In many jurisdictions, the law requires arbitrators to have full legal capacity. Oftentimes, the rules of arbitration refer to qualities only humans possess, such as gender or nationality. For these reasons alone, robots are not going to replace human arbitrators anytime soon.

Clearly, the time for changing the law and the rules of arbitration to allow for non-human decision makers has not yet come: Robots are not very good at nuanced decision-making. Reportedly, IBM’s famous “Watson” supercomputer failed to diagnose cancer with the same reliability as humans. Robots also lack the innovative spirit that is ideally a characteristic of human beings. Astonishing as it may seem, robots are not even free of bias. Being programmed by humans, robots tend to replicate their programmers’ biases. While the biases of human arbitrators are something we can usually deal with, it is unclear how one might detect the possible hidden biases of robots. And even if robots might have better and quicker access to legal information, this is not the only quality we seek from decision-makers. We also select arbitrators because of their “wisdom” and life experience. Robots do not walk down our streets or read our newspapers. They do not try to understand and interpret what is going on in the world. Although it may actually be possible to program robots to make legally flawless decisions, those decisions will nevertheless remain detached from the reality of human beings.

That being said, there is no reason for complacency. Humans may be better decision-makers, but do we always need an artful decision, underpinned by decades of life experience and wisdom, and delivered in classic phrases or even ceremonious wording? Especially in cases where the matter is relatively small, businesses will not need to know in precise terms who is right or wrong, but rather they only need to be told (quickly) whether it is likely that they will have to pay any money, and, if so, how much. In many cases, robots will be able to calculate this very rapidly, without involvement of costly external counsel. At the very least, a robot may propose a solution which can then be used as an objective basis for settlement discussions. This is also where arbitral institutions may step in, by offering algorithms that facilitate the necessary calculations.

1. Christian is the co-editor, with Maud Piers, of “Arbitration in the Digital Age: The Brave New World of Arbitration” (CUP, 2018).
Another role for arbitral institutions of the future is that of technology facilitator or technology provider. There is significant demand for communication channels and filing systems where data security, confidentiality and integrity can be taken as a given. By offering such services to thousands of users, arbitral institutions can achieve economies of scale that are perhaps even beyond the reach of large firms. It is understandable that arbitral institutions have concerns as to the liability this may entail, but services of this kind are also a potential source of income.

We are seeing all kinds of “disruptive innovation”, as Sophie Nappert puts it, and not only in the field of Artificial Intelligence (AI). Another is the advent of Telepresence, which will allow callers on conference calls to see life-size images of each other as if they were in the same room. 3D-holograms will project three-dimensional images. Many practitioners will doubtlessly be interested if an institution is able to offer such services in future just as they offer hearing rooms today.

Another issue is reporting and interpreting. Sooner or later, electronic minuting and same-day transcription will become the norm. Universal interpreter services will enable two people to carry on a conversation, with each speaking his or her own language, while hearing the translation of what the other person is saying or seeing it on a screen. Witnesses, counsel and arbitrators will all be able to speak and listen to the proceedings in their native languages. Ideally, the institution can organise electronic reporting and translating services, or offer a virtual hearing room where all of this is included. The availability of such services, and the price for them, will be a distinguishing feature of the arbitral institution of the future.

Institutions can also teach the community of users, explaining how algorithms work and making them aware of risks and opportunities. Again, the decisive issue will be the cost point, but if such seminars are held for a reasonable fee, education of this kind may empower a new generation of practitioners.

Arbitral institutions will also be needed to prevent abuse. In some jurisdictions, in the realm of criminal law, we are presently seeing the return of the lie detector in the form of [(unctional)]MagneticR[esonance][maging], where a scanner measures the reaction of the brain. Depending on which area of the brain is activated, researchers believe it possible to determine whether a person has given a truthful answer. However, my own view is that my brain waves are my own private business. The technology is intrusive and a violation of fundamental rights and freedoms.

Rather than painting a dark picture of the ‘Brave New World’ of arbitration, I wish to conclude by taking a positive outlook. In reality, we have been living with disruptive technologies all our lives. Change is the one and only constant of our history. When the scroll was replaced by the codex in late antiquity that marked a revolutionary change, because it is much quicker to open a codex to a certain page than to endlessly turn a scroll. Access to knowledge became much quicker. In the 21st century, having finally learned how to work with books, we had to familiarise ourselves with laptops. Similarly, the monarchs of the early 20th century found it beneath their dignity to speak over the phone, but some of today’s leaders are said to govern their countries by SMS. When studying the New York Convention, the law students of today have no clear idea of what a telegram looked like. Conversely, I am surprised how playfully they deal with new word processing techniques. Clearly, all of these changes in communication technologies not only have an impact on how we work and communicate, they also affect what we say to each other. It is impossible to know how arbitration will change, but looking at the development as a whole over the centuries, there is good reason to think it will change for the better.