

# Virtual Straitjackets in Judicial Decision Making

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## 1 Introduction

An affirmative answer was the conclusion of ‘Can computers make judicial decisions?’, the inaugural speech with which Jaap van den Herik accepted his professorship in AI and Law in Leiden. This happened more than 15 years ago. In the meantime, the same question has appeared on a regular basis as the centre of a debate about the opportunities offered by computers in legal domains. This article addresses the question whether computer can make judicial decisions from a desirability viewpoint: what happens to legal certainty and equality of rights if computers would make judicial decisions? Van den Herik claims that both would increase. But before I address whether this is the case, the ambiguity of Van den Herik’s main question needs to be reduced.

The ambiguities in the question are made more apparent if we dissect the question in three parts: the parts ‘can’, ‘computers’ and ‘make judicial decisions’. The ambiguity starts in the verb ‘can’, which implies either an ability or a right. The same ambiguity appears in the question ‘can I steal’. Obviously I could steal if I wanted to (as I have my arms and legs and can go to a store and put a piece of French cheese in the pocket of my coat). However, the normative reading of ‘can’ under most circumstances implies that I cannot — that is: may not — steal.

The word ‘computers’ seems to imply that the activity can be attributed entirely to the machine. However, the computer as we know it, and most software that is currently used, is written by human beings, and acts in ways which are, for the larger part at least, predictable by the same persons that program them. Van den Herik’s main question thus leaves open what part of responsibility for the activity is left to computers, and which part to human beings or institutions.

The phrase ‘make judicial decisions’ in the question suggests that the activity is rather unequivocal — that making judicial decisions means the same across legal systems, across legal domains such as civil law and penal law, and across different cases. It does not. Not only because civil law and common law systems are rather different, but also because deciding about whether a person should pay a parking ticket is something quite different from deciding the case for two civil parties in a complex tort case.

Analyzing the main question in this manner implies that we have to reduce the scope of the question elements in order to prevent a multiplication of actual questions. In this article, I will focus on one particular element that is almost completely left out of consideration in the original inaugural speech:

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is it desirable that computers make judicial decisions? I will analyze this question according to the notion of ‘virtual straitjackets’ that I first introduced in Mommers (2006) and that I will elaborate upon in this article. The term ‘virtual straitjacket’, I should state, is rather new, but the underlying concept is indebted to the notion of ‘code is law’ developed by Lessig (1999), for his recognition that programming computers is a normative activity. In brief, I will argue that using computers in the process of judicial decision making — even if their role is only supportive in nature — is very likely to introduce virtual straitjackets.

## 2 Virtual straitjackets

Everyone has had their own experiences with forms lacking proper categories and voice response systems leading you through endless series of selections. I call these ‘virtual straitjackets’, and they are becoming ever more ubiquitous. A virtual straitjacket is a situation characterized by the following:

- (a) The situation consists of ‘forcing’ individuals into options that do not offer the choice they prefer.
- (b) The situation is based on previously made choices with respect to classification schemes.
- (c) The situation is ‘virtual’, in the sense that the option offered is not a physical one.

Although this sounds highly abstract, it can be made concrete very easily. For instance, handwritten notes will not be read if you put them on a computer-readable form, so that your comments about that form cannot be processed. And web forms may contain questions that do not allow you to provide a proper answer, by offering only a limited number of options and not providing an option ‘other, please specify’. Although they are not necessary for their occurrence, information and communication technologies tend to trigger virtual straitjackets because automating processes requires making explicit distinctions in order to avoid manual classification work. We are not conscious any more of many virtual straitjackets, simply because we are adjusted to particular classifications. But even the seemingly simple classification male/female may actually exclude people who do not have a clear gender. Physically-oriented situations, such as having to choose a particular cash register in a supermarket, fall outside the scope of this; ‘virtual’ means that the options do not directly involve physical consequences.

Virtual straitjackets occur more and more often in the legal domain. This is, assumedly, a consequence of the call for efficiency of legal aid and processing capacity. Automation is still often the answer to this efficiency call. Additionally, the use of information and communication technologies in law increases because they are used in normal activities such as word processing and information access, but also in essential parts of procedures, such as the use of video connections for hearings. The most obvious example of a virtual straitjacket in law I came across was noted by Dory Reiling, a judge of the Amsterdam court. She was ‘corrected’ by an employee who said: “Your Honor, you cannot impose

that sanction, COMPAS [the administrative system for the Dutch judiciary - LM] cannot process it!” (Reiling 2005). This ‘Unwertung aller Werte’ is a fundamental threat to judicial independence and discretionary powers.

### 3 Virtualization of Judicial Decision Making

To indicate the way in which technological developments may affect judicial decision making and introduce virtual straitjackets, I discuss the changes that occur within four functional areas: administrative processes, forms of communication, accessibility of information and services, and assessment of information and services. I leave out (potential) benefits of such technologies — which do of course exist. For these benefits, I refer to Mommers (2005), in which I gave an overview of the potential consequences of virtualization for dispute resolution in these four functional areas.

*Administrative processes* have traditionally been substantially affected by the introduction of information and communications technology. This is also valid for ICT within judicial institutions. Within this functional area, we find technology for, e.g., the registration of information about specific cases and the parties involved. Such information systems often contain virtual straitjackets, but they need not directly affect the way in which judicial decisions are made. In case, however, the judiciary itself is forced to use the administrative systems in the primary process, they may easily involve virtual straitjackets concerning, e.g., imposing sanctions and storing case information. Especially if information systems are shared by the judiciary and the public prosecutor, there is a danger of the public prosecutor implicitly imposing norms on the judiciary.

Under the heading of *forms of communication*, several developments can be distinguished. New forms of communication are developed, such as e-mail, chat, and internet forums, changing the way in which people interact. For instance, interaction can have various forms between synchronous and asynchronous communication, meaning that persons may exchange their ideas immediately, or think a short while about them. The traditional division between telephone and mail has turned into a continuum, featuring chat applications, voice-mail, internet forums and e-mail. With the introduction of these new communications means, people are much less dependent on specific locations and points in time to be able to interact. Virtual straitjackets may occur here in the same manner as they occur in corporate communication, and increasingly in government communication: web forms and e-mail management systems that often do not lead to proper answers to a question, but to frustration on the customers’ side. Causes for such frustration may consist of spam filters that do not let normal e-mail pass and systems that lead e-mails to the wrong persons in an organization.

*Accessibility of information and services* has experienced a profound change due to the introduction of information and communication technologies. The transition from paper to screen has resulted in a vast amount of possibilities to rearrange bits and pieces of information in order to facilitate access, for instance through the use of hypertext. Accessibility of information also benefits from

being able to search the whole text instead of only a selected number of keywords, and being able to search very fast through large numbers of documents. The downside of this is that portals and other information services may contain limitations on accessibility not known to their users, e.g. because of the use of certain search technologies. Often, search results are taken for granted, and users do not even realize that they have encountered a virtual straitjacket preventing them from getting access to the right information.

*Assessment of information and services* can change considerably as a result of the introduction of information and communication technology. The diminishing of personal contact may lead to a different assessment of, for instance, interpersonal communication. The assessment may become more focused on its content (cf. Mommers 2003). As an opposite effect, this distance may also lead to indifference, apathy, or to swiftly escalating arguments (which often occur in, for instance, on-line forums and mailing lists, and even in normal e-mail correspondence). Computer-based assessment systems are often very simple and do not leave room for nuance, thus introducing new virtual straitjackets. Although they can be very useful for a quick evaluation of the quality of a piece of information or a service, details are left out, thereby potentially giving a distorted picture of the object of assessment.

#### 4 Virtual Straitjackets and Judicial Decision Making

The debate on Van den Herik's inaugural speech has been often of a heated nature: some people tend to react rather aggressively to the suggestion that a computer can make judicial decisions, and thus replace a judge. Still, it is mostly a matter of assigning competences: although it is common practice to assign competences and responsibilities to institutions, officially doing so to computers is a major taboo. In practice, however, in all too many cases, responsibilities are shifted to information systems. This could mean, for instance, that call center representatives do not only not want to connect you to their manager, but that they are not *able* to do so. Their computer-based telephone systems simply do not allow them to.

There is an unmistakable tendency to accept such virtual straitjackets as facts of life. Their consequences may vary from rather innocent nuisances to severe repercussions for the opportunities to assign responsibility and blame. In case of the judiciary, this would include a violation of the separation of powers introduced by Montesquieu (1748) — although Montesquieu himself might consider using computers an ideal situation, as it would represent a possibility to make a (computer) judge into the 'bouche de la loi'. Today's jurisprudence, however, does not consider this a realistic image of judicial decision making.

The role of information systems in general and in the judiciary in specific has been subject of legal literature. Consider, for instance, Franken's (1993) introduction of general principles for proper ICT-use, and the principles Van den Hoogen (2007) introduces in his Ph.D. thesis, aimed specifically at 'electronic judicial decision making'. Both authors introduce normative principles which

ICT systems should comply with. However, the dangers associated with the use of ICT cannot be prevented by drafting principles only. With respect to virtual straitjackets, the principles should be able to address this danger. Franken's flexibility principle addresses this issue, whereas within the sixteen principles Van den Hoogen distinguishes, I have not been able to identify one of these as addressing the danger of virtual straitjackets, except — maybe — for the principle that responsibility is assigned to judges.

What are, then, the concrete dangers of virtual straitjackets to judicial decision making? In the previous section, I have listed potential virtual straitjackets in four functional areas. But the core of judicial decision making is, in my opinion, the freedom of judges to make a decision according to their own appraisal of facts and rules. Any use of computers in the decision making process imposes a (potential) danger of limiting that freedom by offering only 'programmed' options. This will prove undesirable in many cases. Although legal certainty and equality of rights may benefit from such virtual straitjackets, these values have to be weighed against other ones, such as judicial independence and fair trial.

We return to the end of Van den Herik's inaugural speech, where he claims that computers can make judicial decisions in certain areas of law. This was as true back then as it is now — if computers are attributed the 'power' to make those decisions. Not much has changed since then on the issue of the modelling effort needed to make computers fit for their judicial decision-making task. A lot has changed, however, in the use of information and communication technology in the judiciary. Therefore, the debate on the question 'can computers make judicial decisions?' should be shifted to a new question 'which roles of computers in the judiciary are desirable, and which are not?'

## 5 So, Now, Then...

As a personal note, I should say that my answer to the main question of Van den Herik's inaugural speech used to change on an hourly basis. I have always sympathized with the affirmative as well as the negative answers to the question. The fact that it is so ambiguous in nature could explain that attitude. However, the most prominent danger is not that computers make judicial decisions, but that information systems prescribe how judges should make judicial decisions. First, independence of individual judges is one of the backbones of Western legal systems. Second, behind information systems, there are often powers outside the judiciary itself, thus crossing the border between powers which, ideally, should be separated.

## References

1. Franken, H. (1993), *Kanttekeningen bij het automatiseren van beschikkingen*, in: Franken et al., *Beschikken en automatiseren (VAR-reeks 110)*, Alphen aan den Rijn: H.D. Tjeenk Willink, p. 7-50. Herik, H.J. van den (1991), *Kunnen computers *rechtspreken?** (inaugural speech Leiden), Arnhem: Gouda Quint.

2. Hoogen, R. H. van den (2007), *E-Justice, Beginselen van behoorlijke elektronische rechtspraak*. Ph.D. thesis Utrecht University.
3. Lessig, L. (1999), *Code and other laws of cyberspace*. New York: Basic Books.
4. Mommers, L. (2003), Application of a knowledge-based ontology of the legal domain in collaborative workspaces. In: *Proceedings of the Ninth International Conference on Artificial Intelligence and Law*, Edinburgh, UK, 2003, pp. 70–76.
5. Mommers, L. (2005), Promoting legitimacy: feedback in dispute resolution. *Artificial Intelligence and Law* 13(2), Springer Netherlands, p. 207–232.
6. Mommers, L. (2006), Burger Service Nummer levert weinig service en veel risico's. In: *NRC Handelsblad*, dinsdag 30 mei 2006, p. 7.
7. Montesquieu, C. de (1748), *De l'Esprit des Lois*. Genève: Barrillot. Translated in Dutch by Jeanne Holierhoek (2006) as “Over de geest van de wetten”, Amsterdam: Boom.
8. Reiling, D. (2006), Doing justice with information technology. *Information and Communication Technology* 15(2) (special issue on virtualization of dispute resolution, eds. Mommers, L. and A.R. Lodder), p. 189–200.