Journal of Information, Law and Technology

Code, Hybrid Models of Consent and the Electronic Commerce (EC Directive) Regulations 2002

Joseph Savirimuthu

Lecturer, Faculty of Law, University of Liverpool

jsaviri@liverpool.ac.uk

This is a **refereed** article published on: 30 November 2004.

Citation: Savirimuthu, 'Code, Hybrid Models of Consent and the Electronic Commerce (EC Directive) Regulations 2002', 2004 (2) *The Journal of Information, Law and Technology (JILT).*
<http://www2.warwick.ac.uk/fac/soc/law2/elj/jilt/2004_2/savirimuthu/>.

Abstract

Such is the pervasive reach of substantive norms and doctrines in the law of contract that an understanding of technology is perceived as having little or no direct bearing on the meanings we attach to the concept of consent.The accessibility of contract doctrines has resulted in a tendency by commentators to be content with understanding the governance challenges in constituting legally binding agreements in the online environment through the narrative of case law and rules. This article questions the prevailing wisdom in understanding the new modes of governance purely through a linear analysis of doctrine. To appreciate the subtleties of governance in the online environment, we cannot overlook the interplay of the four modalities- law, code, norms and markets. The article concludes with an illustration of how the hybrid model of consent provides a better understanding of the process of constituting legally binding agreements.

Keywords: Code, contract norms and rules, online contracts, Electronic Commerce (EC Directive) Regulations 2002.

1. Introduction

The substantive doctrines in contract law define the circumstances when commitments becoming binding on the parties. The rules on contract formation for example, can be seen as advocating a particular model for defining responsibilities and obligations assumed voluntarily by the parties. When the relations between the parties can be brought within the categories of offer and acceptance, the law deems that the consensual arrangement matures into legal rights, duties and obligations. [1] Much of the legitimacy and justification for the adherence to the principle of sanctity of contracts can be traced back to the value attached by society to the normative underpinnings of private ordering. The emergence of the Internet as a medium for determining contractual obligations has resulted in policymakers responding to the new technological realities. The Electronic Commerce (EC Directive) Regulations 2002 can be seen as a response to providing an effective regulatory framework. Do the judicial norms on choice, autonomy and accountability in relation to binding commitments correspond with the use by online retailers of software? The terms 'West Coast Code' and 'East Coast Code' were used by Lessig to emphasise the significance of the new technologies realities – the communications infrastructure of the Internet (West Coast Code) – for traditional modes of governance (East Coast Code).[2] Surprisingly, contemporary accounts of the governance challenges facing contract law have subscribed to a linear analysis of the dynamics of online contracting. Indeed, scepticism has been directed at those who attempt to suggest that the distinctive features of the virtual environment introduce a new mode of governance - code.[3] The accessibility of contract doctrines has resulted in a tendency by commentators to be content with understanding the governance challenges in constituting legally binding agreements in the online environment through the narrative of case law and rules. This article questions the prevailing wisdom in understanding the new modes of governance purely through a linear analysis of doctrine.[4] The aim of this article is to sketch a hybrid model of consent that reflects the subtleties of online contracting. The focal point of the critique is whether it makes sense to view the communications infrastructure as nothing more than a passive technological medium. If we are to obtain a deeper understanding of

the significance of the communications infrastructure of the Internet for the perceived role of the Electronic Commerce (EC Directive) Regulations 2002, we need to begin by acknowledging the normative dimensions of technology. To appreciate the subtleties of governance in the online environment, we cannot overlook the interplay of the four modalities- law, code, norms and markets. The article concludes with an illustration of how the hybrid model of consent provides a better understanding of the process of constituting legally binding agreements.

2. East Coast Code: Contract Norms and Doctrines

Historically, contracts were local in character. It was meaningful to define an agreement as arising from 'discrete' or 'relational' interpersonal characteristics. The image of parties bargaining at arm's length and the constitution of agreements through an exchange of mutual promises, enforceable in law, is one which, shapes contemporary rhetoric of the justifications for statutory/precedent modes of legitimate governance. [5] The consensual nature of the constraints voluntarily undertaken by the parties is condensed in the following metaphor – a 'meeting of the minds'.[6] Whilst contract norms can be justified in philosophical terms, the logic of the market and its rules are not apposite to its appeal as an instrumental governance framework for private ordering and rational decision-making. According to the Chicago School of Law and Economics, the market model (or more appropriately):[7]

'Economic analysis of law has heuristic, descriptive, and normative aspects. As a heuristic, it seeks to display underlying unities in legal doctrines and institutions; in its descriptive mode, it seeks to identify the economic logic and effects of doctrines and institutions and the economic causes of legal change; in its normative aspect it advises judges and other policymakers on the most efficient methods of regulating conduct through law.'

Contract norms and rules in this respect are seen as being legitimate and efficient to the extent that they mirror the modality of the market. It is inconceivable, in the light of the emphasis placed by judges on the objectivity test when ascertaining parties' intentions, that voluntary undertakings do not make parties better off.[8] Contract rules in this limited sense can be said to have a pragmatic dimension.[9] The test is not what the party says he intended. This is of course relevant but the courts have long relied on an objective test when arbitrating competing claims: will a reasonable man, in the light of the evidence of the communications between the parties have bound himself in a similar manner?[10] Adapting the Coasean theory of transaction costs, the normative foundations of contract law can be linked to the obligations of distributive justice that the market undertakes alongside the modality of social norms and doctrine. The 'meeting of minds' metaphor can be said to condense the ideological, cultural, philosophical economic considerations that shape and influence the governance of autonomy, choice and decision-making.

If one moves away from the archetypical depiction of a contract being concluded between parties at arms length, the 'meeting of minds' metaphor becomes a little fuzzy. What are the normative foundations governing binding commitments arising from communications between parties who are not in each others presence? The mailbox rule, enunciated in *Adams v. Lindsell*, identifies the moment of posting as being the critical point in time when determining the emergence of legal

obligations.[11] This is not an absolute rule. Where instantaneous communications are relied upon a binding commitment is concluded when the communication is received.[12]

Considerations involving the efficiency of allocating risks and responsibilities can be used to legitimise the operation of these rules. Substantive rules do not merely provide answers to questions regarding the formation of contract. Neither should its value be limited to the question of how the law facilitates efficient commercial transactions. Contract doctrine can be seen as upholding prevailing cultural and social norms like trust and cooperation. Rules, which are coherent and accessible, are more than likely to create incentives on the part of the contracting parties to comply with the agreement.[13] Law in this respect can be seen as part of the social system. Whether the law has struck a happy balance integrating on the hand the principles of *laissez-faire* on the one hand, and social (welfarist) norms on the other is beyond the scope of this paper. It is proper however to conclude that contract rules and doctrines can be seen as a subset of general strategies for governing choices and decision making. This brief account of the regulatory dimensions of contract law is meant to provide a different vantage point from which we can begin to think about contemporary understanding of the modes of governance that shape and influence the process by which parties voluntarily bind themselves in the online environment. Whilst there is unlikely to be much discussion about the interplay of law, norms and the market in this environment – the orthodox constituency regard attempts to emphasise new technology as a relevant mode of governance with a degree of scepticism. It is worth delving into the reasons for this stance.

It is argued that the proper and correct approach to understanding the process of constituting legal agreements is not through an exploration of technology. Rather, from the analysis that is frequently employed, we are led to assume that contract doctrine and its rules provide a comprehensive analytical framework for understanding governance in the online environment. The challenge, one is inclined to conclude here is that that to understand online contract formation – we need to *identify* the rules and then *apply* these to the facts. Attempts to introduce technology may be seen as being superfluous. This does beg the question: why is technology explained away so readily? When justifying the linear approach to analysis, it is said that a legally binding commitment cannot be regarded as being justiciable until the badges of contract formation are present. Reed is of course right when he observes that: [14]

'[t]he basic principles of contract formation are still the same, however, so that the existence of a contract and its terms are discovered by identifying the communications which pass between the parties, identifying the offer, and then determining whether that offer has been accepted.'

Reed's observation is unequivocal – it however proposes to answer a question that is premised by a restrictive view of governance. Contract law as solutions to problems. Indeed, many of the problems that the orthodox constituency face and which results in attempts to explain away as application conundrums, have their roots in the failure to recognise the critical role of technology in the governance of choice and autonomy. On close examination of the extract above, the governance issue is not what seems to be alluded to by Reed - *what* principles of contract govern online contract formation.

Contract doctrine and rules are too well embedded in society to make this a contentious line of inquiry. A more relevant question would be one which requires an answer to the issue of whether the process by which choices and decisions are made correspond with the norms and values associated with contract doctrine. It is difficult to see how doctrine can provide an answer here without a prior consideration of the nature of technology and its significance for contemporary accounts of governance. To be sure, close analysis of the architecture of the Internet suggests a paradox. Code can either undermine the balance and safeguards provided by law on the one hand or enhance norms and compliant conduct where enforcement would have been inefficient or problematic. Before exploring the nature of consent in the online environment it might be useful to bring into sharper focus the assumptions that the orthodox legal constituency make when characterising the communications infrastructure of the Internet as method (i.e., a passive technological medium).

The line of reasoning, resulting in the characterisation of the Internet as a passive technological medium, merits particular attention, since an understanding of technology is seen as being peripheral. Attempts to suggest a linkage between law and technology, it is suggested, are based on a tenuous understanding of the nature of the online environment. The fundamental oversight stems from the characterisation of cyberspace as a separate place. Contracts are constituted between real persons and in a 'physical' space – not 'cyber' space. Consequently, it is argued that the communications infrastructure of the Internet is nothing more than a passive technological medium.[15] Reed suggests that the 'cyberspace fallacy' leads to a false prospectus:[16]

'The Cyberspace fallacy states that the Internet is a new jurisdiction, in which none of the existing rules and regulations apply. This jurisdiction has no physical existence; it is a virtual space which expands and contracts as the different networks and computers, which collectively make up the Internet, connect to and disconnect from each other…A moment's thought reveals the fallacy. All the actors involved in an Internet transaction have a real-world existence, and are located in one or more legal jurisdictions…It is inconceivable that a real-world jurisdiction would deny that its laws potentially applied to the transaction.'

Online contracts have their analog in the real space world of interpersonal communications:[17]

'[The Internet] is fundamentally no more than a means of communication, and that the new issues of Internet law arise from the differences between Internet and physical world communication methods, particularly communicating via intermediaries…the contracts themselves are not fundamentally different. What *is* different is the method by which those contracts are formed, using indirect communications via packet switching hosts.'

Reed's conceptualisation of the Internet as nothing more than a system of passive communications is axiomatic of the orthodox approach to dismissing alternative avenues through which governance can be understood.[18] A sophisticated telephone telecommunication network enables people to communicate. The online environment in this respect shares discernible similarities with other forms of instantaneous communications. *Ergo*, the communications infrastructure of the Internet is seen as

having no significance for the way contract doctrines and institutions are expected to regulate the way parties define their choices and autonomy. The question, how should we conceptualise consent is absent in the contemporary debates about online contract formation. Governance challenges in the online environment are now to be viewed as requiring nothing more than requiring access to the toolbox of 'black letter' law.[19] To be sure, this interpretive constituency defines governance very much in terms of formal mechanisms of private ordering. The Internet is perceived as being nothing more than a passive technological medium. Another reason may be simply that doctrine is readily accessible and easily grasped. The design architecture, it is assumed, makes rational consideration of the process of contract formation unduly complicated:[20]

'[T] he Internet, though, does raise unique technological issues when examining contract formation. It is these technological issues which all too often cloud our analysis of the contract.'

An understanding of technology is superfluous since substantive doctrines provide the necessary analytical framework, notwithstanding that: [21]

'When we add to this the fact that a seller may not be communicating directly with the customer but instead form part of a virtual marketplace or Internet shopping mall, and that the customer may not be making purchasing decisions directly but acting through an automated agent, it becomes obvious that the process of contract formation is not so straightforward as in the physical world.'

Accepting the veracity of the assumptions for the moment, we can sketch the line of analysis that is favoured when thoughts turn to the legal issues facing online contract formation. Consider for example, the intuitive response of lawyers when faced with a purchase transaction of goods by a consumer responding to a web advertisement. Using the case law on 'offer' and 'acceptance' as analogies to the transaction, the governance challenge will be characterised and ultimately, disposed in these terms. The ruling in *Carlill v Carbolic Smoke Ball* will be relied upon as authority for the rule that an online retailer can potentially bind itself, if the prerequisites of acceptance and reliance are met. [22] Judicial precedents in the form of *Pharmaceutical Society of Great Britain v Boots Cash Chemists*, can be used to introduce policy issues that warrant circumscribing the general rule – of unlimited liability to unlimited members of the web community.[23] Surely, a rule that exposes an online retailer to contractual liabilities to anyone with an Internet connection is likely to be seen as onerous and burdensome.[24] The online contract cannot be binding on the parties until there has been an agreement. For example, the decision in *Adams v Lindsell* is relied upon to explain when an online contract becomes legally binding.[25] A binding commitment arises when the consumer clicks on a button on the website concluding the offer. This rule is however subject to two exceptions. First, where the online retailer clearly specifies that additional steps be taken to formalise contractual relations, as was evident in cases like *Henthorn v Fraser* and *Holwell Securities v Hughes*.[26] Second, where the mode of communication is seen to be instantaneous. According to judicial precedents in *Brinkibon* and *Entores v Miles Far East Corp* immediate knowledge (actual or imputed) would be deemed to be sufficient to constitute the contractual obligations.[27] In the absence of incontrovertible judicial precedents, legal arguments regarding the application of the rule on instantaneous communications to

the online environment are likely to figure prominently in resolving the precise moment when a binding commitment materialises. Ought the new methods of purchasing items on the Internet impair the way we view the process by which parties conclude an agreement? Online retailers now have at their disposal two avenues through which contracts can be concluded: 'click-wrap' and 'browse-wrap'. A ‘click-wrap’ contract, for example, involves a web page with contains the terms and conditions of the agreement. The consumer signifies his assent to the terms governing the transaction by clicking on a button located on the web page. The software on the retailer’s website prevents the user from regarding the agreement as being concluded until the icon 'I Agree' (which indicates acceptance of the terms and conditions) is clicked. Other web retailers employ a ‘browse-wrap’ agreement. When the user clicks on an item he wishes to purchase, he is not immediately presented with the terms and conditions. These can be accessed by a link to a separate web page. Unlike a ‘click wrap’ agreement, the consumer can conclude the agreement without actually browsing the terms and conditions. The entry into the purchase transaction is deemed, in itself, to be evidence of assent to the applicable terms and conditions.

A key feature in the illustration above is the way the emphasis on doctrine contributes to a linear (almost static) view of governance: Who are the offerors and offerees? Can the advertisement be characterised as an 'offer'? Has the offer been 'accepted'? Is a 'mistake' sufficient to prevent reliance by the offeree at the expense of the offeror? 'New wines old bottles', is an overused metaphor, which becomes an end in itself. The emphasis on contract doctrines forecloses the narrative of governance.[28] The remainder of the discussion in this section will be directed towards redressing the imbalance that results from the preoccupation with doctrine.

What troubles commentators who view governance challenges through the lens of legal rules and doctrines is the idea that somehow by accommodating technology in the analysis, one is a step removed from claiming the viability of new rules and norms for the online environment. We can infer this line of thinking in the standard move adopted by Reed in characterising technology as a passive medium. Of course, any argument premised on the idea that the online environment requires a new set of doctrines governing contractual relations is rightly dismissed. In this respect Sommer’s observation hits the mark: [29]

'In contract formation, UETA presents only one new issue – contracting with machines that have something resembling discretion. People have long been forming contracts with vending machines. Courts have not been fazed by such contracts, probably because they have closely resembled ordinary 'take-it-or leave-it' consumer contracts.'

That said, the alignment by Reed of the idea of 'cyberspace fallacy', with the conclusion that technology is merely a passive medium, misses the point on two accounts. First, it cannot be said that rules emerging from cases like *Adams v Lindsell*, *Brinkibon* or *Entores,* in themselves, provide a *sui generis* map for understanding the process by which commitments become legally constituted, or for that matter, the normative foundations informing the way we characterise the actions of the contracting parties. Close reading of the judgements in these cases in fact caution against mechanical application of doctrinal rules and norms – the emphasis as always being on the relativity of law. Given the control exercised by the online retailer,

through the software and hardware, over the choices and decision making behaviour of its users, the *ex ante* policy issue regarding the processing and structuring of consumer choice and autonomy cannot be easily explained away. Another criticism of the assertions made by 'cyber-sceptics' is that they provide no plausible explanation for the characterisation of the communications infrastructure as a passive technological medium.[30] Katsh has suggested that:[31]

'The law is an intriguing area in which to study change since it has links to all other important institutions. It is a focal point that sends out rays that touch economic activity, political interests, ethical values, and individual concerns…. For politicians, change in law affects the process of allocating resources, of establishing standards of behavior, and of responding to citizen desires. For citizens, institutions, and corporations, change in legal processes, concepts, and values touches traditional relationships, aspirations for achieving a more just society, and valuable property interests. As law feels the impact of the new technologies, change will not be located in only one area. Rather, as legal change occurs, many different facets of our society will be affected.'

Katsh is right when he remarks on the value of integrating law and technology into a study of the role of law in regulating the Internet. He is also correct in his observation on the power structures that define the spheres of law, technology and society. Differing perspectives of the role of law, technology or even the concept of an information society are not merely academic. To appreciate the depth and intensity of the issues at stake we need look no further than the controversy that surrounds issues regarding post – 9/11 government surveillance, rights management software, data mining, the extra-territoriality of national jurisdictions or even allocation of spectrum. If technology can be seen as having transformative value – surely, one could legitimately explore more closely the problems the new technologies are attempted to solve and how law reflects their significance for the complex dynamics of private ordering?[32] Are techno-phobes Luddites? Or can we accept without comment the claim by technophiles that technology is neutral – and end in itself?[33]

The close mapping of online contract formation by doctrine more worryingly impairs subsequent evaluation of the Electronic Commerce (EC Directive) Regulations 2002. Murray finds the discordance in the narratives problematic.[34] The Regulations he concludes:[35]

'say remarkably little on contract formation. It provides duties for those who market their products over the Internet, but makes no attempt to define the legal position of an electronic offer or acceptance. In addition the Directive is of limited effect when dealing with contracts concluded exclusively by e-mail due to several exceptions which apply to e-mail communications.'

Lloyd is worried that the consequences resulting from the apparent lack of certainty and clarity:[36]

'[will] pose problems for the UK system which…sees offers emanating from the customer rather than the supplier. There appears also to be an element of unnecessary complication by adding the requirement of acknowledgment of receipt of acceptance as a condition for the conclusion of a contract.'

If the regulatory framework is to provide a framework for strategic planning and ordering, then it is wanting in this respect and will:[37]

'prove to be extremely disappointing to those who read it with a hope of obtaining guidance on the formation of contract within the European Union….[On the whole] it provides no more than equivalence at the point of formation of a contract.'

In the light of these apparent deficiencies it has been suggested that:[38]

'it is perhaps time the postal rule was restated for the twenty-first century. A possible reformulation would focus on the non-instantaneous nature of communications which benefit from the rule.'

The following prescription underlines some of the shortcomings that result from leaning heavily on the rationality of legal rules to illuminate the subtleties of online contract governance:[39]

'[W]here an offer contemplates acceptance by a non-immediate form of communication, that acceptance is effective from the time it leaves the acceptor's control.'

The prevalence of this narrow view of governance assumes too readily either that technology has no normative aspect or that it can be used to structure decision making. A general point can be made here. Legal rules and infrastructures are distillations of competing ideological conventions and historical tensions.[40] Developments in the law of contract have all too clearly pointed to the reflexivity of law to the social and technological environment.[41] The challenges facing contract law can also be situated in the debates about the significance of the interface between law, technology and society. For example, it has been pointed out that technological innovation in the contemporary environment is increasingly confronting communities, policymakers and industry with difficult questions.[42] In the space of a decade, the deterministic nature of technological rules in the area of cloning, genetic screening, biometrics, surrogacy, digital music and surveillance has resulted in policymakers, judges and communities re-examining the ramifications of the latent ambiguity of their values for legal institutions and societies.[43] As Webster notes:[44]

'The sheer scale, scope and speed of technological innovations, from home entertainment systems to the latest missile defence, from new medical treatments to in vitro fertilisation techniques, draws attention of commentators. Information and communication technologies (ICTs) especially, followed closely by biotechnology and genetics, are presented as the main motors of change, as innovations which are bringing about radical social transitions.'

Perhaps, the most troubling aspect in the orthodox resistance to embracing the design architecture, is the uncritical and ready acceptance that existing methods of governance – law, markets and norms are – are sufficient to ensure the legitimacy of the process by which choices and autonomy are now determined. Liberal ideas about autonomy, choice and consent are rooted in socio-cultural ideas about what constitutes an individual.[45] The institution of contract can be seen as a mode of governance designed to facilitate the realisation of the ideals of individuality,

autonomy and self-determination.[46] Brownsword hints at the complex dynamics of this institution: [47]

'[W]hilst we might hope to construct a definition of a ‘contract’ around the shared idea of an enforceable transaction, there is little agreement about how this is best articulated. Some definitions might centre on the idea of an enforceable agreement; others might be anchored to the concept of an enforceable promise (or set of promises); and others might emphasise that contracts are essentially exchanges, or perhaps bargained-for exchanges…In practice, it might be thought, it cannot matter whether a contract is conceived of in terms of promise, agreement, bargain, or whatever…On occasion, however, the way in which we conceive of a contract does have a practical bearing.'

We can extend his insights, particularly the last sentence in the quoted extract, to pose the following question: does doctrine adequately reflect the dynamics of effective and legitimate governance in the online environment? Whilst the logic and coherence of contract doctrines may be compelling, the linear narrative is ill equipped to illuminate the interaction between the four modalities.[48] It is important to be clear that in making this assertion, one is not subscribing to the romanticised idea of the Internet as a separate place or that governance of online contract relations require new rules. The transformation of text into digital media and the emergence of software technologies as mechanisms for structuring and processing social, political and economic relations, it is said, cannot leave the law untouched.[49] History has already proved to be harsh critic of those who have been content in entrenching and prolonging the dominance of institutional infrastructures. The immediacy of the need to understand the significance of the technological developments for law and its role in legitimating the values which govern the consensual nature of binding commitments cannot be emphasized enough. The reach of the communications system powered by the Internet implicates the process by which choice and decisions are structured and ultimately processed. The argument here is that doctrine restricts the view of what governance in the online environment entails. Doctrinal analysis fails to illuminate the regulatory aspects inherent in the use of 'click-wrap' or 'browse-wrap' technology. Lessig exposes the deceptive nature of the 'cyberspace fallacy' thesis. He suggests that the modes of governance in the online environment:[50]

'are distinct, yet they are plainly interdependent. Each can support or oppose the others. Technologies can undermine norms and laws, they can also support them. Some constraints make others possible; others make some impossible. Constraints work together, though they function differently and the effect of each is distinct. Norms constrain through the price that they exact; architecture constrain through the physical burdens they impose; and law constrains through the punishment it threatens….an analog for architecture regulates behaviour in cyberspace – code. The software and hardware that make cyberspace what it is constitute a set of constraints on how you can behave…The code or software or architecture or protocols set these features; they are features selected by code writers; they constrain some behaviour by making other behaviour possible, or impossible. The code embeds certain values or makes certain values impossible.'

To be sure commentators like Lessig, Benkler and Boyle, have consistently argued that software now emerges as a new modality of governance.[51] Lessig, for example,

goes to great lengths to emphasise the significance of understanding this modality of governance and it. It is particularly telling that unlike contracting in real space, software now assumes a pivotal role in structuring and processing contractual relations.

To summarise, an overemphasis on contract doctrine and the linear approach to problem solving, does not reflect the realities of online contracting and finally leaves unexplained, not only the role of the Electronic Commerce (EC Directive) Regulations 2002 but its complementarity with conventional contract doctrine. The emphasis on the traditional narrative of textbook contract analysis does not allow us to transcend the restrictive conceptualisation of governance in the online environment. This restrictive view of contract law obscures a fundamental deep-seated argument about the basis upon which rules on contractual ordering of social relations are now to be legitimated in an environment where contractual agreements are mediated by software. This debate, it is suggested cannot be undertaken without reference to the contextual background of the Internet.[52] The idea that technology is passive is in itself untenable. Additionally, the existing narrative which defines governance in terms of its linear rules is found wanting for the following reasons. First, no evidence is offered for the claims that technology is a passive conduit or that its incorporation into the process by which binding agreements are constituted, confusing. Second, characterisation, in short is not mandated by a legal rule but the result of arguments used to shape facts to 'fit' into a legal rule or outcome.[53] There is room for pursuing alternative routes to understanding the legitimacy of contract ordering rules. Third, the rule-oriented narrative implies that the institution of contract is free of contradictions and omissions. This is not necessarily borne out in the jurisprudence of the Common Law.[54] It has already been shown that the rational foundations in cases of the postal rule and mistake are attempts by the common law to provide a result, which blends considerations of instrumentalism and fairness. The image of meeting of minds epitomises the reliance on abstractions to articulate the values of private ordering rules.

3. West Coast Code: Techno-Regulators

The TCP/IP protocols provide the means through which 'communication' in the online environment is now made possible.[55] As the communications infrastructure of the Internet becomes the fora through which consumers now identify their choices it becomes important to expand our analysis to accommodate the capacity of technology to regulate behaviour in the online environment. The metaphor ‘old wines-new bottles’ is premised by a restrictive view of governance. Reidenberg, highlights the significance of the dynamics being created in the communications infrastructure powered by the Internet:[56]

'Global communications networks challenge the way economic and social interactions are regulated. In the past, legal rules usually governed behavior in distinct subject areas for defined territories. These national and substantive borders formed the sovereignty paradigms for regulatory authority and decision-making. For example, intellectual property rights and privacy rights—each critical for the ordering of an information society—have been designed as distinct bodies of law. Copyright, patent, trademark, and trade secret law protect specific attributes of information and its economic value, while privacy law guards specific information about individuals from

particular harms. Customarily, such distinct rules applied only in the rule-maker's geographically defined territory. Few 'transnational rights' in the economic and social sphere truly exist; international treaties and regional obligations typically establish some degree of harmonized, national standards instead of a single, unique ‘global’ right. With the GII, however, territorial borders and substantive borders disintegrate as key paradigms for regulatory governance. ….'

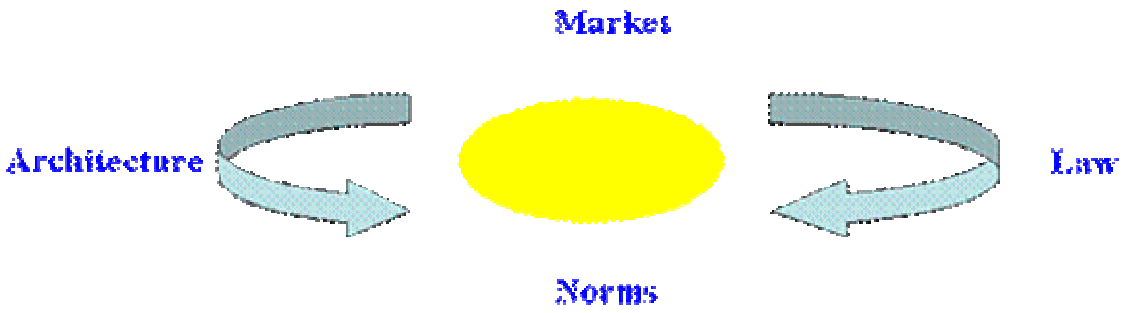
Unlike the traditional rules on contract the architecture of the Internet and the evolving state of technology, the determination of 'meeting of minds' or consent becomes less than straightforward. Indeed, software becomes the primary facilitator of choices, expectations and autonomy – a form of techno-regulation:[57]

'When the Internet is looked at as an architecture, it manifests two different abstractions. One abstraction deals with communications connectivity, packet delivery and a variety of end-end communication services. The other abstraction deals with the Internet as an information system, independent of its underlying communications infrastructure, which allows creation, storage and access to a wide range of information resources, including digital objects and related services at various levels of abstraction.'

If the institution of contract is to continue to provide a framework for promoting choice, competition and fairness, the central policy issue raised by the online communications environment, is the creation of an effective and legitimate governance system. There is a need therefore to not only know the 'law' but to also understand the nature of technology and its significance for governance. To unravel some of the complexities of technology and its capacity to penetrate into traditional ideas of the process of constituting contractual relations the 'layer principle' advocated by Yochai Benkler provides a useful commencing point for understanding the regulatory capacity of software.[58] Lessig sums up Yochai’s ideas of the layers principle well:[59]

'The layers that I mean here are the different layers within a communications system that together make communications possible…At the bottom is a 'physical' layer, across which communication travels.' This is the computer, or wires, that link computers on the Internet. In the middle is a 'logical' or 'code' layer – the code that makes the hardware run. Here we might include the protocols that define the Internet and the software upon which those protocols run. At the top is a 'content' layer – the actual stuff that gets said or transmitted across these wires. Here we include digital images, texts, on-line movies, and the like. These three layers function together to define any particular communications system. Each of these layers in principle could be controlled or could be free….we could imagine a world where the physical and code layers were controlled but the content layer was not.'

The layer principle is best understood by the use of the term 'code'. This term can be understood in two ways. In its traditional sense 'code' can be used to describe the orthodox governance instruments – legislation and judge made law. The cybernetic model of governance envisages 'code' as comprising both hardware and software. Lessig identifies four modalities of governance in the online environment: laws, norms, market and code.



We have already identified the role of law in defining the rules governing binding commitments. The common law is now supplemented by a number of statutory enactments intent on ensuring that competition and choice are not subverted. The Electronic Commerce (EC Directive) Regulations 2002 is one example of the move to supplement the legal code. The invisible hand also acts as a constraint on contractual behaviour by ensuring that the economic and social costs associated with cooperation and coordination do not become prohibitive. Concerns about trust, cooperation, abuse can provide a disincentive to online contracting behaviour. In this respect, the principle of 'technological neutrality' adopted by policymakers is meant to take into account the innovation in technology that contributes to the creation of an environment conducive to the constitution of economic relations. Norms, in the sense of creating incentives for cooperation and coordination can 'educate' users to the benefits and culture associated with transacting on the Internet. How far does contract doctrine fulfil this aspect, particularly in an environment, where anonymity can pose immediate problems of consumers entering into binding commitments with any online retailer? Code. Lessig's point is that if we wish to understand governance in the online environment we cannot overlook the way hardware and software blurs the boundaries of legislative accountability and authority. He suggests that code is an important addition to the orthodox institutional infrastructures through social, economic and political activities are ordered. How is this metaphor pertinent to the present discussion? When we distinguish the communications infrastructure of the Internet from that of say a telephone network we are in fact acknowledging two critical attributes not present in communication media like the telephone and fax. The first critical attribute is 'end-to-end' architecture and the second is code. The idea of software and hardware as devices for structuring interpersonal relations is critical to Lessig's 'code is law' thesis. Code exists in a distinctive architecture that now shapes the process by which agreements are constituted. Recalling the orthodox model of consent, it is not sufficient, when thinking about binding commitments in the online environment to merely read the governance challenges facing law purely through legal rules and cases. Since the domain of contract is parenthesised by norms of fairness, objectivity and rationality it becomes important to analyse the extent to which the architecture of the Internet and the instrument through which behaviour is ordered corresponds with the ideals that we regard as being embedded in the substantive rules of contract law. Can we readily accept the view that the checks and balances encapsulated by the legal regime are affirmed by the design of computer software and hardware? Does technology constrain, *de facto*, the norms and values of reasonableness and fairness? The value of the 'code is law' thesis lies in its ability to enable us to adopt a more expansive view of governance. As Murray and Scott correctly acknowledge:[60]

'Lessig's work is of great value for reminding us of the importance of architecture as a basis for regulation.'

Their subsequent observation is particularly astute:[61]

'The potential for controls to be built into architecture have long been recognised, as exemplified by Jeremy Bentham's design for a prison in the form of a panopticon…Lessig suggests that as a means of regulation architecture is self-executing and thus different at least from norms and law. This claim appears correct up to a point. However the analysis which separates the functions of a control system shows that the standard-setting element of architecture-based regimes may be self-executing as to monitoring and behaviour modification.'

It is important when making a case for integrating the communication infrastructure into the way we reason about contract formation, to acknowledge the wider context of governance.[62] Governments and policymakers have recognised the impact of information and communication technologies on traditional business models, proprietary entitlements, privacy and so forth.[63] The expansion of new modes of governance is becoming a dominant feature of political, economic and social ordering:[64]

'First, the institutional advance of regulation in the context of privatisation and the neo-liberal hegemony presents a paradox…. Second, the development of proactive policies for the promotion of economic competition (regulation-for-competition) represents a departure from the past. If the regulatory agencies that were established in the United States during the New Deal era legitimised monopolies, the new regulatory authorities that are now established all over the world are committed to active promotion of competition, using modern regulatory techniques (more rules, more competition: see Vogel, 1996). This might lead to institutional structures and policies that are basically more mercantilist than liberal (Levi-Faur, 1998). Third, the incremental transfer of regulatory knowledge and institutions have some clear advantages over ministries, and that the mere fact of reform opens new possibilities for effective governance…Finally, while the American regulatory state that was created in four waves of institutional construction and deconstruction after the late nineteenth century availed of celebrated 'prophets' (McCraw, 1984) and had clear political affiliation (Vogel, 1989; Rose-Ackerman, 1992), the political forces that sustain, promote, and diffuse the regulatory state, and the benefits and costs that it imposes on business, are still unclear.'

These observations about the politics of regulation need not be confined to the ambivalence that surrounds state hegemony in private ordering. [65] The orthodox command and control hierarchy of governance with its emphasis on identifiable modalities of law, norms and market, Lessig argues, is being implicated by the architecture of the Internet. It is premature to venture a view as to whether the architecture of the Internet is blurring the orthodox nodes of power and avenues for legitimate social and economic policymaking in contract law. The remainder of this part will provide an account of the insights that the analytical framework of architecture and code on the governance issues relating to the constitution of binding commitments.

A caveat is in order. The metaphor of architecture is not exclusive to understanding governance in the online environment. Media either in its crude form of oral communications between parties dealing at arms length, telephone, fax and online communications infrastructure can for example be seen as the 'physical' layer; the substantive layer can comprise social norms and values, the rules on contract formation, doctrines on contract vitiation and enforcement; and content will comprise the duties, rights and obligations which law and the market attempt to regulate.

From the time of the invention of the printing press to the 20th century, communication infrastructures have been at the centre of doctrinal concerns in the quest to balance 'welfarist' and 'efficiency' concerns. Advances in the communications infrastructure reduced potential barriers in the form of time, space and distance. Clearly, accompanying the norm of contracting at a distance are valid concerns facing the definition of entitlements and obligations – fairness, uncertainty, efficiency and risk distribution. In the pre-telephone and Internet era, the post was viewed as a reliable and efficient way of contracting. We can map the process of contracting onto the emerging legal architecture of rules, namely, those that address the respective acts of presenting the intentions on paper, the acts of reading the 'offer' and 'acceptance' and the posting of the respective responses. Communication through the telephone leads to the delineation of a set of rules that modifies general rules of contract that draws on the normative dimensions of this architecture. The text of the communications, involving a product or service, is communicated instantaneously, where contract formation can be said to materialise when there is a meeting of minds.

We can compare and contrast a bilateral transaction between A and B (dealing with each other at arms length) with a transaction where a contract is concluded through the agency of the advertisement or post. Each media is defined by its own set of physical characteristics, and with its own set of substantive rules. The rule on direct assent, which requires communication to be received by the offeror, is suspended where the act of one party, in the case of a unilateral contract, is deemed to be sufficient to constitute the agreement. A different outcome emerges when the architecture of contractual negotiations involve the use of the post. Whereas it is correct to think of an agreement being constituted on the basis of 'meeting of minds' or consent in the sense of voluntary consensual exchanges, its presence in the latter two instances are the product of a willingness on the judiciary to import a fiction to justify the existence of rule. Some have suggested that this is a rule of convenience. This may be true but the important point here is that each rule, which corresponds with the distinctive architecture can be said to underscore particular values.

Each form of communication or media – be it oral, written, post or instantaneous – can be seen as embodying distinctive architectures, which leads us to allocate particular values in their design. The architecture of the telephone, can be differentiated from the post as would be the case when two parties face each other: in all three instances, a binding commitment cannot be created until the law characterises that these communications express an 'offer' and an 'acceptance'. It is not without significance, that as the architecture alters, so too does law’s view of the technology and the appropriate rule or norm which is to be used to govern the situation.

The postal rule is generally regarded as an exception to the general rule of assent being communicated to the offeror. In *Adams v Lindsell*, the court was faced with a

different architecture, but this was easily overcome, with the courts rationalising that an agreement had been formally constituted when the acceptance was posted. The absence of direct communication of acceptance or the offeror's knowledge of assent was held not to be fatal. What seems to emerge here is that the terms offer and acceptance, have continued to embed the image of consent when providing a justification for holding that an agreement had been constituted.

Another example of the way the distinctive architecture of communication has led to a court ruling on the question of a binding commitment is the use advertisements by manufacturers. *Carlill v Carbolic Smokeball* can be viewed as an example where contract formation is conceptualised in terms of the process of voluntary undertakings and the methods. The acts of the manufacturer, which included the placement of the advertisement and the pledge honouring the claims by the deposit of a sum of money, were held to be binding when the customer made the purchase from the retailer. The court's characterisation of the advertisement as an offer can be regarded as a recognition of the imbalance in the relationship.

The rule governing instantaneous communications draws attention to the analogy of a particular architecture – parties dealing with each other. We accept the logic and coherence of these rules uncritically. But if we paused to reflect, it should become apparent that certain architectures lead to the law examining the question of whether a different understanding is required of the rule governing the way legal agreements are to be concluded. The technology of the post, for example, can be seen as embodying particular ideas about the feasibility of commercial transactions being conducted through this media, or the certainty that is promoted (i.e. absence of delay or reduced risk of the acceptance not reaching the offeror) by adopting this particular architecture of communication. Contrast this with a situation when two parties attempt to contract in each other's presence, but intermediated by a physical divide either a river or lake. This architecture is clearly not as reliable as the former, and hence courts have been reluctant to conclude that the utterance of an acceptance in itself will not lead to a constitution of the agreement. The same can be said with the applicable rule governing use of media like faxes, telephones and answering machines. Some have suggested that these rules and the use of analogies are rules of convenience and resonate very much of the genius of the creativity of the judiciary. It is probably true, but the point of these illustrations is to reflect the liberating dimension, accompanying the characterisation of contractual relations in terms of the technological architecture.

What we should be questioning, particularly with online communications in mind, is the manner in which norms, markets, architecture and law regulate contracting behaviour. In the electronic environment of disintermediation are mercantilist norms being used to supplant traditional ideas of autonomy and choice? To what extent can the new technical orchestrations of choice redefining the checks and balances in place? Labels like 'offer' and 'acceptance' can be cast in wider terms, which reflect the way coordination, competition and trust issues are mediated. Brownsword, for example has argued that the constituents of a contract provide the beginning and not the final point of analysis. The decisions and the rules, he suggests, must be seen against the backdrop of the prevailing economic and cultural conditions.[66] These include, the relative bargaining strengths of the parties, clarification, reduction of transaction costs, customary practices and risk management. To summarise, the benefit of employing the architecture metaphor lies in the expansion of our

vocabulary to integrate technology into the mainstream discussions of how governance in the online environment can be made effective. Orientating the traditional discourse on online contract formation towards this expansive mode is particularly timely as software now assumes an instrumental role in structuring and processing consumer choices. If the buyer intends to make a purchase online he will need to engage with the code. The software interprets the steps in the negotiations from the clicks made by the buyer. If the buyer does not communicate, the process will either cease or a new range of options presented for consideration by the consumer. These are not the only avenues through which software attempts to regulate relationships in the online environment. For example, the website may have agreements which stipulate the process by which commitments become binding. Refusal to assent to the terms will lead to the termination of the transaction. This may not be a bad thing, since a buyer may move on to another online retailer. It is true, that end-to-end architecture may create new opportunities and choices. One should not overlook however, that the market many not be particularly effective in promoting competition, where the online retailer enjoys market dominance. Where code assumes the identity of law through the programming of its values, the user has two options: he either complies with the pre-determined structure of communications or moves on to another website. Code's latent ambiguities have the ability to structure choices and preferences. Yet, despite this it cannot be overlooked that contract law is designed to resist pressures of economic relations descending into a market for lemons. Code embeds values, which cannot be dismissed when we think about the values to be pursued by contract. What is unclear is whether the orthodox values of transparency, certainty and autonomy are being arbitrarily marginalized by code. One of the central issues that the paper confronts is whether technology enhances or impairs the norms and values that doctrine is meant to uphold.[67] The remainder of this paper will locate the Electronic Commerce (EC Directive) Regulations 2002 within the four modalities identified by Lessig.

4. The Electronic Commerce (EC Directive) Regulations 2002: Hybrid Models of Consent?

How do we solve the governance problems in a disintermediated environment where voluntary constraints are premised by legal rules requiring consent? Contract doctrine provides the holding operation for dealing with clear cases of fraud and abuse of bargaining positions. Regulations 2002 attempt to address the governance challenges facing online contract formation:[68]

(i) The communications system now creates a new set of dynamics in social and economic relations; and

(ii) West Coast Code now shapes the process by which commitments mature into legal rights and obligations.

Regulations 2002 provides a framework, which promotes transparency and accountability. This is achieved in the following way. First, a clear attempt is made to separate the *act* of constituting an agreement ('process') from the *terms* binding the parties ('content'). Second, the Regulation ensures that the communications infrastructure ('West Coast Code') does not foreclose autonomy and competition. Save where email or more traditional mediums are used, online electronic contracts can

only be constituted in accordance with the provisions in the Regulations 2002. We need not at this juncture re-visit the jurisprudential question of whether the phrase 'meeting of minds' can be applied where one party to the transaction or both are electronic agents.[69] A more interesting and directly relevant issue would be to explore more closely the interplay between the four modalities.[70] A preliminary point can be dealt with summarily. It is sometimes thought that the lack of prescription in terms of the identity of 'offer', 'acceptance' in recognisable categories, as is the case in the common law jurisprudence, deprives the Regulation 2002 of its force in promoting transparency and certainty. Regulation 12 for example, states that the placement of an order need not be necessarily characterised as a contractual offer. If technology is to retain its flexibility, it is difficult to see what plausible gain is to be derived from reading common law analogies and rules into the online contracting process. Ironically, recourse to orthodox analogies with the post or instantaneous communications rule are likely to be a hindrance – the use of metaphors often became ends in themselves and may lead to legal rules and principles being applied mechanically, without prior reflection on the purpose. To be sure, the emphasis on creating transparent and readily recognisable rules on the contracting process draws attention to two particular aspects of governance: compliance and policy. To be sure, Regulations 2002 introduces two new ideas about online contract formation. First, the placement of the onus on the retailer to fulfil the various obligations creates a presumption of non-agreement. The rationale seems to be based on the viability of allocating responsibility on the retailer to ensure that the consumer is provided with all relevant information; retailers after all have the means and the incentive to design their websites, which make decision-making efficient and transparent. Second, the distinction between ‘process’ and ‘content’ is often underemphasized when debates turn to online contract formation. Contractual relations are now seen as having a fluid character and more critically a 'welfarist' bias; the clicking of a button on the web page (e.g. 'I Accept') will not in itself to determine the process of inquiry. Regulation 9 for example states in no uncertain terms that:

'(1) Unless parties who are not consumers have agreed otherwise, where a contract is to be concluded by electronic means a service provider shall, prior to an order being placed by the recipient of a service, provide to that recipient in a clear, comprehensible and unambiguous manner the information set out in (a) to (d) below –

(a) the different technical steps to follow to conclude the contract;

(b) whether or not the concluded contract will be filed by the service provider and whether it will be accessible;

(c) the technical means for identifying and correcting input errors prior to the placing of the order; and

(d) the languages offered for the conclusion of the contract.

(2) Unless parties who are not consumers have agreed otherwise, a service provider shall indicate which relevant codes of conduct he subscribes to and give information on how those codes can be consulted electronically.

(3) Where the service provider provides terms and conditions applicable to the contract to the recipient, the service provider shall make them available to him in a way that allows him to store and reproduce them.

(4) The requirements of paragraphs (1) and (2) above shall not apply to contracts concluded exclusively by exchange of electronic mail or by equivalent individual communications.'

Regulations 2002 can be viewed as a strategy intent on creating transparent and uniform procedures – a form of techno-legal code. Recalling, Lessig's thesis, effective and legitimate governance requires an understanding of technology and designing laws that reflect the new modes of governance in the online environment. Regulations 2002 must be aligned with the ideological 'European experiment', which is to promote trust and reduce barriers to the free movement of information society services between Member States of the European Union.[71] The interests shaping the new online market order have characteristic economic and political overtones.[72] The elaborate process by the Regulations 2002 in structuring the process of an agreement also reflects the civil law concept of 'good faith' and ideas about consumer welfare. A pilot study, *E-Commerce in Europe* illustrates the target audience of the enactment:[73]

'Confirming the need for a trustworthy environment in which to conduct e-commerce, enterprises cited the uncertainties about the conditions under which transactions take place as the main problems when using e-purchasing or as a barrier to using it…. Uncertainties concerning contracts, terms of delivery and guarantees were said to be of high or of some importance by 40% of enterprises…

We can illustrate the interplay between the Regulations 2002 and the modalities of governance by using a hypothetical transaction involving an online retailer – Amazon.[74] This online retailer has a web presence in the United Kingdom. [75] A visitor to the site is greeted with a web page that contains a range of goods for purchase. The online environment is distinctly different from that which most visitors to a bookstore on the High Street commonly encounter. Issues of trust arising from the anonymity of the parties, the potential for identity fraud, transaction costs clearly requires that binding commitments are constituted in a manner, which is in compliance with established law, norms and expectations of the market. The software engineers on Amazon have designed a website that can be seen as reflecting the interplay of the modalities of law, code, norms and market. For example, first time visitors are provided with a range of links, which mirror the process of contract formation. Links lead the visitor to the items available for purchase, information of the products and availability, a 'shopping basket' which can be used to provide the visitor with an immediate account of items for potential purchase, and an order form. The impression one immediately gets, when thinking about the architectures for structuring and processing the choices made by the visitor is the way code replicates familiar legal rules and norms one associates with purchasing transactions in a real space book store. It is also useful to observe that in this domain that the entire process can be initiated and ultimately concluded without reliance on either party on formal substantive doctrines. It might be thought that as there is very little disparity between the way parties constitute their contractual relations, that there is very little qualitative difference between real space and cyber space. This conclusion is misconceived. The

resulting disintermediation makes it imperative that online retailers think creatively about the way code, norms and market can be factored in the web design. Rather paradoxically, code can be used to reduce the ensuing transaction costs by constituting norms, which incentivize parties to engage in cooperative and productive relations. A simple illustration will provide a snapshot of the new dynamics of governance. For example, the transaction cannot be undertaken without the visitor filling an online order form. To access the online order form, the first time visitor is required to enter an email address. The visitor is then required to provide a real space name, address and credit card details. Non-compliance with requests for this information will prevent the transaction going any further. Assuming that the details have been provided, the visitor is then presented with a page, which contains relevant details regarding the quantity of the products being purchased, and the order total. Should the individual wish to amend the purchases or withdraw this can be done easily. To conclude the transaction, the visitor has to click on the 'Place your order' button. Below this button is a statement, which makes clear the nature of the obligations arising from the action. The user is informed that on placement of the order an e-mail will be sent acknowledging receipt of the order The obligation to purchase (i.e. that the user has bound himself to the purchase) does not arise until much later:

'Your contract to purchase an item will not be complete until we send you an e-mail notifying you that the item has been dispatched to you.'

The user is also informed that for book purchases:

'our 30-day returns guarantee means that if for any reason you are unhappy with your purchase, you can return it to us in its original condition, within 30 days, and we will issue a full refund for the price you paid for the item.'

We can see from this brief account of the online contracting process some of the ways through which the Regulations 2002 makes space for the development of norms and code to provide solutions to the problems of coordination and cooperation. How should the law respond in the case of mispricings? It is inevitable that in the case of an online retailer like Amazon.com, where over 1.5 million items are listed on its catalogue, mispricings will occur. It is therefore imperative that legal rules are set in place not only to deal with this potential for abuse, but also to ensure that customer decisions are not the product of misrepresentation or fraud. Outside the strict parameters of legal code, it is interesting to note the existence of a statement on the Amazon site that recognises the value of cooperative norms and the need to make available to customers the choice of seeking alternative sellers. For example, where the correct price of the product is higher than that stated, the terms stipulate that Amazon will cancel the order and notify the consumer of the cancellation. Of course, a technological solution that anticipates potential mispricings problems will be ideal. Since it is difficult to design code to overcome the problem of mispricings or erroneous selection or choice, Amazon attempts to cultivate norms that promote cooperation between the retailer and the consumer.

Another aspect of the governance of private ordering in the online contracting environment is the process of structuring decision making by consumers. The structuring of the purchasing process, with the options for modification and withdrawal, attempts to promote informed consent in the contracting process. By

delaying the conclusion of a binding commitment to the point of despatch and thereafter the 30-day return period, an attempt is made to reflect cultural rather than legalistic norms into the contracting process. The use of the email can also be viewed as a creative solution through the use of code to promote coordination and convergence in parties' expectations. The limited role of law in this entire process underscores the assertion that the communications infrastructure now makes available new modes of governance – resulting in what can be loosely termed as a hybrid model of consent.

To be sure the disintermediated environment compels us to think clearly about what it is that makes voluntary constraints binding (i.e. consent) and how technology defines this process (i.e. the normative foundations). Rather than be content with the doctrinal rules, the communication infrastructure of the Internet requires us to rethink some of the implications resulting from the behaviour ordering character of code. By approaching governance through this line of analysis, it is not at all surprising that Regulations 2002 defers to the other modalities of governance.

How does code shape the way we view consent and more significantly the metaphor of 'meeting of minds'? A partial answer has been provided in the discussion above on the architecture of the website.[76] Let us return to the norm of 'meeting of minds'. In reality, as has been seen, this is a myth that is so deeply ingrained in orthodoxy that we have ceased to question its absence, when we use the post or enter into contracts which have standardized terms. Yet, what is particularly striking about the role of the Regulations 2002 is the way it complements the design of amazon.com software, which is intent on bridging expectations of the consumer and the retailer. It is trite to say that conflicts in large part emerge from the absence of convergence in expectations. How are these potentials for conflict being minimized in the online environment? Clearly in real space, the distinctions between invitation to treat and offer help reduce the scope for divergences in expectations on the legal consequences accompanying a particular conduct. Yet, it is not possible to find an analog that translates readily into the online environment. To resolve problems two particular modalities have direct significance: first code and second regulation in the form of Regulation 2002.

The absence of parties contracting in each other's presence is not a barrier, since code can be used to promote convergence and also promote norm compliant conduct by making available relevant information and reinforcement of the value of consensus. In this respect, Regulation 2002 can be said to support this norm compliant behaviour. What guarantee is there to ensure that onerous terms in the online environment do not bind the consumer? Regulation 9(1)(c) promotes the idea of a tiered or layered contract. The question of an act (i.e. clicking on the mouse) which gives rise to an agreement is treated as being separate from the enforceability of the terms. [77]

The absence of case law in the UK to illuminate the interpretation of the Regulations is not fatal as the questions contract formation disputes raise have to some extent been considered in the United States.[78] An analogy can for example be drawn between the hypothetical case study and *ProCd v Ziedenberg*.[79] Goods were purchased by a customer and payment made at the time of the order rather than receipt. It was held that a binding commitment would be created at the point in time the shrink wrapped packaging was removed from the merchandise.[80] The terms of the agreement were

presented at the time the goods were delivered. An agreement could not be constituted at the time the purchase price was made since the consumer had no knowledge of the terms. Judge Easterbrook's conclusion can be seen as departing from the strictures of the narrative of offer and acceptance. His approach seems to acknowledge that technology can lead to altering the dynamics of power relations between the parties – manufacturers can control and define when an agreement is constituted and the terms applicable to the relationship. It could be suggested that the recognition of the alteration of the dynamics in contractual relations and the recognition of what constitutes acceptable commercial norms and practice leads Easterbrook to advocate the idea of 'tiered contracting' – the content of the agreement is seen as being built gradually in tandem with the ongoing communications between the parties.[81]

It is pertinent to note that in reaching this conclusion the court was approaching the issue of binding commitment through *ex post facto* rationalisation. Particular emphasis, for example, was placed by the court on the overt act of the consumer removing the shrink-wrap as evidence of assent and the opportunity to review the terms of the license. [82] The opportunity, whether taken or not, was deemed to constitute the legal relations.[83] What this approach seems to suggest is that whilst formalism has a particular value, the court (at least in this case) was prepared to accommodate the technological dimensions in the contract formation process. This approach would seem to be very much in line with the balance the Regulations 2002 attempts to achieve between the role of software in structuring relations and consumer welfare.

For example, prior to an order being placed by the consumer, information regarding the process of constituting the legal relations is to be provided in a clear, comprehensible and unambiguous manner. A is therefore required to provide information enabling B to identify and correct any input errors. The omission of any provision enabling A to re-write the agreement in view of errors in its mistake could be construed as being determinative of the parties' rights and expectations. Regulation 9(3) stipulates that where a service provider provides terms and conditions applicable to the contract to the recipient, the service provider shall make them available to him in a way that allows him to store and reproduce them. As noted previously, it is not entirely clear what the standard of review is with regard to the issue of 'opportunity to review'. In *Specht v Netscape Communications*, it was observed by the court that the act of downloading browser software did not bind the user to an arbitration clause in the licensing agreement.[84] This begs the question – what would constitute an *affirmative* assent? Consent, in the *Specht* situation implies an additional signification of agreement. The court seems to be acknowledging that the architecture of code and the power to control the process of agreement formation were aspects which consumers could not reasonably be expected to be familiar with. As the court stated:[85]

'[A] reasonably prudent Internet user in circumstances such as these would not have known or learned of the existence of the license terms before responding to the defendant [Netscape's] invitation to download the free software.'

In *Specht*, the 'act' failed to attain the status of an 'unambiguous manifestation of assent' since:[86]

'[A]n offeree, regardless of apparent manifestation of his consent, is not bound by inconspicuous contractual provisions of which he is unaware, contained in a document whose contractual nature is not obvious.'

5. Conclusion: Whither 'New Wines and Old Bottles'?

The stated aim of the paper was to argue that the exclusion of technology from current debates on online contract governance deprives us of understanding the new modes of governance in the online contracting environment. The claim that the communications infrastructure of the Internet is a passive technological medium is founded on intuitive terms of reference provided by 'black letter law'. Whilst it is true to assert that doctrine provides important answers to the governance challenges, it does not necessarily render an exploration of the nature of technology superfluous. To be sure, the adherence to the view that software is mere method misunderstands the significance of West Coast Code to existing governance infrastructures. To paraphrase Stoker, the architecture of the Internet is constructing a set of conditions, which cannot be efficiently and democratically addressed, unless the nuances of power dependencies and norm creating constituencies in the socio-cybernetic system are recognised.[87] The Electronic Commerce (EC Directive) Regulations 2002 provides a mode of governance that reflects some of the complex dynamics of contracting in the online environment. The metaphor 'old wines – new bottles' can be a useful heuristic, if it is relied upon as intuitive pump. Where it is used to foreclose counterintuitive attempts to unpack the modalities of governance, such attempts must at best be seen as regressive. In such circumstances we do well to recall the observation made by Fuller:[88]

'Thomas Reed Powell used to say that if you can think about something that is related to something else without thinking about the thing to which it is related, then you have the legal mind…. the legal mind generally exhausts itself in thinking about law and is content to leave unexamined the thing to which law is being related and from which it is being distinguished.'

This article can be seen as taking a small step towards reflecting the dynamics of the interplay between law, technology and society.

Notes and References

[1] Examples of the linear approach to conceptualising online contract formation include: C Reed, *Internet Law: Text and Materials* (London: Butterworths, 2000), GJH Smith, *Internet Law and Regulation*, 3rd ed (London: Sweet & Maxwell, 2002) pp 449-459, S Pitiyasak, 'Electronic Contracts: Contract Law of Thailand, UK and UNICTRAL Compared' CTLR 9 (2003) pp 16-30, CH Ramberg, 'The ECommerce Directive and Contract Formation in a Comparative Perspective' (2001) 26 EL Rev pp429-450, S Jones, 'Forming Electronic Contracts in the United Kingdom' (2000) 11 International Company and Commercial Law Review pp 301-308, D Rowland and E Macdonald, *Information Technology Law*, 2nd ed (England: Cavendish Publishing, 2000) pp 295-306 and Andrew D Murray, 'Entering into Contracts Electronically: The Real W.W.W.' in L Edwards & C Waelde (eds) *Law & the Internet* (Oxford: Hart, 2000) 17. See however the critical stance advocated in the following literature with regard to conceptualising legal rules: OW Holmes, 'The Path of Law', (1896-1897) 10

Harvard L R 457, 476. Reprinted in (1996-1997) 110 Harvard LR 989, PS Atiyah, *The Rise and Fall of Freedom of Contract* (Oxford: 1979), *Essays on Contract* (Oxford: Clarendon Press, 1986), M Furmston (general editor) *The Law of Contract* (London: Butterworths, 1999), H Collins, *The Law of Contract*, 3rd ed (London: Butterworths, 1997) R Brownsword, *Contract Law, Themes for the Twenty-First Century* (London: Butterworths, 2000).

[2] L Lessig, *Code and Other Laws of Cyberspace* (New York: Basic Books,1999) pp53-54.

[3] See for example C Reed, *Internet Law: Text and Materials, supra*,n1 p 1. More generally, on the limits of formalism see O Fiss, 'Objectivity and Interpretation' (1982) 34 Stanford LR 739, W Twining and D Meirs, *How to do Things With Rules* 2nd ed (London: Butterworths, 1982), J Bell, *Policy Arguments in Judicial Decisions* (Oxford: OUP, 1983), JM Feinman 'Critical Approaches to Contract Law' (1983) 30 UCLA Law Rev 829, D Sugarman, 'Towards a New History of Law and Material Society in England, 1750-1914' in GR Rubin and D Sugarman (eds) *Law, Economy and Society: Essays in the History of English Law, 1750-1914* (1984), D Sugarman, 'Legal Theory, the Common Law Mind and the Making of the Textbook Tradition' in W Twining(ed), *Legal Theory and Common Law* (Oxford: Basil Blackwell, 1986) 26 and B Simpson, 'The Common Law and Legal Theory' in W Twining, *supra*, p 8.

[4] See D Sugarman, 'Legal Theory, the Common Law Mind and the Making of the Textbook Tradition', *supra*,, pp26-28, 48-53 and B Simpson, *supra*, pp10-18. Edward H. Levi, *An Introduction to Legal Reasoning* (U. of Chicago Press, Chicago, 1949), pp27-32.

[5] See P Atiyah, *Rise and Fall of Freedom of Contract* (Oxford: Clarendon, 1979) and M. Chissick & A. Kelman, *Electronic Commerce Law and Practice* (London: Sweet & Maxwell, 1999).

[6] H. Collins, *The Law of Contract (Second Edition)*, (London: Butterworths, 1993).

[7] R Posner, *Frontiers of Legal Theory* (Cambridge: Harvard Univ Press, 2001) pp5-6.

[8] See *The Hannah Blumenthal* [1983[1 All ER 34 and *Gibson v Manchester CC* [1979] 1All ER 972.

[9]*Storer v. Manchester City Council* C.C. [1974] 1 W.L.R. 1403. Also G.H. Treitel, *The Law of Contract (Tenth Edition)*, Sweet & Maxwell, 1999.

[10] *Smith v. Hughes* [1871] L.R. 6 Q.B. at 607.

[11] [1880] 5 C.P.D. 334.

[12] *Entores Ltd v. Miles Far East Co.* [1955] 2 Q.B. 327. See also *The Brimnes* [1975] QB 929.

[13] R Brownsword, *Contract Law, Themes for the Twenty-First Century*, *supra*, n1, p1.

[14] C Reed, *supra*, n1 p 174.

[15] This of course may be seen as overstating the claim. See however David Post, 'Law and Borders:

The Rise of Law in Cyberspace' 48 Stan L Rev 1367 (1996), Mark Lemley, 'Place and Cyberspace'

91 Cal L Rev (2003), Dan Hunter, 'Cyberspace as Place and the Tragedy of the Digital

Anticommons' 91 Cal L Rev 439 (2003).

[16] C Reed, *supra*, n1 at pp 174-175. Contrast this account with a more nuanced attitude towards online contract formation in Margaret .J. Radin, 'Online Standardization and the Integration of Text and Machine', (2002) 70 Fordham L. Rev. 1125 and 'Humans, Computers and Binding Commitment', (2000) 75 Ind. L.J. 1125.

[17] C Reed, *supra*, ibid.

[18] See D Sugarman, 'Legal Theory, the Common Law Mind and the Making of the Textbook Tradition', *supra*,, pp26-28, 48-53 and B Simpson, *supra*, pp10-18. Edward H. Levi, *An Introduction to Legal Reasoning* (U. of Chicago Press, Chicago, 1949), pp27-32.

[19] See examples in n1.

[20] A Murray, *supra*, n1 at p 18.

[21] C Reed, *supra*, n1 at p 175. The distinction between the physical world and the online environment seems at odds with the frequent assertion of engaging in cyberspace fallacy. If the distinction between 'real' and 'cyber' worlds is questionable then the use of the distinction here could be subject to similar scepticism.

[22] [1893] 1 QB 256.

[23] [1953] 1 QB 401.

[24] For example, the courts have shown a willingness to take into account prevailing commercial practices and the reasonableness of the reliance when determining the question of whether a particular representation was sufficient to amount to an offer.

[25] 106 ER 250.

[26] [1892] 2 Ch 27 and [1974] 1 All ER 761.

[27] *Brinkibon Ltd v Stahag Stahl* [1983] 2 AC34 and *Entores Ltd v Miles Far East* [1955] 2 QB 327.

[28] See I Cohen and J Blavin, 'Gore, Gibson, and Goldsmith: The Evolution of Internet Metaphors in Law and Commentary' (2002) 16(1) Harvard Journal of Law and Technology 265 (available at: <http://ssrn.com/abstract=479742)>.

[29] J Sommer, 'Against Cyberlaw' (2000) 15 Berkeley Tech L J 1145.

[30] See for example J Sommer, 'Against Cyberlaw' (2000) 15 Berkeley Tech Law Journal 1145. The author argues that the governance issues raised by technology is not new nor difficult, since legal concepts and rules have flexibility embedded in their institutions. This it should be noted is not the claim made in this paper. I do not suggest that we need a law of cyberspace, rather that we need to understand ex ante technology and its design values so that we can articulate the responses of law. This is a separate argument and should not be conflated with the other premise, that is contestable – traditional laws are ill-equipped to deal with the issues raised by online activity.

[31] E Katsh, *Law in a Digital World* (Oxford: OUP, 1995) at p 6.

[32] G Graham, *The Internet: A Philosophical Inquiry* (London: Routledge, 1999). See M Hauben and R Hauben, *Netizens: On the History and Impact of Usenet and the Internet* available at <http://www.columbia.edu/~rh120/ >.

[33] N Negroponte, *Being Digital* (New York: Vintage Books, 1995), T Roszak, *TheCult of Information*(Univ of California Press, 2nd ed, 1994).

[34] A Murray, *supra*, n1 at p 28.

[35] Ibid.

[36]I Lloyd, *Legal Aspects of the Information Society* (London: Butterworths, 2000) p 243.

[37] A Murray, *supra*, n 30.

[38]Ibid.

[39]Ibid.

[40]T Kuhn *The Structure of Scientific Revolutions* . (Univ of Chicago Press, 2nd ed, 1962). See excellent review by S Weinberg, 'The Revolution That Didn't Happen' in The New York Review of Books 45 (15 October 8, 1998). Available online at: <http: www.cs.utexas.edu/users/vl/notes/weinberg.html>. A portal of Thomas Kuhn's work can be found at: <http:www.emory.edu/EDUCATION/mfp/kuhnsnap.html>.

[41]A Feenberg, *Critical Theory of Technology* (Oxford: OUP, 1991). A Feenberg & A Hannay (eds.) *Technology and the Politics of Knowledge* (Indiana, 1995).

[42]K Semple, 'UN to consider whether to ban cloning of embryos', *New York Times*, 3rd November, 2003.

[43]S Labaton, 'Critics Press Case on TV Privacy Rules' New York Times, 27 October, 2003 (available at: < http://www.nytimes.com/2003/10/27/business/27flag.html?th=&pagewanted=all&position>). See Greene, Brian, *The Elegant Universe*, (New York: Random House, 1999) pp 3-17 and B Friedman & PH Kahn 'Human values, ethics and design' in J Jacko and A Sears (eds.), *The Human-Computer Interaction Handbook* pp 1177-1201) (New Jersey: Lawrence Erlbaum Associates, 2003) (available at: < http://faculty.washington.edu/pkahn/articles/Human_Values_Ethics_Design.pdf>.)

[44]F Webster, *Culture and Politics in the Information Age: A New Politics?* (London: Routledge, 2001) p3.

[45]Historians have long grappled with questions revolving around the way society and institutions of ordering have been constructed and legitimated. See WW Buckland, AD McNair and FH Lawson, *Roman Law and Common Law* (2nd ed) *(Cambridge, 2nd ed, 1952)* B Simpson, 'Innovation in Nineteenth Century Contract Law' (1975) 91 LQR 247.

[46]H Collins, 'Contract Law and Legal Theory' in W Twining(ed), *Legal Theory and Common Law* (Oxford: Basil Blackwell, 1986) 136, pp 137-139.

[47]See R Brownsword, *Contract Law, Themes for the Twenty-First Century, supra*, n1 at p 2.

[48]See J Savirimuthu, 'Taking Online Contract Formation Seriously'(2004)

[49]ME Katsh, *Law in a Digital World* (Oxford: OUP, 1995) at pp 4-20. Also by the same author *The Electronic Media and the Transformation of Law* (Oxford: OUP, 1989). More generally, J Abbate, *Inventing the Internet* (Cambridge, Mass: MIT Press, 1999). See also J Boyle, *Shamans, Software, & Spleens* (USA: First Harvard UP, 1997)

[50]Lessig, *Co*de and Other Laws of Cyberspace, *supra*, n2 at pp 88-89

[51]L Lessig, *Code and Other Laws of Cyberspace*, *supra*, n2. Also see L Lessig, *The Future of Ideas* (Random House, 2001), Y Benkler, 'From Consumers to Users: Shifting the Deeper Structures of Regulation' (2000) 52 Federal Communications Law Journal 561 and J Boyle, 'A Politics of Intellectual Property: Environmentalism for the Net?' (1997) 47 Duke Law Journal 87.

[52]See for example, the attempts by the Motion Picture Association of America to lobby the US government to require computer hardware manufacturers to include copy protection schemes: F Manjoo, 'Hollywood to the Computer Industry: We don't need no stinking Napsters' (available at < http://www.salon.com/tech/feature/2003/10/27/broadcast_flag/index_np.html>). This is the justification provided by the entertainment industry:

'The broadcast flag is a sequence of digital bits embedded in a television program that signals that the program must be protected from unauthorized redistribution. It does not distort the viewed picture in any way. Implementation of this broadcast flag will permit digital TV stations to obtain high value content and assure consumers a continued source of attractive, free, over-the-air programming without limiting the consumers' ability to make personal copies.'

[53] J Casti, supra, n52.

[54]See in particular G Postema, *Bentham and the Common Law Tradition* (Oxford: Clarendon Law Series, 1986) pp 263-301.

[55]For a historical overview of the Internet see Barry M Leiner, et.al, 'A Brief History of the Internet' available at: <http://www.isoc.org/internet/history>. Also Janet Abbate, *Inventing the Internet* (Cambridge, MA: MIT Press, 2000) and R Griffiths 'History of the Internet, the Internet for Historians' available at: <http://www.let.leidenuniv.nl/history/ivh/frame_theorie.html>. For an annotated timeline of cyberlaw seeUCLA Online Institute for Cyberspace Law and Policy, 'Growth and Development of Cyberspace Law in the United States: Highlights of the Past Decade' available at: <http://www.gseis.ucla.edu/iclp/decade.html>.

[56] 'Governing Networks and Rule-Making in Cyberspace' (available at: < http://web.archive.org/web/19971119123936/http://www.law.emory.edu/ELJ/volumes/sum96/reiden.html>.

[57]Robert E Kahn and Vinton G Cerf, 'What is the Internet (And What Makes it Work) – December, 1999

[58]Yochai Benkler, 'From Consumers to Users: Shifting the Deeper Structures of Regulation' (2000) 52 *Federal Communications Law Journal* 561, pp 561-563.

[59]L Lessig, *The Future of Ideas, supra,* n51, p 23.

[60]A Murray and C Scott, 'Controlling New Media: Hybrid Responses to New Forms of Power' (2002) 65 MLR 491, 500

[61]Ibid. p 500

[62]See in particular, J Jordana and D Levi-Faur 'The Politics of regulation in the age of governance' in J Jordana and D Levi-Faur (eds), *The Politics of Regulation* (Cheltenham: Edward Elgar, 2004) pp 1-28

[63]See generally, I Bache & M Flinders, *Multi-Level Governance* (Oxford: OUP, 2004), J Pierre (ed) *Debating Governance* (Oxford: OUP, 2000), J Rosenau, 'Governance, Order, and Change in World Politics', in J Rosenau & EO Czempiel (eds) *Governance Without Government: Order and Change in World Politics* (Cambridge: CUP, 1992), OECD, *Government of the Future* (Paris: OECD, 2000) pp 11-89, R Rhodes, *Understanding Governance* (Philadelphia: Open Univ Press, 1997) Chapter 3.

[64]Ibid J Jordana and D Levi-Faur (*supra*)

[65]See also RAW Rhodes, 'The New Governance: Governing Without Government' (1996) XLIV Political Studies, 652-677

[66]See R Brownsword, 'General Considerations' in M Furmston (eds), *supra*, n1 pp 1-21

[67]The following account builds on the insights provided by critical contract scholars like Atiyah, Brownsword, *supra*, n1, Collins, *supra*, n1 and R Bradgate, 'The Formation of Contracts' in M Furmston (eds), *supra*, n1 pp 204-513. Their accounts provide us with a foundation for understanding the political, cultural and economic foundations of contemporary contract doctrine. It is beyond the scope of the paper to revisit their arguments and analysis. The aim of the paper has been to take a small step towards bridging the gap between 'theory' and 'technology' by exploring the benefits of re-thinking binding commitments in the online environment. None of the authors have however undertaken a critique of Regulations 2002 through the heuristic of code.

[68] See recital 17 of the Directive as covering 'any service normally provided for remuneration, at a distance, by means of electronic equipment for the processing (including digital compression) and storage of data, and at the individual request of a recipient of a service') has the meaning set out in Article 2(a) of the Directive, (which refers to Article 1(2) of Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations[5], as amended by Directive 98/48/EC of 20 July 1998[6]);] Regulation 2(1)(a) covers service providers utilizing commercial communications in their dealings with consumers. This is said to cover ‘a communication, in any form, designed to promote, directly or indirectly, the goods, services or image of any person pursuing a commercial, industrial or craft activity or exercising a regulated profession, other than a communication - (a) consisting only of information allowing direct access to the activity of that person including a geographic address, a domain name or an electronic mail address; or (b) relating to the goods, services or image of that person provided that the communication has been prepared independently of the person making it (and for this purpose, a communication prepared without financial consideration is to be taken to have been prepared independently unless the contrary is shown);’

[69]That said, there are some refinements to this view.

[70]See the recent issue of Business Week which suggests that retailers are going out of their way to ensure that technology is utilised to realise consumers expectations of online transactions (available at:
<
http://www.businessweek.com/technology/content/nov2003/tc20031125_6802_tc136.htm?c=bwtechnov27&n=link1&t=email>). The way architecture can be used to reintermediate contracting parties can be seen in this feature: <
http://www.businessweek.com/technology/content/nov2003/tc20031125_1528_tc136.htm?c=bwtechnov27&n=link3&t=email>.

[71]See Commission, *Proposal for a European Parliament and Council Directive on certain legal aspects of electronic commerce in the internal market* (COM (98) 586) OJ 1999 C30/4. Also *A European Initiative in Electronic Commerce* (COM(97) 157 final). Article 9 of the Draft Directive requires Member States to make provision in their legislation that the legal requirements applicable to the contractual process neither prevent the effective use of electronic contracts nor lead to such contracts being deprived of legal validity because of the fact that they have been concluded electronically. See also the move towards convergence of national contract laws in *Communication from the Commission to the Council and the European Parliament on european contract law/: available at* **COM/2001/0398 final */** See generally documents at: <: http://europa.eu.int/information_society/topics/ebusiness/ecommerce/index_en.htm> and < http://www.dti.gov.uk/industries/ecommunications/electronic_commerce_directive_0031ec.html>. As to the history of the development of unified regulatory framework, see documents in: < http://europa.eu.int/information_society/topics/ebusiness/ecommerce/8epolicy_elaw/law_ecommerce/legal/1ecommerce/index_en.htm>.

[72]See: < http://www.dti.gov.uk/industries/ecommunications/electronic_commerce_directive_0031ec.html> . The Regulations must be read alongside the obligations imposed on businesses under the The Consumer Protection (Distance Selling) Regulations 2000 (SI 2000 No 2334) (available at: < http://www.legislation.hmso.gov.uk/si/si2000/20002334.htm>). This regulation implements the EC Directive 97/7/EC (available at: < http://europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=EN&numdoc=31997L0007&model=guichett>).

[73]At paragraph 2.5 in*E-Commerce in Europe: Results of the Pilot* Surveys carried out in 2001. Available at: < http://europa.eu.int/comm/enterprise/ict/studies/lr-e-comm-in-eur-2001.pdf>.

[74]See: <http://www.amazon.co.uk>.

[75]See also P Howitt, 'The perils of online pricing' E-Commerce Law & Policy (2003) 5(4) pp 2-3. This article provides an outline of the proactive self-help contractual devices that online retailers can adopt to avoid falling foul of online pricing errors. See also Unfair Terms in Consumer Contracts Regulations 1999 (SI 1999/2083) Reg 7(2). Also A C Brock 'Amazon and pricing' Electronic Business Law 2003 5(5) 16 (pricing error in iPaq PDAs).

[76]See for example *Pretty Pictures v Quixote Films Ltd* [2003] EWHC 311 (QBD)(the court had to address the question of whether a contract could be formed when email was used during the negotiation process. Also see J Englefield 'Will your email correspondence result in a binding contract? (2003) 17(9) Corporate Briefing 12-15; this article provides a normative account of the challenges facing businesses as online methods of communication are increasingly incorporated into the negotiation process. Also K de Haan, 'Determining where a bet is struck' (2003)5(7) E-Commerce

Law & Policy 10-11. The author provides an overview of the scope of the postal rule with regard to the placement of bets online. He concludes that certainty, with regard to the applicable principles can be promoted by bookmakers placing standard terms on the homepage. P Howitt 'Avoiding legal uncertainty' (2003) 5(5) E-Commerce Law & Policy 12-15. The primary focus is on the restrictions placed by the Unfair Contract Terms Act 1977 on computer contracts.

[77]Click-wrap contracts denote agreements placed on web pages. Consumers when filling an online agreement have to signify their assent to these terms by clicking on the mouse. Radin describes a machine-made contract as comprising a number of variants, notably, those which involve negotiations between two electronic agents, electronic enforcers, viral contracts.

[78]A useful summary can be found in P Johnson, 'All Wrapped Up? A Review of the Enforceability of 'Shrink-Wrap' and 'Click-Wrap' Licenses in the United Kingdom and the United States' (2003)25(2) EIPR 98-102.

[79]86 F.3d 1447 (7th Cir. 1999).

[80]86 F.3d 1447 (7th Cir. 1999). Also see *Hill v Gateway 2000 Inc* 105 F.3d 1147 (7th Cir. 1997) and *Klocek v Gateway Inc* 104 F Supp 2d 1332 (D.Kan 2000).

[81]See however *Step-Saver* 939 F.2d 91, *US Surgical Corp v Orris Inc* 5 Supp 2d 1201 and *Arizona Retail Sys Inc v Software Link In* 831 F Supp 759 (D.Ariz 1993) where the tiered contracting approach was not followed.

[82]See P Johnson, 'All Wrapped Up?A Review of the Enforceability of 'Shrink-wrap' and 'Click-wrap' Licenses in the United Kingdom and the United States' EIPR (2003)25(2) pp 98-102.

[83]See UCITA § 112: '(a) A person manifests assent to a record or term if the person, acting with knowledge of, after having an opportunity to review the record or term or a copy of it: (1) authenticates the record or term with intent to adopt or accept it; or (2) intentionally engages in conduct or makes statements with reason to know that the other party or its electronic agent may infer from the conduct or statement that the person assents to the record or term…(e) With respect to an opportunity to review, the following rules apply: (1) A person has an opportunity to review a record or term only if it is made available in a manner that ought to call it to the attention of a reasonable person and permit review. (2) An electronic agent has an opportunity to review a record or term only if it is made available in manner that would enable a reasonably configured electronic agent to react to the record or term. (3) If a record or term is available for review only after a person becomes obligated to pay or begins its performance, the person has an opportunity to review only if it has a right to a return if it rejects the record. However a right to a return is not required if (A) the record proposes a modification of contract or provides particulars of performance under § 305; or (B) the primary performance is other than delivery or acceptance of a copy, the agreement is not a mass market transaction, and the parties at the time of contracting had reason to know that a record or term would be presented after performance, use, or access to the information began.

[84]150 F Supp 2d 585(SDNY 2001). See also *Pollstar v Gigmania* 170 F Supp 2d 974 (ED Cal 2000).

[85]150 F Supp 2d 585(SDNY 2001).