of components and arrive at elements and properties we cannot further deconstruct. We may learn about them and the nature of their components and how to assemble them to means that were previously known or unknown. Still, it appears that regardless of how far we might venture in our explorations, we rely on given placement, substance, and properties in the construction of our means.

Even if we contribute our efforts to avail ourselves of the benefits of certain objects and events, their fundamental nature as coincidental, independently existing circumstances that we use for our pursuits does not change. We and our efforts are based on such circumstances as well. Much of what we are comes about without our contribution. We did not have to originate any of our resources, and it may remain beyond our abilities to originate them. They may largely function without and beyond our control. We may be able to place them in positions in which they exercise their properties. We may be able to mirror impressions of their functions in our mind and to project them back in their management. But the objects and events we can create in us and our environment are all conditional and secondary to the preexistence of the underlying resources in us and our environment. As long as we cannot devise elements and change properties and interactive laws of nature, our ultimate resources remain out of our control. They existed with all their potential before we became aware of them and exercised power over them. We found them to coincide with our wishes and learned to access their potential. We continue to depend on them. Our perception of control over them may arise from our familiarity with us and our environment, from our insights into the construction and behavior of resources and their predictability. In truth, however, we and our control are determined by these resources.

Even with rising technological knowledge and skill, the means we apply remain at best hybrids that are comprised of controlled and uncontrolled aspects. We might deem that we can have the most control of our environment if we identify and learn to manage its components. Yet, in their mass occurrence and at higher levels of combination, substances may exhibit properties that are difficult to discern at an elemental level. Knowledge about substances acquired at a component level may provide us some guidance regarding the result of their combination at more complex levels. Fundamental scientific research may improve predictability. Still, occasions may remain where we pursue paths at higher assembly levels without knowing where they lead us. Mass occurrences of the same type of component may offer unifying attributes that apply to a variety of substances, but they may also have distinguishing characteristics. Additional properties might be revealed when quantities of different substances become amalgamated. Although all of these functionalities are native to the components, science may not be able to detect them or trigger their application without interrelating these at more elevated levels of assembly. This may cause us to attribute properties and laws to higher levels of assembly. The potentially varying behavior of substances at different levels of assembly suggests that we conduct exploration at several levels.

But many of our problems have a more mundane cause. Even if we comprehend substances, principles, and processes in a segregated manner, and even if we are cognizant of the functioning of objects and events we have created from them, many of our pursuits may involve extensive diversities, numbers, and interactions of objects and events. This complexity renders it hard to keep track of participating aspects, to understand their interaction, and to conceive how we can successfully interact with them. This problem is only partly answered by purposeful aggregations because we and the objects and events we create may be positioned into settings with an extensive number and variety of circumstances. As a result, we may not be fully aware of all necessary aspects to reach fulfillment even at a high degree of development. We may not know how to locate, create, or assemble means. We may not be able to formulate practical wishes. If we can identify a possible path of pursuit, there may be problems regarding the availability of resources or our ability in using them. Unforeseeable factors may interfere with our plans. Even if we can discern prevailing facts at one time, these might change. The complexity of our world may not allow us to safely predict deviations even if we understand that complexity exists. Some changes can be predicted because they follow defined programmed schedules for events. Others regularly remain within predictable

margins or may be anticipated as possibilities based on previous experiences of similar developments. Yet many occurrences of coincidental phenomena are so irregular that we cannot predict them or their likelihood with useful reliability. We may have to develop and adjust our strategies as we experience their effectiveness and efficiency.

Our dearth of control over circumstances in our environment is met by personal circumstances of our mind and of our more obvious physical aspects over which we have only incomplete power. These are primarily defined by our genetic dispositions and our experiences, and particularly the growth, boundaries, and interferences we undergo by them. Our priorities and strategies may transform because our needs or our capacities may change. We might not be able to manage these fundamental aspects. Moreover, we possess only a limited capacity to control our fulfillment state in the shorter fluctuations. That state depends on the presence of adequate means we derive from outside our body and is in large part governed by unconscious or instinctive programming and the use of our more obvious physical dispositions. The fulfillment of our needs also depends on mental resources we develop. But even these are not completely under our command. That is in part because they as well depend on environmental resources that we may only be able to partly control. Beyond that, we must largely operate on the basis of the mental capacities we possess even if we can use them to increase and shape our mental resources. We may guide our rational mind and perceptions by the dictate of our emotions to arrange pertinent resources. We may use perceptive and rational features to help traits manage our emotions by producing conditions for their deprivation or fulfillment, or for their adjustment. Emotional traits may influence one another. Still, our mental state depends on external and internal factors that impose themselves on us and conduct us. It appears that everything we are and produce has been given to us. We only assemble these aspects under the command of some of these aspects.

The dynamics of external influences on our personal conditions and of the processing of these influences by mechanisms in us add to our difficulties to maintain pursuits according to a preconceived plan. Our control is significantly reduced not only because of vicissitudes in building our sequences of pursuit. We also must continually fight the deterioration of fulfillment by its inherent nature to fade or as a result of interference before, during, and subsequent to pursuits. That happiness is incessantly threatened by decay or disturbances dictates our agenda in the form of reiterated or of new pursuits and maintenance efforts. We may not be able to maintain or reiterate fulfillment conditions or emulate them with similar conditions due to external circum-

stances. Even if we can generate all outward circumstances of maintenance or re-creation, these circumstances might not have the same effect. Our needs and priorities adjust because of physiological developments or regression. Our ability to create happiness may be altered by our experiences. Besides these factors, continued deficiencies that prevent fulfillment may leave lasting emotional impressions. But single or repetitive achievements may impact our emotional profile as well. Fulfillment challenges us with several dynamic effects. Its experience can reorder our perspectives regarding the importance of fulfilled and unfulfilled wishes and needs. Unfulfilled needs will change previous priorities as these have been fulfilled or as the relative pain of deprivation changes. Moreover, our happiness may wane in spite of the continued existence of the circumstances that led to its achievement. Fulfillment of our needs does not seem sufficient to guarantee our happiness. Our happiness is fleeting by its nature. It does not appear capable of existing as a static experience. The satisfaction of our needs appears to require that we engage in additional pursuits. This requirement exposes us to recurring deficiencies in spite of our fulfillment. It subjects us to never-ending demands that we can only temporarily satisfy by providing conditions of fulfillment, and even these can lose their power. Our resulting situation seems to be largely removed from our control.

Even what we might regard as independent self-determination would appear to be taken out of our control because we are the product of our genetic and acquired dispositions. These dispositions largely define our obviously physical attributes as well as our mental structures and processes. Both are effects of forces that we did not control. The actions we pursue after the formation of our mental traits are not under our control because they are directed by these dispositions and their experiences that influence what we might pursue. These experiences may be intensely shaped by our environment. But to the extent we contribute to them, our actions are determined by our dispositions and by our previous experiences attached to them. Any discourse we might observe in our mind is the result of different needs and the perceptive and rational instruments they engage to determine their relative priority and strategies. What we regard as our personality is merely a forum that reflects the collection of positions imprinted on us by our mental traits and the interpretation of our prior and current experiences by these traits. Such influences might not harmonize. Our acquired mental traits are particularly at risk of steering us toward acts against our overall interests. Even if our traits find a way to reconcile, our impression of self-control is a result of traits engaging in a pattern of contest and negotiation with one another that is decided by the rel-

ative weight of their interaction. The attributes of our needs that are issued by our emotional traits obligate us irresistibly and can solely be contained by external intervention or one another's influence. To willfully shape our needs, the manner in which they assert themselves, or their priorities may necessitate that we overcome natural or acquired mental traits. Our council of traits may possess such power by itself or may be able to render decisions to engage external assistance. But our council's determinations depend on emotional traits to make that decision and prevail over their detractors. Even if we can conform traits, our determination whether and how to apply that capacity would be indirectly controlled by the conditions that gave rise to our emotional traits and shaped how they interact with surrounding experiences. Accordingly, our needs and the manners in which we manage them appear to be determined by influences beyond our control. Consequently, our impressions of us as independent entities that govern their affairs independently reveal themselves as an illusion. We act and react consistent with the programming we received applied to information about conditions we meet. At best, we appear to be in control of the technical aspects of our approaches that remain unbiased by our emotions. Still, even here, correct perceptions and rational handling of the physical aspects of substances and laws on which they are based must direct our deliberations and our choices if we are to succeed.

Although the dependences of our mind are evident if we review them, we may discount the lack of control they imply. Because the immediate processes that determine our thoughts, emotions, and actions occur within the physical confines of our body, we may regard them to be autonomous. We may identify with our mind and the remainder of our body without awareness of or giving credit to their sources. Even where we perceive their sources, our physical separateness and segregated mental processes and the proprietary aspects of our mental and other physical structures and processes still suggest autonomy. While we may concede that our mind and body must relate to our environment, their mobility and their capacity to select among many alternatives may make them appear distinct from the resources that are used to build and maintain them. Particularly our awareness that our council of traits considers and judges circumstances makes us believe that our mind is more than the sum of our mental traits. These immediate impressions may prompt us to ignore contradictory evidence. We may maintain the resulting semblance of control and freedom because the truth would categorically encroach on our needs for control of our circumstances, self-determination, and possibly for self-respect. This denial of our lack of control may expose us even more to its absence.

Even if we give in to our illusion and operate under the assumption that we interact with our world as independent control units, our control of our physical environment does not reach far as a matter of our immediate facilities individually or combined with other individuals. To find better solutions for our needs, we seek to expand our control by exploration of us and of our world. Even if we at first passively observe, we are likely to employ our insights eventually to prove them accurate or in further exploration of open questions. In covering new terrain through exploration, we must incur risk. Our interference with ourselves and our environment in our struggle to gain control is hazardous because we may not be able to determine the limits of our control without testing and possibly overstepping them. In our efforts to expand our control, we may evoke effects that reduce or eliminate the control we have already reached. In our forays into the unknown, we may subject ourselves, other humans, and further aspects of our environment to problems and degrees of hardship that may be difficult to foresee. Not all our forays expose us to unfathomable risk. Many of the dangers may be controllable because we might be able to extrapolate from our present knowledge what the dangers and how likely their occurrence might be. Inferences from our knowledge might permit us to remain within parameters of safety. The risk is particularly high when we push the boundaries of what we can control and do not have a sufficient understanding to predict what the ramifications of our actions might be. However, no absolutely secure prediction might be possible. By our endeavors to expand the boundaries of our incomplete control to understand and control ever more remote aspects in us and in our environment, and by employing what we deem to have comprehended without being yet secure in that understanding, we are bound to venture beyond our control. We risk setting free consequences that we do not understand or that we cannot contain. Besides becoming familiar with our discoveries, gaining and executing the technology of controlling a resulting expansion may require time and additional effort. Until we reach sufficient knowledge and management capacity, we invite heightened exposure to uncontrollable dynamics we are awakening or generating by our trials or by our premature application. The best we can do is to undertake our explorations in deliberate increments that permit us to contain potential fallout and to exhaustively test applications in a limited scope before we widely introduce new technology.

It then appears that making the best use of our capacity to expand our knowledge and skills necessitates as much self-control as it requires control over our environment. We have to take responsibility for our actions. The components and properties and their higher con-

glomerations that we find and use may be independent of us. But our allocation of these resources controls whether they will benefit, damage, or be neutral in pursuits of happiness for us and others. Through our interaction with substances and connected laws of nature, we assume responsibility for them. However, becoming aware of and committing to this responsibility may be difficult for us. We may continue to rely on the traditional constant where our actions were controlled by our genetic instincts and were not capable of greatly affecting our environment. We may take the presence of resources and the relative benevolence of our established environment for granted and consider them to be impervious to our behavior. We may not even be aware of their importance for our happiness. We may be slow to recognize that matters about which we did not have to worry and could only disturb on the surface have become susceptible to our intervention.

We may underestimate the individual and combined impact of our actions. We may misjudge the risks we produce because we do not know what our forays into the unknown will yield. We may shirk our responsibility under the argument that we did not intend to cause certain consequences or that our interference represents merely one contributing cause among other independent factors. We might not only underrate the detrimental effects of our experiments and implementations. We may also overrate our recently found technological abilities to control circumstances because we do not fully comprehend them or how they match with our challenges. If we are at the beginning of understanding potential resources, their setting, and how to apply them best, we may fail to discern what we still have to learn about the detriments their derivation and allocation can cause and the benefits they can yield. Our lack of insight that coddles us in a wrong sense of simplicity and our pride of having advanced may render us overconfident. They may have us prematurely announce that we have mastered technology. But we might not be able to control a resource even long after we assume that we are capable of doing so, and we may believe that it can assist us in excess of its actual capacity. Such miscalculations may be reasons environmental protection, resource preservation, and ultimately self-preservation challenges suffer from inattention, incredulity, and resistance despite adverse developments. Regardless of the disturbances we cause, we seem to instinctively assume that our environment will continue to provide. At the same time, we seem to trust that we can surmount any limitations our environment poses. We may believe that we have the capacity to subject it to our will to a degree that absolves us from its careful management. Even if we acknowledge present limitations in human control, we may trust that human ingenuity

will always find a way to solve problems that humans cause, either by progressing technology or at least by reversing ill-fated developments. Our failure to clearly recognize the consequences and the limits of our control imperils our individual and collective survival and thriving.

The interaction between control and coincidence is not limited merely to obviously physical aspects of our environment. We are confronted with it as well in the area of human mutuality. It may be possible to impose some control through the creation of markets and defined exchanges and enterprises. But our control may fade when emotional resources enter a relationship. Frequently, we produce or we activate emotions and resulting benefits or detriments provided by others through our demeanor or mere presence. We may be able to intentionally contribute to or modulate such emotions. On the other hand, the receipt of emotional resources from others may often appear to be beyond our control. While that might be attributable to their dispositions and circumstances, the reasons may also lie in our nature or behavior. The more control we assert, the more we may block the generation or transfer of emotional resources. We must avoid pursuing control of them to where our actions become subject to adverse emotional and related reactions. But even if we abstain from impositions, we may be unable to create the means for the pursuit of important interactive needs. We may only be able to proffer resources to others in the hope that they will answer as we expect. Our ability to evoke emotions or other reactions of our choosing might be limited because we might not be able to control our emotions or behavior or foresee the effects our activities and characteristics wield on the emotions of others. Further, we may reject emotional or other resources from others because they do not match with our desires. Our receipt of emotional and resulting resources from others might then be subjected to coincidental risks whose occurrence and materialization we might not overcome.

When we inspect the sources from which we derive our happiness, we must admit that none of the benefits are purely based on our independent power. As much as we may think that we create our success, as much adversity we might overcome, we can only achieve these heights because we have enormous assistance from our circumstances. Although our actions may be crucial for our success, our ability to create happiness is planted on mountains of coincidence, of independent conditions. Our perception of control rests in the selection among coincidental options. The multitude of choices, the variety of situations in which we select, the range we possess to evolve, and our unawareness of how our motivations are guided by our dispositions and experiences provide us with an impression of liberty. This may prevent us

from perceiving the conditions of our existence as confining. As long as we do not encounter our external or internal boundaries or we do not perceive a need to venture beyond them, we can cultivate an illusion of total freedom. We may derive the idea that our choices and potential for achievement are limitless and that we can be in full control of our existence. However, the layers of impositions by the physiological condition, intelligence, knowledge, and personality of us and other individuals and more generally defined economic, technological, political, legal, cultural, and other environmental conditions may constrict our choices. To the extent these limitations do not enclose our decisions, our rational and emotional preferences will make up our mind because they move us to select the best manner of pursuit. We may be able to modulate many parameters for our decisions. Still, the motivations for all modulations we apply to enable preferred choices remain beyond our control. Our impressions of liberty in our selections are in large part grounded on our cognizance of theoretical alternatives that we determine to be inferior or unavailable. Additional impressions are caused by conditions that require us to resort to alternatives we would not have selected otherwise. Although our motivations to afford us of the best available solution do not leave us a choice in such situations, we perceive the availability of workable alternatives as liberating.

When we attempt to maximize our means to create happiness, we may encounter the limits of our practical control because we might try to expand our influence beyond the best we can currently achieve to the best we can conceive or even past that. This limiting experience can negatively affect our confidence in our ability to increase our happiness. We may ask ourselves whether we should, whether we can restrict ourselves to generating happiness merely within the parameters that are under our control. The demands of our needs may not permit us to remain within predictable zones of activity. In that case, we may benefit from the inclusion of independent, uncontrollable factors into our strategies. But the pervasiveness of circumstances over which we have only partial or no control might also render it regularly obligatory to interact with them at the risk that they might turn against us. Including independent forces into our plans does not necessarily represent an inextricable problem. As long as these sources are predictable with some degree of probability, we might find utility in working with them or suit ourselves with respect to them. By including them in our plans, we can assert at least partial control over their correlation with us. This might seem to change when we encounter circumstances that do not follow recognizable probabilities. Reason appears to tell us that unpredictable coincidences cannot give us much happiness. We might view them as nuisances and threats because they undermine our control over our environment or ourselves in relation to our environment. We might believe that if something cannot be predicted, it might only rarely be helpful for our pursuit of needs that require regular or steady fulfillment. It seems that we cannot fulfill our wishes if we cannot predict. We might be convinced that our ability to predict and shape our success is the tool by which we achieve happiness. We might think of unpredictable circumstances as chaotic, adversarial, and dangerous.

Such negative impressions of unpredictable coincidences are in part accurate because they may work against us and harm us. But our reality does not reflect the dominance of such an impression. Rather, we can observe considerable evidence to the contrary. A large part of what brings us happiness is based on unpredictable coincidences. The more momentous a circumstance is for our existence, the more it appears to be ruled by unpredictability and the pervasive absence of control. Our very existence reveals itself as an unpredictable coincidence if we consider the odds that we individually would result from an unbroken chain of ancestors over billions of years and countless generations from the beginning of life. Viewed from the beginning, it would have been quite unpredictable that we specifically would come about. The probability of that occurrence appears to be so small that it does not appear relevant. Our ancestors' struggles with cataclysms, climatic changes, starvation, predators, accidents, illnesses, wars and with other forms of competition among their species, the risk of dying before producing and raising the next ancestor in line, and the coincidences and choices during all this time make our existence an extremely unlikely occasion. Similar assessments apply to other humans and possibly to the existence of our or other species and our world. The coincidence that the world developed the particularities that permitted us, other individuals, and species to develop and exist may be so striking to us that we may refuse to acknowledge it as a coincidence. Instead, we may infer a premeditation from the apparent miracle of our existence. We may add to that conviction by reviewing the unpredictability of pivotal contributions to our happiness that were not and seemingly could not have been planned by us. The importance of such incidents to us, the apparently faint chance of their occurrence, and their occurrence seemingly without conscious pursuit by us may make us believe that another intelligent, powerful, and caring force must have guided us or arranged circumstances to assist us in fulfilling our needs.

Even if we do not acknowledge a guiding hand in our fortune, it may appear to us that good luck is not only a helpful but also a necessary ingredient of our happiness. That chance occasions occur may in itself not strike us as mysterious when we consider our world's complexity. It is to be expected that some circumstances develop beyond our control in such a way that they coincidentally support our wishes. Besides that, we might call occasions lucky if we achieve positive outcomes without having to or being able to cycle through the full variety of possible constellations. We might acknowledge that the precipitated incidence of a lucky occasion may be due to random circumstances and our random positioning with regard to them. Still, we might wonder about the nature of chance if we experience an apparent overproportionality of good luck. We might question why the absence of control seems to work to such an extent and in such seemingly mysterious ways in our favor. We might think that chance should be neutral and that good and bad luck should over time equalize each other.

We might have experiences of overproportional good luck because we might focus on positive features more than detractions. We may more vividly remember the chances we took that succeeded than those that yielded nothing or little or resulted in detriment. What we call luck may be a function of trial and error in which we have forgotten or discounted hardships and disappointments. A similar dynamic might apply in conditions where we were surprised by lucky occasions and had no perceptible course of action in motion that was targeted at generating them. There as well, we may remember lucky coincidences more than unlucky or neutral coincidences. We may also never know how many potentially beneficial developments were in fact prevented without coming to our attention. We may further experience overproportional good luck if we accept a general undercurrent of adversity as a state of normality that might not strike us as bad luck. We may expect that most coincidental developments will not result in means or resources for us. Low expectations of positive occurrences may weaken us into an attitude of reduced or nonexistent entitlement. We may accordingly notice positive occasions as extraordinary. Although these occasions may be relatively uncommon, we may notice them overproportionally. A perception of bad luck may only occur when a positive occasion we have obtained or had within our reach becomes frustrated by coincidental forces. Conversely, our outlook may also be distorted to notice an overproportionality of bad luck. We may ignore or discount the quality of positive conditions. We may focus on and memorize negative coincidences more than positive occasions. We may additionally have expectations to be favored by circumstances. This may create a sense of entitlement that has a tendency of being disappointed. The divergence between our expectations and occurrences of good luck may raise impressions of bad luck if occurrences lag behind.

Even if our sense for chance occasions that we categorize to be good or bad luck is not distorted, we might experience a prevalence of one or the other type in our pursuits. Such an overproportionality may happen because conditions for beneficial or detrimental occasions are overproportionally represented in us or in our environment. Personal dispositions may pose objectives that are difficult or impossible for us to fulfill or create other impediments for the fulfillment of our needs. Further, if we exist in an environment that is hostile to our pursuits, chances are that hostile forces will depress our pursuits. If we possess constructive dispositions or live in a conducive environment, chances rise that our motivations or conditions that surround our pursuits will yield beneficial results. Our personal or environmental circumstances may be systemically more favorable or unfavorable. Yet, even if we are aware of such prevalences, we might deem ourselves lucky or unlucky depending on our expectations of how happy we should be. These expectations might be based on our assessment of general conditions or of our attributes and environmental positioning compared to others.

As we explore occasions of good and bad luck, we discover that they are not matters of pure chance but that there might be plausible subjective and objective reasons that we would be or regard ourselves lucky or unlucky. Even coincidences that cannot be easily illuminated do not fall within the category of pure chance. Pure chance would require that matters go a particular way where they could have gone another without any discernible differentiating cause. Most of our experiences do not suggest such an occurrence. We tend to describe matters as chance occasions if we do not know of any or of all the objects and events that caused a result, fully assuming that guiding causes exist. We seem to reserve characterizations of pure chance to phenomena that lie at the cusp of our understanding, including our research at elementary levels of matter. To explain observed phenomena without admitting our lack of knowledge regarding their causes, we may find it necessary to introduce the concept of pure chance. Only, reliance on pure chance as an explanation is a precarious strategy with regard to matters that are not yet understood. As our knowledge develops, matters that earlier were deemed unpredictable have the tendency of becoming understood in their causalities. In time, we regularly find that all effects of a certain kind have causes of a certain kind. We also find that identical causes cannot give rise to different results. We find that there is always a reason that an object or event develops one way and not another. That we would hold otherwise to explain occurrences at the forefront of exploration might then be a product of our ignorance of what remains to be discovered and our inability or refusal to recog-

nize our ignorance. Even if phenomena of pure chance should exist at an elemental level, they do not appear to have a discernible effect on us. They would appear to be restricted to a class of elementary occurrences. We might be able to apply the apparent randomness of these phenomena in developing certain instruments at elemental levels. But higher-level means constituted from multitudes of elemental components that appear to occur or behave by pure chance at their component levels comport themselves in manners that do not exhibit chance occurrences or effects. Even if we are dealing with incidents at an elemental level where we have to account for varied outcomes seemingly without a discernible cause, we can derive a formula of distribution of outcomes from accumulated observations of single incidents. Occurrences at elemental levels where we purportedly observe pure chance have a tendency to exhibit patterns in parallel settings or repetitions. Their mass occurrence becomes predictable even if a single incident is not predictable. We can even calculate the probability of outcome regarding single incidents of purported pure chance. The compliance of objects or events with this formula demonstrates that the underlying components and processes follow laws of nature. Nature would appear to remain bound into an ordered, preordained program that must develop according to its principles. A law that permits us to predict the probability of an outcome does not describe events of pure chance. If there were truly no cause for an occurrence, there would be no reason it should comply with probability patterns. Rather, its hallmark would be that it is not ruled by laws or probability but would be entirely unpredictable. This, however, is not what we perceive in events that are deemed to display pure chance. The problem seems to be that we only understand principles at work with regard to their cumulative effects without comprehending their grounds or processes. With our perceptions in elemental subjects being challenged or eliminated, it does not seem surprising that we cannot measure physical causes and processes. But our rational mind may also be unable to grasp phenomena that profoundly differ from our experiences and our processing pathways.

Even if we should be mindful of the constituent causalities that are involved in the formation of objects or events in principle, we may still regard the presence of objects and events as chance occurrences if the coincidence of the observed causes is rare. The reason for the unpredictability that seems to be the basis for our observation of chance is often that the causalities yielding a result emerge from multilayered and interwoven processes and structures. We are habitually surrounded by a multitude of causes and interactions that exceed our ability to trace and evaluate them. Many of our surroundings confront us with

such complexity that they are not only beyond our control but also beyond our predictability, including our probability assessments. Even if could trace with sufficient resources the causal links that create a purported chance event, their combined complexity might be overwhelming when we come upon circumstances without the preparation of intricate investigations. Since we do not possess the capacity or information or unravel interacting amalgamations of causes, we are surprised by their results if they are not ordinary. Their coincidence strikes us as a chance episode. Even if we become aware of all causal connections involved, we may still hold on to our perception of chance if it would have taken exorbitant planning, management, or resources to produce the result through intentional action. On the other hand, we deny the quality of chance to a great number of coincidental occurrences if they form regular parts of our environment, although we might not be able to trace or replicate them nor fully understand their workings.

We may call damaging surprising incidents misfortunes or accidents and designate rare beneficial coincidences as events of serendipity. We may define serendipity as coincidental occurrences in our pursuits in which what we desire presents itself apparently without being pursued simply as a matter of happenstance. Serendipity may occur in relation with humans or other objects or events. Notwithstanding this breadth of the phenomenon, we might often narrow it to describe correlations with humans. Serendipity may occur in the form of unilateral windfalls. For luck to strike, our participation may not have to go further than the minimum of our existence or our presence. Others may do all the work in correlating with us. Not all acts or potentials by others that are complementary to our pursuits may be intended by them to be complementary. We may serendipitously benefit from others as an unintended byproduct of their pursuits. Nevertheless, in many serendipitous coincidences, a more deliberate participation by other parties or by benefiting parties seems to be helpful or necessary. We may consequently scrutinize serendipity as the coincidence of complementary pursuits. We may perceive a match of wishes to be a rare occasion because of the many variations in mental traits, satisfaction levels, and environmental circumstances among individuals. But the chance quality of serendipity may not solely be a matter of scarcity in complementary wishes. An additional difficulty is frequently that complementary circumstances and resulting wishes might not find one another.

The format of complementary participation that is necessary or helpful for serendipity is not easy to delineate. It is a cooperative initiative that is launched without knowledge of the existence or the particularities of other participants' pursuits. Still, participants who desire benefit from serendipity may undertake strategies that render meeting with complementary cooperative capabilities and intentions of others more likely. We may make ourselves noticeable by displaying particular characteristics and deportment. We may indicate our readiness to participate in an exchange or a contribution to a common venture of a particular type. We may look for characteristics or for behavioral indications in others that signal compatibility. We may open ourselves to give and to receive communications regarding what we and others are offering or seeking. We may place ourselves in a state of awareness of our surroundings and a state of readiness to take advantage of opportunities if they should present themselves. Thus, although we may not be able to cause serendipitous occasions to happen by specific intent, we may facilitate them. Our behavior and awareness and the behavior and awareness of others may become matched in such a way that they invite, find, and detect compatible behavior in one another.

When we look back at a serendipitous result, we can establish causation of our actions that led to the result. This traceability implies the potential of control. That impression is at times reinforced by the systematic character that our behavior or mindset may take in serendipitous approaches. Then again, the behavioral mode responsible for creating serendipity is very different from the mode we adopt for pursuits we seek to control. When we endeavor to assert control, we take planned action toward the matter we try to control until that objective has been accomplished. We try to overcome or align independent involvement of other participants. We seek to shape objects and events according to our authority. We focus on actively obtaining or creating the instruments to meet our objectives. A serendipitous approach may require certain key activities from us as well. However, it also includes a passive aspect of waiting for extraneous, independent occurrences, a coincidental harmony. It requires us to prepare our part so we can attract or be receptive for complementary occurrences. It involves selfcontrol and patience. We have to employ an essential level of preparation and control up to the point where we need to leave our happiness to the activities of independent sources. Serendipity constitutes an extension of our pursuit of happiness where our control and our control attempts end. It builds on foundations of control, but it attains means beyond our control. In that quality, deliberate serendipity carries similarity to trials. Both constitute coincidental pursuits. Yet experimentation to reach control strives to make currently unpredictable phenomena predictable and repeatable. By expanding our comprehension and skill with experimental settings that we arrange, uncontrollable occurrences might become controllable. Serendipity does not share this assertive stability. It does not allow us to control participating factors to an extent that makes remaining factors controllable. Rather, we drive our pursuit of a wish that can benefit from serendipity to a level of exposure that facilitates other objects or events to connect with our pursuit in ways that are independent. An occasion of serendipity does not extend our control because its occurrence and repeatability depend on independent cooperation. It is a constellation that happens because of conditions outside our influence. Circumstances might independently change or because of the results of an event of serendipity that render subsequent pursuits of the participating factors controllable. Yet, unless there is such a change, the complementary constellations remain out of our reach even after they have transpired and we comprehend their causalities. The reason that serendipity functions seems to lie between acute planning and submission to chance. It expands our reach into a region where strategies of obtaining and asserting control fail or only work to a limited degree and may be counterproductive. To make serendipity work, we have to develop a set of qualifications that is different from those required for explorations by trial. In similarity to trials, we must open ourselves to risk. But we must be more respectful of our human and nonhuman environment and strive to harmonize.

Although serendipity seems to be involved in incidents of voluntary cooperation among humans, we may further encounter it in relation with other life-forms or nonbiological objects, frequently in the form of fortuitous occasions that help our pursuits. The most plausible form of cooperative serendipity would appear to have a chance of occurring in interrelation with other life forms. In matters where we and these life forms possess the ability to engage in voluntary cooperative behavior with one another, the resulting mode of serendipity might be similar to experiences in human interactions and might result in extended mutuality. Individual specimens might exhibit forms and constellations of needs, levels of satisfaction, capacities, and circumstances that give rise to a harmonious interaction. However, serendipitous strategies might only be necessary if we desire to expand our pursuits in relationships with advanced life forms that resemble relationships with other humans. Large portions of the resources we seek to obtain from other life forms seem to be accessible by empiric methods and by strategies of control that would not be successful with other humans. This appears to be even more the case when we interact with nonbiological phenomena, at least to the extent they do not simulate or exceed advanced biological entities or humans. Their reduced complexity makes it more likely that their behavior could be reduced to natural laws. As our empiric comprehension of our biological and nonbiological environment develops, it holds less surprise for us. As phenomena of nature are demonstrated to work by objective substances and principles, they become increasingly predictable and controllable and appear to be less engaged in serendipity. Experimental exploration to assert control over nature appears to be a superior method of advancing in these areas. Once we know the involved substances and principles, we can develop the technical capabilities to put natural phenomena to use. We may acquire similar knowledge about how humans or highly developed animals function. But particularly the nature of humans appears to resist patent control efforts. Further, imposing control on humans may violate our requirements of mutuality, our sense of empathy, and our need for collective survival and thriving. We may develop similar sentiments toward highly developed animals. We advance our pursuits more by voluntary cooperation. Control attempts with regard to less developed species and other phenomena tend to meet with less resistance or at least less capability to effectively resist. In addition, we may deem ourselves more licensed to take advantage of their vulnerabilities because we may lack empathy for them and because our need for collective survival and thriving disregards them. Nor may our control activities be inhibited by considerations of mutuality because we may believe that we can sufficiently fulfill these in other interactions. We may therefore have confidence that we can treat our extended environment as a resource we can exploit or a threat we must exclude.

Still, we may wonder why we should not apply empiric methods of exploration and control to ameliorate human behavior and interaction. After all, we and these matters, as everything else we know, consist of natural substances and functions. Because events of serendipity are composites of empirically explainable occurrences, our perception of serendipity may seem to be an issue of lack of information or a lack of capacity to translate that information into means of control. If we could understand subjects that we might previously have reserved to serendipity as a complex conglomerate of components driven by natural laws, we might be able to formulate better strategies. We might be able to replace uncertainty with planned harmonious behavior. To actualize that potential, we might have to subject our mind to scientific exploration and possibly modification. We may readily assent to have our perceptive and rational capacities ameliorated with exterior assistance because we regard them as mere tools in our pursuits. We may also assent to receive information because we deem ourselves capable to process it according to our own capacities. But we might refuse to subject our emotional mind to empiric exploration because we might fear that scientific knowledge of our personality may empower others to manipulate us. We might be of the opinion that the prospect of improved coordination with others does not warrant incurring that risk. In addition, we might regard preserving the free development and association of individuals unfettered by scientific examination, determination, and modification as essential to preserve the decisional liberty of our council of traits. We might also deem it necessary to enable the fulfillment of the multiple needs that rely on the voluntary nature of our decisions. However, these concerns appear to be unfounded. The adjustment of our traits would forestall detrimental motivations. Yet it would not thereafter constrain our council of traits in autonomous decisions according to these adjusted traits. It would therefore not harm pursuits that rely on the voluntary nature of decisions. Still, we would want to ensure that adjustments remain in conformance with the determinations by our council of traits upon proper information.

Therein lies a problem. Our council of traits might resist empiric adjustment at the behest of idiosyncratic traits that fear for their existence or integrity. As a result, we may not acknowledge science as a superior authority. We might oppose the development of scientific exploration of our personality for fear that, once commonalities and particularities have been empirically understood, the temptation to manipulate minds to produce collective reconciliation based on their commonalities might be too great to resist. We might have apprehensions that scientific optimization may make it hard to defend the pursuit of happiness as an uncontrolled, idiosyncratic endeavor. Indeed, holding on to our particularities may cause us to forgo improvement opportunities. If our common traits were not particularized, the maximization of human happiness could be arranged as a general, harmonious program. The irritants, obstacles, and conflicts that idiosyncrasies tend to insert into individual pursuits and human interaction could be avoided. Empiric insights and their resulting potential of change, including the elimination of idiosyncrasies, might then result in a higher yield of happiness and a better chance of individual and collective survival and thriving. They should therefore be in our interest. Arguably, our council of traits should arrive at this conclusion. But that may be impossible because the influence of specific traits may be too great. Our council of traits might be able to defeat the resistance of specific traits once a decisive number of other traits identify it as detrimental. Yet, to the extent specific traits that do not exhibit a strong detrimental contrast, our council of traits might find it difficult to consent to their equalization. Even if it could be rationally established that our individual and collective reconciliation could be more successful with an adjustment of idiosyncratic traits, these traits may enter into a covenant of mutual

protection that may be difficult to overcome. They may be able to project onto us the fear they sense regarding their demise and exaggerate it as the demise of our personality, where in fact our personality would continue its identity in a clarified, more perfect form. They may hold us confined in their set ways under the pretense of securing our freedom of pursuit while they appear to be only focused on securing their freedom to influence us as agents for their pursuit. We may therefore lack at least in emotional insight that the elimination of idiosyncratic emotional traits is in our interest. Our council of traits might employ empiric methods solely to fight the traits that it has identified as noxious and for other technical assistance but leave all other idiosyncratic traits untouched. To guard these traits, it might reserve the expansion of means in areas where we exhibit particularities to serendipity with only limited, subordinated assistance from empiric science. Although specific traits may permit the fulfillment of one another and their underlying common traits at adequate levels, they may hold us back in increasing and in maximizing our happiness. We may not realize such shortcomings because the satisfaction we derive from their fulfillment may mask the fact that we are investing resources in their pursuit that could be more productively spent on advancing existential pursuits.

Still, there is hope that we will find the strength to defeat their control over us. The solidarity of congenial specific traits is only likely to hold if we manage to adequately satisfy all of them. Further, the undisputed reign of specific traits in our council of traits is only likely to last as long as all our underlying existential traits are adequately fulfilled. As we increase our means, idiosyncratic pursuits should become safe from these exceptions. But the desire by adequately fulfilled specific traits to increase their satisfaction level might prove irresistible as better means become available. With the scarcity of means resolving, they might contend for relative space and priority to utilize available means. In this contest, they may attempt to uncover one another's frivolity and detrimental consequences, thereby exposing one another as an entirety. This insight strengthens our existential foundations in the desire to shake off these encumbrances on their missions. Hence, the consolidation of emotional traits may become unavoidable as humanity progresses. Under the authority of our existential traits, our council of traits appears destined to determine that increases in our happiness warrant the removal of idiosyncrasies in favor of rationalized mechanisms that coordinate the pursuit of existential needs among individual common traits and individuals. Provided that technology exists to implement such a determination without offensive competitive impositions, we might relinquish our serendipitous pursuits because empiric pursuits advance us better. Such a technology would have to allow us to narrow emotional traits to common existential confines, to leave these undisturbed by particularized experiences, and to purposely advance them in a reconciled manner. The technology would involve the control of genetic particularizations for emotional traits. It would also entail the modification of mechanisms by which we acquire emotional traits, possibly assisted by impressing all humans with all information available to any one of them. Such facilities demand a level of technological advancement, including of human information processing ability, that may exceed current capabilities if not human capacities.

We might approve an empiric exploration of our personality for other purposes than adjustment. A better understanding of our emotional traits and of what will satisfy the needs they issue can make the proceedings of our council of traits more conspicuous and assist us in the development of these proceedings. It might also help us to understand the commonalities among humans and thus enhance the correlative aspects of our pursuits. To the extent we decide to keep idiosyncrasies or are incapable of adjusting them, their exploration may further provide a better basis for matching individuals who wish to establish serendipitous relationships. But such explorations all appear to be hampered and might be frustrated by reservations from idiosyncrasies that are fearful of permitting revelations that make them stand out as particularly bothersome and might make them targets for adjustment. Their disclosure may therefore only be possible in parallel steps and to levels that leave none of them particularly exposed. That caution may substantially defeat the purpose of their disclosure to us and others.

Concerns that we might lose control of our self to others if we consent to the expansion of empiric methods may not be restricted to aspects of our personality. A similar phenomenon is detectable in attempts to expand control over our world through advanced strategies. We trade the relative self-sufficiency of using unrefined resources that nature provides for access to the higher effectiveness and efficiency of manufactured products. The complexity of the means we strive to secure drives us into complex coordinated systems. The generation, use, and maintenance of advanced means require specialization and cooperation. Further, acquiring such means frequently necessitates that we adjust to the needs of others in the production of goods and services that we must offer in return and to the requirements of such production. Similar adjustments are necessitated by the pressures of coexistence and their secure management. Through cooperation, we increase collective control. On the other hand, by increasing our capabilities of participating in collective control, we weaken our individual control.

The more we try to bind others into systems that produce means and social arrangements for us, the more we succeed in tying ourselves into these systems. As long as these systems provide us with what we need, we may feel empowered by them. We may not sense our lack of individual control until systems fail to provide the results we require or their requirements or consequences interfere with the fulfillment of our needs. Our counterparts may not fare better in the loss of control resulting from their reliance on others. Forays into a collectively controlled terrain have a tendency to solidify into parameters that control all participants of the resulting system. The inability of individuals to deviate transforms cooperative events into anonymous, settled structures, conventions, and processes that take on their own independent nature. Even without a usurpation and any abuse by competitive forces, such a system can have exclusionary and exploitative effects on us. Our pursuit of happiness is likely to be limited by the entanglements with our environment and their hardening that specialization of production and the regularity of other pursuits bring on. What began as a strategy to expand our control results in the increased control of us by our environment. That process threatens its completion as human automation gives way to mechanical automation. The lack of productive involvement of humans places a heavy liability on them to maintain the production of emotional resources and to detain frustration when human production of all other types of resources has been withdrawn. Accordingly, while cooperation advances the pursuit of our happiness in many respects, it also endangers our ability to pursue our happiness consistent with our determination. To some extent, we encounter limitations as a consequence of progress in all arrangements of our pursuits, even on an individual level. Any choice of or in a pursuit sets us onto a path that diminishes our subsequent choices. We reduce, lose, or narrow the potential of our means when we invest them. For everything we obtain, we must give up means that render that result possible. With every step, we bind ourselves to a particular pursuit. To advance, we must surrender the relative versatility of our means and our liberty to employ them. Pursuits tend to take ownership of us because they delimit means and options. Controlling our affairs without them asserting control over us embroils us in an ongoing struggle.

To generally address aspects of our environment with a tendency to control us, we may determine that we need to reserve independence from particular means and from mechanisms that generate these means. We must try to abstain from strategies that lock us into their pursuit. We may therefore desire to build and to sustain our ability to switch strategies and to call on alternative means. This means that we

cannot rest on having found one appropriate way to fulfill our needs. We must continue to explore alternatives and make and keep these alternatives feasible so that we are free to select them. Then again, the creation and reservation of alternatives may require a substantial dispersion and sparing of resources and an intentional or a resulting restraint of worthwhile endeavors. Keeping our freedom of choice might entail that we sacrifice effectiveness and efficiency in our pursuits because we reserve means for pursuits that may never come to pass. Arrangements with other individuals may suffer from tepid engagement. Reserving other strategies may thus produce more damage to the fulfillment of our needs than the loss of flexibility might engender.

The application of the coincidental methods of serendipity and trials to gain control in an effort to render alternatives available multiplies that concern. These approaches may present us with opportunities to grow our resources, to enhance our choices, and to secure our pursuits. On the other hand, their unpredictable character can subject us to influences that diminish our control because they do not permit us to plan our strategies to the same extent. The indeterminate character of coincidental efforts with regard to risk, cost, and benefit may expose us to detriments that may not be worth the benefits we derive. We might be better advised to instead invest our resources into pursuits that are more within our control or that abide by stable sequences out of our control. Where the potential of better fulfillment is powerful enough to lure us into coincidental adventures, we may conclude that such strategies must be applied judiciously and with a maximum of preparation and control to maintain effectiveness and efficiency parameters. If we permit our desire to increase happiness to overemphasize coincidental strategies, we might lose our footing and suffer setbacks not only in new but also in previously stable areas. The expansive nature of what we are attempting to accomplish with coincidental methods inescapably infuses an uncertainty that we can only hope to contain but cannot eliminate. We might not be able to determine the risks, costs, or benefits involved in a coincidental pursuit until we pursue and experience coincidental strategies. Our reduced capability to ascertain these factors may have us consider that it might be better to remain within areas we can manage if we can still acceptably fulfill our needs. We might contemplate decreasing our rate of progress or even adjusting our needs to acceptable fulfillment levels. We might reserve coincidental approaches to emergencies in which we have little to lose because the risks and costs of remaining within controlled sequences threaten to surpass the risks and costs involved in coincidental methods. The next chapter discusses the wisdom of such an approach.