

Preface
Special Issue of Computational Economics
*Commemorating the Birth Centennial of Herbert Simon**

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An Outline and Summary of the Contributions to the *Special Issue*

“Broadly stated, the task is to replace the global rationality of economic man with a kind of rational behavior that is compatible with the access to information and the *computational capacities that are actually possessed by organisms, including man*, in the kinds of environments in which such organisms exist”
Simon, 1955, p. 99; italics added.

In this brief **Preface**, we summarise the contents of the various contributions to this *Special Issue* of **Computational Economics**, albeit *ultra-briefly*. We expect the ‘interested’ reader to read the originals for access to the ideas and complete contents of the rich contributions¹.

Herbert Simon’s *Professional Life*, by Velupillai & Ragupathy, with the essentials of the personal part, is summarised in the next essay.

Bucciarelli & Mattosco, adopting an *abductive* – or *retroductive* – approach to research design, as distinct from the tiresome *duo* of deductive/inductive, that emphasises, as always by Simon, the experimentally grounded capital structure of business organisations.

Chen & Yu tackle *one* aspect of Simon’s lifelong interest in *information*, especially by agents (and institutions) bounded in attention and abilities to process it, especially when data is abundant.

Dharmaraj, in a richly historical and methodological narrative, studies the path taken by Simon towards *Human Problem Solving*.

Druzdel & Kalagnanam develop the idea of *causal ordering* which permeated almost the whole outlook on research permeating Herbert Simon’s work. They are the only two, among the contributors to this *Special Issue*, who personally collaborated with Herbert Simon – in

¹ This is done so alphabetically, as is the arrangement in this Special Issue, with respect to the first author, although in the case of Chen & Yu, they state that the latter is the first author. An additional exception is the concise ‘introductory’ essay on the Life of Herbert Simon by Velupillai & Ragupathy, for ‘obvious’ stylistic reasons.

particular on themes that are broached in the paper here: developing ‘insights into the financial structure’ of *a* University².

Kao & Ragupathy illuminate the classic difference between *Human* and *Machine Problem Solving*, in the enlightened spirit of Herbert Simon, underpinned by effective *learning mechanisms* that characterizes them.

Ethics and morality played an important role in Simon’s outlook on life – personally and as a research scientist. Cassey Lee, in his important contribution to this *Special Issue*, takes up the issue of moral problem solving by information processing systems in a pioneering way.

Patrick Love of the OECD – the ‘only’ non-University affiliated contributor to this Special Issue – does correctly point out Simon’s role in the Marshall Plan, which was crucial in the establishment of this Institution. True to their roles as effective policy organs, Patrick Love in his contribution shows the many fruitful ways Simon’s innovative behavioural and complexity theoretical insights play a role in current debates on policy making.

Proofs, in a variety of mathematical senses, and *predictions* of machine performances, especially by *Information Processing Systems*, in *Human Problem Solving* contexts, were themes that were central in Simon’s professional work. They are discussed in Velupillai’s contribution.

It is not because the most recent winner of the *Riksbankens Prize in Memory of Alfred Nobel* ‘popularised’ the concept of *nudging*, nor because the impressive work of Diaconis et. al., (2007) show the ‘biases’ of so-called *fair coin-tossing* exercises, that we end with a Simon quote. It is, instead, to show the prescience of a learned scholar, almost in a *Zen-like* way, to be a precursor to concepts and issues that become research topics at various frontiers.

“Each time I came to a point of choice, they *nudged* me along one path rather than another – a little *more reliably* than if I had *tossed a coin*.”
Simon, 1996, pp. 386-387; italics added.

² We have replaced the definite article used by the authors, here, with the indefinite ‘a’, which seems to us to shed the kind of light which is in the spirit of Simon.

Some of these frontiers are effectively broached by the contributions to this *Special Issue* to *Commemorate Herbert Simon's Birth Centennial*.

REFERENCES

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Simon, Herbert A. (1955), *A Behavioral Model of Rational Choice*, **The Quarterly Journal of Economics**, Vol. 69, No. 1, February, pp. 99-118.

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