The digital constitutional state
Democracy and law in the information society

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Abstract
What are the consequences of the ongoing process of informatisation for the democratic constitutional state? To answer this question a topical perspective of the constitutional state is provided. In this perspective, the constitutional state is portrayed as a ‘house’, an edifice to which new storeys and rooms have been added and furnished over the course of centuries. Each storey of this edifice originated as a result of the major societal transitions that occurred during previous centuries. The majority of western societies are currently once again in the throes of yet another such transition, namely from an industrial to an information society. The possible consequences of this newest transition for the constitutional state, are reviewed on the basis of four important features of the information society (deterritorialisation, turbulence, horizontalisation and dematerialisation). Renovation, the simple adaptation of the house to the needs of the information society will suffice in a number of cases. Innovation is called for in some
respects: deterritorialisation of democracy, horizontalisation of the constitutional state and the development of transparency as a new supporting topos.
1. The constitutional state in the information society

What are the consequences of the ongoing process of informatisation for the ‘democratic constitutional state’? This is a question that is easier asked than answered.

In the first place, the concept of the ‘democratic constitutional state’ is not one that is unequivocally understood by everyone in the same way. On the contrary, the concept of ‘democratic constitutional state’ comprises a set of fundamentals and institutions evolving over the course of centuries that continue to be a topic of debate up to the present age. Moreover, the constitutional state is surrounded by variously different national legal traditions, all of which exhibit clear differences in style. For example, in the continental, Napoleonic or Prussian tradition, the principle of legality, the idea that any exercise of public authority should be based on written, general and parliamentary enacted laws, is considered the keystone of the constitutional state. By contrast, the British tradition places far more emphasis on the sovereignty of Parliament.

Also, the meaning of the term ‘informatisation’ is far from well defined. It can refer to concrete ICT applications, such as e-mail, Internet, databases, expert systems, or chip cards, as well as to the far broader transition from an industrial to an information society. Even more problematic is predicting just how these ICT applications will function in practice, or the ultimate shape which the information society will take, and the various opportunities and threats for democracy and the constitutional state which this will spawn. [1]

In this article, we propose to show the ways in which ICT and informatisation are already affecting the Dutch variant of the democratic constitutional state today. First, an outline of the Dutch constitutional state and the information society is given, after which a number of opportunities and threats will be discussed.

2. The edifice of the constitutional state

Following the example of the classical rhetorics, the constitutional state could be said to have a topical character. The constitutional state is a vessel full of arguments upon which speakers can draw in their striving to sway their audience in legal or political debates. [2] The classical political and legal orators, such as Cicero or Quintillian, developed an ingenious mnemonic device to enable them to adhere to the line of their lengthy orations, which were spoken entirely from memory. [3] Each argument, every relevant principle of law was situated in a room of a huge, imaginary building. When the time came to deliver the speech, orators needed only to wander from place to place – hence the word topos - through this building in their minds in order to recall the arguments and principles they had placed there. The modern-day constitutional state should therefore be viewed as a collection of topos, a building filled with principles and arguments.

Although the foundations of this edifice of the constitutional state had, in fact, already been laid during the Middle Ages, during the investiture struggle between the Pope and the German emperors [4], the building began to assume a more well defined shape in the course of the 18th century. The first layer, or ground floor as it were, is that of the liberal constitutional state. Characteristic of the arguments situated
in this layer is the central focus on the protection of citizens from the government. Important rooms in this layer are legality, legal protection, the Trias Politica and, obviously, the traditional liberal rights.

In the course of the 19th century, a second layer was added, namely that of the democratic constitutional state. Here, the accent is on civic participation in government. As the 19th century wound on, topoi such as political rights, the parliamentary system and the segregation of politics and administration increasingly gained ground in the political and legal debates.

In the course of the twentieth century, which in the Netherlands and in Germany may be considered to have commenced with the enactment of the very first social legislation at the end of the 19th century, a social layer was added. Key emphasis was on the protection of the citizens by the government against an assortment of socio-economic calamities, which was expressed in a number of broadly formulated social constitutional rights. This required a whole array of social and economic regulation, including the regulation of competition, of industrial relations, and of the provision of goods and services. The new activist role played by the government has subsequently given rise to a set of new topoi that redefine the role of the government in the welfare state: the principles of proper administration and other requirements of good governance developed over the past decades by administrative courts, legislatures and national ombudsmen.
The edifice of the constitutional state [5]
Approaching the constitutional state in a topical fashion is preferable to a more essentialist tack. In the first place, there is no single, unchanging core to a constitutional state; such a state is better understood as a rather organic set of arguments that propagates and changes in response to social developments. Another important aspect is its cumulative nature. The topoi in the social layer do not supplant the liberal or the democratic topoi, but overlay these. It is, therefore, always possible to appeal to these deeper layers in political or legal debates.

The constitutional state, as presented here, is therefore not digital, but analogous in character, at least metaphorically. A constitutional state is not measured in terms of all or none, but in gradations. There is not one criterion by which to determine the constitutionality level of a state. However, there is a set of principles and criteria that are more or less relevant to the question as to whether or not a state is indeed a constitutional state.

Each room in the building is to some extent furnished with a set of (sub)principles and arguments. A number of these are shown in the figure. An appropriate metaphor here is perhaps that of the homepage. In every room is a set of keywords that can be clicked on to gain access to well-filled legal libraries. The various layers are also vertically linked – to form hyperlinks, as these could also be called.

The rooms of the building in the figure have been furnished from a Dutch perspective. The cornerstones of this Dutch edifice are, on the one hand, the various groups of constitutional rights and on the other hand, in line with continental tradition, the general requirement that the government be bound by measure and rule. These cornerstones receive a different treatment in each layer. Inside the building, several rooms have been drawn that primarily concern the mutual relations between the organs of state.

Just as, when travelling, differences in architectural styles immediately make it clear that a new border has been passed, the architecture of the German, British, American or French edifice of the constitutional state clearly differs from the Dutch edifice sketched in the figure. In particular, strong differences are apparent in the implementation of the Trias Politica, and the structure of the political system. In France, for example, strong emphasis has traditionally been placed on the separation of powers, while in the United States the focus has always been on the achievement of a state of equilibrium – the Madisonian checks and balances. And while the Dutch constitution prohibits constitutional judicial review, this is emphatically permitted in the United States, the Federal Republic of Germany and France. Obviously, sharp differences are seen also in the political layer between the parliamentary systems on the one hand and the presidential systems on the other. Yet even within the group of parliamentary democracies, major differences are evident. In the United Kingdom, for example, the argument of administrative transparency is of far less portent than in the Netherlands.

3. From an industrial to an information society
The edifice of the constitutional state has become attuned to its historical and social environment. The social environment has, in turn, adapted to the constitutional state. The development of the liberal constitutional state should be viewed against the backdrop of an up and coming middle-class that felt a need for defined frameworks for trade and industry. The democratic layer is closely associated with the
emergence of industrialisation and urbanisation, and with the emancipation of the smallholders and land workers accompanying this. The social constitutional state, in conclusion, is not only a response to the abuses of the industrial society, but was also made possible by the rise of a service economy, complete with huge financial and care institutions, in the course of the twentieth century.

Currently, we are in the throes of a following social transition. The latter decades of the twentieth century were the fin de siècle of the industrial society and the start of the information society. The former role of agriculture and industry as the main drivers of the economy has been quietly taken over by the information sector. [6] This embraces a wide range of businesses and service companies: producers of information and telecommunications technology, vendors of telecommunications and postal facilities, software producers, graphics companies, publishers, producers of entertainment and culture, broadcasting companies, newspapers and weeklies, press offices, vendors of information services, libraries, museums, universities and other institutes of higher learning, banks and insurance companies, accountancy firms, law firms, advertising agencies, research institutes, design engineering firms, media consultants, management consultancy, and a broad assortment of other advisers and consultants. All are engaged in designing and producing technologies, equipment and services mainly directed at transmitting thoughts, ideas and emotions. In many western countries, the contribution of the industrial sector to the national product is shrinking, as is the percentage of the working population in blue-collar jobs. Increasingly, people are employed in the generation, collection, processing and transmission of information in the broadest sense of the word.

At this point, it may be wise to insert a few comments aimed at eliminating any scepticism about digital hype. In the first place, every society is, to some extent, an information society. Every kind of societal cooperation demands that information be exchanged. It would probably be better, therefore, in emulation of Castells, to refer to the informatisation society rather than to the information society. This is characterized by the fact that ‘information generation, processing and transmission become the fundamental sources of productivity and power’. [7] The point is that not only are agrarian products, machines and equipment, or health care and social facilities important social goods, information products in the widest sense of the term, have become so as well. To gain social power, it is no longer sufficient to become a landowner, engineer or captain of industry, but to become a management guru, media magnate or, of course, the owner of Microsoft.

This is no new development. Information services and information facilities have been gaining in societal importance since the nineteen-fifties, although the mass application of ICT services and products admittedly dates from the late nineties of that same century. The spectacular development in ICT over the past decade moreover appears mainly to bolster existing trends rather than actually to initiate new ones. The information society is furthermore far wider in scope than ICT, the Internet or the electronic highway alone. Internet, intranet, e-mail chip cards and numerous mobile communications options are important informatisation channels, but are by no means the only ones.
4. Characteristics of the information society

What are the characteristics of the information society? There are four distinguishing features that are important to the constitutional state.

1. **Deterritorialisation.** The information society extends far beyond the borders of the national states. Informatisation further stimulates the ongoing trend towards internationalisation and globalisation of the economy, society and culture. Information exchange is in some cases barely associated with one specific locality, and can extend relatively easily into the territory of several states or possibly no longer even be able to be traced to a specific territory.

2. **Turbulence.** A second relevant characteristic of the information society is the high degree of turbulence. New technologies and applications succeed one another at a rapid pace, while their use by society and the social consequences thereof remain highly unpredictable – even for the producers of these products, as Philips, Francetelecom and numerous ICT companies have discovered again and again. This unpredictability not only relates to the application of new technology. In an information society, information about society causes changes in society itself. New knowledge penetrates into the remotest corners and areas and can give rise to speedy fluctuations and variations in conduct. As a consequence, the information society is, paradoxically, in some respects a difficult society to fathom. [8]

3. **Horizontalisation:** because of this turbulence and due to the enormous proliferation of knowledge, the importance of negotiation is growing and the force of command decreasing in social relations. Big companies and government institutions are no longer the sole purveyors of wisdom and have become to a large degree dependent on actors in the field for their information supply and steering endeavours. Hence markets and networks have taken the place of hierarchies as the dominant forms of social organization. Castells even goes so far as to state that the horizontal networks have become the basic units of society. [9]

4. **Dematerialisation:** The material goods owned by an individual no longer fully dictate his or her economic and social position in society. In an information society, information channels, information services and information products are the crucial social and economic goods. This is not only true of the relationship between government and citizen, but also in the mutual relations between citizens. Those without access to information and information channels can generally wield very little political and administrative influence, in addition to running the risk of social exclusion, of losing ground on the labor market and of encountering hindrances in his or her personal development.

5. Constitutional state and information society

It should be noted that we have experienced social transitions of this kind before which were accompanied by tensions regarding justice and the constitutional state. A previous transition, that from a relative nightwatchman state to a welfare state, gave rise in the nineteen-forties and -fifties to concerned discussions about the tension between the constitutional and the welfare state. Von Hayek and Popper are the names associated with the previous period. [10] Just as they did in their time, we, too, wish to pose the
question of how the social transformation outlined above will affect the edifice of the constitutional state. In doing so, we propose to fall back on the characteristics of the information society outlined in the above.

_Deterritorialisation_ encroaches on the very foundations of the edifice of the constitutional state. This edifice is built on the premise of a national state within a clearly delimited territory within which it exercises the monopoly on violence. The international character of the information society therefore undermines the national character of the edifice of the constitutional state, not because this renders the government and its adherence to measure and rule superfluous, but because deterritorialisation leads to huge enforcement problems. [11]

Deterritorialisation forces states to extensive forms of harmonisation and cooperation in the arenas of fiscal, criminal, economic administrative, and commercial law. This does not render the edifice of the constitutional state a virtual edifice, as the polemic of Frissen would have it [12], but will presumably cause the variety in architecture and the amount of normative leeway to diminish. A further requirement will be the development of international equivalents for a series of national topoi and constitutional institutions. It will not be enough to simply build upon the European constitutional state – an edifice that is still greatly flawed, as Curtin has demonstrated. [13] Expansion of the constitutional state is also necessary at the global level, which will demand that particular attention be given to the democratic layer.

_Deterritorialisation: the WIPO treaties_

In December 1996, a conference of the World Intellectual Property Organization (WIPO) was held in Geneva. The topics of this diplomatic conference were three draft treaties on copyrights, adjacent rights and databanks. In these draft treaties, a number of important issues relating to intellectual property in the information society were provided for on a global level.

The WIPO treaties were adopted after three weeks of intensive negotiations. Parties to these negotiations not only included government representatives, but also large delegations from the publishing lobby, and the lobby organizations for the film and music industry, telecom companies and the computer industry. These lobby organizations held a special observers’ status that not only entitled them to attend meetings, but also gave them the right to speak. The number of observers just about equalled that of the official representatives and they attended the conference almost on the basis of equality with the diplomats. Every morning, for example, the American delegation (which was chaired by a former lobbyist for the film industry) held a working conference with the American lobby organizations to discuss their tactics. Among the stakeholders, the distribution of the various lobbyists was extremely uneven. An estimated 70 to 75% of the lobbyists were there to protect the interests of the claimants. The music industry, for example, was represented for the full three weeks by a highly professional delegation of nearly twenty lawyers and lobbyists. There were almost no representatives present on behalf of consumers, authors, libraries or other users.
During the conference, for a long time it looked as if the music industry lobby and the lobby for the software companies and the publishers were going to succeed in having the ‘technical copy’ come under the reproduction right. This would mean that the simple retrieval of a page from the Internet would also be subject to the reproduction right. This would have effectively nipped the development of the Internet, which was still in its infancy in 1996, in the bud. Only at the very last minute, in the last night of the conference was this section of the treaty scrapped. This was solely due to the fact that representatives from the telecom and computer industry, who feared that their sales would drop if the development of the Internet were to stagnate, came out in support of the opposition.

In most countries, these negotiations were hardly steered or controlled in a democratic fashion. The Dutch Parliament was informed of the general agenda in a letter received some six months before the conference. A two-minute debate on the technical reproduction right was held during the negotiations in response to reports in the press, which led to the adoption of a motion (which corresponded however with the standpoint already adopted by the Dutch delegation). A month after conclusion of the conference, the minister sent a report by letter. Further debates were not forthcoming.

The treaty still remains to be formally ratified, but the Netherlands is already bound to the outcome of the negotiations due to the effectiveness of the WIPO treaties via an EU council directive. Thus the manoeuvring room open to the national legislator has become severely restricted, as a result of which he has been degraded to nothing more than the executor of international directives. [14]

The high degree of turbulence in the information society mainly increases the pressure on the liberal layer of the constitutional state. Technological turbulence and social unpredictability promote a high turnaround rate for social problems. In particular, this could lead to the legislator ending up in a catch-22 situation. On the one hand, the Trias and the principle of legality require meticulous, stable and unambiguous legislation, while on the other hand, the ongoing social development heightens the need for open rules and rapid amendments. Especially the requirement that substantive rules are to be laid down in the law, has come under pressure in this respect. Currently, formal legislation often lacks the necessary insight to arrive at an adequate regulation. Moreover, the parliamentary legislation process is extremely lengthy and is inevitably highly technology dependent. Particularly where ICT is concerned, there is a considerable chance that a parliamentary act will already be obsolete by the time it makes it into the Government Gazette, as new technologies and applications will have overtaken the old. ICT experts can usually provide a reasonable overview of the technological state of the art, but are generally unable to predict the way these technologies will be used in society – and they are wholly incapable of providing any insight into the legal problems that may be ensuing from that possible use.
Turbulence: the new Telecommunications Act in the Netherlands

In the early nineteen-nineties, it became clear that the Dutch Telecommunications Act (WTV) urgently needed to be replaced. A host of new mobile telecommunications services arose, the PTT was privatised and the telecommunications market was liberalized. After an outline memorandum was drafted in 1993, a complete revision of the WTV was announced at the urging of the Second Chamber at the start of 1994. A project team was put together at the Directorate for Telecommunications and Post (at the Ministry of Transport and Public Works) that went enthusiastically to work.

The issues were far from tidy, however. The telecom industry had rapidly developed new types of telecommunications that were not easily classified into the standard categories of fixed and mobile telephone connections, cable or the ether, infrastructure, services and products. Cable companies were seeking to offer telephone services, telephone companies were also offering e-mail facilities, and the broadcasting stations were proposing to broadcast via telephone cables. In addition, new players who have concluded unanticipated alliances (such as Enertel, comprised of a group of cooperating energy companies, the railways, and cable companies desirous of offering telephone services) are continually entering the market without it being immediately clear whether or not they were disruptive to the forces of the market.

The Telecommunications Act therefore became increasingly more voluminous and detailed. Despite the high priority of this act for the Ministry of Transport and Public Works, it took until the end of 1998 for this act to appear in the Government Gazette; five years after the initial memorandum. By then, the act comprised twenty chapters and consisted of a total of forty-five closely spaced pages. The legislators’ task, however, is far from over. The Internet, that was still wholly unknown in 1994, has since taken a gigantic stride and become one of the most important means of communication available. The new Telecommunications Act failed to take the Internet into account – the word Internet occurs not once in the entire Act. By the start of 2000, voices were heard in the Second Chamber in favour of a revision of the Act. By mid 2002, the Act had already been amended four times and new amendments are under preparation.

Conditioned forms of self-regulation, judicial law, and administrative rules are therefore far preferable from the point of view of flexibility, but these lead to vague framework acts with open rules. However, ICT can offer new opportunities in this respect as well. There are various areas in which it is more important, as far as their legal security is concerned, that citizens are adequately able to ascertain on time what their rights and duties are comprised of, rather than ensuring that all this is formally laid down in law. To quote Scheltema: ‘the requirement of legality has little function in the pursuit of legal security and legal equality (...) (almost) no one reads the law and it is a complete fiction that the people know the law.’ [15] For this reason, the awareness principle is more important in an information society than the requirement of a formal statutory basis. Easily accessible internet sites with adequate hyperlinks to lower-level regulations and relevant case law are at least just as important to legal security and legal equality as
the laborious path to publication in the Government Gazette. An obvious consequence is that this information be made available free of charge or at low cost, and not be monopolized by commercial publishers, as was the case in the past. [16]

**Horizontalisation**, the third characteristic of the information society will mainly have reverberations for the nineteenth century democratic layer of the constitutional state. The majority of topoi of the democratic constitutional state, such as the separation between politics and administration, ministerial responsibility and the primacy of parliamentary politics are essentially hierarchical in character. They are based on the subordination of administration and policymaking to political steering and control. The advent of the information society, however, has led to the shifting of the political struggle away from the traditional political arenas, such as Parliament and cabinet, to bureaucratic gateways and policy networks. Interactive policy development and the rise of horizontal forms of governance, especially when supported by ICT, undermine the 19th century Weberian topos of the primacy of politics, and they bowdlerize the parliamentary system as we know it. While they are accompanied by the promise of new forms of direct democracy, they also bear the risk of a further concentration of power among policy officers and information experts, and of a return to former practices such as backroom politics and corporatism. [17]
The development of new forms of political accountability should therefore be high on the agenda of the constitutional state. [18]

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**The horizontalisation of the Directorate General for Public Works and Water Management**

A comparison between the current course of affairs involving the large infrastructural projects in the Netherlands with the construction of the Delta Works, a large-scale complex of dikes and dams that was built to protect Zeeland from the sea, offers a good idea of what this horizontalisation process entails. At the time of the construction of the Delta Works in the sixties and seventies of the previous century, the authority of The Hague, and of the cabinet and of the engineers working for the Directorate General for Public Works and Water Management was wholly unchallenged. The Directorate General for Public Works and Water Management drafted extremely detailed plans for dams, dikes, locks and canals based on the Delta Act. With the memory of the Great Flood of 1953 still fresh, the local population accepted those plans without question. It was not until the Oosterschelde was closed off, in the nineteen-seventies, that any serious social discussion developed. The difference with the situation in the nineteen-nineties around the reinforcement of the dikes and the construction of the Betuwe Line and the High Speed Line – two new, major railways - could not be greater. The projects were initially approached in the same way as the Delta Works project. Project groups consisting of highly competent engineers were formed and in due course detailed plans for broader dikes, railway tracks, and viaducts were presented. These were followed by the usual public enquiry rounds. This time, however, these elegantly drafted plans received a poor reception. Widespread resistance arose, not only from the green movement – which had been anticipated - but also from the general public and local administrators. Opponents to the plans did not stop at organizing protest marches

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and lodging petitions. Experts in this area were also mobilised into action. In the debates on the High Speed Line, a single opponent, Willem Bos, then an unknown civil servant at the Ministry of Education concerned with the standards on maintenance and cleaning of schools, somehow found the time to develop in his free time a route regarded by the political policymakers as a full-fledged alternative. As a consequence, the plans were delayed by several years and the Ministry of Public Works and Water Management was literally forced to negotiate the way through the Betuwe and the Green Heart.

Having learned from experience, the Directorate General of Public Works and Water Management became one of the first to experiment with interactive decision-making in the latter part of the nineties. In the Infra-Lab experiments on various major projects such as the restructuring of a number of highways, radically different tactics were adopted. The blatant assumption that the authority knows best was abandoned. Engineers made way for discussion leaders and process managers. No longer were blueprints drafted; instead, an inventory of possible bottlenecks was drawn up, problems were formulated collectively and promising solutions were charted and investigated. Interest groups, activists and local administrators were no longer viewed as troublemakers and excluded, but invited in as negotiation partners. This approach has since been widely copied and the first descriptions and analyses of interactive policymaking trajectories have been compiled. A salient point is that it is no longer the interest groups, but the politicians, and in particular the representatives of the people, who are regarded as annoying troublemakers and problem causers. [19]

Dematerialisation, finally, also invokes a number of fundamental constitutional issues. In the first place, that of citizenship. What is the effect of the increased importance of information as a social good on the functioning of the people? Is it possible for citizens to function in the information society without access to channels that are essential for both disseminating and receiving information? The exclusion of citizens is likely in many cases to take the form of exclusion from the information infrastructure. Anyone without a social security number, e-mail address, chip card and cable connection will run the risk of political and social marginalisation in the future. This means that not only will the liberal, political and social rights need to be differently set out, but also that a number of digital information rights extending considerably further than the current Government Information Act and the freedom of gathering news will need to be developed. [20]

In an information society, it is also entirely reasonable to demand of the government that all citizens, whatever their social position or income, are indeed able to gain access to the information services and sources that are crucial to their social functioning. Obviously, this is particularly the case when the government itself requires citizens to use ICT in their contacts with the government, for example when voting, or filing tax returns, or applying for forms. If, for example, it becomes virtually impossible to function in the future in society without a chip card, because cash payments are only accepted by second-hand car salesmen, it is the job of the public authorities to ensure that the banks do not exclude, for commercial reasons, certain groups from gaining access to chip cards. This could be
accomplished for example by targeted subsidization to compensate for possible bad risks, or by the creation of a guarantee fund or enforcement of regimen based on the universal services concept.

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<th>Chip cards: fundamental social rights and societal exclusion</th>
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<td>Following a somewhat hesitant start in the early nineties, the use of chip card technology has since been gaining in popularity in the Netherlands. A growing number of public facilities have become solely accessible via use of a chip card or pin card payment. The municipality of Rotterdam, for example, installed chip card technology in all the parking meters in the streets in 2002. Since that time, electronic payment has become the sole method of payment available for paying parking fees. While cashless parking prevents theft and destructive vandalism, the measure raises questions regarding the public accessibility of the city. Chip cards are currently only furnished by commercial institutions to their account holders. Whoever has no bank or giro account, and therefore no corresponding chip card, is unable to pay by electronic means and will therefore be able to park in the city only with great difficulty. The city of Rotterdam provided for this contingency by issuing prepaid chip cards. These are cards with prepaid credit that do not require a bank account, and that cannot be recharged after use. These cards are intended for young people, tourists, elderly persons and other people without a bank account or bankcard and can be purchased from the city parking department. A major disadvantage to the use of these cards is expense. A twenty euro card yields a prepaid credit amount of just € 17.50; the rest is deducted for administrative charges. Citizens with fewer means, for whom the prepaid chip card was intended in the first place are consequently considerably worse off than the group formed by attractive customers for the bank. [21]</td>
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There are also a number of compelling questions relating to proper administration. Alas for all the post-modern visions of anarchist archipelagos, the relentless progress of ICT in the execution of government policy in the so-called ‘ruling factories’ (such as the tax department) would seem merely to have served to promote the technocratic nature of the relevant work processes. The street-level bureaucrat with his discretionary authorities, so feared by Hayek, has now made way in many large executive organisations, for screen-level bureaucrats. Their actions are strongly bounded by the pre-programmed frameworks in their computers. In some organisations, the executive officers have already been completely replaced by expert systems. They have become system-level bureaucracies, where the bulk of the work is carried out fully electronically, without any human intervention at all. [22] While this may promote legal equality and legal security, it also conjures up new constitutional questions, as justice is thus reduced to a set of algorithms. Today, the system designers, policy lawyers and automation experts may be considered the new equivalents of the former street-level bureaucrats. These system-level bureaucrats must continually make choices when converting the legal frameworks into concrete algorithms, decision trees and modules: which definitions should be applied, how are vague terms specified, what processes are structured in what
way, and how are these connected? As a result, they become, just as the street-level bureaucrats used to be, policymakers instead of docile policy executives.

6. Renovation and innovation in the edifice of the constitutional state
This is where the contours of the digital constitutional state start to emerge. The development of the information society has given rise to the need for both renovation and innovation in the edifice of the constitutional state. A digital constitutional state is, after all, not the same as a virtual constitutional state. It is not as if either constitutional law or the state dissolve in cyberspace. They will continue to play an important social role. While informatisation is accompanied by a horizontalisation of the relations between government and society, there are various areas in which the dependence of the citizens on both government and ICT will indeed increase.

It is therefore vital to ensure that the liberal layer of the constitutional state, which serves to protect against the power of the government, is well maintained in good condition. A number of renovations have already been launched in the Netherlands, such as taking steps to make a number of human rights independent of technology, and the legal formalisation and restriction of electronic investigation methods. The rooms housing the Trias Politica and legal protection, however, have a great deal of back maintenance to deal with. The process of formal legislation often takes too long and is too remote from actual practice to be able to offer citizens sufficient legal security. This gap could be filled by forms of self-regulation, case law and administrative rules, provided the information about this that is made available to the people is freely accessible and transparent. A complication is that the judicial power lags substantially behind the executive power as far as informatisation is concerned.

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However, a great deal more is required than merely catching up on back maintenance. At this time, we can foresee at least three possible innovations for the constitutional state.
Deterritorialisation of democracy: The deterritorialisation of the democracy should have a place at the top of the agenda. National governments increasingly have difficulty in enforcing justice on their own. International cooperation and harmonisation between states are inevitable. This could form a threat to the constitutional state, as numerous constitutional guarantees, such as democratic representation, freedom of information, and public accountability, have not been or have only barely been laid down at the international level. This is an issue that goes beyond the democratic deficit of the European Union, as the international cooperation and regulation increasingly involve global networks and arenas, as we saw in the WIPO case. This internationalisation of public decision making calls for an internationalisation of the constitutional state in order to make sure that a large number of the guarantees that have been laid down at national level are also able to be guaranteed in international contexts. This is a major innovation to the constitutional state, and is one that could and should lead in fact to a design for a new supranational edifice of the constitutional state next to the national edifices.

From legality to transparency: In the information society, legality, or the laying down of government authorities in generally applicable, formal laws, will increasingly fade into the background as a means to protect citizens from the power of the government. This is not because the underlying ideals of legal security and legal equality have somehow depreciated in value, but because the classic guarantee for these of a legislative power that was chosen by the people is now under pressure. Deterritorialisation presents the national legislator with accomplished facts, and completely sidetracks the representative body, at least for the time being. The rather considerable degree of turbulence causes the formal legislature to lag behind and calls for flexible forms of regulation. Horizontalisation allows the partial shifting of the production of generally binding rules away from the classical legislative power to other regulatory parties that have no democratic legitimacy, such as independent administrative bodies, umbrella organisations and interactive policy partners. De-materialisation makes it possible for the system designers in the major executive organisations to gain ground at the expense of the legislators in the departments and in parliament.

Transparency presents itself, however, as a new independent constitutional topos, that could partly assume the protective role hitherto assigned to the principle of legality. On the one hand, informatisation makes it possible to strongly enlarge the transparency of the rules and regulations, of policy processes, and of policy performances. At the same time, transparency is an important condition for legitimacy and accountability. These exist by the grace of the ample possibilities open to citizens, the media and interest groups for collecting, analysing and combining information. The same holds for the system-level bureaucracy: transparency, in this case of expert systems and informatisation choices, is an important condition for the legitimacy and democratic accountability of the work of the system designers. Information rights, finally, form the constitutional counterpart of the transition from legality to transparency.

From a vertical to a horizontal scope of the constitutional state: The constitutional state primarily
offers *vertical* protection. It was developed over the course of centuries with a view to protecting citizens from the arbitrariness of the authorities above him: feudal lords, absolute monarchs, corrupt regents, inaccessible bureaucracies and anonymous civil servants. However, much of the societal power wielded in the information state is no longer concentrated in the government. The government is but one of the several players in the game of politics. The activities of media magnates, consultants and interest organisations often have a far greater impact on the organization of the public domain. A larger degree of horizontalisation with respect to social relations will similarly demand a horizontalisation of the constitutional state, in particular regarding the transparency requirement. Companies will no longer be able to hide behind the Annual Accounts Act and will be called upon to answer to a far wider scope of social responsibility. Every process of self-regulation and self-organisation leading to third party applicability of any kind should be transparent from the very beginning. Which parties are participating and what are their interests? What is the decision-making procedure? Who can exert influence or lodge an objection, and when? Private organisations will further be forced in some cases to make their information sources available to the public at large, for example because this information is crucial for the democratic debate. This would require the development of a horizontal information right to obtain access to scientific sources, studies, advisories and archives. [24]

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<th>Information rights</th>
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The digital layer of the constitutional state

These points offer the basic construction specifications for building a 21st century, digital layer onto the edifice of the constitutional state. To remain within the logic of the edifice outlined here, the new layer should contain at least two new rooms: a room containing information rights, which would form a logical continuation of the column of constitutional rights, and a room that has transparency as the central principle, which should be seen as the logical extension of the column that is founded on the legality principle. With this new layer, the edifice of the constitutional state will continue to be an major shelter for citizens from the perils and powers that linger in the information society.

References
[16] The formal enactment route remains important from the point of view of democratic legitimacy. However, here again, the question to be asked is whether the long, time-consuming formal legislative procedure is truly essential to ensure adequate steering by parliament in all areas of the law. Compare E. Jurgens, *De mythe van Meerenberg: Over de betrekkelijke legitimatie die uitgaat van medewetgeving door de Staten-Generaal*, NJB 30 (1993), 1381-1386.
