

THE SENIOR COLLEGE MESSENGER

Issue 23: September, 2023

This is an organ for members of Senior College to submit short articles that share news, letters to the editor, reactions to the program and anything that they feel will be of general interest. Its regular appearance will allow for an exchange of opinion of topics of interest to the members. In particular, it would be interesting to record reactions to the talks, colloquium topics and books discussed.

Please submit contributions to the editor, Ed Barbeau at barbeau@math.utoronto.ca

IDEOLOGY: MASTER OR SERVANT?

It seems that every field of human endeavour, be it science, the arts, politics, governance, religion, is governed by codes that provide protocols for how they should evolve. Our complex world is long past the stage where traditional knowledge can be passed from person to person and matters can be left to intuition and individual judgment. The role of an ideology is to provide a coherent guide to behaviour and ensure consistency as well as development. However, these days we see too many instances where the application of some code is blind to matters that should concern us as human beings. Thus, national constitutions can be invoked against the dignity of the individual, a body of laws rigorously applied can fail to deliver justice, artistic innovation can be stultified, science can be denied the paradigm shifts needed to break deadlocks, and one is left to wonder what sort of God some religious leaders actually worship. This raises the issue of whether people are dominated rather than supported by orthodoxy.

Each area has fundamental values and criteria for legitimate practice that evoke a consensus among its fervent practitioners, but are difficult to completely cover in writing, however detailed. There has to be room for *iconoclasts*, although I would prefer to call such people *refiners*, because their real role is not to destroy what has gone before, but to recall it to its true purpose. This is a sentiment neatly captured in the words of Christ: *Think not that I am come to destroy the law, or the prophets. I am not come to destroy, but to fulfill.* (Matt. 5:17)

I invite readers to reflect on how this tension between orthodoxy and individual judgment works itself out in their own activity. What is the nature of the consensus about practice and values? How have these evolved historically? What is regarded as sacred and what is open to interrogation? I have made a first stab in the *Aftermath* section. *EJB*

SYMPOSIUM LINK

In case you missed the annual symposium in April or wish to have a record of the proceedings, here is a link to the abstracts.

IN MEMORIAM

Wayne Johnston (d June 29, 2023; aged 80 years)
Department of Vascular Surgery, Faculty of Medicine

Hugh Segal (October 13, 1950 – August 9, 2023)
Principal of Massey College

Patricia Anne Staton (July 18, 1933 – August 12, 2023)
Business Officer, Biochemistry Department (1966-1982); Green Dragon Press

CALENDAR OF COMING EVENTS

Events marked with **F** are for fellows and external fellows. Registration a few days ahead is necessary for each event. This can be done in response to a weekly email from Senior College to its members that describes the events or by going on line at www.seniorcollege.utoronto.ca .

Talks: Wednesdays 10-12 am (In person & Zoom)

September 6: Elizabeth Harvey, *Out of one's mind: dementia in Anne Carlson's poetry*

September 13: Kang Lee, *Little cheaters and how to make them honest: the origins of academic dishonesty in childhood*

September 20: Valerie Tarasuk, *Food insecurity in Canada: a blind spot in public policy*

September 27: Howard Eisenberg, *How reality works and the case for non-duality: echoes from Plato's cave*

October 4: Geoff Rayner-Canham, *Chemistry and Inuit life and culture*

October 11: Paul Delaney, *The evolution of the space telescope*

October 18: Heidi Bohaker, *Ontario treaties as First Law: Indigenous-Crown relations and Land Conveyance Agreements*

October 25: Joanne Tod, *The dearth of irony: postmodernism, identity politics and the visual arts*

November 1: Sue Waddington, *In the footsteps of the group of 7 and Tom Thomson*

November 8: Marie-Hélène Budworth, *Diversity at work: uncovering barriers to inclusivity in employment*

November 15: Derek Denis, *English in multicultural Toronto*

November 22: Jacqueline Gibbons, *Spread your wings: Icarus to 1912 (Flight, the men and women)*

Book Club: Mondays 2-4 pm (Zoom only) (F)

September 11: David Graeber & David Wengrow, *The dawn of everything: a new history of humanity* (2021) (Leaders: Daphne Maurer, Susan Pfeiffer)

October 2: Tom Stoppard, *Arcadia* (1993) (Leader: Alexander Leggatt)

November 6: Charles Darwin, *On the origin of species* (1859) (Leader: Sara Shettleworth)

December 4: Jennifer Raff, *Origin: a genetic history of the Americas* (2022) (Leader: Susan Pfeiffer)

January 8, 2024: Kevin Rudd, *The avoidable war: the dangers of a catastrophic conflict between US and Xi Jinping's China* (2022) (Leaders: Max Nemni, David Milne)

February 5: Alistair MacLeod, *No great mischief* (1999) (Leader: Meg Fox)

March 4: Ed Yong, *An immense world: how animal senses reveal the hidden realms around us* (2022) (Leader: Sara Shettleworth)

April 1: Willaim Carlsen, *Jungle of stone: the extraordinary journey of John L. Stephens and Frederick Catherwood and the discovery of the lost civilization of the Maya* (2017) (Leader: Jim Gurd)

May 6: Siddhartha Mukherjee, *The song of the cell: an exploration of medicine and the new human* (2022) (Leader: William Logan)

June 3: Helen Macdonald, *H is for Hawk* (2014) (Leader: Peter Alberti)

July 8: Alex Ross, *The rest is noise: listening to the twentieth century* (2007) (Leaders: Linda Hutcheon, Michael Hutcheon)

Aftermath

The seventh proposition is so thoroughly fallacious that Euclid would have done better not to attempt a proof.

Many more general criticisms might be passed on Euclid's methods, and on his conception of Geometry; but the above definite fallacies seem sufficient to show that the value of his work as a masterpiece of logic has been very grossly exaggerated.

Thus Bertrand Russell wrote in a brief article published in *The Mathematical Gazette* 2 (33) (1902), 165-167, which is reproduced here. In introducing this article, the editor notes that "Euclid's main fault in Russell's eyes is that he hadn't read the work of Russell".

That is fair comment. Any logical system has to be founded on a base of premisses. Euclid's based his arguments on assumptions that seemed so obviously true that many of them were implicit. It is only when the subject matured during the Enlightenment that paradoxes and controversies emerged that forced a closer examination of the what can be taken for granted and how apparently logical arguments can fall short. The failure to produce a proof of Euclid's parallel postulate from other axioms opened the door to "non-Euclidean" geometries and a revision of how mathematics related to the "real world". By the time Bertrand Russell wrote his *Principia Mathematica*, mathematics was the study of abstract structures, a logical tower of propositions founded on a base of definitions and axioms. Gödel's incompleteness theorem that no set of axioms would allow every statement of a formal system to be proved as either true or false meant that there could be different abstract models that could be applied in the study of a particular situation in pure or applied mathematics. Indeed, even the very rules of logic itself could be interrogated. However, underlying all of this are fundamental principles of validation upon which mathematicians can agree.

Mathematics is objective in that a consensus exists on a valid process. But there is an important human dimension as well. Results are evaluated according to their usefulness, interest and comeliness or *elegance*. A correct argument will not save an ugly or inapplicable theorem from obscurity. It may also not be completely satisfying in realizing the deeper goal is understanding how it fits into a larger structure and conveying the sense that it is not only true but inevitable. So a theorem may be proved in many ways, each with its own perspective, methods and level of generality. This makes it all the richer.

It seems to me that this tension exists between the structures that order and govern other areas of human behaviour, and the ideals they are intended to realize. Various theologies, codes, conventions and ideologies exist for religion, constitutional government, legal systems, scientific practice, artistic form and criticism. There seems to be a kind of Gödel's theorem that situations arise in practice where rules and conventions are insufficient and perhaps counterproductive. Informed human judgment has to come into play to challenge orthodoxy and ensure that the goals of the system, be it respect of human dignity, justice, understanding or creativity, are met.