# The sea decides

When the artist group A Kassen poured liquid bronze into the harbour at Køge on Saturday 28 January 2017, allowing bronze figures to be formed by chance, the philosopher Anders Fogh Jensen gave a speech at KØS, pondering the question of what chance is. For example, he spoke on the differences between the arbitrary, contingency and necessity. And about how one may understand Nietzsche's dictum that 'the iron hands of necessity shake the dice-box of chance'.

Philosopher Anders Fogh Jensen (Filosoffen.dk), KØS, Køge, 28 January 2017

### 1. Thank you for inviting me – was that by chance?

Thank you for inviting me. The first thing that crossed my mind when I received my invitation to speak here today was to wonder whether it had come by chance. Just as you might wonder if you stumbled upon your invitation by chance. Some might say: 'well, it was somewhat by chance; I wasn't looking for it'. And the event organisers might say: 'yes, inviting you was a bit of a chance occurrence, but we did have our reasons'.

Oh, so they had their reasons, did they? This gives us an ideal opportunity for considering an important distinction in philosophy between different chance occurrences:

### 2. The arbitrary and the contingent

In philosophy we use two different concepts of chance, and it may be useful to distinguish between them here. First of all, we must understand that to a philosopher, 'chance' means all that is not governed by necessity. Chance is everything that could be different. Necessity is that which cannot be any other way – for example that an aunt is a woman or that the shortest distance between two points in the kind of space that we non-physicists occupy is a straight line.

Traditionally, necessity has also been associated with fate: that which had to happen because some power or deity decreed it for reasons we do not know and cannot access.

Most things that happen in everyday life can be described as chance occurrences. Getting the last leg of lamb on sale at the supermarket was a chance occurrence – meaning that I was lucky. Meeting my girlfriend for the first time at the supermarket was a chance occurrence – meaning that I was lucky.

*Contingency* is a term used to designate that which happens by chance, but nevertheless happens for a reason. I got the last leg of lamb because I heard about the deal from a friend and was hosting a dinner party. I met my girlfriend because I left home four minutes before her and lived a corresponding distance farther away from the supermarket. So it happened by chance, but there were reasons why things turned out as they did. That is contingency. The arbitrary is that which happens for no

reason at all. The absolutely random. Atomic quantum leaps may be random. The fact that we met at the supermarket ... yes, that also sort of happened by chance, but there were reasons after all.

We should pause here to consider the fact that much of what we call chance should in fact be considered part of the realm of necessity. For example, when you roll two dice in a dice-box, the result is not random to anyone who knows the start positions of the dice, their density, the force behind the throw, the distance to the table, the hardness of the table, the angle of the throw and the laws of nature. They absolutely had to end up as two twos by necessity.

There is this thing about chance: we humans find it difficult to live with. Meeting that one woman happened by chance, you might as well have married one of 10,000 other people. And, which is worse: she might as well have married one of 10,000 other people.

This is where friends come in: in their wedding speeches, her friends must introduce the narrative of necessity into the tale of chance. They must pull this chance encounter in the direction of necessity, speaking of all the things she'd had to go through in the past and of why we were meant to be. Wedding speeches are about inscribing necessity into contingency so that it seems not random, but absolutely necessary that the two of us, of all people, met that day at the supermarket.

### 3. Meaning

This is because chance is in a sense meaningless. Bringing a cause into the narrative prompts more of a sense of meaning, but still this doesn't quite cut it. "You were fired because the board of directors rolled the dice, and they rolled a five, and your name was fifth on the list." That doesn't make sense. Greater necessities are called for. Real reasons, not just causes; something that someone wanted, meant to happen, thought about. We want to see intention. Meaning is to understand the reasons why. When we struggle to cope with the meaninglessness of chance, we must narrate reasons. Understanding reasons gives us explanations.

# **<u>4. The function of myth: From Ananke and Adrestia</u> <u>to Fortuna</u>**

The function of myth has been exactly that: to provide reasons. A familiar concept is that of fate: it had to happen. But what is fate, actually – does it arise out of necessity or chance? That is an ancient discussion.

In early classical antiquity, goddesses such as Ananke were set over necessity. She carried bronze nails in her hands, using them to hammer home necessity. Another was the Phrygian goddess Adrestia – she who cannot be escaped.

Later, in the Hellenistic period, when faith in the gods waned and vast changes took place, faith in fate was not lost. However, fate shifted away from the predetermined Kommenterede [RL1]: Her står der i den danske tekst "af adratos – vi kender det fra adræt og idræt"; man kunne medtage "from a-dratos, as in adroit", men jeg er faktisk ikke sikker på, at det er etymologisk korrekt.

towards chance – moving in the opposite direction of the typical hopeful wedding speech.

An old character stepped into the limelight: Tyche, the divisive moment in tragedy. In Latin, Tyche became Fortuna, fortune. Fortuna stood on top of an orb, symbolising chance. In football we also say that as long as the ball is round, anything might happen. She holds a rudder in one hand, while the other holds a cornucopia, spilling out treasures. The riches of Fortuna are achieved through luck – by chance. When I think of the cornucopia of Fortuna I cannot help thinking of the outpouring of bronze that we will witness here later today.

#### 5. Chances and falls

Fortuna decides what befalls you. So chance is a fall, "tilfælde" in Danish and "Zu-fall" in German. The "fall" part comes from the Latin *cadere*, which also gave us the French *chance* and the English word *chance*.

We distinguish between different kinds of random occurrences. "Chance" is a random occurrence with a favourable outcome. "Accident" is a random occurrence with an unfavourable outcome. In French they use a neutral umbrella term, *hasard*, derived from an Arab game, to designate all that is random. The Danish lottery authority once had a slogan claiming that "the ones who do not play are the ones who do not win" – but they

conveniently forgot the losers. One might say that to engage with *hasard*, which means "gambling" in Danish, is to see what befalls you in terms of chances and accidents.

Today, "risk" is associated with accidents, with unfavourable occurrences. And standing by the sea as we do today, I cannot help mentioning that the concept of risk also has its origins on the sea. In Renaissance Italy, *riscare* was the term used to describe what might befall the ships you sent out to sea: pirates, crashing into a reef (riscare) or foundering in a storm. The concept of risk is about our efforts to chart the occurrences of the world when we cannot penetrate their reasons.

#### 6. In any case

In Danish we don't say "in any case" about certainties, about that which will happen irrespective of chance. We say "in any fall". Both expressions concern that which will necessarily happen in a given situation – and also indicate that we know that we do not know everything. But we do know something. Something is necessary before chance gets its day.

What do we know in any case about this art experiment? - In any case the bronze will go into the water.

- In any case the bronze will move downwards when poured, meaning that it will hit the water.

- In any case the bronze will not stay liquid; it will solidify.

The things we know 'in any case' are necessarily so (or, if you want to get very pedantic about it: we've never seen

any cases of it *not* happening – 'in any case' means 'in all previously known cases').

Probability theory is about 'in any case'. It seeks to apply our knowledge to penetrate into those realms where the reasons seem impenetrable. Nature does not allow us to sniff out its necessities, but it does seem to follow standard distribution. We should bear in mind that the standard distribution curve is not a mathematical curve, but an empirical discovery, based on the way the men of the French army arranged themselves when arranged by height. We are navigating for outcomes.

## 7. Is this by chance?

We generally regard nature as governed by necessity. However, mutations and quantum leaps may also involve elements of chance. So why do some of us think that when liquid bronze is poured into cold seawater, the result will be random shapes?

One answer to this is that when we cannot fathom the reasons, we call the whole thing random.

Another answer is that it is the throw, the fall, the pouring, the human aspect that is the element of chance while the rest is governed by necessity. This is fundamentally important to be able to speak of morality at all: that the things that people do are governed neither entirely by necessity nor entirely by chance. Here, though, we probably call the whole thing random because not even the artists know how it will all end up.

### 8. The dice-box of chance or necessity

In what we are about to witness, bronze being poured into the sea, we will probably find both necessity and chance. More than 140 years ago, the German philosopher Friedrich Nietzsche captured this duality in the outcomes of history when he stated that will and purpose may both be merely imaginary. He added that, "Those iron hands of necessity which shake the dice-box of chance play their game for an infinite length of time" – and so he believed that there *had* to be results (fall-outs) which looked both rational and purposeful, but which were in fact random and necessary; without meaning, simply as they happened to be.<sup>1</sup>

That which does not only have outcomes (fall-outs), but reasons, we do not call chance. This is probably what Albert Einstein would have meant if he had indeed said that God does not play dice with the universe to Niels Bohr, who claimed that quantum leaps are arbitrary.

But nature has its necessities and chances – and they may not mean anything more than that. What Nietzsche described as the iron hand of necessity shaking the dicebox of chance.

- But perhaps things are in fact the other way around. It is the shaking, the human aspect, that is random. And it is nature that shapes things through necessity: the pouring is

<sup>&</sup>lt;sup>1</sup> Nietzsche, Friedrich: Morgenröte, §130 (1873)

the shake and roll of chance, while the bronze and the sea are the table of necessity. This is not the iron hand of necessity shaking the dice-box of chance, but the throw of chance hitting the table of necessity.

### 9. In any case, a form: The sea decides

I think we should go down to watch chance and necessity at work – and look at the bronze and the water.

What can we say 'in any case' beforehand?

- That something will be formed, but we do not know how. That in any case we do not yet know the form, but we know that there will be forms. The sea will decide on something.