
ONE

DESTINY DOMESTICATED

Our fate is not what we experience, but how we bear it.
—Salomon Baer-Oberdorf

THE BIJLMER PLANE CRASH

On Sunday October 4, 1992, there was a plane crash with fateful (and fatal) results in one of Amsterdam's districts, called Bijlmer. On that day, an El Al cargo plane took off at Amsterdam Schiphol Airport at 6:22 p.m. Six minutes later the pilot announced to traffic control that one of the engines on the right wing had failed. Some minutes later he reported that the second engine on the right wing had also stopped working. The crew was unaware of the fact that both engines had torn loose from the wing and dropped into the IJsselmeer, a large lake in the vicinity of Amsterdam. They decided to return to Amsterdam Schiphol Airport. This was not an unreasonable decision, even if they had known about the two missing right-wing engines. In normal weather conditions a jumbo jet can be landed safely even with these two engines missing. However, due to wrong instructions provided by traffic control with regard to the course that should have been followed, combined with a failure in the hydraulic navigation system, it soon became entirely impossible to steer the plane. At 6:35 p.m., thirteen minutes after takeoff, the plane crashed into two apartment buildings in the Bijlmer district, which resulted in the deaths of thirty-nine people. The country was in shock. For weeks

afterward, the Bijlmer plane crash was the talk of the day and made the headlines in all the newspapers.

The Bijlmer plane crash is a textbook example of what we call *fateful chance*. Looking back on it, based on the research report composed by the aviation authorities, we can explain the disaster as a combination of several factors, such as rusty safety bolts, an incorrectly constructed engine suspension system, hairline cracks, metal fatigue as a result of overburdening, unclear and failing procedures, incomplete safety inspections, and traffic controllers who responded inadequately to an emergency situation. However, no research report can explain why this disaster took place at exactly this place and this moment. “That,” philosopher Paul Wouters wrote correctly several months after the Bijlmer plane crash, “is a chance occurrence, one that is irreversible and incomprehensible, but a chance occurrence nevertheless” (Wouters 1992/93, 65–66). In an article in one of the national newspapers in the Netherlands a few days after the crash, another philosopher came to a similar conclusion:

It is impossible for us to accept the whims of chance. It does not fit into our perception of the world, literally: we lack the coordinates for it. . . . There is no answer to the question *why?*, because we are not built for accepting chance for what it is. There is no reason why the people in [these two apartment buildings] have died. Their deaths served no purpose. They are nobody’s or nothing’s “fault,” and have no goal. And this is why they are incomprehensible and unacceptable, and this is why—as El Al wrote in its memorial ad—there are no fitting words. And this is why, at the same time, there are never enough words, because we still want to understand and explain. And so to escape the chaos we will keep on asking the same fruitless question: *why?* (Groot 1992)

What we encounter in these heartrending words is a general human desire for an all-encompassing plan, which serves a specific purpose and provides meaning, makes sense of the fateful chance occurrences that we encounter in our lives. Perhaps this desire is connected with the hope that knowledge of that plan could have prevented the disaster from happening (Oderwald 1993, 34). But at the same time Ger Groot’s words express a tragic awareness that such a plan does not exist, and that fateful chance occurrences will keep on confounding us time and again.

How should we deal with fate, chance and the tragedies that incessantly haunt our existence? Before deigning to answer that question, in this chapter I will first look into the question of what these concepts actually mean. After that I will provide a brief sketch of some of the different attitudes that have developed within Western culture with respect to fateful chance.

NECESSITY AND CHANCE

In the previous paragraph I labeled the Bijlmer plane crash as a *fateful chance* occurrence with a *tragic* ending. To start with, I will look at the three italic concepts and some related notions. While I will put forward a history of these concepts, I obviously do not strive for historical completeness. Rather, what I am after is to systematically map these concepts based on a number of remarkable moments in their conceptual history, and to chart the connections between them.

The concept of *fate*, like so many concepts in Western civilization, finds its roots in Greek and Roman literature and philosophy. In it we encounter a set of notions that express different aspects of the idea of fate. One of the oldest of the notions is the concept of *moira*, allotted fate. For Homer this concept refers to a mystical force to which even the gods are sometimes submitted. For his contemporary Hesiod, *moira* is personified by the Three-formed Fates: Clotho, Lachesis, and Atropos, who spin, unwind, and break off both the human and the divine threads of life. In Latin the concept of *moira* was translated as *fatum*.¹ The concepts of *moira* and *fatum* communicate the idea that our fate is the result of a powerful force that is outside of us. Moreover, these concepts express that our allotted fate is inevitable; fate does not simply befall us regardless of our will or choices, but also (at least largely) escapes our intervention. We have no control over it.

While the concept of *moira* occurs predominantly in literary texts, in philosophical texts the idea of fate is often expressed by using the concept of *heimarmenē*, which is sometimes connected with the concept of *anankē*, blind causality or necessity. This connection might be caused by the etymological roots of the former: *heimarmenē* stems from *heirmos aitioōn*, which means “causal sequence.” This is why the atomistic philosopher Democritus and the later Stoics connected fate with the laws of the cosmos in a causal-deterministic fashion (Kranz 1992, 1275). According

to Democritus, the world is composed of an infinite number of atoms, indivisible particles that are too small to perceive, which perpetually and rectilinearly move through empty space. When enough atoms come together, turbulence arises, in which they bump into one another or lump together. These conglomerates make up our visible reality. As we will see below atomism is a very early predecessor of the modern conception of fate in the natural sciences. The Stoics also labeled the idea of blind necessity governing all processes in the universe *pronoia*, providence.² This concept also resurfaced again in later times, as we will see; it would play an important role in the Christian faith.

While the concepts of *moira* and *heimarmenē* express the inevitable necessity of that which befalls us, the emergence of the notion of *tuchē*, which stems from the verb *tuchanoō* (which means “to strike”), reveals a different, partially opposing connotation of the idea of fate. As Buriks has shown in her studies on the development of this concept, in the beginning *tuchē* was still closely connected with the notion of *moira*. In the pre-Socratic period *tuchē* referred to being struck by a god, the intervention of a god in human life. However, it is remarkable to see that this concept does not exclude human responsibility, but rather presupposes it: “*Tuchē* is always the *supplement* of human action from a domain that he cannot control, a supplement that is necessary to allow his accomplishment to be shown to advantage” (Buriks 1948, 7; italics added). On this subject, Buriks refers, among others, to Pindar, who argues that Sokleidas’s son must fight bravely himself to win the battle, but that divine intervention is needed for ultimate success. The concept of *tuchē* also expresses, however, that one may never simply count on this divine intervention. There is always a large degree of insecurity and unpredictability. This latter connotation increasingly comes to dominate the notion of *tuchē* from the fourth century BC, according to Burik. From then on, *tuchē* is often equated with capricious *daimones*, personal demons of the kind that regularly plague Socrates in the Platonic dialogues. In the Hellenic period *tuchē* is used almost exclusively to refer to completely unpredictable *chance*. The most ardent defender of this conception of *tuchē* must be Demetrius Phalereus, who presents a philosophy of history in his *Peri Tuchēs*, which views the course of events as entirely dependant upon unpredictable *tuchē*.³ This meaning is also preserved in the Latin translation, *fortuna*, the capricious force that decides upon prosperity and adversity and that is personified by the goddess Fortuna.

TRAGIC, CHRISTIAN, AND MODERN PROVIDENCE

The above shows that the concept of fate can be explained in two opposing ways. The starting point of both interpretations is that fate is an irreversible phenomenon, which we cannot, or can only partially outrun, but this inevitable fate is taken to be something that is *necessary* in the way that it is in the one interpretation, while in the other interpretation it is understood as something that is what it is *by chance*. Fate apparently can be taken to be a necessary consequence of a previously created plan or a set of laws, but also as something that could easily have been otherwise.

With respect to the first interpretation, of fate as a necessary consequence of a previously conceived plan or a set of laws, several sacral and secular variations developed throughout the history of Western culture. In the Christian tradition, which mixes the Jewish religious heritage (“Jerusalem”) with the Greek philosophical tradition (“Athens”), this conception of fate is expressed in the teachings of divine *providence*. Divine intervention in the world, according to this view, is not so much about God’s constant and immediate involvement, but rather uses man’s organization and those of forces of nature that work in certain directions.⁴ Nothing escapes divine providence, which entails that there is no chance in relation to God. In this perspective, both good and evil are part of God’s plan. This interpretation of providence has led, among other things, to the doctrine of *predestination*, which in some readings leaves room for human freedom to choose good or evil⁵ but in other readings is interpreted in a strictly fatalistic way. In God’s plan each individual human being is destined for eternal bliss or eternal damnation. Especially the Gnostic tradition took this idea of providence as *the* decisive force of fate, which calls to mind the *moira*. In the Calvinist tradition, too, providence, that is, the merciful election or reprobation (rejection by God) through a horrible decree (*decretum horribile*), is understood as unalterable fate. Seen from such a perspective the Bijlmer plane crash does not appear to be fateful chance, as was the case for the authors cited in the first paragraph, but rather as an event that was preordained by God’s Rule (which is mostly incomprehensible to us).

Faith in predestination is not limited to theology, but can also be encountered in secular forms. Besides the examples I have discussed above, that is, the determinism of the Greek atomists and the Stoics, one could think, for instance, of *determinism* and *mechanicism* in the modern

sciences. The physicist Laplace has phrased the natural scientific version of the idea of fate in a very poignant way. In *A Philosophical Essay on Probabilities* (*Essai philosophique sur les probabilités*, 1814) we read:

Given for one instant an intelligence which could comprehend all the forces by which nature is animated and the respective situation of the beings who compose it—an intelligence sufficiently vast to submit these data to analysis—it would embrace in the same formula the movements of the greatest bodies of the universe and those of the lightest atom; for it, nothing would be uncertain and the future, as the past, would be present to its eyes. (Laplace 2007, 4)

After all, the laws of nature are such that in principle every future state of the universe (the position of all particles, and the forces exerted between them) are determined, in light of the current state. Laplace assumed that the infinitely intelligent being would be able to complete all of the necessary calculations with absolute precision (Ruelle 1991). In this deterministic worldview, we currently find, for instance in the recent debates about the predestined workings of our “genetic passport,” that ultimately there is no room for chance. What we call “chance” (and in this context that means unpredictability) is not truly a chance occurrence, but is only interpreted as such by us, because we have insufficient knowledge of the complex chains of causal relations. Seen from this perspective, the BijiMer plane crash cannot be labeled a chance occurrence, unless we mean to say that it was unforeseeable due to our limited knowledge.

In the social sciences we also find versions of determinism. There is the famous example of the “invisible hand,” proposed by the liberal economist Adam Smith. According to Smith, an invisible hand ensures that those things that individuals aim for against the background of their own limited goals contribute to the harmony and well-being of society as a whole. There is a striking religious undertone in these deterministic theories. In fact, they are more or less secularized versions of the theory of divine predestination. To my mind, this also applies to Hegel’s philosophy of history. In it, Hegel speaks of “the trick of Reason”: according to him, Reason, which unfolds itself in world history, uses human plans that sometimes appear to fail in the eyes of their inventors, but that serve history’s progress from Reason’s perspective instead, in a similar fashion as

God's will in the theory of predestination. Marxists have often explained Marx's interpretation of the inevitable course of history in the direction of a classless society in a similar teleological and deterministic fashion.

In opposition to these versions of interpreting fate as a predetermined plan we find the idea that fate is the result of *chance* (which is more or less blind), as I have argued before. This interpretation claims there are events that are *not* determined and therefore are also not necessary. We encounter an early version of this indeterminist interpretation in Aristotle's *Physics*. In this book, he notes that while many things always occur in the same way, some events are the result of "chance and spontaneity" (Aristotle 1984, *Physics*, II-5, 196b). Epicurus's vision is more radical. He adhered to Democritus's atomism but adjusted the latter's teachings in one fundamental respect. In opposition to Democritus, Epicurus argues that atoms do not move in all directions, but rather constantly fall perpendicularly because of their weight. In order to explain how they can still collide with one another, he poses that at entirely random places and intervals the atoms display minimal sideways movements that lead to collision. Here we find another example then, of a plea for the fact that some events have *no causes*, but rather occur *spontaneously*.

With his notion of spontaneity Epicurus also wanted to safeguard human freedom of choice, which is presupposed in his ethics (see note 3 of this chapter). He connects spontaneity and human *freedom of the will*. This would remain an important motive for defending indeterminism throughout the history of Western philosophy. One striking example can be found in the work of the late Medieval philosopher John Duns Scotus. At the end of the thirteenth century, philosophers and theologians realized that Greek determinism was incompatible with Christian philosophy. After all, it undermines God's freedom. To understand this freedom, Duns Scotus returned to the classical notion of "contingence" (in Latin: *contingens*).⁶ Duns Scotus argues: "I do not call contingent that which is not necessary or not always, but that the opposite of which could have happened at the very same time it actually did" (quoted in Knuutila 1982, 353). "Contingence," in this interpretation, is the freedom of God's will, according to Duns Scotus. After all, God's will is not free just because He can choose to do now this and then that, but also in the sense that when He does want something, He could just as well not have wanted it. For instance, He could have not created the world. With this argument, Duns Scotus took the Christian idea of creation from nothing

(*creatio ex nihilo*) to its most extreme consequence (Vuyk 1990, 168). As we will see in the chapters to come, this notion of contingency will play an important role in the determination of human freedom.

Indeterminism is also central to modern twentieth-century physics, especially quantum physics. In this respect, quantum physics clearly diverges from classical mechanics. The latter acknowledged that it is impossible to know the exact position and velocity of every single particle *in practice*, and that we should therefore be content with probabilistic certainty. This means that we *can*, in fact, establish exactly what the odds are of a specific particle being in a particular area and moving with a particular speed. However, the recognition that our “subjective uncertainty” concerning the position and velocity of specific particles is combined in this perspective with the supposition that their position and velocity are, in fact, completely determined in (objective) reality, by all the previous states of the physical system. In his relativity theory, Einstein, too, adheres to this assumption (which he so powerfully summarized in the statement “God does not play dice”). Contrary to these ideas, in quantum mechanics it is claimed that the uncertainty with respect to the position and velocity of specific particles is not just a consequence of the fact that it is practically impossible to gather all the information concerning these individual particles, but also involves a theoretical impossibility. This uncertainty is a “law of nature” that is part of the physical system *itself*. The indeterminist conception of quantum mechanics is contested, not only because it does not match classical and Einsteinian mechanics, but also because it is said to lead to a conception of nature as being entirely chaotic. On the other hand, some philosophers—in the spirit of Epicurus: history repeats itself, however, always with a twist—have gratefully embraced this indeterminism in their attempts to understand the possibility of human freedom within nature (see for instance Penrose 1990).

Chance and contingency have not played an important role just in twentieth-century physics. In modern philosophy, these concepts have also developed into key themes. Sometimes philosophers explicitly tied in with Duns Scotus’s interpretation of the notion of contingency. However, they didn’t treat it only in relation to the will, but turned it into a fundamental ontological category. The central idea is, then, that life is what it is, but that it could just as well have been different. Here, too, we can distinguish between different versions.

Previously I mentioned the Hellenic conception of *tuchē* as entirely unpredictable chance and the Roman faith in “Lady Fortune.” In modern

times we encounter a tradition that has adopted this interpretation of fate and has developed it further. An early example in this tradition is Montaigne, who explicitly returns to the classical conception of the role of fortune in our lives in his *Essais*.⁷ Several centuries later we find similar ideas in the so-called philosophy of life of Dilthey and Nietzsche. “We will never be done with what we call chance [*Zufall*]; what has become significant for our life, whether wonderful or fearsome, seems always to enter through the door of chance” (Dilthey 1985, Vol. 3, 96; cf. De Mul 2004, 357–66). In the poetic wording of Nietzsche’s Zarathustra, who takes a position in opposition to Einstein:

Oh sky above me, you pure, you exalted one! This your purity is to me now, that there is no eternal spider and spider web of reason—that you are my dance floor for divine accident, that you are my gods’ table for divine dice throws and dice players! (Nietzsche 2006a, 132)

Note that in this case the concept of contingency does not provide the foundation for human freedom, but rather appears to undermine it. Who we are and what we become is not so much the result of our choices, according to these philosophers, but rather of (more or less fateful) chance.

Surprisingly, we also encounter some remarkable statements on the role of chance in human life in the works of the philosopher Kant. Kant notes that it is not just the existence of things that is fundamentally random, but also the specific nature of the a priori forms of intuition and the categories of understanding that constitute human experience. While Kant argues, on the one hand, that the logical notions according to which we pass judgment have logical necessity and universality, he adds that this necessity is ultimately founded in chance. This realization, says Kant in his *Critique of Pure Reason*, “is for human reason the true abyss” (Kant 1998, A613). While chance was taken to be failed necessity in a large portion of the Western philosophical tradition, and therefore a notion that ought to be eliminated through philosophical reflection, in Kant’s interpretation there appears to be a reversal: what we call necessity should be understood as a “successful accident” (Marquard 1991, 112). In this perspective, laws of nature could also be understood as necessary relations that are ultimately based on chance, in the sense that they could have been otherwise.

In Heidegger’s work we encounter yet another radicalization of the conception of fateful chance. In *Being and Time* he argues that fate is not

something that befalls man, but that human existence (*Dasein*) ultimately is fate (*Schicksal*) (Heidegger 1996a, 351–52). After all, our existence is characterized by the fact that we are thrown into a life that we did not choose (for) ourselves. The place and time of our birth, our character and our (genetic) disposition, the environment in which we grow up, our conception of the world, all of this is not, or only partially, the result of our choices, but first and foremost of fundamental chance. And after this, a significant part of what we encounter on our path of life, from a winning lottery ticket to an unexpected hemorrhage or ghost-driver, these things also happen to us predominantly outside our own intentions and choices.

In this interpretation of fate as chance we can also distinguish between a more fatalistic interpretation and one that leaves more room for intervention in our own destiny. The later Heidegger, who emphasizes the inevitability of our historical fate (*Geschick*), is the one, of all the philosophers mentioned above, who is closest to the fatalistic version. While Dilthey and Nietzsche also stress that fateful chance clearly delineates human freedom and autonomy, they still provide ample room for human responsibility. In this respect it is worthwhile to distinguish between two forms of chance (Marquard 1991, 119). On the one hand, there are fateful chance occurrences that we have no influence over. The fact that I was born in the Netherlands in the second half of the twentieth century as the person that I factually am is the result of a kind of chance that I can only contemplate in all of its incomprehensible mysteriousness, but that I cannot change. The fact that I am mortal is also an “accident” which is inherent to human existence and which seems entirely outside my control. On the other hand, there are all sorts of chance events that are not outside our choices, but rather are the result of our choices. The fact that I am now writing this text, is a chance occurrence in the sense that I could also have decided to take a walk or do the dishes instead. When someone suffers from a fatal illness, has unbearable pains, and decides, after thorough consideration, to end his life, this choice can be called contingent or random in the sense that it could have turned out differently as well. A substantial part of our lives revolves around chance occurrences and dealings that are the result of our own choices.

The two kinds of chance that I have just distinguished are often hard to distinguish in practice. For instance, with respect to the Bijlmer plane crash, one may wonder whether it was a chance occurrence in the first or rather in the second meaning. On the one hand, one could argue, this disaster was the result of specific choices (for instance regarding the

frequency of safety checks or regarding the construction of a large airport in a densely populated area); on the other hand, history teaches us that not a single form of prudence can entirely prevent such disasters from happening. We can never anticipate chance entirely.

When we survey the two fundamental conceptions of inevitable fate discussed here—fate as something that is *necessarily* so, or as something that is what it is *by chance*—then it appears, at face value, that these two perspectives are incompatible. However, there are hybrid forms between the two. First of all, we assume that some events are the result of a combination of necessity and chance. For instance, when someone has a genetic disposition for a particular type of cancer, this type of cancer will necessarily arise if that particular gene is activated. But whether this actually happens is always related to all kinds of contingent epigenetic factors (Charney 2012), for example whether this person is a smoker or not. The evolution of life, too, is often taken to be a conjunction of necessary laws of nature and random circumstances, as we will see in the next chapter.

The relationship between necessity and chance can also be more complex. This is the case, for instance, in *chaos theory*, which has been developed in mathematics and natural sciences in the last few decades and has also found its way into numerous other sciences. On the one hand, chaos theory maintains the deterministic worldview that we encountered in Laplace's work, that is, it, too, presupposes the fact that a physical system's specific state determines⁸ the future states of that system, but it acknowledges—just like quantum mechanics—that it is *fundamentally* impossible (even for Laplace's infinite intelligence) to make exact predictions. The fact is, many physical systems are characterized by a sensitive dependence on initial condition. In such systems the slightest deviations in the initial state lead to ever-larger (exponentially increasing) differences in the future. Take, for instance, two billiard balls, one real and one imaginary, that we thrust off with the same velocity, but of which the trajectories initially make an almost imperceptible angle α (Ruelle 1991). Every time these balls collide with another ball, the angle doubles (resulting in an angle of 2α , 4α , 8α , 16α , etc.). After ten shocks the difference in angle is already 1024α . However, in reality the balls' trajectories will quickly be completely different, if only for the fact that soon after the initial state they will encounter different obstacles. An example by the mathematician Takens illustrates how sensitive this dependence on the original condition is (Takens 1993–94). When making predictions with respect to a cannon

with nine balls one has already to take into account the gravitational force that the player exerts on the balls. If we increase the number of collisions the result quickly becomes truly dazzling. For instance, when molecules collide (which can be described using the same laws as the collision of billiard balls), after only fifty-six shocks the pull of a single electron in the farthest regions of the universe impacts the outcome!

We can only make short-term predictions for systems that are characterized by sensitive dependence on initial condition, due to the inevitable impreciseness and limitedness of our perceptions. The weather forecast is a paradigmatic example in this case. Such predictions have a clear predictability limit of approximately ten days. After all, a very small factor, such as—to use Lorenz’s famous example—a butterfly flapping its wings in Brazil, can completely alter the state of the atmosphere in New York some time later. While the previous discussion explains why it is impossible for humans to make long-term predictions for chaotic systems, at first this does not seem to refute the possibility, on principle, of making such predictions (using Laplace’s infinite intelligence). However, according to Takens, the principles of chaos theory exclude the realization of such an intelligence:

In order to predict the future of one molecule, we must predict the future of our entire universe (and all of the particles present in it). But since determining the position of such a particle requires a mental space in a material mind (for instance a computer), which itself is also made up of various elementary particles, such an “intelligent mind” cannot be realized within the universe. Thus we see that the movement of a molecule, in response to heat movements, cannot be predicted *on principle* because of the sensitive dependence on the initial condition. (Takens 1993-94, 82; italics added)

Chaos theory shows that even on the basis of a strictly deterministic theory the future is uncertain and, especially in the longer run, fundamentally unpredictable. This also explains why disasters such as the Bijlmer plane crash are so difficult to prevent. A conjunction of factors that are not worrisome at all in themselves, combined with small chance disruptions, may have disastrous consequences. This also has important implications for human freedom and responsibility. The choices that we make often have unforeseen and unforeseeable consequences. A particular

action may contribute to unintentional unwanted effects or even effects that oppose the original intention. For instance, in hindsight it was established that the jumbo jet's pilot's choice to return to the airport using a righthand turn after the starboard engines had failed, which was in line with the regulation at the time, unintentionally contributed to the disastrous course of events. One of the philosophically relevant questions is to what degree we can attribute responsibility for such unpredictable consequences. When we attempt to answer this question we soon find ourselves reflecting on the tragic dimension of human action.

The *tragic* is also part of the web of concepts surrounding the idea of fate. Tragic heroes in classical Greek tragedies almost without exception face their downfall. And this fate appears to be unavoidable. When the Choir in Aeschylus's *Prometheus Bound* comes to bemoan the Titan for his gruesome fate, the latter remarks that it has been preordained by the Three-formed Fates (Moirae). "Chorus: Who then is the steersman of necessity? / Prometheus: The three-formed Fates and the remembering Furies" (Aeschylus 1991b, verses 514–15). In some sense, this inevitability (*anankē*) is closer to philosophical determinism than to the Christian conception of a divine plan. Prometheus remarks about Zeus: "For he too cannot escape what is fated" (Aeschylus 1991b, verse 518).⁹ It appears that there is also something like tragic providence. Prometheus tells the Choir that "he [Zeus] may be spoiled / of his throne and his power" (Aeschylus 1991b, verse 171–72). He even predicts that this will happen through "light-witted counsels" and "a marriage which one day he will rue." In tragedies there also appears to be a form of providence.

However, tragedy and fate are not synonymous: the tragic and the fateful can even be at odds with one another. In a strictly fatalistic interpretation of fate there is no tragedy. If our lives were fully preordained by the Moirae, by God, or determined by the laws of nature, Reason, or any other institution, then such a life might be disastrous, but not tragic:

When fate, destiny . . . is complete, there is no room for the tragic. The mental patient's suicide need not longer be tragic: he no longer knows what he's doing, he is no longer free to make his decision, his act cannot be supported by his own responsibility. The tragic is controlled by a tension between *freedom* and *fate*—a tension that may become unbearable because both, in their complete contradiction, are true. . . . Thus, circumstances do not just turn man's destiny into something tragic . . . but also

man's part of it, the "blame" he bears, his unintended, inevitable guilt. (Heering 1961, 17)

Not every form of suffering is tragic, then, and not every failure leads to tragedy. He who freely chooses to do evil and suffers from the punishment he gets for it is not tragic, just like the innocent victim of an accident or a crime is not tragic. Only when freedom and necessity come together in a paradoxical way tragedy arises.¹⁰

The tsunami that killed tens of thousands of victims in Japan in 2011 was a tremendous disaster, but this event cannot be called a tragedy, because it was not a result of human action. The nuclear disaster that followed the tsunami did have a tragic dimension. While the tsunami itself was not a consequence of human action, the meltdown that occurred was at least partially caused by human action (the decision to build this nuclear plant, the way it was built, the way it was maintained, etc.). The Bijlmer plane crash can also be labeled tragic, because this disaster, too, was partially the result of human action. After all, safety bolts and engine suspension systems, maintenance controls and safety procedures are all products of intentional human action. Even if we acknowledge that no single individual person can be held responsible for the Bijlmer plane crash (seen from the point of view of the individual, it appears as though the technology executes fate autonomously) it seems to me that we can, in fact, speak of collective guilt in this case. This guilt does not merely extend to the airline personnel and the airport, and to the scientists and technicians that enable air traffic, but in fact to anyone who occasionally travels by plane and thereby contributes to the continued existence and further development of this institution. This is one of the reasons why air travel, and modern technology in general, can be called a tragic phenomenon. It leaves us with the impression, just like the Greek tragedies, that "*man falls especially because of his grandness* into an unfathomable fate, in which he is involved because of and despite of his own responsibility" (Heering 1961, 18).

LIVING WITH FATE

Against the background of the previous introduction of the three core concepts of fate, chance, and tragedy I would like to present three different attitudes toward fate that have developed throughout our cultural

history: the tragic, the Christian, the modern, and discuss the present emergence of a fourth, postmodern attitude. Here, too, I am proposing more of a typological distinction of these attitudes than a comprehensive (and hence more nuanced) historical overview.

The starting point for this sketch is the idea that every culture aims at what I call *domesticating destiny*, both on a practical level (with respect to controlling nature and regulating social traffic), and on the level of its worldview (in art, religion, and philosophy). Every culture develops specific strategies to deal with chance fate. Human beings are compelled to such domestication because, without exception, their happiness is very fragile. As Martha Nussbaum has argued in her book *The Fragility of Goodness*, human happiness depends on *tuchē*, on uncontrollable chance, in several respects (Nussbaum 1986, 318–48). This is due to the fact that we often allow ourselves to be ruled by irrational and uncontrolled passions, but, more importantly, also because human happiness depends on numerous contingent—and sometimes qualitatively incommensurable—matters that can easily be lost, such as loved ones, food, and health. One need not be a seasoned pessimist to conclude that “Lady Fortune” has lots of adversity in store for us. Even—or maybe especially—the greatest happiness can easily turn into its opposite: health can unpredictably turn into sickness, love into hatred, peace into war, abundance into scarcity. And the sad thing is that we oftentimes only realize our rare happiness when disaster strikes. Often, health is appreciated only after sickness has set in, uncomplicated love when storm clouds gather over the happy couple, and peace after war has broken out. But even in our happiest moments we are often aware of the fragility and transitory nature of our happiness, which at the same time undermines that happiness.

One of the most important functions of culture, therefore, is to develop techniques to help us face our fears regarding this ubiquitous fateful chance. The four attitudes mentioned above, which have developed in our culture, show us four different ways of domesticating fate. While the order in which these four perspectives appear in history is not determined by some iron logic, it is not entirely random either: in some respects every later attempt is a response to and a transformation of the previous attitudes. We could label this as “discontinuous continuity” (a term to which I will return in the fourth section of chapter 4 and the third section of chapter 7).

The *tragic* attitude toward fate, which was already mentioned in the introduction, aims at taming (the terrifying fear of) fate by bearing it

heroically. Oedipus, the prototype of the tragic hero, attempts to endure the literally disturbing alterity and exteriority of his fate by making himself fully responsible for killing his father, despite the curse on his family. In Nietzsche we find a more recent ardent defender of this heroic attitude:

My formula for human greatness is *amor fati*: that you don't want anything to be different, not forwards, not backwards, not for all eternity. Not just to tolerate necessity, still less to conceal it—all idealism is hypocrisy towards necessity—, but to *love* it. (Nietzsche 2005, 99)

However, Oedipus's tragedy and the tragic ending of Nietzsche's life show us that such *heroic acceptance* of fate comes at a high price. Oedipus pokes out his eyes in desperation and Nietzsche loses himself in insanity. Many other tragic heroes also end their lives in despair or madness—Shakespeare's King Lear is an example. Classic tragedies show us that even the most elevated heroes are incapable, or at least not always capable, of bearing their fate without collapsing under its weight.

It is not surprising, therefore, that already during the classical period of Greek culture, the tragic attitude was replaced by a fundamentally different one. According to Nietzsche the great reversal already took place in the fifth century BC, in the works of Plato. In *The Birth of Tragedy*, Nietzsche writes that the Socratic man, the ideal presented by Plato, leaves the tragic attitude behind because he “believes in correcting the world through knowledge, in life led by science” (Nietzsche 1999, 85). In *The Fragility of Goodness*, Martha Nussbaum comes to a similar conclusion. According to Nussbaum, Plato attempts to point the way out of the instability and contrariness of our everyday world. In fact, Nussbaum argues, he was looking for “goodness without fragility” (Nussbaum 1986, 85f.). He attempts to control fate by approaching it in a strictly rational way. *Tuchē* should be kept in check with *technē* (Ibid., 94–95). This term is the forerunner of our concept of “technology,” but it has a broader meaning. It can also be translated with words such as *handicrafts*, *practical knowledge*, and *art*. It is used for such widely diverging capabilities as riding a horse, building houses, acting, and the arts of medicine, meteorology, and mathematics. In Plato's age the word *technē* was even used regularly as a synonym for *epistēmē*, knowledge as such. For Aristotle, who had a medical background, this focus on practice is even stronger. Aristotle explains what requirements the *technai* should meet, if they are to fulfill

their function. They should be universally applicable, they should be transferable to others, they should lend our actions precision (*akribeia*), and they should be based on explanations (Nussbaum 1986, 95–96). With this practical approach Plato and Aristotle form the vanguard of the strategy that was developed in modern times. In the two intervening millennia, however, a different worldview takes center stage, in which fate is approached in a fundamentally different way.

Just like Plato, the *Christian* attitude toward fate rejects the tragic one. However, the Christian attitude is different from the Platonic one. It does not focus on controlling contingent fate so much, but should rather be understood as the *negation* of its existence, or at least of its contingent character.¹¹ As I have argued earlier in this chapter, (the dominant version of) Christian teaching of *providence* leaves no room for chance. Everything that happens, including things that, at face value, appear to be the result of fateful chance, have a purpose in God's predetermined plan and are therefore meaningful. This idea increases the believer's capacity to bear his fate, particularly when eternal salvation is promised as a consolation. Whereas the Platonic strategy attempts to control fate, the Christian attitude remains closer to the tragic one in the sense that it, too, aims at accepting fate, with this difference: in this case there is no heroic, but rather a *humble acceptance* of fate.

It is evident that this Christian strategy also asks a lot from suffering man, although it might offer more consolation than the tragic attitude. This is all the more true for adherents to the teachings of predestination, in which believers take into account that some people are doomed to eternal damnation. Moreover, the teaching of providence only offers consolation as long as there are no alternatives to choose from and it remains the *only* remedy against fateful chance. In the long period of the Middle Ages there simply was no other remedy but a certain kind of acceptance to protect oneself from the overwhelming forces of fate—one need only think of the massive deaths resulting from famines, epidemics, and violence. Only with the rise of the modern natural sciences and in the wake of modern technology, were instruments developed that enabled man to no longer accept the inevitability of fateful chance.

With the rise of modern natural sciences and technology, and the “mechanization of the world picture” (Dijksterhuis 1986) that accompanied it, the *modern* attitude toward fate emerges.¹² This attitude differs fundamentally from the tragic and the Christian ones, because it does not aim at accepting fate, but rather firmly defends itself against it.

Modern man aims at actively *controlling* fate. Modern technology offers unrivaled opportunities for this goal. He who uncovers the universal laws that govern the universe cannot only explain events from the past and predict events in the future, but can also control these events. Diseases that were incurable before can now be cured, the growth of crops can be controlled, and the immense powers of nature can be used to satisfy our needs—possibilities that Prometheus did not even dream of.¹³ Fate is replaced with the idea of the *malleability* of fate. Marquard has pointedly phrased the creed of modern times: “Everything can be made, everything is at our disposal, everything can and must be changed, and change is always improvement” (Marquard 1989, 66).

As noted before, the modern attitude toward fate appears to reach back past the Middle Ages toward the Platonic strategy, which also aims at rational control. However, in some respects the modern attitude is also a continuation of the Christian tradition. Previously I referred to the religious origins of the deterministic perspective within the natural and social sciences. The Christian idea that world history unfolds according to an all-encompassing plan was adopted in modern times, even while the role of the Great Ruler was increasingly embraced by man himself. Whereas God hides himself (*Deus absconditus*), withdraws from ruling the world (*Deus emeritus*), or is declared dead by man (Nietzsche), the latter is forced, as it were, to take God’s role upon himself. The death of God invites people to take their fate into their own hands. As God created the forces of nature for his preordained plan of salvation, so modern man must use these forces to execute his own plan of salvation. Worldviews in various (idealist, positivist, scientist, Marxist, and neoliberal) styles have thrown themselves at this noble goal with fervor. And it has to be said: faith in the malleability of the world has changed much in the world over the last two centuries. Fate was confronted both boldly and briskly.

Looking at the three attitudes toward fate that we have just encountered, there appears to be an ever-increasing degree of controlling fateful chance. According to Nietzsche, in our increasing control of contingency we have simultaneously lost our fear of chance to a similar degree: “Now the whole history of culture represents a waning of that *fear of chance*, of the uncertain, of the sudden. Culture precisely means learning to *calculate*, learning to think causally, learning to act preventively, learning to believe in necessity. As culture grows, man becomes able to dispense with that *primitive* form of subjugation to evil (known as religion or morality),

that ‘justification of evil.’ Now he wages war on ‘evil’—he abolishes it” (Nietzsche 2003, 179).

The irony in Nietzsche’s words has only increased since the time they were written. When we look at the technological developments over the last century this irony need not surprise us. While our technological control over nature has led to some impressive successes, particularly in the twentieth century, it has also become abundantly clear that chance’s “evil” is a lot harder to eradicate than we had long imagined. Taking God’s place turned out to be less simple than we had hoped. Just like the previous attitudes toward fate, the modern one also turned out to have its downside. It soon became clear that total control over fate was a dangerous illusion. If we only look at the ecological disasters of the last century, then we realize the extent of both the unforeseen and unwanted consequences of our technical interventions in nature. Similarly, the colossal failures of fascist and communist societal experiments, which have cost the lives of millions of people, have made us thoroughly aware of the limits of political malleability.

Previously, I noted that with the rise of chaos theory awareness has also grown within the natural sciences that the possibility of prediction, and the level of control that is based on it, is contained within strict limits. Even an “infinite intelligence” is no longer believed capable of such control. And in 1793 the Scottish sociologist Adam Ferguson already noted that society is “the result of human action, but not of human design” (Ferguson 1966, 205). “Planning,” we have learned at our cost, often boils down to “a continuation of chaos by other means” (Marquard 1989, 81). Fate, which was abolished by Christianity, appears to have reentered world history through the back door. Or, in the ironic words of Marquard:

In modern times, after the end of the God who was the end of fate, the official defatalization of the world is accompanied by its unofficial refatalization; or, putting it differently, the outcome of the modern disempowerment of divine omnipotence is not only the official triumph of human freedom but also the unofficial return of fate. (Marquard 1989, 81–82)

This unofficial return is also expressed in the emphasis that has been placed on contingent fate in contemporary philosophy. Previously, I pointed

toward the tradition in which Montaigne, Kant, Dilthey, Nietzsche, and Heidegger stand. In the works of twentieth-century philosophers such as Derrida, Rorty, Nussbaum, and Marquard, the contingent character of our existence is also fundamentally emphasized. While such voices cannot be called representative of our culture in general, we may nevertheless conclude that the myth of malleability is losing strength of conviction and that it is increasingly viewed with skepticism and cynicism. In the past decades, even the government, for the longest time a stronghold of belief in progress, has “receded” and leaves more and more things to the social field of forces and the “free market”—to the joy of neoliberals who still believe in Adam (Smith) and to the despair of the few socialists that are still left.¹⁴

It appears as though our culture is once again getting ready to say goodbye to a problematic attitude toward fateful chance. At the same time, we can distinguish experiments—on theoretical, political, technical, religious, and aesthetic levels—with alternative approaches to chance. Since we are still in the middle of the transition from our modern faith in control to these postmodern alternatives, it is difficult to make firm assertions with regard to these developments. Particularly in light of chaos theory it is dangerous to make predictions regarding the outcome of these experiments. Against the background of the history of the domestication of destiny that I have sketched, we can, however, formulate a number of hypotheses.

First of all, it is likely that the postmodern attitude toward fate will remain dependent on the earlier attitudes that have developed throughout the course of European history, based on the fundamental finitude of human experience. Time and again, these other attitudes relied on techniques that were previously developed. We may expect that the postmodern attitude will be a transformation of the previous attitudes, rather than the development of an entirely new or different attitude. However, a return to an attitude of the past, which is advocated by conservatives, does not appear to be a real option. Let me clarify this with respect to the tragic attitude to life.

We have seen that our attitude toward technology is not devoid of the tragic. We are responsible for developments that we cannot foresee, or fully control, in light of our finite existence. While the modern faith in malleability is resilient,¹⁵ many people have gradually become aware of the tragic dimension of our existence. I mentioned Nussbaum above, who has claimed that within the field of ethics we should find a new openness