

AMICUS CURIÆ

Journal of the Society for
ADVANCED LEGAL STUDIES

ISSUE 110
Summer 2017

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Typeset and printed by imageData Group, Exion 27, Crowhurst Road, Hollingbury, Brighton BN1 8AF

ISSN 1461-2097

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LEGISLATING FOR INTERNET SAFETY

Last year's Annual Conference of the IALS Information Law and Policy Centre (ILPC) held on 17 November considered the issue of children and digital rights, in particular how to protect a child's rights to privacy, freedom of expression and safety both online and offline. Leading policy makers and regulators joined practitioners, academics and representatives from industry in analysing the opportunities and challenges posed by current and future legal frameworks, and the policies required to balance safeguards and rights.

In the preceding month the government published its *Internet Safety Strategy Green Paper* containing measures designed to tackle a wide range of harms – including cyberbullying, online abuse, harassment, trolling and sexting – which particularly, but not exclusively, affect children. People and organisations were asked for their views on proposed initiatives which included a social media code of practice; transparency reporting for social media companies, a social media levy; and the development of children's online literacy.

The government response to the Green Paper, published on 20 May 2018, notes that public awareness of unacceptable behaviour and content online has grown in recent months. The use of the internet to spread "fake news", the dangers of using artificial intelligence to manipulate public opinion, and the potential for data to be used for unethical or harmful purposes have all gained prominence and demonstrated the importance of establishing a comprehensive approach to improving online safety while ensuring that the UK's digital economy remains buoyant. Now that government has gained an overview of the nature and prevalence of online harms, both from its own researches and the comments of some 600 respondents to the Internet Safety Strategy Online survey, the time for action draws closer. Six in ten respondents said they had witnessed inappropriate or harmful content online, with four in ten saying they had experienced online abuse, and four in ten reporting that concerns they put to social media companies were not taken seriously.

Matt Hancock, the Digital Secretary, has promised publication of a White Paper by the end of this year which will contain plans for legislation covering both harmful and illegal online content. Potential areas where the government will legislate include the social media code of practice, transparency reporting and online advertising. Further work is to be done on areas of safety identified during the consultation process, such as age verification to assist companies to enforce terms and conditions; policies aimed at improving children and young people's mental health, including the impact of screen time; issues related to live-streaming; and identifying harmful content.

A survey of over 6,500 children conducted by the British Computing Society in parallel with the consultation revealed that children feel there is a gap in their digital resilience education that needs to be addressed; they have low expectations of social media platforms, and younger children in particular would like

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to be better protected from abusive content.

The Department for Digital, Culture, Media & Sport (DCMS), working in collaboration with the Home Office and a range of stakeholders, will develop the White Paper. There are still key issues to be resolved. For example, the government's Green Paper response states (on p 14) that the current position concerning the legal liability of social media for illegal content shared on their sites is looking increasingly unsustainable as it becomes clear many platforms are no longer just passive hosts. However, "whilst the case for change is clear, applying publisher standards of liability to all online platforms could risk real damage to the digital economy." Work is in progress "to understand how we can make the existing frameworks and definitions work better, and what a liability regime of the future should look like."

Although the consultation supported the social media code of practice and transparency reporting announced by the Prime Minister in February 2018, there were mixed responses to the proposed social media levy. More time will be taken to gather evidence and analysis on how online safety should be funded.

The impact of long periods of time spent online, and the relationship between social media and the mental health of children and young people, form the subject of a current study by the Chief Medical Officer, Dame Sally Davies, which involves a review of all relevant international research in the area. Her report is due out next year, and therefore will not appear in time for the White Paper to take account of its conclusions.

The Green Paper focused on harmful but potentially legal content and conduct, but the DCMS and Home Office are taking forward initiatives to tackle illegal harms. Collaborative work will also continue on addressing activities which could become illegal, and with a greater focus on preventing potentially harmful online content from being published in the first place. Vulnerable users, particularly children, will remain a central consideration when formulating policies. The scope of the internet safety project continues to broaden, presenting those responsible for setting out legislative proposals in the forthcoming White Paper with an increasingly difficult task.

Julian Harris

Deputy General Editor, Amicus Curiae

Electronic signatures and reliance

by Nicholas Bohm and Stephen Mason

The Law Commission is presently working on the 13th programme of reform, with a project to consider electronic signatures. As a result, the authors thought it would be useful to prepare something on the reliability of electronic signatures. The discussion below is predicated on the extensive case law and wealth of materials brought together in the standard book on the topic (which is now available as open source), *Electronic Signatures in Law* (4th edn, Institute of Advanced Legal Studies for the SAS Humanities Digital Library, School of Advanced Study, University of London, 2016).

It is intuitively clear that there are important differences between signatures made with ink on paper and those made electronically on documents in electronic form. We suggest that a fruitful framework for analysing the legal implications of these differences can be found by looking at who relies on a signature, and for what purpose, at different stages in a transaction. This note explores reliance in the context of handwriting on paper before addressing the implications of adopting forms of electronic signature.

A signature on a letter, a cheque, a signature-card payment voucher, a land transfer form, a form transferring intangible property such as a patent, an application for a service such as the supply of electricity or water, or a form notifying a registry such as Companies House of the appointment of a director, all have a similar purpose in common. That is to facilitate action by the recipient based on evidence of the origin of the signature inherent in the unique characteristics of a signature on paper.

SCRUTINY AND ACCEPTANCE OF A SIGNATURE

The scrutiny of a signature by a recipient varies with the circumstances. A bank will have a specimen of its customer's signature for comparison with that on a cheque presented for payment, which will be carried out (at least for cheques above a certain value) by an experienced person who may well have received training in it. The signature on a signature-card payment voucher will be compared with the signature on the card presented by the customer, but the person making the comparison may have limited experience and probably no training. Signatures on forms submitted to keepers of registries very probably receive no scrutiny beyond a check that there is in fact a signature. Registries may have no specimens to use for comparison, but even in principle a signature should match that on an earlier document received by the registry, the

routine retrieval of earlier documents may be impracticable. Recipients of applications for services like the supply of utilities are unlikely to have any specimen for comparison.

Scrutiny and acceptance of a signature, and the action taken in consequence, may mark only the beginning of a train of events. If an account is charged with a payment, or the transfer of an asset is recorded, or a person is recorded as being a director of a company, or utilities are supplied and charges made for them, then sooner or later the person on whose purported authority (or with whose purported consent) such things have been done may repudiate the signature supposed to evidence the giving of the authority or consent which has been relied on.

In that event the recipient who has acted on the basis that the signature is genuine, and in some cases third parties who have derived an ensuing benefit (such as purported transferees of assets), have an interest in producing evidence that the signature was genuine; but the repudiating party has the opposite interest. The relevant evidence is not necessarily confined to expert evidence about the signature itself, and whether or not it was made by the purported maker. In many cases there will have been correspondence and meetings between parties to the transaction in which the signature played its part, and evidence might be directed to the participation in that correspondence or those meetings of the purported signatory so as to connect him or her to the signature itself. Such evidence may in some cases carry greater weight than a document examiner's evidence that the signature was not made by the purported signatory: it may demonstrate convincingly, for example, that the purported signatory had arranged for the "forgery" of his own signature by having another person sign his name with a view to subsequently repudiating it. (Such a signature is not in law a forgery, having in fact been made with the authority of the signatory by whom it purports to be signed.)

There will also be cases where the only or main evidence is derived from scientific examination of the disputed signature. Usually the original recipient who acted on the signature will seek to uphold its genuineness and the purported signatory will contend that it is forged. The literature commonly refers to the original recipient as the relying party. Although the usage is not wrong, it neglects the fact that at the later stage when the issue is joined the purported signatory who has repudiated the signature is also relying on the signature to prove that he or she did not make it, and can thus equally considered to be a relying

party. This leads to the question of how good a safeguard a handwritten signature really is.

Unfortunately this is a question to which there probably cannot be a certain answer for all cases, because there is no objective way of quantifying the skills of the best forgers or those of the best document examiners. In cases where the forger's objective is both that the signature shall be accepted by the original recipient and that it shall survive scientific examination in a subsequent dispute, there must therefore be uncertainty that the truth will prevail. The forgery of a will is likely to be a case where the forger wishes his work to withstand serious scrutiny, since a challenge from disappointed relatives is foreseeable. Whether a highly skilled "professional" forger is likely to be engaged to forge a will seems debatable, however. Much more commonly a forgery will accomplish the forger's objective if it is accepted by the original recipient – a cheque or credit card voucher is accepted, or a property sale or charge is completed, money changes hands, and the forger disappears (or if he is found, the money is not). It is unlikely to be the forger's objective to have the forgery accepted as genuine in the ensuing dispute between banker and customer, or between rival claimants to an interest in land. It therefore seems unlikely that the forgery will have been made good enough to withstand more than the comparatively lightweight examination typical on initial receipt. The forger has no interest in the outcome of the ultimate dispute, and has no reason to incur more trouble and expense over the quality of the forgery than is necessary for his own limited purpose. Where this analysis applies there is every reason to expect that forgeries which have initially deceived their recipient will be detected by scientific examination.

LEGAL POSITION OF A FORGED DOCUMENT

Having completed this sketch of reliance as it operates with handwritten signatures on paper, and before turning to the effects of introducing electronic signatures, this note briefly outlines the legal position of a forged document. It is a nullity and has none of its purported effect. It is thus no answer for a person who has acted on a forged authority to plead that he acted honestly and reasonably having taken due care. It is however an answer to plead estoppel – that the purported signatory is precluded by his conduct from asserting the forgery, eg because he has previously accepted as binding on him similar signatures by the same forger. In the case of cheques and other bills of exchange the law was codified by section 24 of the Bills of Exchange Act 1882. Although codification did not change the common law as it then stood (and now stands), it has the convenient advantage for bank customers that it appears to override any attempt to alter its effect by contract, eg by providing that a bank may debit an account with a forged cheque if it has been deceived despite having taken due care to detect the forgery.

ELECTRONIC SIGNATURES

In this note "electronic signature" means any mark made in an electronic document, or in a separate file appropriately connected with it, for the purpose of signing it. One form of electronic signature is the "digital signature," namely a signature made using public key cryptography. The attraction of the digital signature is that if the purported signatory's verification key can be used to verify a signature, that fact provides strong evidence (a) that the purported signatory's signature key was used to make that signature, and (b) that the document has not been altered since it was signed. But it must be noted that this evidence does not go so far as to prove that the purported signatory made or authorised the making of the signature or, if he or she did, that this was done with the intention of signing the document to which the signature relates. This is discussed further below. Other forms of electronic signature may consist of an image of a handwritten signature added to an electronic document; the typing of a name into a document (sometimes in a font which mimics handwriting, to indicate its intended function); the use of a stylus and electronic pad to insert the user's handwritten signature into an electronic document; and a number of other variants or systems of different degrees of complexity and sophistication.

It is obvious that a number of these forms of electronic signature offer weak or no intrinsic evidence of their own genuineness. Anyone can type anyone's name into a document, and a good many people can scan an existing document so as to make an image of a signature in it to insert into another document. In general, electronic artefacts can be copied and transferred without leaving evidence of their provenance. A number of proprietary signature platforms have been deployed which are intended to provide a framework within which the genuineness of signatures is to be assured. This note does not examine their details, but anyone invited to use one of them either as a signatory as any other form of relying party would be well advised to check carefully exactly what assurances are given by whom and to whom about the reliability of the system, and what responsibilities are assumed by their users, and to whom they may be answerable, in respect of them. Digital signatures are capable of providing strong evidence to connect a signature key with a signature, but cannot provide any intrinsic evidence about who used the key to make the signature.

Biometric methods, involving scans of the iris, retina or fingerprints, or the capture of signature dynamics (speed, acceleration, pauses, pressure variations) can offer strong evidence of an identity between the person from whom specimens were originally taken and a person later claiming to be the same. Useful as this evidence may be in, for example, controlling access to highly secure premises, it does not by itself constitute a signature or connect the source of the biometric data to a specific document. The biometric data generated for matching against the original profile is as vulnerable to being copied and inserted into other documents as is a scanned image of a paper signature. The recipient of such data can therefore

only trust it if it is obtained from the purported signatory directly through the recipient's equipment and under the recipient's observation. This limits the utility of the method. It also exposes a purported signatory who has provided data for a profile to the risk of that data being used for forgery – the system protects the recipient but fails to protect the purported signatory.

The crucial difference between handwritten signatures and electronic signatures is that electronic signatures are made using electronic machines. Handwritten signatures offer only small opportunities for error or mischief. For the reasons discussed above, forgeries will usually be detected eventually. A signatory may sign the wrong document by mistake, or be tricked into doing so by sleight of hand – and signatories with impaired visual or other faculties may be especially exposed to such risks; but mischief of this kind requires a lot of talent, and is far from amounting to a systemic risk of the method. Using handwriting, generally we know that we are signing something, and we know what it is. (We may not be as diligent about reading it as we should be; but the same is equally true of electronic documents, and the signer rightly bears the risk of not reading.) Using an electronic machine the case is very different. Even someone who understands the principles of the method being used to make a particular signature is unlikely to understand the details of the software implementing that method, so as to know that the method is correctly implemented, or to have any clear evidence of what software is in fact running on the machine in use at the relevant time if it is a general-purpose computer. It is also hard for the user to know that the signature-making operation that he or she initiates will be applied to the document visible on the screen and not, either instead or as well, to some other document.

This last possibility is more likely to be realised through malice than by accident; but with millions of computers found to be compromised, without their users' knowledge, for use in sending spam email or carrying out other nefarious purposes, it is only the infrequency of the use of electronic signatures that has so far spared the process from the attentions of those who use malicious software to exploit the computers of unknowing users for gain. (Attacks are likely to aim at digital signatures, if ever they are in general use, because they appear to offer a degree of assurance and are easy to verify. Anyone can scan a signature into a document, or type a name into one, and a sophisticated attack would be wasted on a trivial result.)

Because simple forms of electronic signature are trivial to forge, and because a digital signature is vulnerable to malicious software, and because neither provides intrinsic evidence to connect it with its purported maker, two different strategies have been contemplated to promote their adoption. One is to use secure signature creation devices. In principle these are not difficult to specify, partly because their strength derives from limiting their functionality and their exposure to interference. They would probably be expensive, and inconvenient to use. This would militate against wide adoption for commercial use,

because if sellers' customers can buy goods or services simply by providing credit card details, they will be unwilling to accept the inconvenience of using a special device (even if paid for by sellers); and sellers will be unwilling to push customers away by refusing to accept credit card purchases.

The other strategy has been to ignore the technical problems and argue that anyone publishing a digital signature verification key should be taken to accept responsibility for whatever it verifies (until it is revoked). But it seems more than a little unlikely that a term (or a Carbolic Smokeball offer (*Carlill v Carbolic Smoke Ball Company* [1892] EWCA Civ 1, [1893] QB 256, [1893] 1 QB 256)) to that effect could be implied by the publication of a verification key on ordinary principles as to the implication of terms, and publishers of keys could anyway negate it by an express term (for an example see <http://www.ernest.net/contact/NicholasBohm.asc>). Would-be signature acceptors would have to insist on imposing such a term contractually (which might well be unacceptable to signers, and might be found unenforceable against consumers as an unfair contract term), with commercial results similar to those liable to result from demanding the use of secure signature-creation devices. These considerations may account for the fact that there has been little general uptake of digital signatures. The two exceptions are (a) some closed groups, like the participants in the SWIFT banking communications network, and (b) monopoly providers of a necessary service, such as public sector bodies, who may be willing and able to impose their own rules.

IMPLICATIONS OF ADOPTING FORMS OF ELECTRONIC SIGNATURE

This note began by exploring who relies on a signature, and for what purpose, at different stages in a transaction. It now addresses the implications of adopting forms of electronic signature. When the recipient of a document signed with a simple electronic signature which provides no intrinsic evidence of its genuineness decides to accept it, he takes the risk of forgery. He may have contextual evidence to support the decision, and there may be evidence in metadata like email headers if he can interpret them. But otherwise, if the purported signatory repudiates the signature, the recipient is not well placed to prove it was genuinely his. His only prospect of establishing his case by further evidence may be to attempt through legal proceedings to gain access to the purported signatory's computers in the hope that expert examination will show that they were the source of the signed document. There is a significant risk that such an endeavour will be fruitless: evidence may not survive long on a computer, or may be erased without trace; the computer used to create the signed document may not be found; or that computer may turn out to have been shared with friends, family or work-colleagues, thus providing at best weak evidence against the purported signatory. The endeavour will incur expense, and a risk of having to pay its target's legal costs if it fails. The recipient's

position is materially weaker than it would be if he had a handwritten signature backed by an expert's opinion that it matches undoubtedly genuine signatures or other handwriting of the purported signatory.

It is important to note that in many disputes there is no issue about what written communications were exchanged, whether or not handwriting is involved. The resolution of those disputes is unaffected by the weakness of the evidence supporting the authenticity of the documents involved, since it is never put to the test. It is possible that growing awareness of potential weakness in the evidence will lead to an increasing number of cases where the genuineness of documents is disputed; but there is no evidence of any such trend at present, and no way of knowing whether the weakness of simple electronic signatures in principle will lead to adverse consequences in practice.

It is certainly clear that there is a substantial volume of impersonation fraud using electronic messages. UK Finance, representing a large number of UK finance industry organisations, reports that in the first half of 2017 there were some 20,000 cases in which people were deceived by fraudulent messages into making payments to criminal imposters, with resulting losses of £100 million (of which the industry reimbursed one quarter) – see <http://www.ukfinance.org.uk/authorised-transfer-scams-data-h12017/>. Even if litigation ensues, there will in practice in such cases be no dispute about the fact that the messages in question were forgeries, and therefore no adverse consequence of the evidential weaknesses will affect the litigation. It may be that if the use of more secure electronic signatures becomes commonplace, such forgeries will be harder to make convincing; but for the present this is a purely speculative possibility.

The purported signatory who has been impersonated likewise lacks the opportunity to demonstrate through expert evidence that the forgery was not made by him. But this way of putting it overlooks the important matter of the burden of proof. If an impersonation is successful (whether through forgery or otherwise), the victim is the person deceived. The person who was impersonated bears no responsibility. In any claim against him, the usual litigation principle applies that the claimant must prove his case. The lack of a handwritten signature is immaterial. This obvious proposition has been obscured in recent times by the reframing of impersonation as “identity theft.” This witless modernism has the effect of depicting the person who was impersonated as the victim, instead of the person who was deceived; and the relentless stream of advice to the public to shred its discarded correspondence and to conceal all secrets which might be useful for authentication seems to prepare the ground for blaming the carelessness of the innocent party for the losses of the real victim of the deception.

That leaves for consideration the cases where electronic signatures provide strong evidence – the digital signature, with or without a secure signature-creation device, and those signatures where biometric technologies are used. What

they all have in common is that the recipient of the signed document can on its receipt verify its genuineness as fully as that can be done. Apart from an examination of contextual evidence from metadata or other sources, nothing is added to verification by repetition. (This distinguishes the case from that of handwriting, where an initial examination can be supplemented by the work of a specialist document examiner.) Verification is in practice all or nothing – it either succeeds or it fails. (In truth the underlying technologies are probabilistic in their foundations, relying on the assumed infeasibility of certain computations or the assumed rareness of certain coincidences, and an issue might be joined if the assumptions were challenged as unsuitably made in a particular technological case.) The practical effect of the immediate success of verification is to reinforce the recipient's readiness to rely on its success in the face of a repudiation, and to respond “But it *must* have been you!” And there is nothing in the signature on which the purported signatory can rely for exculpation.

In the case of digital signatures, which are made with the signatory's signature key, the fact that the recipient can verify the signature using the signatory's verification key is convincing evidence that the signatory's signature key was used. (That is not to say that this conclusion is irrefutable, but errors in software or hardware would probably have to be established to refute it.) The recipient also needs evidence that the verification key is in fact associated with the signatory in question: there are various possibilities, including an assurance from a trustworthy third party. The success of verification does not by itself prove that the signatory made the signature or authorised its making, and there may be no other evidence of that necessary fact. The recipient must then rely on whatever representation, express or implied, accompanied the publication by the signatory of the verification key, or its communication to the recipient, or on any contractual terms applicable to it. Digital signatures have not had any widespread use in commercial transactions in England and Wales, and no body of practice, much less of judicial decisions, has developed.

Where a signature key is held in a personal computer or a smartphone, the general insecurity of such devices suggests that no very extensive responsibility would be accepted by a signatory for keeping the key safe from misuse by third parties, nor be implied from publication of a verification key. There have been too many examples of the penetration of computers belonging to the military or intelligence agencies of major nations by young untrained computer enthusiasts, using no more equipment than they can set up in their bedrooms and no more guidance than has been published on the internet, to make it reasonable to hold private citizens to any high standard of defence against the misuse of their signature keys. Where the signatory's key is held in a secure signature-creation device there might be justification for setting a standard of responsibility high enough to be of material value to the recipient. But that assumes that there are objective grounds for regarding the particular type of device as trustworthy. And

there is also some anecdotal evidence that users who already have a smartphone are resistant to the suggestion that they need additional equipment to carry out financial or commercial transactions.

Where biometric information is used to verify that the signatory is the same person as the source of a previously obtained profile, the recipient needs some way of knowing that the source of the verification information is also the signatory of the document being verified. This may not be achievable to a satisfactory degree of assurance unless both the verification and the signature take place under the recipient's observation using the recipient's equipment. If so, this must limit the utility of the method to those cases justifying the inconvenience and cost entailed by such a procedure. And although such a procedure may provide the recipient with a high degree of assurance, it also provides the signatory with almost no protection against fraud by the recipient, since the recipient is in control of the system and can replay the signatory's biometric data and associate it with any document.

CONCLUSIONS

In summary, using the concept of reliance as a basis for analysing the way in which signatures are used reveals the variety and complexity of the functions performed by signatures in their daily use. With the growth of widespread literacy and later the development of forensic science, the handwritten signature has come to form a trusted part of people's commercial and financial interactions. The ways in which the various forms of electronic signature can be relied upon, and the varying kinds

of evidence they provide for the resolution of disputes over forgeries and impersonations, differ significantly from what is familiar in the case of handwritten signatures. At the present time the continuing vulnerability of many electronic systems to malicious interference, the cost and difficulty of investigating events within an electronic system in a disputed case, and the novelty for lay people, lawyers and judges of understanding the difficulties involved, all serve to present formidable challenges to achieving fairness in dispute resolution in those not very common cases where the genuineness of a signature is in dispute. But computer security engineering (in which the present authors are laymen) is a work in progress. New security procedures will continue to be developed, and new computer system vulnerabilities will continue to be discovered and exploited. The implications for the reliability of electronic signatures will have to be reconsidered from time to time with the benefit of the advice of experts, and an analytical framework for the assessment of the results will remain essential.

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Stephen Mason

The authors have been appointed by the Law Commission to the advisory group for their project on electronic signatures and the electronic execution of documents.

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The complexity of financial regulation and a quest for the grail

by Armin J Kammel

1. SOME OBSERVATIONS

The global financial crisis (GFC) has undoubtedly been a turning point in financial regulation (see Weiss & Kammel (eds), “Government Versus Markets“ in *The Changing Landscape of Global Financial Governance and the Role of Soft Law*, pp 3-5). Roughly 10 years now into the post-GFC environment, it is obvious that the massive regulatory responses to the incidents of the GFC have created a new regulatory environment. Massive push-backs to the deregulatory trends pre-GFC culminated in unprecedented government intervention with thousands of pages of new regulations attempting to address the weaknesses, failures and unregulated areas revealed by the GFC (for some significant examples, see section 3.3. below) These regulatory responses have been that massive, that they are often referred to as a “regulatory tsunami” (see for example David Ricketts in his article “Regulatory tsunami floods business“ in the *Financial Times* on 12 May 2013, available at: <https://www.ft.com/content/1f3a817e-b184-11e2-9315-00144feabdc0>).

Although the usage of the term “tsunami”, which stands for a seismic sea wave caused by the displacement of a large volume of water with disastrous effects, seems to be excessive at first sight, one should not blank out the massive consolidation in the financial industry as a result of these massive regulatory responses. The driving forces behind these massive regulatory responses have been the regulatory evergreen consumer protection – see among others Andenas & Chiu, *The Foundations and Future of Financial Regulation* at pp 16-17 – plus plus the rather recent regulatory focus on financial stability. The latter one especially, although of common interest, is somewhat problematic because there is quite some ambiguity in relation to the understanding of the term and the purpose of financial stability which had already been recognised by the ECB in 2007 when it was stated that “[f]inancial stability is difficult to define and even more difficult to measure...[but] can be defined as a condition in which the financial system [...] is capable of withstanding shocks and the unravelling of financial imbalances, thereby mitigating the likelihood of disruptions in the financial intermediation process [...]” (ECB (2007), “Progress towards a framework for financial stability assessment”, speech by José-Manuel González-Páramo, available at: <https://www.ecb.europa.eu/press/key/date/2007/html/sp070628.en.html>). In a way, the difficulties in the understanding of and the factors

contributing to financial stability have triggered a substantial increase in regulatory measures so that both consumer protection and financial stability can be considered as the main rationales for financial regulation.

Against this background, it is apparent that there has been a significant change in the landscape between governments and markets (see Kammel, “Government Versus Markets“ in Weiss and Kammel (eds), *The Changing Landscape of Global Financial Governance and the Role of Soft Law*, pp 23-25). This change also reflects a new occurrence in the regulatory system, which is the attempt to shift regulatory action from almost exclusively being reactive to becoming more pro-active (this is typically labelled as macro-prudential supervision). This shift in the overall regulatory approach exposed a phenomenon well-known in regulatory theory: complexity. This article offers an introduction to the concept of complexity, and makes a critical assessment of its application to financial regulation which will be complemented by some future policy recommendations.

2. THE CONCEPT OF COMPLEXITY

2.1. Terminology and usage

The term “complex” is a compilation of the two Latin words “com”, meaning “together” and “plex” meaning “woven”. This little semantic assessment indicates the main feature of complexity being interconnected activities of various elements. However, complexity has emerged as a science on its own and there is no generally accepted meaning of the term. Nevertheless, as stressed by Boulton, Allen & Bowman in *Embracing Complexity* there are a few patterns that depict important attributes of the term complexity as being (a) systemic in the sense that the whole is different from the sum of its parts; (b) path-dependent, reflecting that history matters and that the sequence of events shapes the future; (c) sensitive to context, which indicates that one size does not fit all since generalisation runs the risk of ignoring specific information; (d) emergent in the sense of uncertainty but not randomness since the world is somewhere between chaotic and predictable; and (e) episodic since things are changing but this change seems to happen in fits and starts, although radical change defines new patterns and some completely new features.

These described patterns point out that the concept of

complexity is multi-faceted, which makes its understanding challenging. The catenation of something being systemic, path-dependent, sensitive to context, emergent and episodic requires a holistic understanding of the interconnected activities of the respective elements. This implies that complexity is traditionally linked to some sort of a system which is commonly defined as a regularly interacting group of elements forming an integrated whole. Consequently, the multilevel nature of a system triggers the challenge in understanding which is often referred to as complexity. In other words, when making use of the term complexity, it stands for an expression of a condition of numerous components in a system and various forms of relationships among its elements which often leads to a basically synonymous usage of the terms “complex” and “complicated”. A further impediment in the understanding of complexity is that what is being considered as complex is relative and subject to change. Against this background, the following elaborations attempt to provide an introductory comprehension of complex systems, and as enhancement complex adaptive systems, before appending some complexity aspects of regulation.

2.2. Complex systems

When applying the concept of complexity in practice, it is apparent that numerous real-life examples constitute so-called complex systems such as (financial) markets, the internet or other systems in the areas of biology, technology or social sciences. In this regard, it is striking that all such systems are composed of interactive components whose cooperation is typically characterised by nonlinearity, spontaneous orders and adaptations. Moreover, the mentioned property emergence, which means that – as Holland in *Complexity* puts it – “the action of the whole is more than the sum of the actions of the parts” is often considered as the distinctive feature of complex systems. This is essential for the understanding of the functioning of such systems because any modification of it is easier comprehensible when considering the holistic nature of complex systems. In addition to this, hierarchies in complex systems are important because emergent properties at any level must be consistent with interactions specified at any lower level. This implies that interactive emergent properties of the various levels of a complex system constitute a pervasive feature of such a system aside from characteristics such as self-organisation, chaotic behaviour where slight changes in initial conditions lead to significant later changes, the relevance of “fat-tails” where rare events occur more often than predicted in standard (bell-curve) models or adaptive behaviour where interacting agents have the capacity to change and learn from experience and therefore modify their actions. In consideration of these aspects, it is also worth noting that complex systems have boundaries with different sources of input and output which obviously affect the nature and structure of each system.

Without going into the shallows of complexity theory, it does not come as a surprise that financial markets fulfil many of these features of a complex system, such as emergent

behaviour, hierarchies, self-organisation and adaptiveness. The latter, however, as well as aspects of chaotic behaviour and the relevance of “fat tails” have only rather recently – in the wake of the GFC – made it into the spotlight (a prominent push into this direction was made by Taleb in *The Black Swan*). Consequently, the general assessment that financial markets exhibit numerous features of a complex system requires an evaluation whether financial regulation is capable of reflecting such complexity. When conducting such evaluation, the rationales and general characteristics of financial regulation need to be assessed. However, this is somewhat challenging because financial markets clearly exhibit one key property of complex system being adaptive interaction of its agents (see in more detail Lo, *Adaptive Markets*). The property of adaptiveness has continuously made it into the spotlight, although complexity theory itself has been dealing with it for a while. Thus, a better understanding of adaptiveness in complex systems is necessary to evaluate the ability of financial regulation to reflect the complexity of financial markets.

2.3. Adaptive Interaction of agents in complex adaptive systems

The capacity of interacting agents in a complex system to change and learn from experience leading to modifications of actions (see Holland, *Hidden Order*, pp 41-87) is the subject of one of the two subfields of complexity theory examining emergence, the study of so-called complex adaptive systems (CAS); the other stream deals with complex physical systems (CPS), for more details on which see Mitchell, *Complexity*. When analysing CAS, it is worth noting that the ability of the interacting agents to adapt has the ancillary effect that such CAS usually do not converge towards an equilibrium, which means that the adaptation of agents to each other triggers new agents with new strategies to emerge which themselves interact so that the overall complexity of the system increases (see Holland, *Complexity*, p 9 and in more detail Holland, *Hidden Order*, pp 6-10). This behaviour can also be detected in financial markets whose functioning has been subject to multitudinous studies including complicated mathematical theories. The weakness of most of these theories, however, is that they are not able to properly capture the adaptive interactions in a CAS. This means that the assumption of always rational agents does not reflect market realities because financial markets and their agents have regularly demonstrated their ability to become subject to irrational exuberance; a prominent example is the so-called Arrow-Debreu model – see Arrow & Debreu, *Existence of an Equilibrium for a Competitive Economy*. Hence, the assumption of always rational agents has to be rejected, also on the grounds that each agent – in order to be always rational – would have to act on full knowledge of the future consequences of its and other agents’ reactions which is neither feasible nor realistic (see the classic by Shiller, *Irrational Exuberance*). When considering that omniscient, completely rational agents do not exist, it also becomes apparent that the assessment of adaptive interactions of agents in financial markets with mathematical tools has significant constraints because the

property of adaptive behaviour cannot be captured by traditional mathematical means such as linearity and additivity (it is worth noting that linearity and additivity are features of CPS – see eg Arthur, *Complexity and the Economy*, p 92. Therefore, to steer CAS, it is important to go beyond collecting and organising data to discover the mechanisms that generate such data based on a standard language (see Holland, *Complexity*, p 11). However, both the existing lack of standard language, as well as a holistic understanding of the hidden orders of CAS, indicate that CAS theory is at its earliest stages. Notwithstanding these limitations, it is possible to analyse the structure of CAS agents as well as the hierarchical structure in which the respective combinations of agents at one level become agents at the next level. This implies that CAS are characterised by hierarchical generative processes (see Holland, *Complexity*, p 33).

According to Holland, when focusing on the structure of CAS agents, three common levels of activity can be detected, being (a) performance, meaning moment-by-moment capabilities; (b) credit-assignment as the respective rating of the usefulness of capabilities; and (c) rule-discovery as the generation of new capabilities. The understanding of these three activity levels is essential since they constitute the basis for the adaptive behaviour of agents. Against this background, performance in simple terms is a set of conditional “if/then” rules which means that conditions, or in more sophisticated cases, rules send signals which trigger activities or, when repeatedly done, can constitute chain rules which can be understood as rules in computer programming. In addition to this, the performance of agents is influenced by the activities of other agents which are captured by detectors that translate them into signals for internal processing of the agents. Consequently, depending on the signals received, an agent can modify its behaviour, or in other words adapt (for further details, see Holland, *Hidden Order*, pp 43-52). This basic activity is complemented by so-called credit assignment which means that based on experience, an agent is able to determine whether conditions or rules are useful. The agent determines the usefulness of a rule based on strength. Strength itself is in both simple conditional environments, as well as more complex chain rules influenced by the speed of achieving the result as well as the quantity based on experience (Holland, *Hidden Order*, pp 53-60). The third level, called rule-discovery, is the testing of hypotheses which means that the described credit assignment supports the confirmation of hypotheses. This implies that, for example, confirmed hypotheses constitute strong rules, whereas disconfirmed hypotheses trigger weak rules.

Against the background of the three common levels of activities of CAS agents, it becomes clear that the various signals received by agents may not necessarily always trigger rational behaviour, nor is it possible to derive convincingly sustainable results from linear and additive mathematical tools applied. In any case, complexity theory incorporates these findings into a framework (see Holland, *Complexity*, pp 75-90) which is primarily concerned with the structuring and the validity of

the various peculiarities of CAS models (see further Holland, *Hidden Order*, pp 161-72). A comprehensive description of complexity theory would not only go beyond the scope of this contribution but is of limited suitability when addressing aspects of external intervention into CAS.

2.4. *Intervention into CAS*

In addition to the peculiarities of CAS models, biology and health science, among others, deal with possibilities to control or intervene into CAS which in any case is challenging because the resilience of CAS suggests in general terms that the traditional means of regulatory intervention typifying top-down control cannot be considered as efficient when it comes to CAS intervention. Thus, interventions or control mechanisms need to have sufficient flexibility to address the mentioned properties of CAS and thereby be able to create the conditions for flexible, self-organising responses which operate by applying simple forces and nudging, and make use of a variety of diffuse influences which also triggers ideas about developing regulatory responses as part of a coordinated network of governance (see in general Boulton, Allen & Bowman *Embracing Complexity* pp44-47, and from a strategic perspective pp 138-70). Consequently, traditional linear control and intervention mechanisms are not efficient because CAS require speedy knowledge transfers, the ability to learn, and modular thinking, as well as a diversity of regulatory approaches ensuring flexibility (for some concrete examples in the context of financial market regulation see Schwarcz, *Regulating Complexity in Financial Markets*, pp 245-56).

When assessing that the current intervention and control frameworks, most of them reflect the typical top-down approach which in the case of CAS is not deemed efficient. Moreover, insights from complexity theory are in sharp contrast to the reality of intervention and control mechanisms, particularly financial markets. The lack of awareness that financial markets constitute a CAS is reflected in the inadequacies of current financial regulation which from a conceptual point of view is almost agnostic to adaptive system behaviour. Consequently, when introducing some of the insights of complexity theory with respect to CAS, fundamental dogmatic changes to the regulatory environment and the supervision of financial markets are necessary. The recent regulatory tsunami in the area of financial markets serves as a convincing verification of the regulatory inadequacies since current financial regulation itself is subject to complexity. Thus, the increasing complexity of financial regulation and the lack of reflecting insights from complexity theory stress the importance to induce necessary dogmatic changes in the regulatory nature of financial markets.

3. COMPLEXITY OF FINANCIAL REGULATION APPLIED

3.1. *Financial regulation and its inherent complexity*

When analysing the current environment of financial regulation, the aforementioned contrasts to insights from

complexity theory are apparent not only due to its top-down nature but also the fact that financial regulation is fundamentally based on the assumption of rational market behaviour. However, as CAS theory convincingly indicates, omniscient, completely rational agents do not exist whereas excesses of irrational exuberance occur on a regular basis. Contrary to the valuable insights from complexity theory which suggests speedy knowledge transfers, the ability to learn, modular thinking as well as a diversity of regulatory approaches ensuring flexibility and adequate contingency planning when intervening into CAS, the regulatory responses to the GFC have primarily been like an unadjusted “sprinkler system” operating based on the principle of the more the merrier; see Kammel “Government Versus Markets” in *The Changing Landscape of Global Financial Governance and the Role of Soft Law*, pp 19-21, and Kammel, *Financial Regulation as an Adjustment Screw*, pp 48-49.

This approach is problematic per se since an overflowing quantitative increase in regulatory measures which tend to lack both, consistency and coherence constitute an instable system on its own. This can be illustrated by an analogy to matrix calculations whereby – in its basic version - the current regulatory settings can be reproduced as a matrix consisting of columns representing the areas of financial regulation, such as banking, securities and markets as well as insurance regulation, whereas the rows indicate the respective national, supranational and international level of regulation. By application of standard matrix operations such as additions or multiplications, the respective regulatory add-ons such as new or amended requirements can be factored in, which thereby increases the complexity of the matrix. When repeating or expanding these operations, the complexity will even increase further and faster as any application of the various mathematical computations highlights. The applications of such matrix operations in the area of financial regulation is useful with respect to capital requirements, reporting requirements, risk management requirements or trading restriction requirements which can be reproduced by way of such calculations indicating the impact of (additional) regulatory measures in concrete circumstances.

3.2. Causality and complexity

As the means of matrix calculations demonstrate, complexity in financial regulation can easily escalate to levels which are deemed to be of excessive nature as numerous concrete current regulatory frameworks reflect (good examples in this context are both the MiFID II/MiFIR package and the CRD IV/CRR framework in the EU or the Dodd Frank Act in the US). The justification for such increases in regulatory coverage and complexity is traditionally the argument that the complexity in financial structures requires adequate (complex) regulatory responses. However, this argument can only partly be supported when evaluating concrete regulatory measures to tackle financial stability consideration whereas paternalistic consumer protection measures tend to have contrary effects. This means that the stressed causality is typically reversed because the permanent – intended or unintended – regulatory

push to more quantitative and qualitative complexity triggers complexity in financial structures and system as a response. Thus, the reversed causality helps mitigating regulatory costs and restrictions. In addition, complexity in regulation has competitive ramifications since it causes higher entry barriers associated with the costs of regulatory compliance. Costs of regulatory compliance are considered as fixed costs which may also have a price rise effect on financial products which cannot be in the interest of clients of financial services. Hence it is important to get a better understanding on whether regulatory complexity can be measured.

3.3. Measuring regulatory complexity

Although the application of mathematical computations such as matrix calculations are instrumental in the assessment of complexity, it remains difficult to measure complexity in financial regulation. Complaints about the perceived increase in complexity of financial regulation coming with the proliferation of new regulatory requirements have continuously been voiced for over 10 years and beyond. However, objective evidence to such complaints can be provided twofold. First, the quantitative increase in the volume of bank regulatory frameworks is staggering when for example considering that the Basel framework exponentially grew from the original Basel I framework of 1988 with 30 pages to the Basel II revision in 2004 with 347 pages and finally to the recent Basel III update with 616 pages. Similar developments can be observed in the areas of securities regulation as well as insurance regulation where for instance the MiFID framework when advancing from MiFID I to the recently implemented MiFID II/MiFIR made it up to a volume of a few thousand pages (including implementing measures and ESMA guidelines) similar to the Solvency framework which has accumulated in the course of advancing to the current Solvency II regime more than 3,200 pages of rules. Comparable quantitative increases in new regulatory requirements can be monitored in investment fund regulation where, for instance, the European UCITS framework from its original UCITS I to the current UCITS V amendment dramatically expanded in quantitative terms. In addition to this, the central US regulatory response to the GFC, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 consisted of 848 pages from its introduction.

These dramatic increases in the sheer quantitative figures of financial regulation have also been accompanied by a significant increase in staff of National Competent Authorities (NCA) where, for instance, the Austrian Financial Market Authority (FMA) has quadrupled its number of staff between 2006-15. Figures of other NCAs in both the EU and the US show comparable developments as well as the continuously expanding ESMA at supranational level.

Notwithstanding these impressive quantitative increases in both the quantitative increase in pages of new regulation as well as in new staff, one has to bear in mind that the perceived increase in regulatory complexity based on such quantitative

figures is somewhat relative because other industries are confronted with much larger (quantitative) amounts of pages of regulation or bigger numbers of regulators staff. This can be underscored by facts such as that the *Code rural et de la peche maritime, code forestier* in France has more pages than the *Code monetaire et financier* or that the Federal Aviation Administration (FAA) has more employees than the Fed system in the US.

Against this background, one has carefully to calibrate the nexus between the complexity and quantity of financial regulation since quantity per se is often just one parameter of complexity. Consequently, measuring regulatory complexity requires a multiple-layer approach addressing important questions such as the difficulty of understanding regulation, the difficulty of drafting regulation without mistakes, or the difficulty of testing the application of regulation on a specific entity. However, in order to be able to answer such questions, respective quantitative (impact) assessments of market participants, regulators and supervisors are essential which has general limitations in the need for massive amounts of data which are not necessarily available as well as mathematical and/or statistical constraints when aggregating data. Moreover, even in case it was possible to compile the necessary data and to conduct quantitative (impact) assessments, several significant shortcomings when conducting such exercise are likely to happen such as the limited, often sector-tailored availability of information which then needs to be factored into the methodology used, the structural differences of business models as well as possible business substitutions. Considering these likely difficulties and limitations of measuring regulatory complexity in a more precise manner, it remains questionable whether the compilation of massive amounts of (new) data and reporting requirements is the most effective way forward. In any case, a promising alternative to this is the assessment of current financial regulation with a focus on its tools of risk measurement.

4. COMPLEXITY OF FINANCIAL REGULATION AND UNCERTAINTY

4.1. Complexity and risk measurement

Risk measurement as the evaluation of the likelihood and extent of risk has been one of the focus areas of the post-GFC regulatory environment because it is considered as a critical tool for improved risk management. As the GFC revealed, risk management, which is traditionally understood as the identification, evaluation and prioritization of risks followed by coordinated and economical application of resources to minimise, monitor, and control the probability or impact of risks to business operations (see Hubbard, *The Failure of Risk Management*, p 46), has been inadequate. Consequently, since managing risks is at the core of managing financial institutions, the regulatory responses – ranging from banking law to securities law to insurance supervisory law – have been massive, with increasingly complex risk measurement requirements and a substantial sophistication of risk management in general.

In addition to this, the risk management function within a financial institution has been strengthened, as the ever-lengthening regulatory rulebooks, such as CRD/CRR, MiFID II or Solvency II convincingly underscore.

However, this regulatory focus on risk management with enhanced quantitative tools of risk measurement is also a reflection of the general understanding that both the financial markets as well as financial regulation have become increasingly complex in the post-GFC environment. This means in other words that complexity has been met by even more complexity in order to improve the predictability and prevention of future financial crises. Although this is a noble and at first sight rational approach, it is questionable whether it is compelling and successful because it almost exclusively focusing on the notion of risk and therefore lopsided in terms of continuously introducing more detailed and sophisticated quantitative risk measures. This implies that the regulatory approach is driven by the assumption that accurate quantitative measures are the panacea to predict and prevent future financial crisis. However, there seems to be a confusion of risk with uncertainty.

4.2. Risk and uncertainty

Before shedding more light on the confusion between risk and uncertainty, it is important to point out that both mainstream economics and finance are based on the so-called “rational agent model”. This means that the main assumption in economics and finance is that economic agents act in a rational manner and that thereby their respective actions are conducted in situations of known and calculable risks. However, as indicated above, this strong and omnipresent assumption does not reflect market reality since each rational agent would have to act on full knowledge of the future consequences of its and other agents’ reactions – see also Holland, *Complexity*, p 24 – which is neither feasible nor realistic. In other words, real-world problems do not necessarily always fall into the various categories of known and calculable risks. Hence, the “rational agent model” has significant restrictions which cannot be attenuated by the general statement that any model is only an abstraction of reality because its basic assumption of rational agents is simply not valid. Moreover, the limitations based on the assumption that rational agents conduct their actions in situations of known and calculable risks typically leads to the double-edged conclusion that providing more information is always perceived to be better than less. Thus, prospectuses and other information documents are continuously enlarged with additional information, particularly risk measurements. Leaving aside the fact that most of the provided information documents are neither read nor fully understood in practice, the conclusion that providing more information is always better than less, requires an increasing precision and thereby sophistication of the information (particularly about risk) provided. However, this increasing precision has the ancillary effect that it also increases complexity in terms of both, the information provided and the regulatory tools in place to cope with it. Moreover, any traditional “rational agent model” does

not reflect the costs of complexity which means that complexity is simply neglected.

In addition to neglecting complexity and the almost exclusive material reflection of risk with the clear tendency of increasing precision and sophistication, rational agent models do confuse risk with uncertainty. Almost a century ago, Frank Knight in *Risk, Uncertainty and Profit* stressed that “[the] practical difference between the two categories, risk and uncertainty, is that in the former the distribution of the outcome in a group of instances is known, [...] while in the case of uncertainty this is not true [...]”. This means that while risks can be calculated, ie with probability calculations, uncertainty arises in case not all risks are known or even knowable. Thus, the distinction between risk and uncertainty is so crucial but unfortunately neglected in both rational agent models and consequently financial regulation.

The negligence of both uncertainty and complexity in rational agent models has implications on other economic models, particularly the dominating assumption of normal distribution, ie in the Black-Scholes model. A normal distribution, well-known when displayed in bell-shaped curves, is often used in complex, adjusted economic models but has its known weaknesses at its tails. These weaknesses which are based on statistical and mathematical aspects culminate in the negligence of fat tails (of the curve) or black swans, which stand for certain kinds of rare and unpredictable events, in other words, uncertainty (for further details, see Taleb, *The Black Swan*). Although economic models based on the assumption of normal distribution do neglect black swans, they tend to be overly flexible in explaining the events within the bell-shaped curve which itself has the tendency to act as a trigger of uncertainty.

4.3. *Uncertainty*

When accepting that real-world problems go beyond the categories of known and calculable risks and therefore uncertainty exists, it is crucial to be aware that it is impossible to assign probabilities of uncertainties. Therefore, in the words of Knight:

[u]ncertainty must be taken in a sense radically distinct from the familiar notion of risk, from which it has never been properly separated. . . The essential fact is that “risk” means in some cases a quantity susceptible of measurement, while at other times it is something distinctly not of this character; and there are far-reaching and crucial differences in the bearings of the phenomena depending on which the two is really present and operating. . . It will appear that a measurable uncertainty, or “risk” proper, as we shall use the term, is so far different from an unmeasurable one that it is not in effect an uncertainty at all (Risk, Uncertainty and Profit, pp 19-20).

This is important in its practical application because as evidence has shown, financial markets can be very sensitive to minor adjustments, ie economic or political, leading to different outcomes of non-linear nature. Similar effects can be

observed when assessing the impact of failures of individual financial institutions on the financial system.

The incommensurability of uncertainties is not only applicable to black swans in the sense of certain kinds of rare and unpredictable events but is deeply rooted in human behaviour. Individual, not always rational, actions are sharpened by respective beliefs about the past, the present and the future which implies that the unpredictability of human action is an important factor in triggering uncertainty. Consequently, the assumption of rational agents again needs to be rejected on the grounds of the unpredictability of human action (see extensively on the various facets of human action, von Mises, *Human Action*). In practical terms, the differentiation between risk-takers and risk-averse actors tends to be a solid means of categorising expected investor behaviour in financial markets, but does not automatically mean that investors in neither category may be prone to irrational exuberance. Thus, the chance of meeting a black swan cannot only be limited to rare events outside the normal distribution although the probability there is much higher.

As these reflections demonstrate, many human actions cannot be mapped by traditional risk management criteria or even quantitative risk measures but are subject to uncertainty. Hence, it is questionable whether the regulatory focus on risk management is a promising and effective way forward or simply the line of least resistance (see for concrete examples Schwarcz, *Regulating Complexity in Financial Markets*, pp 238-45). In any case, the management of uncertainty is per se nothing new as numerous sciences such as technology, biology, epidemiology, meteorology or psychology indicate. Moreover, behavioural economics has emerged as a separate sub-discipline of economics by factoring in behavioural aspects linked to risk and uncertainty. For an excellent overview on judgment under uncertainty, see Kahneman, Slovic & Tversky (eds), *Judgement under uncertainty: Heuristics and biases*; the works by Kahneman and Tversky were groundbreaking in this context and stimulated further research and push for behavioural economics. Without going into the shallows of the technical aspects of uncertainty management with respect to these sciences, it is striking to note that the common feature in the management of uncertainty is the development of robust but simple strategies. This has been nicely pointed out by Simon in the article “A Behavioral Model of Rational Choice”, pp 99-118, who showed that human behaviour tends to follow simple rules precisely because humans operate in complex environments, which was appropriately labeled as bounded rationality.

5. OUTLOOK: THE QUEST FOR NEW APPROACHES TO FINANCIAL REGULATION

The argued critical stance towards current financial regulation based on the restrictions of the underlying rational agent model, the unjustified overreliance on risk and the negligence of uncertainty calls for a reassessment of the regulatory approaches taken towards financial markets. Such

reassessment shall be based on three key reflections which may be helpful in the quest for the grail:

- (a) *Reflections on complexity and CAS*: As pointed out, financial markets need to be understood as CAS, which implies that the current regulatory approach addressing phenomena such as contagion, resilience or systemic threats is not sufficient, when not addressing the notion of complexity. This means that financial regulation needs strategies to address the nature of CAS; since financial markets are without doubt of nonlinear nature, they continuously adapt and are prone to spontaneous orders. When comprehensively reflecting on these features of CAS, it will be easier to understand systemic threats as well as the adaptive nature of financial markets. Lo in *Adaptive Markets* has already meaningfully demonstrated the necessity for such a better understanding of the real functioning of financial markets by directly addressing their adaptive nature. Such improved understanding of the functioning of financial markets will ensure a better management of such CAS, especially when gaining valuable insights and evidence from other sciences such as biology, epidemiology or technology.
- (b) *Reflections on risk versus uncertainty*: As demonstrated, real-world situations can be characterised by Knightian uncertainty events which means that the lopsided regulatory focus on risk with increasing precision and sophistication does not only go astray but it is also not efficient to only add new “risk” categories to already complex regulatory frameworks when totally neglecting uncertainty. In addition, the omnipresent assumption of normal distribution and the negligence of black swans needs to be mitigated by an improved understanding of human behaviour. Only a thorough understanding of the restrictions of the traditional rational agent model will help to develop useful strategies for an effective management of uncertainties which are a given in any CAS. Again, helpful insights from other disciplines such as biology, technology as well as behavioural economics need to be made use of in this context. Finally, accepting *Simon’s* approach of bounded rationality, which means that human behaviour tends to follow simple rules precisely because humans operate in complex environments shall help to move away from the current sprinkler system of financial regulation which tends to primarily increase precision and complexity, but does neither address nor solely manage real-world uncertainties.
- (c) *Reflections on the need for more interdisciplinary in financial regulation*: As discussed, important insights in the understanding of and intervention into CAS as well as the management of uncertainty can be obtained from other disciplines. Biology, technology or behavioural economics are only a few worth mentioning. Although some of the financial regulators have started to incorporate findings from behavioural economics into

their respective regulatory work (the FCA in the UK as well as ESMA at European level are worth mentioning here), in many cases, one unfortunately gets – in practice – the impression that financial regulation is still often conducted from the ivory tower, designed by bureaucrats with no practical experience, neglecting market realities and resisting innovation in their respective area. When analysing the vast literature on the struggling interplay between financial supervisors and central banks, one can easily understand that innovation and interdisciplinarity are no buzz words in this area. Thus, it is not surprising that the current post-GFC environment is rather characterised by a sprinkler system of financial regulation which turns out to be rather inefficient but costly – see Kammel, “Government Versus Markets” in *The Changing Landscape of Global Financial Governance and the Role of Soft Law*, pp 19-21.

As these three reflections indicate, law as the driving discipline in financial regulation needs to accept some significant challenges. First, there is a clear quest for more interdisciplinarity, also with sciences that are conceptually not that close to law such as biology, epistemology or technology. Thus, the first examples of incorporating aspects of behavioural economics into financial regulation need to be strengthened.

Moreover, recalling the origins of law is worth pursuing because when reflecting on the history of law, it is noteworthy

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that some norms (or acts) are clearly more successful and thereby longer-lasting than others. As examples like the 10 commandments, Roman law, the *Code civil de Francais* of 1804 or the *Allgemeines Bürgerliches Gesetzbuch* of 1811 in Austria show, the composition of broad, generally accepted principles in combination with some precise rules is way more successful than complex, technical norms which are only to be understood by experts in their respective fields. Unfortunately, financial regulation is a prime example of the latter. Against this background, it is important to stress that the future of financial regulation lies in its robustness, interdisciplinarity and simplicity, not in its current complexity and perceived safety.

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IALS Events

All events take place at the Institute of Advanced Legal Studies. Events are free unless otherwise indicated. CPD accreditation is provided with many events. For enquiries and bookings please refer to Belinda Crothers, Academic Programmes Manager, IALS, 17 Russell Square, London WC1B 5DR (tel: 020 7862 5841; email: belinda.crothers@sas.ac.uk).

You can also find out what is coming up on the School of Advanced Study events listing page (<http://www.sas.ac.uk/support-research/public-events>) or on our Eventbrite (<http://www.eventbrite.co.uk/o/institute-of-advanced-legal-studies>) and Facebook pages (see <http://www.ials.sas.ac.uk/>).

Friday 12 October, 10.00am – 5.00pm Conference

The future of the commercial contract in scholarship and law reform

This third annual conference presents research undertaken during 2016-2018 at the IALS Centre for Corporate Law (CCL). It focuses on the interface between public and private law, the new frontiers of commercial law and will have a special section on the notion of hardship in international commercial contracts (including public/private contractual relationships) and related rules and remedies.

Academic convenors:

DR MAREN HEIDEMANN

IALS

MS CATHERINE PEDAMON

University of Westminster

DR JOSEPH LEE

University of Exeter

For information on the future of the Commercial Contract in Scholarship and Law Reform project, and the programme of the 2017 conference, access the links provided on <https://ials.sas.ac.uk/events/event/16160>

Organised by the IALS CCL, University of Westminster, and University of Exeter. Further information on the programme will be posted in due course.

IALS Call for Papers Conference

Friday 23 November 2018

Transforming cities with artificial intelligence: law, policy, and ethics

Deadline for abstracts: Friday 13 July 2018 (5pm BST)

The Information Law and Policy Centre (ILPC) at the Institute of Advanced Legal Studies is pleased to announce this call for

papers for the centre's Annual Conference on 23 November, supported by Bloomsbury Professional's *Communications Law* journal.

We are looking for high quality and focused contributions that consider information law and policy within the context of improving the governance of the public interest within cities through the use of AI-based systems. Whether based on doctrinal analysis, or empirical research, papers should offer an original perspective on the implications posed by the use of algorithms and data-driven systems for improving the effectiveness of the public sector whilst also ensuring that such processes are governed by frameworks that are accountable, trustworthy, and proportionate in a democratic society.

Topics of particular interest in 2018 include:

- Explainability and transparency of algorithms
- Smart cities
- Data privacy and ethics
- Internet of Things
- Cyber security
- Open data and data sharing
- Public-private partnerships
- AI and digital education
- The EU General Data Protection Regulation

The conference will include the Information Law and Policy Centre's Annual Lecture and an evening reception.

The ILPC is delighted to announce that **BARONESS ONORA O'NEILL**, a leading philosopher in politics, justice, and ethics, who is also a Crossbench Member of the House of Lords and Associate Fellow of the University of Cambridge Leverhulme Centre for the Future of Intelligence (CFI), will deliver this year's Annual Lecture.

Attendance will be free of charge thanks to the support of the IALS and our sponsors, although **registration is required** as places are limited. See the Events Section of the IALS website (<https://ials.sas.ac.uk/events>) for further details.

The best papers will be featured in a special issue of *Communications Law*, following a peer-review process. Those giving papers will be invited to submit full draft papers to the journal by 1st November 2018 for consideration by the journal's editorial team.

Please send an abstract of between 250-300 words and some brief biographical information to Eliza Boudier, Fellowships and Administrative Officer, IALS (eliza.boudier@sas.ac.uk) by 13 July 2018. Abstracts will be considered by the Information Law and Policy Centre's academic staff and advisors, and the *Communications Law* journal editorial team.

Other Events

Sunday 2 September – Sunday 9 September

Thirty-Sixth International Symposium on Economic Crime

Unexplained wealth – whose business?

Jesus College, University of Cambridge

PROFESSOR BARRY A K RIDER OBE, Executive Director and Co-Chairman of the Symposium, writes:

“Over the last 36 years, the Cambridge Symposium has established itself as a unique vehicle for promoting, at a truly international level, greater understanding of the real and practical issues involved in preventing and controlling economic crime, corruption and abuse and thereby facilitating meaningful cooperation. The programme for our Thirty-Sixth Annual Symposium has been designed on the advice of agencies and individuals with real and current involvement in identifying and controlling the risks, particularly to those who mind other people’s wealth, presented by criminal and subversive activity. In many of our jurisdictions there is a perception, justified or otherwise, that numerous laws we have enacted and strategies that have been adopted have not achieved what it was hoped and what our societies expect. On the other hand considerable burdens both financial and in terms of risk have been placed on our banks and other financial and business institutions. This year the symposium will focus as its main theme on how we can be more effective in identifying and controlling wealth that is both “unexplained” and suspected of having questionable

origins. In other words, we will be placing emphasis on the possession and control of suspect wealth and the implications that the new laws and practices of those in law enforcement have for those who in the ordinary course of business handle other people’s wealth and those who advise them.

“As in previous years we will also address in plenary sessions, but also in specific workshops, a host of other issues related to economically motivated crime and misconduct and the risks that face our economies and the stability of our financial and trade systems. The emphasis is always on the practical aspects and how we might better manage risk and achieve more effective results whether in terms of disruption or through more conventional legal and regulatory procedures. Well over 600 experts from around the world will share their experience and knowledge with other participants drawn from policy makers, law enforcement, compliance, regulation, business and the professions.”

The symposium is sponsored by The Centre for International Documentation on Economic and Organised Crime (CIDOEC), the Institute of Advanced Legal Studies; the National Crime Agency; City of London Police; the Serious Fraud Office; the Crown Prosecution Service; and the Metropolitan Police.

For further information, contact Mrs Angela Futter, Symposium Manager (email: info@crimesymposium.org; tel: +44 01223 872160) or visit www.crimesymposium.org

IALS News

JULES WINTERTON TO STEP DOWN



Jules Winterton, who pioneered its adoption of digital technologies for international access to legal research materials

and resources, will retire this autumn after nearly five years as Director of the IALS.

A significant figure in the law librarianship, legal information provision and legal bibliography fields, Mr Winterton has completed 27 years at the Institute and announced his retirement on 23 February 2018. He first joined as the librarian, a role he continued to fulfil after taking up the directorship in April 2013. Professor Rick Rylance, Dean and Chief Executive of the School of Advanced Study, said:

I will be saddened to see Jules leave. He has been an outstanding colleague over many years and, though I have known him only a relatively short time, I can say with confidence that he will be much missed, not only in IALS, but in the School and university, for his calm good sense and thorough knowledge. We all wish him well in his retirement.

Mr Winterton is associate professor at the Kwame Nkrumah University in Ghana, and a member of the board of the Ghana Institute of Advanced Legal Studies. He started his professional career at Queen Mary University of London, having worked at the Institute of Classical Studies. From 2004 to 2010 he was president of the International Association of Law Libraries and in 2012 received the Joseph L Andrews Bibliographical Award in the USA for the *International Handbook of Legal Information Management*. His many accomplishments include board membership of a range of legal organisations including the British and Irish Legal Information Institute, LLMC Digital, and the Chinese and American Forum on Legal Information and Law Libraries. He was chair of the British and Irish Association of Law Librarians in 1994/95 and received its Wallace Broom Memorial Award in 1998 for *Information Sources in Law* (2nd edn). He has been a visiting fellow at the Max Planck Institute for Comparative and International Private Law in Hamburg and at the University of Florence. In a statement, Mr Winterton said the university and the school have played a large part in his career.

I have worked at the Institute of Classical Studies, Queen Mary University of London, and for quite a few years at IALS, and I have had a great time at all of them. Thank you to all my friends and colleagues who have made the university such an interesting and worthwhile place to work. I look forward to developing my outside interests and also continuing my involvement in access to legal information. I wish everyone the very best for the future.

IALS TRANSFORMATION PROJECT IS UNDER WAY

Work has begun on the IALS transformation project, the multi-million pound refurbishment of Charles Clore House taking place over the next two years.

On 1 June 2018 the academic and administrative offices moved from the fifth floor to Dilke House at 1 Mallet Street, Bloomsbury, London WC1E 7JN. The Sir William Dale Centre

for Legislative Studies remains on the fifth floor of the IALS at room 509a.

Building work will take place over the summer, with library staff and the training room moving to the fifth floor and a temporary entrance to the library opening on the second floor. A new reading room will be created on the fourth floor,

Details of the project have been posted on the IALS website (see <http://ials.sas.ac.uk/about-us/news/ials-transformation-project-2018-2020>).

MASON GIVES PRESENTATION AT ITALIAN TECHNOLOGY CONFERENCE

Stephen Mason – barrister, IALS Associate Research Fellow, and Member of the IT Panel of the General Council of the Bar of England and Wales – gave a presentation at the Genova DET 2018 Il doppio volto della tecnologia 2018 (“Law, Ethics and Technology: the double face of technology”) conference in Genoa, Italy on 11 May 2018.



Stephen presented Avv. Barbara Grasso, who chaired the session, a copy of his book *Electronic Evidence* (4th edn) published by the IALS Open Book Service for Law. The conference was organised by Ordine degli Avvocati di Genova and Consiglio Notarile Genova and held at the Palazzo Ducale, in the Sala del maggior Consiglio.

Other News

REPORT BY WOMEN'S AID AND QUEEN MARY ASKS "IS IT #TIMES UP FOR THE FAMILY COURTS?"

Women's Aid and Queen Mary University of London have released a new report on domestic abuse, human rights and child contact cases in the family courts, revealed to coincide with closing of the Domestic Abuse Bill consultation.

Survivors of domestic abuse reveal their experience of systematic gender discrimination within the family courts that is putting children's safety at risk, according to Women's Aid and Queen Mary University of London's report *What about my right not to be abused? Domestic abuse, human rights and the family courts* released on 30 May 2018.

The report collected quantitative and qualitative data from 72 women living in England on their experiences of the family courts which confirms and builds on findings from existing research in this area. The report uncovers that there is a prevalence of damaging gendered stereotypes and harmful attitudes towards domestic abuse survivors and mothers within the family courts; this is putting survivors and their children's safety at risk and preventing them from accessing justice.

Women's Aid has called for the government to commission an independent inquiry into the family courts to tackle this systematic gender discrimination. Survivors reported that they were repeatedly not believed, were blamed for experiencing abuse and seen as unstable by judges, barristers and Cafcass officers. Almost half of survivors (48%) reported that there was no fact-finding into the allegations of domestic abuse in their case, while one survivor reported that her abusive ex-partner was able to cross-examine her about her sexual history during child contact proceedings.

In January 2016, Women's Aid launched the "Child First" campaign calling on the family courts and the government to put the safety of children back at the heart of all contact decisions made by the family court judiciary. Since the campaign launched there has been some progress made with the revision of Practice Direction 12J, the guidance given to family court judges in child contact cases where there is an allegation of domestic abuse, and a government commitment to ban the practice of abusers cross-examining victims in the family courts. Yet the report shows that there continues to be a lack of protections within the family courts for survivors of domestic abuse. One quarter of survivors (24%) surveyed reported that they had been cross-examined by their abusive ex-partner during the court hearings; while three in five survivors (61%) reported that there were no special measures – for example, separate waiting rooms, different entry/exit times, screen or video link – in place in the court despite allegations

of domestic abuse in their case. These lack of measures to protect survivors from abuse during the court process harms their ability to give evidence and prevents them from effectively advocating for their children in court. The report also revealed a clear link between survivors' experience of domestic abuse, including coercive control and post-separation abuse, and risks to children's wellbeing and safety.

Over two thirds of survivors (69%) reported that their abusive ex-partner had also been emotionally abusive towards their child(ren), while almost two in five survivors (38%) reported that their abusive ex-partner had also been physically abusive towards their child(ren). Yet unsupervised contact with an abusive parent was most likely to be awarded in the cases in the sample taken by the report. This reinforced findings from a recent report by Cafcass and Women's Aid which revealed that unsupervised contact was ordered at the final hearing in almost two in five cases where there was an allegation of domestic abuse (39%).

In the most extreme cases, contact decisions threatened survivors and their children's human right to life when contact orders placed them in unsafe proximity to abusive ex-partners or confidential information about their address or location was revealed during the court process. Survivors' lack of access to a fair hearing is clearly putting children's wellbeing and safety at risk.

Katie Ghose, Chief Executive of Women's Aid, said:

We're calling time's up on a family court system that is not just, we're calling time's up on a family court system that does not take allegations of domestic abuse seriously, we're calling time's up on a family court system that shows attitudes of deep-rooted gender discrimination. We want a family courts system where survivors can access justice free from abuse and for children's safety to be put at the heart of all decisions made by the family courts.

Professor Shazia Choudhry, Professor of Law at Queen Mary University of London, said:

When the Human Rights Act was passed in 1998 it was heralded as an opportunity to "bring rights home" in order for British citizens to argue for their human rights in British courts. What this exploratory research has demonstrated is that this has not been the case for a number of women survivors of domestic abuse in the family courts. This research indicates that the human rights of these survivors to their family life and to be free from discrimination are not being given sufficient effect in the domestic family courts.

Moreover, there is evidence of the family courts failing in their responsibility to prevent and investigate acts of violence towards these survivors and facilitating or failing to challenge a climate of gender discrimination within the courtroom. The findings of this research are deeply concerning and require urgent attention from both the judiciary and the legal profession.

LSE ACHIEVES FOURTH PLACE FOR LAW IN THE COMPLETE UNIVERSITY GUIDE

The LSE has been ranked fourth for law in the Complete University Guide 2019 behind the universities of Cambridge, in first place, Glasgow and Oxford. UCL, in sixth position, and the Dickson Poon School of Law at Kings College, ranked ninth, are also in the top ten. Other member institutions of the University of London, and their positions in the legal section of the guide, are Queen Mary (21st); Birkbeck (39th); SOAS (43rd); and City (53rd).

CANADIAN PARLIAMENTARY INQUIRY RECOMMENDS ADOPTING JURY TOOL DESIGNED BY PROFESSOR CHERYL THOMAS



A Canadian Parliamentary inquiry into improving support for jurors has recommended that all Canadian provinces and territories adopt a juror notice designed by UCL Faculty of Laws Professor Cheryl Thomas and is now used in all jury trials in England and Wales.

The Parliamentary committee said in its report (at p 17) that it: *was particularly impressed with the jurors’ notice handed out by judges to all selected jurors in England and Wales. The three-page pamphlet provides a simple and clear explanation of jurors’ legal obligations and the potential consequences of not respecting these rules.*

Professor Thomas gave evidence to the Standing Committee on Justice and Human Rights in February 2018. In her evidence she explained that the new juror notice for England and Wales was the result of detailed research she has conducted with actual juries at the request of the Lord Chief Justice of England and Wales.

This research identified the most effective means of ensuring that jurors understand their legal responsibilities and are aware of the sources of support available to them during and after any trial. It resulted in a new Criminal Practice Direction (26G.5) requiring the juror notice be used in all criminal jury trials in England and Wales. (Link to Criminal Practice Direction 26G.5: <https://www.justice.gov.uk/courts/procedure-rules/criminal/docs/criminal-practice-directions-amendments-july-2017-summary-of-changes.pdf>).

BIRKBECK REACHES NATIONAL FINAL OF MOOTING CONTEST

Birkbeck Law School has reached the final of the Oxford University Press National Moot Competition after beating City University in the semi-final.

The Law School’s mooting team of Daniel Cullen and Lewis Aldous fought the first three rounds, with Santosh Carvalho taking over from Lewis in the semi-final clash. All three team members are studying for the intensive LLM Qualifying Law Degree in addition to working, in common with many other Birkbeck students.

Human dignity: an illusory limit for the evolutive interpretation of the ECHR?

by Pavel Bureš

When speaking about human rights protection at the national, regional or worldwide level, an idealist would never put any limits to it. The sole fact of limiting an evolution of norms protecting human rights would be seen as counterproductive or even illogical. To claim that human dignity might be a limit for evolutive interpretation of the European Convention on Human Rights (ECHR) could be seen by an idealist as a nonsense. However, the ECHR as an international treaty is not floating in a legal, political and social vacuum, but it is still anchored in a legal, historical and political reality. The aim of this article is to portray some basic elements of the relationship between the concept of human dignity and the evolutive interpretation. The author is unable to give a final answer to the question in the title of this article, but the purpose is more to spread out key elements, notions and considerations for further thoughts. The article will first present some basic issues related to the subject matter, will then focus on the evolutive interpretation, and finally outline the role of human dignity in the case law related to the evolutive interpretation.

1. WHAT IS ON THE STAGE?

During its 65 years of existence, since it was adopted in 1950 by 10 Council of Europe Member States and entered into force in 1953, the ECHR has made important changes to the design and content of the national legal orders of all contracting states (47 Council of Europe Member States). Moreover, through its case law the ECHR has implicitly and sometimes explicitly created the European Public Order (one can count more than 100 judgments and decisions where the European Court of Human Rights (ECtHR) refers to this concept). In spite of being a classical international treaty, the Convention – for its content, the ECtHR’s jurisprudence, and the phenomenon of constitutionalisation – is well and truly immersed in the day-to-day life of Europeans. However, the court has never given up treating the Convention as an international treaty and so it is for states – the contracting parties. Thus, the Convention is in a material way something more than a formal international treaty, and so the interpretation of such a treaty clashes with the very specific legal, political, social, cultural situation

and environment in Europe. It is not possible to treat the Convention as only a classical reciprocal international treaty, even though basic technical processes definitely apply to it. This is true, for example for the process of interpretation. On several occasions, the ECtHR referred in its judgments to the Vienna Convention on the Law of the Treaties and to the rules of interpretation enshrined in it and applicable also to the ECHR. For the purposes of this article, I can use the general definition of interpretation which is given in the *Max Planck Encyclopaedia of Comparative Constitutional Law* (Mattias Herdeger, “Interpretation in international law”, R Wolfrum (ed), vol VI (Oxford University Press, 2012):

Interpretation in international law essentially refers to the process of assigning meaning to texts and other statements for the purposes of establishing rights, obligations. Interpretation is both a cognitive and a creative process.

With regard to the changes of meaning over time, different adjectives are coupled with the term “interpretation” to portray the dynamic/evolutive/evolutionary interpretation. It means there is a new meaning with respect to the subsequent practice of states, new technologies, new norms etc (Julian Arato, “Subsequent Practice and Evolutive Interpretation: Techniques of Treaty Interpretation over Time and Their Diverse Consequences”, *The Law & Practice of International Courts and Tribunals*, vol 9, (Brill, 2010)). With regard to the ECHR, evolutive interpretation lies within the concept of the Convention as “a living instrument” (see *Tyrer v UK* (1978) 2 EHRR 1), to be interpreted in “present-day conditions” (see *Tyrer v UK*, *Marckx v Belgium* (1979) 2 EHRR 330) where the protection of rights embedded in it must be “practical and effective and not theoretical and illusory” (*Airey v Ireland* (1979) 2 EHRR 305).

As mentioned above, the Convention and the adjudicatory power of the ECtHR lies within the legal, political and social environment of Europe. The issue of evolutive interpretation touches other different topics that are more or less related. The author will not examine them in detail, but rather list five main perspectives, as they are important in the overall

understanding of the topic.

(i) ***Theoretical perspective – judicial activism and judicial self-restraint***

Judicial activism or judicial self-restraint are theoretical approaches to the judicial activity of higher courts in general (the theory was first applied to the US Supreme Court). Some authors describe the relationship between those approaches as a “tension between continuity and creativity” (Archibald Cox, “The Supreme Court: Judicial Activism or Self-Restraint?” 47 *Maryland Law Review* 118, 138). The judicial activism approach was also widely debated with respect to the decision-making activity of the ECtHR, and so for the purposes of evolutive interpretation (eg *Marckx v Belgium*). Different theoretical analyses and outcomes have been presented since. Paul Mahoney opined that “as far as the European Convention on Human Rights is concerned, the dilemma of activism versus restraint is more apparent than real” (Paul Mahoney, “Judicial Activism and Judicial Self-Restraint in the European Court of Human Rights: Two Sides of the Same Coin” (1990) 11 HRLJ 57, 59). He concludes (at p 88): “judicial activism and judicial self-restraint are not diametrically opposed and irreconcilable attitudes to adjudication, but are rather essential and complementary components of the process of on-going enforcement of the Convention’s fundamental rights through judicial interpretation”.

Judge Popović points out that those “basic approaches are to some extent parallel” (Dragoljub Popovic, “Prevailing of Judicial Activism over Self-Restraint in the Jurisprudence of the European Court of Human Rights”, (2009) 42 *Creighton L Rev* 361, 395). She further concludes (at p 396) that: “A range of various techniques used by the court, such as evolutive interpretation, innovative interpretation, interpretation contrary to the drafters’ intent, and autonomous concepts, prove that judicial activism has prevailed in the court’s jurisprudence”. If in general terms this conclusion of Judge Popović seems to be acceptable and logically justified by the previous jurisprudential activity of the ECtHR, it does not establish per se any adjudicatory limit to the so-called activism of the court. The court has to face different types of opposition, especially from contracting states (cf the 2018 Draft Copenhagen Declaration, where the High Level Conference states in point 14 that:

[it] affirms the importance of securing the ownership and support of human rights by all people in Europe, underpinned by those rights being protected predominantly at national level by State authorities in accordance with their constitutional traditions and in light of national circumstances [emphasis added].

The wording of this paragraph was criticised in the court’s opinion on the draft Copenhagen Declaration and has not

been finally adopted by the Conference.

(ii) ***Practical perspective - intentionalism and textualism revisited***

Intentionalism and/or textualism is another topic closely related to evolutive interpretation. In the author’s opinion this is the other side of the same coin to judicial restraint. Textualism or intentionalism in a material way corresponds to what judicial self-restraint is in a theoretical and procedural way. In the same sense, evolutive interpretation (or purposive interpretation) corresponds to judicial activism. In other words, if on the one hand judicial activism or self-restraint represents a theoretical approach to adjudicatory activity of the ECtHR, intentionalism and textualism, and evolutive interpretation on the other hand are practical manifestations of those theoretical approaches. As for judicial activism, textualism/intentionalism are originally linked with US Supreme Court adjudicatory activity. For the purposes of the Convention, Letsas speaks about originalist theories. (George Letsas, *A Theory of Interpretation of the European Convention on Human Rights*, (Oxford University Press, 2007), 60). He differentiates textualism which “argues that a legal provision must mean what it was taken to mean originally, ie at the time of enactment” from intentionalism, which claims “that a legal provision must apply to whatever cases the drafters had originally intended it to apply”. As Popović’s conclusion was the predominance of judicial activism over self-restraint, Letsas’s conclusion was that there had been a failure of originalist theories and a predominance of object and purpose approach with respect to the interpretation of the ECHR. Recently, the contradiction between textualism and the purposive approach has been somehow reconciled by Judge Sicilianos in the case of *Magyar Helsinki Bizottság v Hungary* (Grand Chamber judgment, 8 November 2016, Application no 18030/11). In his separate opinion, referring to the evolutive interpretation he claims that:

this interpretative method allows the text of a convention to be continuously adapted to “present-day conditions”, without the need for the treaty to be formally amended. The evolutive interpretation is intended to ensure the treaty’s permanence. The “living instrument” doctrine is a condition sine qua non for the Convention’s survival!

Sicilianos also stressed the importance of travaux préparatoires for the interpretation of the Convention, however assigning to them the role of subsidiary means.

(iii) ***Political perspective – the issue of sovereignty of contracting states (doctrine of in dubio mitius)***

The issue of the sovereignty of contracting states must be considered at this point. If the contradiction between judicial activism and judicial restraint was wrapped up as a theoretical adjudicative approach, with textualism and purposive interpretation its practical manifestation, sovereignty issues with respect to the

evolutive interpretation reflect legal-political aspects in international law and relationships in the framework of regional human rights protection. There are two different approaches: a traditional one, meaning that in the event of doubt an international treaty – the Convention – should be interpreted restrictively in order to protect state sovereignty, and a new one claiming that in case of doubts the Convention should be interpreted with regard to larger human rights protection (what supports more judicial activism etc). The doctrine of *in dubio mitius* is closely related to classical international law and restrictive theory of interpretation. It was widely developed by the Permanent Court of International Justice in the *Lotus* jurisprudence. Nowadays, the traditional approach of *in dubio mitius* is to be applied for international treaties on human rights, rather than (to the opposite) in cases of such treaties the interpretative presumption is considered as a presumption of effectiveness (*effet utile*) which is used by adjudicatory bodies (see Mattias Herdeger, cited above). For the sake of reconciliation between sovereignty issues mirrored in cultural-societal situations of contracting states and the principle of effectiveness, the ECtHR has created through its jurisprudence the doctrine of margin of appreciation. Macdonald puts it in these words: to “avoid damaging confrontations between the Court and Contracting States over their respective spheres of authority and enables the Court to balance the sovereignty of Contracting Parties with their obligations under the Convention” (Ronald St J Macdonald, “The Margin of Appreciation” in R St J Macdonald, F Matscher, H Petzold (eds), *The European System for the Protection of Human Rights*, (Dordrecht: Martinus Nijhoff, 1993) at 123).

(iv) **Structural perspective – the ECHR as a *sui generis* treaty creating European constitutionalism**

The ECHR is far from being classical international treaty, creating reciprocal rights and obligations to states. Here, the individual is a unique holder of rights in opposition to states. Thus the conventional system creates a special situation where reference can be made to the European public order (cf the ECtHR judgment in *Ireland v United Kingdom*, 18 January 1978, Application no 5310/71, §239, which stated:

Unlike international treaties of the classic kind, the Convention comprises more than mere reciprocal engagements between contracting States. It creates, over and above a network of mutual, bilateral undertakings, objective obligations which, in the words of the Preamble, benefit from a “collective enforcement”.

Again, we may observe a certain tension between treating the Convention as a pure international treaty with, for example, rules of interpretation and the position of states and their autonomy on one hand, and the Convention and its case law creating a unique constitutionalised order for

the region.

(v) **Consequential perspective – the question of predictability (legal certainty)**

This final topic with reference to evolutive interpretation diverges a little from previous patterns. The question arises of whether and how states can themselves be aware of the evolution and when necessary change their national legislation in order not to violate Convention rights.

All five perspectives presented relate closely and intervene somehow in the sole phenomenon of evolutive interpretation and its possible limits. The ECtHR assesses changes in societal issues through the technique of the European consensus. The technique was, especially at the beginning, widely criticised by many authors for the lack of transparency and legal predictability, and the low level of legal certainty (for a developed survey of those critical approaches cf Kanstantsin Dzehtsiarou, *European Consensus and the Legitimacy of the European Court of Human Rights*, (Cambridge University Press, 2015) at 115s). Nowadays, the ECtHR and its research unit provide a better understanding and offer empirical data on national legislation relating to the issue at stake (Luzius Wildhaber, Alrnaldur Hjartarson, Stephen Donnelly, “No Consensus on Consensus? The Practice of the European Court of Human Rights”, (2013) 33 HRLJ 248, 259). The European consensus is mostly based on the national legislation of Council of Europe Member States only. Sometimes the court refers to other instruments – international treaties, soft law documents etc – in what is sometimes criticised for being judicial activism. One can understand the need for the ECtHR to ascertain what present day conditions are. What can trigger criticism is the fact the court relies on national legislation and does not introduce any other values which might be taken into consideration to support its arguments. It is fascinating to see the easiness of the process, a simple arithmetic counting carried out by the court to examine whether or not there is a change in societal perception of the issue at stake.

From the ECtHR’s perspective, evolutive interpretation is not based upon subsequent practice (for a general survey on subsequent practice see Georg Nolte (ed), *Treaties and Subsequent Practice* (Oxford University Press, 2013), but rather perceived as changes in societal and/or delicate issues. This fact reconfirms the specific feature of the Convention as a human rights treaty. It would be difficult to perceive societal changes in contracting states as mere subsequent practice to the treaty within the meaning of Article 31 § 3(b), which stipulates: “that shall be taken into account, together with the context” any subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation. This subsequent practice should thus lead to an agreement (James Crawford, “A Consensualist Interpretation of Article 31(3) of the Vienna Convention on the Law of Treaties” in *Treaties and Subsequent Practice*) which is not the case when the ECtHR has to deal “only” with the European consensus. But what arouses

controversy is the total reliance of the court on changes in societal issues. To put it more bluntly, one may ask whether and to what extent the court is “bound” by the consensus among contracting states in any situations involving changes of societal issues. Should the court respect the “democratic principle” of the creation of new evolutive interpretation in its entirety? It could be said that the court should respect the democratic procedures and national law-making procedures at national level, even though they might be guided by political opportunism, ideologies etc.

Here we come to a stumbling block. The court relies on consensus among Member States, which subsequently leads to evolution in interpretation of human rights norms, without assessing whether this “subsequent practice” of states itself conforms to the protection of human rights. The court accepts this process as an evolution in societal perception.

These doubts lead the author now to examine evolutive interpretation and possible limits thereto.

2. EVOLUTIVE INTERPRETATION

This section is divided into three parts, presenting first some conceptual issues with regard to the evolutive interpretation, followed by applied accounts on the phenomenon within general international law, and finally displaying practical cases of limits with regard to the ECHR.

(i) *Evolutive interpretation as a concept*

Evolutive interpretation is not a specific means of interpretation (compared for example to historical, teleological or contextual) but is rather a specific technique dealing with interpretation of generic terms of the treaty at points in time. Fitzmaurice puts it in another way:

The concept of the dynamic (evolutive) interpretation is often equated with the principle of contemporaneity, the teleological interpretation of treaties as well as the principle of effectiveness (Malgosia Fitzmaurice, “Dynamic (Evolutive) Interpretation of Treaties”, (2008) 21 HagueYIL 101, 102).

As interpretation of international treaties in general and the Convention specifically is “both a cognitive and a creative process” (see the quotation from M Herdeger, above), we may ask about any existence of limits to the *evolutive* interpretation concerning situations, principles or phenomena defined and/or existing in the legal system which would stop the evolution in interpretation. As those limits are not at all explicitly mentioned and elaborated on in the doctrine of international law, and neither have they been pointed out in the international jurisprudence, it is rather difficult to grasp the phenomenon. The same is true with respect to the ECHR. We may ask whether there might be some interpretation, which leads where it should not, goes beyond some limits, and could thus be assessed as an erroneous evolutive interpretation, even though grounded on European consensus. In fact, in this situation shall

the societal changes be taken into the consideration? Should they form the basis for the switch of evolutive interpretation or not? Or put it in differently, do those societal changes reflected in national legislation have to be *adjusted (corrected)*?

This claim, however, would require a thorough analysis of the creation of legal norms of (international) law, the concept of law itself, and the role interpretation plays in this process – something outside the scope of this paper. (For a deep analysis of the authority of international law see for example Samantha Besson, “The Authority of International Law – Lifting the State Veil”, (2009) 31 Sydney L Rev 343). However, in assessing this phenomenon two general methodological approaches towards international law come into consideration: conceptual analysis and focal analysis. Those rather philosophical concepts may oscillate between legal positivism and natural law theory. On one hand, for conceptual analysis we may ask what makes the authority of international law. In this regard Besson, referring to Joseph Raz, speaks about legal normativity of international law or a claim to create obligations to obey the law that in principle precludes some countervailing reasons for action (Samantha Besson, “Theorizing the Sources of International Law” in S Besson, J Taioulas (eds) *The Philosophy of International Law* (Oxford University Press 2010, 173). From the perspective of voluntaristic or positivist theory, the consent of the state backed by state practice is crucial for the existence of international legal normativity. As long as the practice of states evolves, the concept of law being backed by this consensual practice cannot be limited. On the other hand, for focal analysis, however, we are not looking at the concept, but focusing on a goal or aim of the system. Patrick Capps speaks in this regard about “social practices conceived of as purposive phenomena” (Patrick Capps, *Human dignity and the Foundations of International Law* (Hart Publishing 2009) at 40). It might be for international law, for example “peaceful coexistence of the state” or “cooperation between states”. With the change of paradigm one can now witness in international law (see Anne Peters, *Beyond Human Rights: The Legal Status of the Individual in International Law* (Cambridge University Press, 2016), the author asks whether human dignity could be the ultimate purpose of international law (see Patrick Capps, cited above).

(ii) *Evolutive interpretation in international and European adjudication*

As it was outlined above, the evolutive interpretation of treaties is a common interpretative technique in international law, related to a purposive interpretative approach and “part of the teleological principle” (Malgosia Fitzmaurice, cited above, at 117). As dynamism or evolution should reflect changes in state practice or changes in societal issues in states (for human rights issues), the evolutive interpretation presents an element of stabilisation of international relations and then a destabilising ingredient. Bernhardt puts it in this way:

If it is the purpose of a treaty to create longer lasting and solid

relations between the parties or to guarantee personal freedoms to citizens as well as foreigners, it is hardly compatible with this purpose to eliminate new developments in the process of treaty interpretation (Rudolf Bernhardt, “Evolutive Treaty Interpretation, Especially of the European Convention on Human Rights”, 42 German Y.M. Int’l L 11 (1999) 16-17).

Thus in international adjudication, the phenomenon of evolutive interpretation has served for the creation of stabilised relations. The International Court of Justice, for example, interpreted in a evolutive way the obligations with regard to the mandate in South-West Africa (ICJ, *International Status of South-West Africa*, Advisory Opinion, 1950); the watershed line principle in the delimitation of boundaries (ICJ, *Case concerning the Temple of Preah Vihear*, 1962) the Martens clause with regard to the use nuclear weapons (ICJ, *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, 1996); or inserted newly developed norms on environmental protection into a treaty (ICJ, *Gabčíkovo-Nagymaros Project Case*, 1997) and similarly with respect to environment impact assessment (ICJ, *Case concerning Pulp Mills on the River Uruguay*, 2010) and recently with respect to the International Convention for the Regulation of Whaling (ICJ, *Whaling in the Antarctic*, 2014). However, it is in the case opposing Costa Rica and Nicaragua (ICJ, *Dispute regarding Navigational and Related Rights*, 2009) where the ICJ displays developed reasoning concerning an evolutive approach in interpretation. The ICJ distinguishes on the one hand the use of generic terms which in accordance with the intentions of the parties, especially for treaties “entered into for very long period” or “of continuing duration” (§66 of the cited judgment) are subject to evolution, and on the other hand the subsequent practice of states which “can result in a departure from the original intent on the basis of a tacit agreement between the parties” (§64 of the cited judgment). Evolutive interpretation of generic terms of the treaty is not the issue. The original intention of the parties having authority for the change through the mechanism of generic terms is somehow replaced rather by subsequent practice possibly backed by new intentions of the parties. This clear distinction is rather difficult to find in the judgments by the ECtHR.

With regard to the evolutive interpretation before the ECtHR, we are in the presence of neither typical generic terms states intended to be evolved in time (see above the dichotomy between the intentional and purposive approach), nor characteristic state practice which would lead in an “agreement” within the meaning of the Article 31 §3 (b) of the Vienna Convention on the Law of Treaties (VCLT). The adjudicative practice of the ECtHR with respect to evolutive interpretation is rather varied. Recently, Djeflal described a deep analysis on evolutive interpretation before the ECtHR where he pinpoints that “the court has shifted its method between balancing and interpretation, consensus and the VCLT, as well as between various ways to interpret the VCLT” (Christian Djeflal, *Static and Evolutive Treaty Interpretation* (Cambridge University Press,

2016) 343). This again confirms a specific characteristic of the Convention where rights and obligations are not reciprocal and so the classical theory applicable to international law is unlikely be applied.

By way of contrast, in an actual case the court is assessing specific, particular national legislation and the conduct of a state whether it conflicts or not with the obligations arising out of the Convention. In order to entail international state responsibility the court has to find that the particular conduct of a state violated the conventional rights of the applicant. It means that, in the situation of evolutive interpretation based on European consensus, in a given case the court, when assessing the particular conduct of a state (sometimes based on its municipal legislation) relies on other conducts, behaviours, and practices of other states. In any event, seen from the perspective of legal certainty and state responsibility it is quite difficult to grasp the phenomenon. On one hand, it is evident a state cannot reason its conduct by its proper national law (see Art 26 of the Vienna Convention on the Law of Treaties which reads: “A party may not invoke the provisions of its internal law as justification for its failure to perform a treaty.”) On the other hand, until the judgment of the ECtHR finding a violation of the Convention is delivered, a state is not aware of the evolutionary shift of the interpretation. The ECtHR when facing this phenomenon has answered in *Vallianatos*:

The fact that, at the end of a gradual evolution, a country finds itself in an isolated position as regards one aspect of its legislation does not necessarily imply that that aspect conflicts with the Convention (see F v Switzerland, 18 December 1987, § 33, Series A no 128). Nevertheless, in view of the foregoing, the court considers that the government have not offered convincing and weighty reasons capable of justifying the exclusion of same-sex couples from the scope of Law no. 3719/2008. Accordingly, it finds that there has been a violation of Article 14 of the Convention taken in conjunction with Article 8 in the present case” (ECtHR, GCH, judgment in *Vallianatos and Ors v Greece* (Applications nos 29381/09 and 32684/09), 7 November 2013, § 92).

Similarly, the court ruled with regard to a (weakly justified) policy choice of a State that: “given that the Convention is a living instrument, to be interpreted in present-day conditions, the State, in its choice of means designed to protect the family and secure respect for family life as required by Article 8, must necessarily take into account developments in society and changes in the perception of social, civil-status and relational issues, including the fact that there is not just one way or one choice when it comes to leading one’s family or private life”. (ECtHR, Ch judgment in *Schalk and Kopf v Austria*, (Application no 30141/04), 24 June 2010, § 139.)

In fact, newly developed intentions of States reflecting societal changes and being mirrored by their national legislative practice (and occasionally by their soft law or

hard law instrumental agreements) can be labelled as a *vis creativa* for interpretational shift to be accomplished by the court. A dimmed perception of this phenomenon would be to characterize it as a vicious circle – States’ practice is making up the evolution and at the same time State practice not taking part in the evolutionary shift is examined by newly interpreted rules. The author could rather opt for a spiral-viewed perspective. Remains then the question of possible limits to this spiralled evolution.

(iii) Limits

Even though the phenomenon of evolutive interpretation is rather well anchored not only in general international adjudication but especially in the human rights adjudication, the question of possible limits to it has not been presented by scholarsThe only exception is a conference organized by the court in 2011 on a regular scheme of *Dialogue between Judges* (“Dialogue between judges, European Court of Human Rights, Council of Europe, 2011” – “What are the limits to the evolutive interpretation to the Convention”) It is worth to highlight that no speaker has questioned the sole existence of such limits to the evolutive interpretation. In his introductory remarks, then President of the Court Jean-Paul Costa put it in these words: “But our seminar will also pose a question: what are the limits to the dynamic nature of that interpretation? That presupposes that such limits exist – we may at least presume they do. In any event, if there are limits what are they? Do they lie in the European consensus or absence of consensus? Are they circumscribed by the intent of the States which, as masters of the treaties, have adopted a number of additional Protocols to the Convention? Is that intent always indicated expressly? Or does evolutive interpretation exist by tacit consent?”

One can see, those limits portrayed either by Judge Costa, or later in her speech by judge Françoise Tulkens are all oriented to the very question of the States’ stance and role in the creation of international legal norms (intent of States, practice of States etc.) In other words, those limits lie in a centre of the court’s adjudicatory role as an international institution created by and for States. We can find similar conclusions in two separate opinions, where judges made an explicit concerns about limits of evolutive interpretation to the Convention. In *X and Others v Austria* (ECtHR, GCh judgment Application no 19010/07, 19 February 2013, §23), in their partly dissenting opinion seven judges, pinpointing on judicial activism, argue that “the point of the evolutive interpretation, as conceived by the court, is to accompany and even channel change; it is not to anticipate change, still less to try to impose it.” By the same token, however in a more comprehensive argumentation, Judge Sicilianos delineates his accounts on limits to evolutive interpretation in the case of *Magyar Helsinki Bizottság* (ECtHR, GCh Application no 18030/11, 8 November 2016, §§10 -17). The Greek judge, after portraying that intentions of the parties not clashing with the evolutive interpretation, gives three limits to it, to wit: the evolutive interpretation cannot be a *contra*

legem interpretation, cannot go against the object and purpose of the Convention and has to reflect present-day conditions. All three seem to be at first sight very logical.

First, the *contra legem* argument. Sicilianos writes: “it is important that the proposed interpretation remains within the limits of the terms used by the Convention and does not directly contradict them”. At first glance, to “remain within the limits of the terms” is a nice example of textualism. However, it is barely difficult to understand the real meaning of this sentence. If it is the very interpretation which gives to the terms their genuine meaning, it is not easy to imagine how the terms to be interpreted might be limiting the interpretation as such. Moreover, there might be a logical problem as well. Admittedly it works for very clear examples Sicilianos gives (right to life does not encompass right to die, right to marry cannot be interpreted as right to divorce). An X being interpreted cannot lead to negation of X. Does it work also, if we only lightly switch the interpretation every, let’s say, two years and with the help of magic ‘living instrument’, after 10 years we get from ‘X’ a ‘negation X’? (One can compare eg the arguments in the *Pretty* and *Vincent Lambert* cases).

Then, object and purpose argument. Sicilianos speaks about the “golden rule of any interpretative approach” enshrined in the Art. 31 §1 of the VCLT. So, what in fact is a rule that applies for every type of interpretation (interpretation not compatible with the object and purpose of the treaty is not permitted by rules governing interpretation methods), cannot serve as a limit for specific technique of interpretation. Moreover, the purposive approach has been frequently used as theoretical ground for evolutive interpretation. Can a propelling force be at the same time a hindrance for the sake of interpretation? And with regard to the evolution of different terms and concepts within the Convention, could we imagine as well a change of the “object and purpose” through evolutive interpretation?

Lastly, the present-day conditions argument. Sicilianos points out that the interpretation should reflect “present-day conditions” not those which might prevail in the future; he alludes to the phenomenon of judicial activism, or court as a law-maker issue. What is rather a consequential description of adjudicatory activity of the court then a “proper” limit to be applied by it.

All three limits presented in the case *Magyar Helsinki Bizottság* by Judge Sicilianos reflect more or less stances which were depicted in theoretical way in section I of this paper. One can rejoice the fact that judges of the court start (explicitly) mentioning issues which have been already put by scholars into consideration years ago. Now it is the question of how those systemic limits will be in fact implemented into the court’s adjudicatory practice. However, at the end of the day, those limitations will still reflect theoretical controversies which arise from the concept of law based on will or practices of States. Would the concept of human dignity be a plausible limit for evolutive interpretation?

3. HUMAN DIGNITY

After all the atrocities perpetrated during the 2WW, the concept of human dignity has started to play an important role of a principle or at least an element of constitutionalism. Since the Second World War, one can encounter the concept of human dignity being intimately related not only with national constitutionalism (Aharon Barak, *Human dignity: the constitutional value and the constitutional right*, Cambridge University Press, 2015), but anchored in the constitutional pattern of law in general (Catherine Dupré, *The Age of Dignity, Human rights and constitutionalism in Europe*, Hart Publishing, 2015; Christopher McCrudden (eds), *Understanding human dignity* (Oxford University Press 2013). It is not the purpose of this article to make an elaborate (historical) depiction of the concept of human dignity. In this paper, I will just take as an assumption that before becoming a very legal concept after WW2 and enshrined explicitly in the German constitution (Art 1) and the 1948 UN Universal Declaration of Human Rights (Art 1), human dignity has been thoroughly discussed as a philosophical concept for at least two centuries before. (Dupré, cited above, at 29). Conceived primarily as a leading notion of constitutional law, the concept of human dignity has started to play a *constitutional* role even in the realm of international law as well.

The author has portrayed above that with reference to focal analysis the authority of international law may be based on specific purpose (cooperation of States, peaceful coexistence of States). It means that, even though the will of States is needed for the creation of particular norms of international law, the existence of international norms reflects a specific purpose of the system. The history of international law shows us different objectives and functions States were aiming at. Nowadays, as the international community comprises also other subjects than States, different stakeholders play an important role in the creation of international norms and the humanity aspects is more and more apparent in all activities on international scene. The focus of the international law has been changed since. Present international law is witnessing a new current stipulating a changeover of the paradigm (cf Anne Peters, *Beyond Human Rights. The Legal Status of the Individual in International Law* (Cambridge University Press. 2016); Antônio Augusto Cançado Trindade, 'International law for humankind: Towards a new *ius gentium*.(I) / (II) (2005) 316/317 *Recueil des Cours de l'Académie de Droit International*). These scholars put forward individuals (their protection, their special position) in international law as an ultimate aim of the legal system. Can we so claim that human dignity (protection of humanity) is an ultimate aim of international law? Until now, this approach to international law through the perspective of focal analysis has not been yet accepted by general doctrine, neither the concept of human dignity as a very aim and motive of international law. However, the author is deeply convinced that the concept of human dignity will play a pivotal role in a future construction of international law doctrine, what one can already experience

in different areas of international law. Thus, as a functional aim of international law, the concept of human dignity has to play a critical juncture in the realm of the interpretation of international law. As it is to be understood quite logically within different areas and concerns of international law (protection of environment, use of force, humanitarian intervention, reparation for injuries, State immunities etc), a question arises on the usefulness with regard to my research topic. In general, human rights protection per se should aim to this very goal of international law. So, we may argue, whatever, or however human protection is carried out by the court, it should be within the realms of human dignity. In other words, at first sight every ruling of the court should fulfil less or more the concept of human dignity. Is it so conceivable to claim human dignity as a limit to evolutive interpretation?

From a methodological point of view, there might be two stances how to approach the concept of human dignity with regard to the jurisprudence of the court – a philosophical (extra-legal) one, and legal one.

Philosophical approach would seem to be more efficient in posing limits for evolutive interpretation. It could work as *Deus ex machina* principle which is above and which poses limits to the system. Different philosophical positions and perceptions of (human) dignity have been presented throughout history. Different cogitators dealt with the topic of dignity sometimes not even grasping it in our modern conception (cf Aristotle, Thomas Aquinas). It is not the purpose of this article to portray in detail a total overview of those conceptions, but here is a reminder of some of them: the conception of human dignity based on *imago Dei* (human being has been created as an image to God); the Kantian conception (Kant speaks about an “inner freedom” – all human beings possess an “inner transcendental kernel” – a value which is “end in self”); free-will conception with the element of self-determination; human dignity based on the person as a gift; or human dignity derived from common goods of human rights (by John Finnis). However, in our pluralistic liberal society it would be inconceivable to choose only one conception of human dignity and based on it legal reasoning in human rights adjudication. It is perhaps the reason why Catharine Dupré, refusing any kind of human dignity conception referring to religion or to God, puts it in more stringent way: “human dignity is a heuristic concept” (Dupré, cited above, at 16), “[i]n order for human dignity to be an effective problem-solving tool of constitutionalism, it has to be considered as a good belonging to all, shaped by all, and for all.” (Dupré, cited above, at 21). No matter how Dupré’s approach seems to be logic and plausible for the sake of “pure” constitutionalism, especially with regard to its heuristic motivation, human dignity cannot be reduced to “all to all” narrative. And legal scholars or practitioners (for example constitutional judges) should not narrow their intrinsic reflections with regard to human dignity to an “effective problem-solving tool”. The concept of human dignity has a transcendental origin (and is inherently engraved in our

existence). Thus it is hardly conceivable that it is grasped solely as a good “shaped by all”. “Shaped by all” approach implies rather intertemporal interchangeability and relativity that is not typical for human dignity as a constant and lasting concept. However, Dupré’s approach can be now freely employed (as an interim way) and human dignity may form an interpretative guidance for the human rights adjudication in general and interpretation of the European Convention on Human Rights, especially arises.

The legal approach to human dignity within the system of the Convention resigns to any philosophical references to the concept of human dignity. The court in its adjudicatory capacity rather proceeds in a quite opposite way and tries to fill the concept of human dignity by specific jurisprudential elements on case-by case basis. The term “human dignity” is mentioned neither in the Preamble of the Convention nor in its operative articles. (However, it appears in the Preamble to the 2002 Additional Protocol to the Convention n°13 abolishing the death penalty in all circumstances). In practice, the concept of human dignity is mostly closely linked with the Article 3 of the Convention (prohibition of torture and other inhuman and degrading treatment or punishment – 932 cases out of 1597 mentioning the term *dignity*), where both facets of this right – substantive one and procedural one – are at stake. (Cf for example Natasa Mavronicola, ‘Inhuman and Degrading Punishment, Dignity, and the Limits of Retribution’, (2014), *The Modern Law Review*, 77(2), 292. The Court, however, is referring to the concept of dignity in its other jurisprudence as well. In the case *Pretty v UK* (ECtHR, Ch judgment, 29. 7. 2002 Application no. 2346/02), the Court held with respect to the Article 8 (right to private and family life) that “[t]he very essence of the Convention is respect for human dignity and human freedom.” Thus, grounding the principle of personal autonomy on the basis of human dignity, the court repeated this in many different cases (eg *Svinarenko and Slyadnev*, *Bouyid*, *Christine Goodwin*, *Vincent Lambert*). However, should the concept of human dignity play a more creative role for the sake of interpretation of particular provisions of the Convention, one would expect the court to develop its characteristics, content and aspects more in detail. Which is not the case. That is why, we can see in the doctrine (for example Michael Rosen, ‘Dignity: The Case Against’, Christopher McCrudden (eds.), *Understanding Human Dignity*, (Oxford University Press), 2013; Ruth Macklin, ‘Dignity Is a Useless Concept’, (2003) “BMJ” 327 (7429) or in some dissenting opinions (cf. joint partly dissenting opinion in the case *Bouyid v Belgium*, ECtHR, GCh judgment, 28 September 2015, Application no 23380/09, § 4) arguments claiming that the concept of human dignity is superfluous or nugatory, as we cannot use it as a proper source of human rights, and rather as a façade. Even though those critiques cannot deny the sole fact the court is referring to the concept of human dignity in its case law, they are somehow relevant in terms of the applicability, relevance and practicality in general in the interpretive struggling of the court. Being framed in future as an internal concept, the concept of human

dignity could pose or frame a limit for interpretation such as other jurisprudential principles or concepts do. (Eg the principle of effectiveness of human rights protection, or the principle that differences based on sexual orientation required particularly weighty reasons by way of justification).

In this regard, two explications have to be given. First, if we compare the concept of human dignity to other concepts or principles used by the court, one great difference is apparent. Whereas, those other concepts rest totally on the court jurisprudence and are strictly inherent to the system, the concept of human dignity is per se independent to the Convention, playing a sort of guest role. And so it is treated like that. For the time being, the concept of human dignity in the court’s case-law has been always put in the typical State-individual relationship (and it is usually perceived even in the national constitutional normativity). Nevertheless, human dignity cannot be narrowed down to a sort of individual good as opposed to State power or interests (so even Dupré’s concept of “human dignity as *Res Publica*” would not work here), or vis-à-vis others’ individual autonomy. Entirely implemented and effective, human dignity of one person fructifies human dignity of other person and both of them contribute to the flourishing of humanity in general. (Pavel Bureš, ‘Consensus on Human Nature? The Concept of European Consensus in the Case-law of the Court in Strasbourg’, *Czech Yearbook of Public & Private international law* Vol 7, 2016, 197). Thus, being a legal concept for the purposes of human rights adjudication of the court, human dignity has to originate in philosophical concept.

Second, with regard to human dignity as a legal concept, The author argues, that like other concepts within the conventional system, it can pose some limits or at least shape a certain framework where the interpretation of the Convention takes place. However, is human dignity actually able to be a limit for evolutive interpretation of the Convention? Is there anything in human rights protection that State practice shaping evolution in societal matters cannot overcome? The concept of human dignity seems to be at first sight a logic and plausible account. However, if we look closely at the jurisprudential machinery, it is rather difficult to imagine for now such a situation.

4. CONCLUSION

Human dignity – based on philosophical accounts and jurisprudential developments of the court – could play this role of limit for the evolutive interpretation as a general extra-legal phenomenon being anchored in the system of human rights adjudication. However, it requires at least some renunciation of pure conceptual approach to human rights protection and restricted perception of pure legal positivism (less norms and more values). Evolutive interpretation of the Convention, even though being based on interpretative technique of European consensus and fuelled by the principle of effectiveness, can however be analysed focusing on human dignity only. Nevertheless, this focal analysis would require a softly different legal perception to human rights protection.

Our restricted regard and reasoning to the protection of human rights through lenses of State-to-individual relation only makes quite impossible to see the stance of individual and his role as a member of human society. It however means to let the State (as a sociological conglomerate of individuals) to bear intrinsic values as well. We will not contribute to the development of human dignity and to its main facet which is free will by annihilating the position and role of the State. Or, is it our goal to become totally free, without any ideological, political, religious or whatever interference of State and society? Would this make us more human?

- This article is an outcome of a Visiting Fellowship at the Institute of Advanced Legal Studies, supported financially by the project 2018 - IRP Internacionalizace carried out at the Faculty of Law, Palacky University.

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