

The Gavin C. Reid Prize for the Best Paper by an CBR Early Career Researcher

Thanks to a generous donation, the CBR has established the Gavin C. Reid Prize for the Best Paper by a CBR Early Career Researcher. The prize is named in honour of Professor Gavin C. Reid, a long-time supporter of the Centre and currently one of its Senior Research Associates. The £400 cash prize, to be awarded annually, is open to early career research staff and research associates of the Centre for Business Research.

The 2024 prize is awarded to Bhumika Billa, for her paper 'Law as code: exploring information, communication and power in legal systems', which was published in the [*Journal of Cross-disciplinary Research in Computational Law \(CRCL\)*, volume 2, issue 1 \(2023\)](#).



Gavin C Reid, Honorary Professor in Economics & Finance, University of St Andrews, and Senior Research Associate, CBR, University of Cambridge

Gavin writes:

I experienced both intellectual pleasure, and scientific enlightenment, in reading this excellent paper by Bhumika Billa, on 'Law as Code'. I am delighted that it is to receive this year's prize in my name. As an essay, it has many merits. It is accessible, well structured, beautifully written, and packed with novelty. My congratulations to her.

I know the intellectual hinterland to this research is firmly embedded in many years of research in the Centre for Business Research within the University of Cambridge Judge Business School. Much of this research has been pioneered and led over decades by Bhumika's supervisor, Professor Simon Deakin. I recall works like 'Evolution for our time: a theory of legal memetics' (CBR WP, No. 242, 2002) two decades ago, and more recently the book (jointly edited with Christopher Markou, 2020) which asks *Is Law Computable?* It interacts the literature of law with that of artificial intelligence (AI).

Against this background of an innovative and supportive research milieu, Bhumika has created an inspired essay, based on her own deep understanding and learning of 'Law as Code'. In doing so, she demonstrates a powerful personal research capacity, subtly weaving diverse research literatures into a many-faceted academic synthesis of 'law as code'. To illustrate her use of diverse inter-disciplinary sources, she cites numerous economists (e.g. Coase, Stigler, Stiglitz, Jones, Tonetti) and many philosophers, of which John Searle (cf. speech acts) and Roy Bhaskar

(cf. law as social reality) are prominent, as is Tony Lawson (cf. ontology) who is both economist and philosopher.

Regarding the genesis of these latest ideas in Cambridge University, I recall a presentation by Simon Deakin to the Amsterdam Centre for European Law and Governance in 2019. He expounded the merits of so-called 'leximetric' techniques for providing evidence-based policy making, using legal inputs from labour law and regulation statutes. In discussion, he suggested that AI had great potential in the field of legal studies, saying 'law is an algorithm, in a way' but 'an algorithm need not be mathematical.'

In that same year, Professor Katharina Pistor of Columbia Law School published *The Code of Capital; how the law creates wealth and inequality*, arguing that legal coding had not been enriching to society. Rather it had increased the inequality of wealth. Her book immediately received academic plaudits, rapidly extending to a wider audience. It became Book of the Year for 2019, in the *Guardian* and *Financial Times* newspapers.

Bhumika's work in her prize essay aims to extend and to develop Pistor's work. But it is not uncritical of it. At root, this is because so-called 'singularists' strive only to encourage decision-making in law to be less uncertain, and more transparent. An alternative viewpoint to the 'singularists', suggested by Jennifer Cobbe (2020), is that efficiency in this sense is not enough to outlaw such malfunctions as exploitation, marginalisation and inequality.

For Bhumika, tackling such problems requires a hybridization of Shannon's (1948) information theory, Luhmann's (2004) conception of law as a social system, and Cobbe's (2020) critique of legal singularity and reflexivity of law. The task for Bhumika has been considerable. But all interested in the direction that 'law as code' is going, intellectually, will want to see how she has bravely and boldly – and cleverly – approached this knotty matter in her recently published research.



Bhumika Billa, Doctoral Candidate and Cambridge Trust Scholar, Faculty of Law, University of Cambridge; Research Associate, CBR

Bhumika writes:

I am honored to receive the Gavin C. Reid prize for 2024 for the paper '[Law as Code: Exploring Information, Communication and Power in Legal Systems](#)' published in the *Journal of Cross-Disciplinary Research in Computational Law (CRCL)*. The paper was written during the first year of my PhD and introduces a framework for a new *Information Theory of Law (ITL)*, a project in progress. I

remain grateful to Prof. Simon F. Deakin for supervising, Dr. Jennifer Cobbe for advising, and the Centre for Business Research for constant support.

The paper sparked from critical scholarship, more specifically the works of Katharina Pistor and Jennifer Cobbe, who focus on the role of law in reinforcing power structures and deepening inequalities. Pistor argues that law has historically been ‘coding’ capital for the benefit of private power and Cobbe argues why future problems and solutions must be aimed at making law more inclusive at a foundational level (rather than making law more efficient at the surface). To bridge these two critical works, I wanted to explore the processes by which law ‘codes’ (or juridically translates) social phenomena (such as ‘capital’) in ways that entrench unequal structures. This legal coding is a crucial meaning-making process that describes, defines, and shapes ontologies and epistemologies about our social reality. For example, what I am writing is legally coded as ‘intellectual property’ and you and I, as ‘legal persons’. The foundational question I therefore ask in this project is—how does law ‘code’ or translate social reality?

To understand the role of agents in a systemic structural coding process, I borrowed from C.E. Shannon’s Information Theory. This modelling helped me frame some agents (those who have access to these legal coding processes) as ‘experts’ who control what information gets transmitted, what gets vetted out, and how it is coded into juridical language. The inherent selectivity or **exclusivity** of law, however, does not solely depend on the agents’ choices. It also roots from and feeds back into systemic exclusions of realities that law has previously rendered illegible. Unlike digital systems, what is rendered as irrelevant or illegible, is sometimes retained by the legal system—making it capable of evolution, and hence, **adaptable**. It is through this temporal evolution that the legal system takes feedback from the society and adapts or responds to, for example, social movements. For instance, how the ontological categories of ‘gender’ or ‘worker’ were legally interpreted two decades ago, is very different from how they are being interpreted today. It is through this co-evolution of law and society that the legal system becomes **reflexive** of the society it is coding.

Using this modelling and the three claims of exclusivity, reflexivity, and adaptability, the gist of the argument in my paper lies in its defence of text-driven (as opposed to code and/or data-driven) law, its adaptability, and its emancipatory potential. My paper argues that a shift from natural language to computational language will stifle legal evolutionary progress by locking in rigid ontological categories and shifting power from an exclusive group of legal experts to a much smaller group of technological experts. The potential of ITL, however, reaches far beyond the debates in law and computation. It can not only be used to bridge a systemic critique with an agent-based critique of law, but also to raise new crucial questions about the various physical sites where law gets written, interpreted, and communicated. Its own limitation, in addressing the power it is coding, infuses new ontological meanings into what it is making. Further, ITL is precise as to whom, and to what, is being excluded from those legal coding and meaning-making processes. Thus, the problem with legal coding processes is not that of efficiency, but of power. And that is what my paper, as well as its larger project, seeks to investigate.