THE SENIOR COLLEGE MESSENGER

Issue 19: May, 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

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ARTIFICIAL INTELLIGENCE

One member of a mathematics education online group to which I belong is doing research into the mentoring of teachers. Having just acquired access to the AI conversation software BARD, he asked it, "What is known about the role of professional development of STEM teachers?" Back came a long essay with such nuggets as "Pedagogy: Mentors can help STEM teachers develop effective teaching strategies. This can include ...". Upon further prompting, a list of seven articles was supplied, all of which were confirmed by my colleague not to exist. What confronted with this, BARD acknowledge this to the the case and promised to try to improve in future.

In the discussion that followed, it was pointed out that the statements were largely unexceptional, but lacked any real substance, in particular about identifying good mentors. The output reflected the material available to train it, and the software seemed to lack any capacity to evaluate it. As one person pointed out, "BARD's response is an empty shell into which the word 'mentor' was dropped semi-randomly. BARD does not know what a mentor is, and that's the point. With good luck, we will have these bots send sludge to each other, leaving the rest of us alone so we can do stuff that is worth doing. With bad luck, this sludge will be used to affect our working conditions and we will be slaves to the sludge machine. . . . Well, not me. I'm retired."

A further email noted that ChatGPT was selling software to grade essays, leading to a situation where human intervention is no longer necessary: students use ChatGPT to write the essay; teachers use ChatGPT to grade it. At about the same time, in the middle of April, Ellen Mauro (of the CBC) and Ron Graham (in the Globe and Mail of April 15) both discovered that an autobiography written for them was riddled by errors,

Most of the readers of this newsletter will not have to deal directly with the use and misuse of artificial intelligence. However, the pressure on both students and their teachers may make this unavoidable for them. The task of separating the wheat from the chaff in our scholarship will be formidable. EJB

IN MEMORIAM

Caesar R. Blake (October 5, 1925 - February 23, 2023) Department of English

CALENDAR OF COMING EVENTS

Events marked with ${\bf F}$ 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 .

THE UTFA ANNUAL RETIREE RECEPTION

Theme: Indigenous politics through a global lens Keynote speaker: Uahikea Maile

Date: Wednesday, May 17: 1-3 pm

This reception is a chance for retirees, especially for those in their first year, to meet fellow colleagues. The event is open to members of UTFA. All retirees in their first year can join with no dues payable; after that, the membership fee is \$50 per year.

Talks: Wednesdays 2-4 pm

- May 17: Merrill Swain & Movie Scenes, Talking Matters (a play) (Live)
- May 24: Lance Wiliford, Classical vocal music and Visual media distribution (Zoom)
- May 31: Geoff Rayner-Canham, Chemistry and Inuit life and culture (Zoom)
- June 7: Katherine Corcoran, A murder and a cover-up: the cost of silencing the press (Zoom)
- June 14: Ella Striem-Amit, Brain plasticity and function from people born without hands (Zoom)
- June 21: Daniel Lang, The Carnegie Foundation and U of T faculty pensions (Zoom)

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

- May 1: Kyle Harper, From shame to sin: the Christian transformation of sexual morality in late Antiquity (Leader: David Milne & David Rayside)
- June 5: Steven Johnson, The ghost map: the story of London's most terrifying epidemic and how it changed science, cities and the modern world (Leader: William Logan)

Aftermath

About the time I retired, a survey among literary folk identified the most influential piece of literature as Don Quixote by Miguel Cervantes, published in two parts in 1605 and 1615. So I decided that my first retirement project would be to read the book; I was rewarded by a complex story full of riotous and subtle humour, ambiguity and literary devices that seemed to belong to a later age. You may be familiar with the story of a minor Spanish nobleman who, so besotted with chivalric tales, sets out as a knight errant accompanied by a humble farmer, Sancho Panza, as his squire, on the promise that Panza would be made the "governor of an island."

In due course, as the guests of a duke and duchess, who for their own amusement, decided to humour the illusions of the Don, it is arranged that Panza become the governor of the 'island' of Barataria (whose inhabitants had been instructed as to how to behave). In this role, he was required to adjudicate various problems brought to him by the citizens of the region. In the excerpt below, you will see that in this particular dilemma, Cervantes anticipated the logical paradoxes of Bertrand Russell by about three centuries. At the end, Panza enunciates a principle that might commend itself to those in the political and legal spheres.

My lord governor woke up, finally, and by Doctor Pedro Recio's orders made his breakfast on a bit of fruit preserves and four swigs of cold water, though Sancho would have been glad to trade all this for a crust of bread and some fried eggs, but though his heart ached, and his stomach along with it, he accepted his fate, seeing that it involved force more than it did volition – and, besides, Pedro Recio had persuaded him that lean portions of delicate foods heightened the mind's powers, which was the most important thing for persons placed in positions of command and high importance, positions that called for mental exertions rather than physical ones.

So Sancho endured his hunger, for the sake of this sophistry, but he was longing for food so piercingly that, secretly, he was beginning to curse the governorship, and he who had given it to him, but nevertheless – hunger and fruit preserves and all – he set himself to judge court cases that day, and the first problem he had to deal with came from a stranger, and was presented in the presence of the steward and all the other attendants.

"My lord, a broad river separates the two parts of a single domain (and please, your grace, follow me closely, because this is an important case as well as a complex one). Now there's a bridge over this river, and at one end there stands a gallows and a court building, in which four judges usually preside, applying the law formulated by the lord of this river, this bridge, and this entire realm, which ran as follows: 'Anyone passing over this bridge, from one section of this domain to the other, must first declare under oath where he is coming from and where he is going, and if he swears truly, he shall be allowed to pass, but if he lies he shall be hanged from the gallows standing nearby, without any appeal or reprieve allowed.' This law, and

its rigorous application, was well-known; many people used the bridge and, since it was obvious that they were telling the truth, the judges would let them cross over. Well, it happened, one day, that a man came and he swore the required oath, saying among other things that he had come to be hanged on that gallows, and for no other purpose. The judges considered his oath, saying: 'If we simply let this man cross the bridge, his oath will be a lie, and, then, according to this law, he ought to die, but if we hang him, the oath that he swore about being hanged on the gallows will be true, and then the same law decrees that he be allowed to cross over in peace.' Please consider, my lord governor, your grace, what the judges should do with this fellow, for even now they remain anxious and unsure how to proceed, and having been made aware of your grace's keen mind and sublime understanding, they have sent me here to implore your grace to tell them how you view this singularly complicated and puzzling case."

Sancho replied:

"Surely, these honorable judges didn't have to send you to me, because I'm a lot better known for dull wits that for sharp ones – but, anyway, tell me this business once more, so I can get a handle on it, and then maybe I'll be able to figure it out."

The question was posed a second time, and then a third, exactly as first, and Sancho said:

"As far as I can see, it shouldn't take long to sum up the whole business: if this man swears he's to die on the gallows, and he does, then he's swearing the truth and, according to the law, he ought to be allowed to cross the bridge in peace, but if he's not hanged then he's swearing falsely, and exactly according to the same law he ought to be hanged."

"Exactly as my lord governor says," said the messenger. "You couldn't ask for a better summary of the whole case, with nothing left out and nothing left unclear."

"So what I'd say," answered Sancho, "is that whatever part of the man swore truthfully should be allowed to cross the bridge, and whatever part swore to a lie should be hanged, and then what happens to him will fit right to the letter of the law."

"But, my lord governor," said the questioner, "the man will then have to be divided into two parts¹, one lying and the other truthful, and if he's divided, then of course he'll be dead, and that won't fit the letter of the law at all, and the law has to be followed."

"Look here, my good friend," replied Sancho. "Either it would be just as reasonable to kill this man we're talking about, as it would be to let him live, or I'm a complete idiot, because if the truth saves him, the lie just as clearly condemns him, and that being the case, as plainly it is, I think you ought to tell the gentlemen who sent you that there's a perfect balance here, as between condemning him or saving him, so let him cross over in peace, because it's always better to do good than evil, and I'd write this out and sign my name under it, if I knew how to sign

 $^{^{1}}$ This 'equitable' approach is reminiscent of the episode involving Solomon and the baby recounted in I Kings 3:16-28. In both cases, the impracticability of the resolution underlines the insufficiency of a strictly legalistic approach.

my name, nor am I just making this up out of my own head, because I remember a rule – one among many I got from my master Don Quijote, the night before I came here to be governor of this island - which says: Any time justice is doubtful, lean towards compassion and take shelter in mercy, and it's God's will that I remember that rule right now, because it fits this case as if it had been made for it."

"True," replied the steward, "and I think even Lycurgus² himself, who gave the Greeks their laws, couldn't give a better judgment that the great Panza has just done. Now, let us conclude this morning's session, and I will arrange for my lord governor to dine exactly as he pleases."

"That's all I want," said Sancho, "turn about is fair play; let me eat, and then I'll tackle cases, and doubts, and go right through them, like a hot knife through butter."

 $^{^2}$ Lycurgas was a Spartan law giver who lived about nine centuries before the Christian era. The extensive Wikipedia entry describing his historical significance is well worth reading.