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The future decisions of RoboJudge HHJ Arthur Ian Blockchain: Dread, delight or derision?☆,☆☆

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ABSTRACT

Steve Saxby's prescient founding of *CLSR*, two hundred issues ago, encouraged and resonated with my own digital visionary thinking and professional activity in the evolving field of *ICT and the Law*. From *Infolex*, the UK's first commercially-available computer-assisted legal information retrieval service, and my *APPEAL Report* (on the admissibility of computer evidence in court and the legal reliability/security of IT systems), via my *Forensic Systems Analysis* expert methodology, to the nascent *CryptoBlockTV*, Steve's scholarly foresight in promoting adventurous exploration of 'digilaw' high-ground topics and issues has presented me with opportunities to generate a stream of prescient material, for which I am immensely grateful. And what is beyond prescient today is that the Coming of the Robots is unstoppable. The Artificial Intelligence (AI) Age is upon us; *RoboJudge* has all but already arrived. While many are concerned about defining and developing Machine Ethics, *Castell's Second Dictum: "You cannot construct an algorithm that will reliably decide whether or not any algorithm is ethical"* reveals that this is a futile exercise. Algorithms are also pivotal to the current mania for *Crypto-Algorithmic Blockchain Technology* Initial Coin Offerings (ICOs), with a 'Crypto Tribe' of Millennials relentlessly raising billions in real money thereby, to the extent that I have dubbed Crypto *the Millennials' Rock'n'Roll*. The seasoned ICT expert professional however bears in mind that there are as yet no ISO standards for blockchain, and there is far more to creating and delivering a complete quality-assured system than just the blockchain component. Furthermore, the legal status of cryptocurrency, smart contract and distributed ledger technology is not clear or uncontentious – and there is already ICO litigation on foot. Nevertheless, taking my limerick-writing *Castell GhostWriteBot*'s advice, it is perhaps time for my own asset-linked ICO, to launch my *CapChere.com* concept designed to reboot Capitalism and achieve *ubiquitous universal share and wealth ownership*. Look out for *Castell GhostWriteBot*'s account (with or without limericks) of how I fared, in the 400th issue of *CLSR*.

☆ As largely authored by his personal *Castell GhostWriteBot*. *Can you tell if this paper has been authored by an AI robot? Would it matter, legally or otherwise, if you can't?*

☆☆ A Contribution to the Landmark 200th issue of *CLSR* under the Editorship of Emeritus Professor Steve Saxby.

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1. Sometimes it's hard to be a shaman [1]. Or an innovator

Prescience. What a wonderful gift. Or is it?

For some years after Steve Saxby asked me to be on the Correspondent Panel of a then relatively young *Computer Law and Security Report*, I contributed a number of articles, reports, comments and letters, almost all of which Steve was gracious enough to publish. These proffered my analyses, insights, and foresights, drawing on my evolving front-line active professional experiences, as both a computer expert and consultant, and as an early information and communications technology pioneer, 'thought-leader', business developer and venture capitalist, in the field of *ICT and the Law* **[2]**.

In 1977, with solicitor Neil Maybury **[3]**, I was the co-founder of *Infolex*, the UK's first ever commercially-available and readily-affordable, computer-assisted legal information retrieval service. This principally constituted and offered to every practising UK lawyer *CLARUS* (for *Case LAw Report Updating Service*), our proprietary dynamically-indexed case-notes database, economically accessible online – 'at the touch of a button' – via the *Prestel* public videotext system, the standout forerunner in the UK to the internet **[4]**.

I personally sold the first subscriptions to *Infolex* entirely by telephone. I here acknowledge with deep gratitude and respect those dozen or so 'immediate early adopters'; not least our very first subscriber, Auckland-based *Russell McVeagh*, widely regarded as New Zealand's premier law firm, who kindly paid to receive, by post, our unique, printed, *CLARUS* 'index to the law', notwithstanding that they could not, and would never be able to, have online access to *Infolex* via the UK-only *Prestel* service.

An essentially 'copycat' service, *Lawtel*, founded by solicitor Graham Ross (a pioneer in *Online Dispute Resolution*) still survives today as part of the *Thomson Reuters* portfolio **[5]**.

Those early legal technology days were wildly stimulating and one tended to meet the same happy, daring gang of academics, researchers, entrepreneurs and practitioners as we presented latest developments, thinking and ideas in a relentless round of lively *ICT and the Law* conferences, seminars, exhibitions and journal pages. These notables included, for example, not only Steve Saxby himself, but also Richard Morgan, Peter Sommer, Professor Sir Colin Campbell, Professors Chris Reed and Ian Walden, barrister Alistair Kelman, and Professor Richard Susskind OBE **[6]**, to all of whom I am profoundly grateful for providing me with collegiate comradeship and piquantly prescient insights.

2. Highfield, trust, and the first dictum

Because of *Infolex*, and the wide national and international interest in it as the 'first cheaply-available online law technology in the UK', I became a somewhat prolific writer and presenter in the field. For years there was rarely a month that would go by without articles, letters or other items by me published in the computer, legal or general press.

In particular, in 1993/1994, within the pages of *CLSR* itself, I pointed out that 'open' Von Neumann computer architecture – now, as then, still essentially the basis for software design and construction of all commercial ICT devices and systems – was *inherently insecure, and not to be trusted* **[7]**.

Before that, I had authored *The APPEAL Report*, a major study commissioned by the CCTA (H M Treasury), on admissibility of computer evidence in court and the legal reliability and security of IT systems, a work still seen by some practitioners, I understand, as something of a definitive study in the field. It concluded with what became known as:

> ***Castell's (First) Dictum: You cannot secure an ontologically unreliable technology by use of an ontologically unreliable technology*** **[8]**.

At around that time Steve Saxby, Dave Birch (of *Consult Hyperion* **[9]**) and I met and decided to form together a new consultancy and advisory enterprise which we named *The Highfield Group*, focusing on ICT technical and legal security, evidential reliability, and information systems quality assurance and best contractual practices. We produced marketing material, and did some promotion and 'pitching'; however, our independent professional activities and developing careers/businesses proved individually too demanding for us to sustain this collaborative venture and it faded honourably away.

I feel we have perhaps nevertheless achieved something of our 'Highfield High Ground' objectives in our respective corners of the *ICT and the Law* field, albeit the true measure of our successes and impacts, if any, are of course for others to judge. It is certainly undeniable how wonderfully well *CLSR*, under Steve Saxby's unique, learned, vigorous editorship, magnificently took on and developed the critical 'digilaw' issues we had identified were going to become important in the legal-technical-business-educational interfacial future, and more.

3. A new trusted machine architecture

I concluded one of my *CLSR* papers by positing that a new *non-Von Neumann machine architecture* was needed to achieve reliable 'inherently trusted computing'. Somewhat in jest I suggested that if I could be funded with a £1bn R&D programme I was pretty confident I could develop such a new *ontologically reliable* technology. The irony is that the, then nascent, techniques, products and services of so-called 'cybersecurity' have developed into a vigorously and relentlessly growing industry, many £ billions in size, yet all arguably founded on the fundamentally false premise that such 'security' can actually be achieved, with absolute certainty, using and relying on current machine architecture.

So, presciently, the *absence* of my putative £1bn R&D programme has proved to be no jest at all. The risks posed by cyber(in)security, corporately, personally/privately, politically, financially, or economically, are now perceived to be amongst the greatest to us all, threatening, at worst, massive human and organised societal and structural failures and catastrophes.