Theory of Knowledge 2017 Blog Posts

Eileen Dombrowski

with guest contributions from Theo Dombrowski

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Posts are compiled from the Oxford Education Blog:

https://educationblog.oup.com/category/theory-of-knowledge

To teachers of IB Theory of Knowledge:

I've compiled these posts into a continuous document so that you can cruise them quickly, looking for ideas for your own teaching. You're welcome to use the ideas and downloadable materials in your own classroom.

Eileen

For more inspirational TOK teaching ideas and resources, explore Eileen's personal website and Facebook page:

Activating TOK: thinking clearly in the world

https://activatingtok.net/

https://www.facebook.com/activatingtok/

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"Comfort" and discomfort: history and the shadows of the past

At first glance, it's a most unlikely statue to ignite a diplomatic row: a barefoot girl sits on a chair, her hands passively in her lap. Nevertheless, the placement of this gentle statue by South Korean activists in front of the Japanese consulate in Busan has set off a storm of controversy and provoked Japan to withdraw its ambassador from South Korea. But why? In Theory of Knowledge, clashing perspectives on this statue take us straight through concepts of symbolic representation and smack into history as an area of knowledge with ethical resonance.

The statue at the centre of the controversy resembles this example.

It seems to me that this incident could be immensely useful for a TOK class. There are plenty of images online of the controversial statue, so there's something visual to anchor abstract discussion. Moreover, students are likely to have their interest (and probably compassion) caught by the story of women forced into sexual servitude – and to grasp quickly both the desire to remember historically, and the desire to forget! The current strong feelings about the issue and how its story is told also help to raise a potent TOK question: Is history really only about the past?

The statue at the centre of the diplomatic storm represents Korean wartime "comfort women", reportedly "a Japanese euphemism for the females who were forced to provide sex for Imperial troops in Japanese military brothels before and during the war." Korean activists placing it in front of the Japanese consulate were confronting Japan with its treatment of an estimated 200,000 Korean women during the second world war. They installed it first on December 28, 2016, on the one-year anniversary of an agreement between Japan and South Korea designed to put the matter to rest "finally and irreversibly". Although Japan had given compensation and expressed regret, many felt that it had fallen short of full acknowledgement and apology to the handful of former "comfort women" or "sex slaves" still alive. The failure of the South Korean government to remove a similar statue near the Japanese embassy in Seoul had already created tensions in the year since the agreement took force. The dispute is presently unresolved, with continuing impact on economic discussions between South Korea and Japan.

In TOK, three aspects of this incident strike me as particularly interesting to explore:

● the use of a work of art to condense attitudes, emotions, and implicitly even arguments so that the representation is charged with symbolic meaning;

● more centrally, the dispute over how the past is acknowledged and recorded, by whom and for whom. How is the truth of what happened in the past established? Can the truth – or how it is spoken about – be decided "finally and irreversibly" by a formal diplomatic agreement?

● further, what are the ethical responsibilities of those in the present for the actions of those in the past with whom they have a national continuity (or other form of continuity)? Is there an ethical "balance sheet" that enables groups in the present to "make up for" the actions done by others in the past? Is restitution for the past a psychological issue or an ethical issue? Or are the roles of apology and restitution wholly pragmatic – enabling people to live together in the present despite the shadows cast by the past?

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Stepping back even further from the particular dispute over a statue, we might be able to prompt our students to muse more broadly about the nature of historical knowledge. What might we lose if we let memories and records be washed away behind us? What can we hope to gain by examining the human record, and trying to understand what happened – and why?

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Image: The statue at the centre of the current controversy resembles this example. https://pixabay.com/en/girl-award-girl-comfort-girl-award-1160088/

"Therapy wars" and the human sciences

Thanks largely to the cognitive sciences, we've learned much in recent decades about how our own minds work. As knowledge flows from research journals to the popular media, recent findings in psychology have stimulated considerable commentary and advice on dealing with the problems that trouble our minds. Psychoanalysis and cognitive behavioural therapy, complex topics within a complex area of knowledge, have drawn lay readers and listeners not just out of interest in knowing how their minds or brains work but also out of hopes to relieve problems and improve their own health.
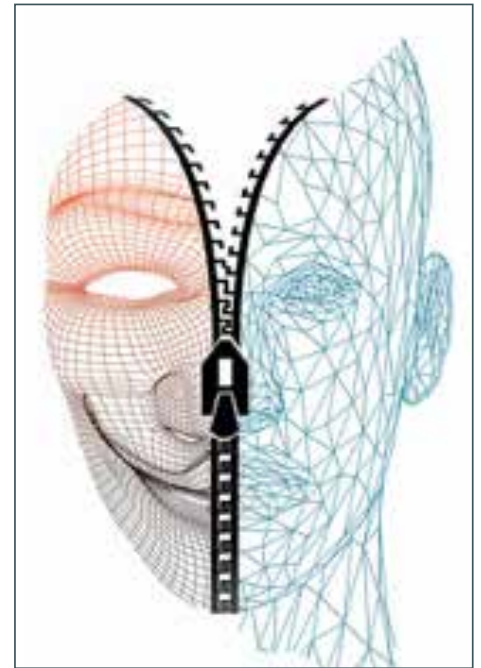
No doubt at least some of your students will have had exposure to psychoanalysis, even if only through sensationalistic movies. No doubt, too, they will have encountered the currently much promoted cognitive behavioural therapy (CBT) and its applications to everyday practices – there are even "apps" available for meditation and stress relief, for example. "Mindfulness", a close adjunct to CBT, is, your students may observe, very much in the air. But how seriously should we take the different approaches of psychoanalysis and CBT as ways of achieving better mental and emotional health?

In Theory of Knowledge, we are not qualified to answer this particular question. Indeed, we have reason for humility as we comment at all on theories and the human sciences. We have to step back deliberately from the knowledge claims within psychology to survey from above the contours of the knowledge in that area, using the applied knowledge of therapy solely as an illustration of the characteristics of the field.

What the contrasting approaches to psychological therapy offer us, in a course that stands back, is an example of different perspectives in play in an area of knowledge that deals with human beings. The appeal of this example, in my opinion, is partly that it is likely to captivate student interest. Moreover, it is an example that illuminates both the difficulties that we face in gaining knowledge and the significance for human lives of the conclusions that we reach.

If you are interested in using this example, the following article could prove immensely useful: "Therapy wars: the revenge of Freud". In it, author Oliver Burkeman pits psychoanalysis against cognitive behavioural therapy (CBT) to outline the influence of differing perspectives on understanding the mind. He identifies some basic assumptions that lie behind these two differing approaches:

> "At their core is a fundamental disagreement about human nature – about why we suffer, and how, if ever, we can hope to find peace of mind. CBT embodies a very specific view of painful emotions: that they're primarily something to be eliminated, or failing that, made tolerable. A condition such as depression, then, is a bit like a cancerous tumour: sure, it might be useful to figure out where it came from – but it's far more important to get rid of it. CBT doesn't exactly claim that happiness is easy, but it does imply that it's relatively simple: your distress is caused by your irrational beliefs, and it's within your power to seize hold of those beliefs and change them.

> "Psychoanalysts contend that things are much more complicated. For one thing, psychological pain needs first not to be eliminated, but understood. From this perspective, depression is less like a tumour and more like a stabbing pain in your abdomen: it's telling you something, and you need to find out what. (No

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responsible GP would just pump you with painkillers and send you home.) And happiness – if such a thing is even achievable – is a much murkier matter."

Burkeman is helpful to us as readers in giving this kind of broad comparison, and he models an approach we encourage in class. Understanding different perspectives in both areas of knowledge and everyday life compels us to attempt, at the very least, to try to identify the underlying assumptions, concepts and values that provide the rails on which the discussion runs.

The article gives some historical background on the development of the competing approaches, with an account of knowledge claims that have been rejected and why. It illustrates, in the process, some of the methodological challenges to an area of knowledge that attempts a scientific treatment of things that are impossible to observe directly and difficult to infer reliably from those observations that we are able to make – even though we are now able to image the brain. Not only does the article thereby suggest the difficulties of an evidence-based explanation but it also presents the difficulties of even a pragmatic test for an explanation: if we test a theory by whether it works or not, then we have to agree at least on what constitutes success, and how to measure it. And then we have to return to evidence and track the results over time.

One conclusion that the article reaches is a good reminder of the humility that is due in the pursuit of knowledge on complex topics: "Perhaps the only undeniable truth to emerge from disputes among therapists is that we still don't have much of a clue how minds work."

Nevertheless, Burkeman's summary that we "don't have much of a clue" seems to me unnecessarily helpless. It seems to me to dismiss all the knowledge gained so far as useless simply because we don't know with certainty. It ends an article that had been explaining and weighing alternative schools of thought by throwing up his hands without conclusion. Am I being unfair (maybe just a bit)?

I recommend this article for helping us as teachers prepare a good example for class of competing perspectives and their influence on methods of research, conclusions, and application of theory in practical treatment. I recommend it also for giving the real life implications of theories we accept, because it treats human suffering and the hopes for relief.

However, I hope that in TOK, as we look primarily not at conclusions reached but at the process of reaching them and claiming knowledge, we can be somewhat more appreciative of the role of unresolved debates in pushing their proponents toward refining or reconsidering their methods. I hope, moreover, that we don't convey to our students the idea that uncertainty – a permanent and dynamic condition of scientific knowledge – is inherently a flaw in knowledge. It could be a flaw in our own expectations if we demand tidy and certain conclusions in topics of immense complexity

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Image: creative commons, Pixabay. https://pixabay.com/en/psychology-psyche-mask-wire-rack-1957260/

February 6, 2017

Media literacy for TOK

Professional development for Theory of Knowledge teachers? February 6 is the last day for signing up for the current iteration of the course [Making Sense of the News: News Literacy Lessons for Digital Citizens](). It's an online course offered on [coursera.org](). It can be done fairly inexpensively for credit or audited for free (presumably without the February 6 sign-up). Me, I've cruised through its outline and preview materials, judged it good, and signed myself up to audit it for the next six weeks. Want to join me?

I've long been interested in media literacy and have dealt with aspects of it in Theory of Knowledge. However, the guidance I used to give students now seems to me to be woefully insufficient. How do we encourage students to evaluate sources and consider evidence when readily accessible channels of sharing knowledge have multiplied massively, when accurate information is often swamped by hasty misinformation, heavily biased accounts or deliberate lies, and when people following their own media streams tend to reject any contrary information offered by others?

The goals of Theory of Knowledge haven't changed: an interest in the diversity of perspectives and a critical approach to the construction of knowledge. We care about knowledge claims in the academic disciplines and in the "wider world" (as the TOK aims put it) – how they are reached, how they are justified, how they are embedded in perspectives that give them meaning, and ultimately how they are appropriately evaluated for accuracy (even though the word "truth" has disappeared from the 2013 subject guide).

But the world around us has changed. We consume our information in different ways, and can be manipulated in different ways. We certainly need awareness of common fallacies of argument – the starting point when I entered TOK in days of yore. But we need awareness, too, of common cognitive biases, and the ways in which our own confirmation biases make the achievement of critical skills so much more difficult – and so much more important. And now I'd say we need a heightened awareness, in addition, of how responsible journalism differs from the sludge washing about in other channels, and how to identify reliable sources.

Can we teach Theory of Knowledge effectively without confronting these topics? In my opinion, no.

Our course aims to embrace both the academic disciplines and the "wider world", whose knowledge flows in such large part through the media. *But the academic disciplines and the wider world have never been independent from each other in any case.* The context of the wider world influences topics taken for study, methods considered acceptable, social influences on interpretations, and ideological pressures on creators and researchers. The social context is obviously unavoidable in considering history as an area of knowledge, or the arts, or ethics. Moreover, the wilful misrepresentation of the natural sciences in the media has certainly increased over my adult life. Students cannot, these days, understand the nature, role, and significance of scientific knowledge without recognizing that "shared knowledge" comes with critical expectations within the sciences, but not necessarily within discussion of science in popular media. Even in trying to establish the characteristics of this area of knowledge, we cannot avoid dealing with the confusions that have been built around it – largely out of economic and political interests, deliberately.

The awareness and thinking skills that students need to understand the wider world and the academic disciplines, moreover, overlap considerably. Areas of knowledge develop, refine, and often formalize into methodologies the skills that are necessary to navigate the knowledge claims of everyday life. Whether we have sufficient experience or information for a sound judgment, whether we are conscious of our limitations, whether

we have overcome our own biases enough not to be blocked in our thinking, whether we are open to others questioning and checking our conclusions – all these are issues in all the knowledge we build and share. Double blind studies, for instance, or insistence on replication of results: these are methods in areas of knowledge that refine our trying to think every day in a way that is open, clear, and fair. Expectations of peer review and scientific consensus: these refine our everyday desire to identify reliable sources, ones we can trust to give us knowledge.

In TOK we aim to "make connections between a critical approach to the construction of knowledge, the academic disciplines and the wider world." As a critical approach to knowledge grows more challenging because of changes in the world around us, we have to develop our own capacities in response. Me, I'm off to work through this course on news literacy to see whether I can update my understanding and pick up some useful tips. What about you? Any suggestions on how else to deal with current challenges?

References

"Making Sense of the News: News Literacy Lessons for Global Citizens", Coursera.
https://www.coursera.org/learn/news-literacy

Image: creative commons, Pixabay

February 13, 2017

AGAINST empathy? Really?

"In the moral domain…empathy leads us astray," argues Paul Bloom, professor of psychology at Yale University. "We are much better off if we give up on empathy and become rational deliberators motivated by compassion and care for others." Bloom adopts a provocative stance to focus attention on what we in IB Theory of Knowledge would call "ways of knowing", and ties emotion, imagination, and reason to ethics as an area of knowledge.

My initial reaction to this book, I'm afraid, is irritation. Its title *Against Empathy* strikes me as pure click-bait – though it catches me long enough to read its less flamboyant subtitle, *The Case for Rational Compassion*. I remain impatient as he bases his criticisms of empathy on a narrow definition of the term as actually *feeling what others feel* (as if one could!) rather than feeling for others (imagination and emotion as ways of knowing) but with some distance (possibly given by reason and knowledge). I'm even more impatient as he counter-argues a position on morality that isn't characteristic of ethical systems in any case – that to be moral it's enough just to feel empathy, without acting (effectively or otherwise).

Bloom's strategy for communication, though, does seem to work. The whiff of controversy attracts media attention and gives him a forum for putting into popular discussion some ideas truly worth considering – ideas fully relevant to TOK and to the larger IB goals of engaging our students to care about the world and act effectively within it.

For a quick introduction to Bloom's arguments and the discussion he's managed to generate, I've listed a few articles and interviews in the References below. For fast access, the radio interview with Anna Maria Tremonti on The Current is good, especially since it provides a written transcript as well. Of the other articles, I'd say that the interview with Sean Illing in The Vox brings out Bloom's views well, with lots of bits that are quotable. You might want to play a clip for your class or pull out a chunk of text to open discussion.

How can we benefit in TOK class from Bloom's arguments?

For one thing, showing our classes that there are issues of contemporary debate around empathy and compassion for others gives an immediate benefit. Of course, the fact that people are talking about something doesn't necessarily mean that it's worth talking about, nor that what they're saying is necessarily worth listening to. However, a bit of contemporary buzz around ways of knowing and ethics, topics we tackle in any case, could give a greater sense of immediate relevance to a class.

For another, there are some specific TOK topics that are highlighted in Bloom's arguments and the discussion around them. I would certainly not present classes with what he says as though they are to accept it at face value. Personally, I think that Bloom, to some extent, is playing word games and setting up straw targets. At the same time, I think he makes some valuable points on ways of knowing and ethics.

It's pretty easy, I think, to add some TOK framing. Here are some questions that come to my own mind:

Concepts/definitions

Applied questions on Bloom: What does Bloom mean by "empathy"? How does his definition of the term affect what he wants to say about it? Would you define "empathy" in the same way that he does? If you don't, can you still accept his definition, at least for the moment, in order to follow his argument?

Knowledge questions: Why is definition of terms considered important in areas of knowledge? In what ways do the central concepts we choose to treat in a field affect the knowledge we gain and exchange?

Ways of knowing

Knowledge questions: What ways of knowing are involved in feeling empathy with others? What is the role of imagination? What is the role of emotion? Is it possible to feel someone else's emotions exactly as they are feeling them – and how would we know if we did (or didn't)? What is the role of reason? Can we claim to "understand" in a general way, or to draw likenesses between situations, without involving reason?

Applied questions on Bloom: What are the objections that Bloom raises against empathy (in his definition) as moral in itself, and as a motivator of moral action? What biases does he identify in empathy? What are his arguments for "rational compassion" rather than empathy? What is the role he gives reason as a way of knowing?

Ethical perspectives

Applied questions on Bloom: What does he argue ethical action to be? What does he mean by "rational compassion"?

Knowledge questions: In what ways do different ethical systems that we touch on in Theory of Knowledge draw on emotion and imagination as way of knowing? In what ways do they draw on reason? What are the different roles of attitude and action? How would you integrate into these ethical systems, or their ethical perspectives, Bloom's idea of "rational compassion"?

TOK and CAS

Knowledge questions, TOK: Do we have a moral responsibility to act for the wellbeing of others? To live ethically, is it enough to feel and think in a compassionate way, or is it important also to take action toward the wellbeing of others?

Questions for TOK and CAS: Would you call all action that is motivated by compassion *ethical action*, or is it important that it also be effective action? What would be the goals of action that is both ethical and effective? How would you measure the success of such action?

Applied questions on Bloom: To what extent do his objections to empathy (in his definition) spring from its biases and failure to galvanize action? (I think Bloom is valuable here.) How can the biases of empathy be overcome?

Ultimately, there are two things that I particularly like about Bloom's arguments:

One thing I like is his focus on the biases of empathy. It's important to look closely at the shortcomings of empathy that he points out: the tendency to empathize with certain people or groups but not others, and to be gripped by the spotlight on individuals but less by the general case, even if it is more pressing! (The article in The Guardian is a good summary.) As we might consider as we treat intuition as a way of knowing, we're cognitively bad at statistics but readily susceptible to stories! In our media age, it's timely to look at how we can be caught just by stories and emotion, and provoked into action with our biases reinforced.

The other thing I like about Bloom is that he does argue for compassion, understanding, and action. He deals with the importance of reason for "rational compassion", generalized beyond engaging stories and framed by larger ethical perspectives, such as offered by a utilitarian weighing of the larger situation – or, I would add, such as offered by reason-based approaches to deontological principles, or human rights. Moreover, he argues for the importance of understanding the perspectives of others, even if you don't like them, or feel toward them any kinship or empathy.

Nevertheless, I wouldn't myself be inclined to dump empathy, with Bloom, and move to a different concept ("rational compassion"). Instead, I'd argue (in education) for means of enlarging empathy through extending imagination and good feeling to take in more groups. (More stories, more personal contact, more literature, more films!) I would also argue for better information on other groups of people, so that any sense of "feeling for them" would be modified by a better knowledge of how they might themselves view their situation or feel about it. Whether you call our response to the plight of others "empathy" or "rational compassion", it is more likely to lead to

helpful action if it is better informed. Knowledge is valuable. And arguing in favour of empathy should be never equated with arguing for empathy alone.

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Image from Pixabay, creative commons https://pixabay.com/en/treatment-finger-keep-hand-wrist-1327811/

Februrary 27, 2017

Thank you, Hans Rosling: numbers, facts, and the world

Hans Rosling, who passed away earlier this month, made numbers tell significant stories about the world. A self-proclaimed "edutainer" – educator and entertainer – Professor Rosling championed a worldview based on facts. He had a genius for revealing large patterns in human development by making people see the data on population, inequality, and global education and health. He leaves to teachers resources on numbers, facts, and large patterns that can continue to help us in our classrooms – and also leaves us, in less practical terms, the inspiration of his love of knowledge.

Hans Rosling: some resources

For Theory of Knowledge, this Swedish doctor, researcher, statistician, and professor of global health (Sweden's Karolinska Institute) continues to be a terrific resource for mathematics applied to the world, for measurement of variables and correlation between them across space and time, for statistics and visualization of ideas, and for assumptions about the world that can be (and should be) tested against fact. In his work, he insists that beliefs about the world can be biased, outdated or otherwise inaccurate, and that it is important to ground beliefs on facts, on data.

Although Hans Rosling himself is no long with us, we still have access for classroom use to Gapminder, with its website visualizations that can be searched and played. As the "About" page explains,

> "Gapminder is an independent Swedish foundation with no political, religious or economic affiliations. Gapminder is a fact tank, not a think tank. Gapminder fights devastating misconceptions about global development. Gapminder produces free teaching resources making the world understandable based on reliable statistics. Gapminder promotes a fact-based worldview everyone can understand."

Ola Rosling and Anna Rosling Rönnlund, Hans Rosling's children, direct Gapminder and will continue their work.

We also have access to Hans Rosling through his talks on video.

The following 20 minute TED talk "The best stats you've ever seen", for instance, was filmed in 2006 but it still makes its point – and if you want to extend the examples to the present, you can update them on the new bubble chart on the Gapminder website. It's on YouTube: https://www.youtube.com/watch?v=hVimVzgtD6w

More up-to-date (2014) is the following 20-minute TED video, How Not to Be Ignorant about the World. It is funnier, too, as Hans Rosling jokes with his audience. It's on YouTube: https://www.youtube.com/watch?v=Sm5xF-UYgdg

Hans Rosling: an inspiration

Not only is Hans Rosling still a good speaker (on video) for TOK, but he can continue to convey to us all his love of knowledge and insistence on its importance in the real world. He is described in Future Crunch as "someone who understood that the stories we tell ourselves really matter. His message was that the world is getting better, but that we need to understand the data if we want to help those being left behind."

The Crunch picks out the following interview (on youtube, subtitled in English) as its favourite for capturing Rosling's attitudes: "Don't use media if you want to understand the world" on youtube: https://www.youtube.com/watch?v=GzRujm9WbQI

Hans Rosling: superstar of knowledge

I want to end today by passing comments over to three tributes to Rosling made by people who knew him and understood his contributions to knowledge. As we draw a distinction in TOK between "personal knowledge" and "shared knowledge", we might want to pause a moment and cheer for someone whose own personal pursuit added in such positive ways to what we all share, not just in presenting data comprehensibly but in conveying its significance. I've left the final words, as you will see, to Ann Linstrom below: **"No one can take your place, but we can all play our part in creating a fact-based understanding of the world that will help us make the right decisions for our future."**

Tributes

Zuzana Hucki, "Five important lessons we can learn from statistician Hans Rosling", Phys.org. February 13, 2017.

"Rosling was not only a statistician but also an exciting storyteller. He would not only express his opinion, he made numbers and figures tell the stories. … he didn't present long boring lists. Instead he showed bubbles of data which represented different countries of different sizes, and different colours were different continents. As he popped those bubbles he also popped the audience's preconceived ideas about the world." (https://phys.org/news/2017-02-important-lessons-statistician-hans-rosling.html)

The Crunch #31, Future Crunch. February, 2017.

"… Professor Rosling also understood human nature. He realised good data wasn't enough; you have to show it in ways that people enjoy and understand. Millions of people had access to the same datasets he did. Rosling's genius was in realising the powerful message they contained would only make sense to the wider public if he could give that data a bit of soul….

"This was someone who understood that the stories we tell ourselves really matter. His message was that the world is getting better, but that we need to understand the data if we want to help those being left behind." (http://us8.campaign-archive1.com/?u=6321feeb3ffd42b0e44a01616&id=ab370299eb&e=902c91567c)

Ann Lindstrand, "Hans Rosling, "a kind and constantly curious genius", The Guardian, February 10, 2017.

"Hans Rosling was a kind and constantly curious genius. He was truly committed to the poorest people in this world, passionate about statistics and dedicated to communicating a fact-based worldview. His knowledge, virtuosity and humour infused his unique data visualisations with a life of their own, encouraging people around the world to engage with facts about population, global health and inequality that might otherwise have passed them by…..

"Hans was discouraged sometimes. "I teach the same thing over decades and ignorance is still there," he would occasionally lament.

"But Hans, you moved so many of us. No one can take your place, but we can all play our part in creating a fact-based understanding of the world that will help us make the right decisions for our future." (https://www.theguardian.com/global-development/2017/feb/10/hans-rosling-remembered-a-kind-and-constantly-curious-genius-ann-lindstrand)

A Bhangra smile: great way to open a TOK class

How could students NOT love this 2-minute dance video? And how could you, as a TOK teacher, NOT seize the chance to ask (just a little!) about the role of the arts in knowledge? The Maritime Bhangra Group of Halifax, Nova Scotia, Canada gives a joyful lift to questions about what is communicated in music and dance.

https://www.youtube.com/watch?v=eHhKMu8jrfw&w=560&h=315

But how does a celebration dance for the harvest in the Punjab in India transform into a dance to lighten winter snow shoveling in the east of Canada? Group founder Hasmeet Singh, who is studying for a masters in computer sciences in Halifax, comments on his group's goals, "We wanted to make people happy. We never thought it would be such a big hit." A video the Maritime Bhangra Group uploaded to Facebook went viral last year as two of its members dance at Peggy's Cove, a scenic spot familiar to Canadians.

The group also has other goals: they raise funds for community causes and draw attention to the beauty of their part of Canada. For TOK, another of their goals contributes to the wonderful classroom tinkle of shattering assumptions as the appearance of the dancers jars with what many students might expect of them. "Just because we look different, we have turbans and we have beards, we get stared at," Singh says. "[By dancing] we want to tell people who we are and why we're doing this."

Their latest video, from February 2017, gave me a moment of delight this morning. Yes, I'll donate to their fundraiser for multiple sclerosis. And I'm smiling as I pass this on to you!

https://www.youtube.com/watch?v=juGVMqvu-30

PS You can also see them teaching their moves to four members of the Canadian Parliament, to demonstrate multiculturalism in action: "Bhangra group teaches Canadian Ministers how to dance".

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TOK and "fake news": 3 tips, 2 downloads and 3 resources

Well, we've done it at last in TOK. We've hit the Big Time. Suddenly the topics that we chat about every day in class – such as concepts of truth and reliability, the nature of "facts", methods of validating or rejecting knowledge claims, and the dynamic and formative role of perspectives – have come into the glaring public spotlight. Headlines blare out claims about "fake news" or "the war on truth" over British and American politics most specifically, but with fallout that rains down on us all. It*'s time for us Theory of Knowledge teachers to take a bow* – and then eagerly scoop up for future classes all the new and relevant resources that are being churned out so energetically in the media-sphere that surrounds us.

Admittedly, the current public controversy swirling around **facts** and **truth** – who has them, who speaks them, who warps them – could create a few problems for us: even uttering the word "truth" in some contexts could potentially provoke the degree of agitation previously reserved for "terrorist". "Science" and "junk science" have already been politicized to the extent that we can hardly talk about them anymore – let alone teach about them – with any opening assumption that we share a common definition with other people! Maybe, though, our TOK syllabus has just become more fun to teach, with ideas that students can quickly see as relevant to their lives.

To treat "fake news" in Theory of Knowledge within the current storm, I'll offer three tips here, and encourage you to add a comment if you have others to share.

1. Frame the current hot topic with a steady consciousness of our course aims.

We want to teach Theory of Knowledge in a way that responds to news and events around us. But we always have to hang onto the knowledge questions and not get mired in the details of the examples.

With charges of "fake news" and "lying media" we're on familiar TOK territory, even if the topic is suddenly livelier in the public sphere. In TOK, as in other IB subjects, we deal routinely with the need to evaluate our sources of information, and to evaluate assertions and arguments for their justifications and their tactics of argument. Current events certainly give us some excellent grounding for plenty of knowledge questions, and we ask them even in quieter times: *Does it matter to tell the truth? How do we find the most reliable account of the world in our areas of knowledge and everyday life?*

For the ongoing framing of such topics in TOK, I offer two pages taken from my book Theory of Knowledge, with permission from Oxford University Press. They give a framework for evaluation of knowledge claims that I call "The Three S's: source, statement, self". I've found this approach very useful over years of teaching, focusing an analysis first on the **SOURCE** of the knowledge claims, then features of the **STATEMENTS** themselves, and finally, more introspectively, on the **SELF** who is doing the evaluation.

Please feel free to download and use this framework if you'd find it useful in your own teaching. You might find it handy just to keep the over-riding questions at the beginning about each of the three S's –and encourage your students to identify what issues they'd raise in each category. You can build on it as the course progresses and you hit new topics. The framework on these pages is a finished version of this process.

DOWNLOAD: SSS GUIDE TO EVALUATING KNOWLEDGE CLAIMS

2. Identify what's new that needs attention.

But is a generic approach to analysis adequate for the kinds of evaluation demanded by the digital age? At a time when the place of truth in public communication has been deeply shaken, we do have to come to grips with the contemporary challenges – and that means identifying what's new about the flow of knowledge claims and integrating new forms of literacy.

In face of these changes and others, the Center for Digital Literacy suggests that we require new skills of evaluation for a new age. Richard Hornik of Stony Brook University identifies 4 specific new challenges:

> "The Digital Age poses four serious information literacy challenges for civil society:
>
> 1. The amount of information we are flooded with daily makes it difficult to sort out what's reliable.
>
> 2. New technologies to create and share information make it easy to create content that only appears authoritative and then to spread it virally.
>
> 3. The conflict between speed and accuracy has been exacerbated by Digital Age demands for delivering information as fast as possible, but accelerating that process increases the chance it will be wrong.
>
> 4. Humans prefer information that supports our beliefs, and the Internet and social media make it much easier for us to select only the information that supports our ideas, reinforcing rather than challenging them."

These four challenges don't come separately, and part of gaining digital awareness is recognizing how they work together. As Hornik points out, one major change is the shift in technology, with a profound influence on the sources from which people gain their news. However, the fourth challenge he identifies is not actually a change – human beings have probably always preferred information that supports their beliefs. What's changed is our understanding of how our minds work. We have become increasingly aware of our own cognitive biases, notably confirmation bias, as the cognitive sciences have studied the way people deal with claims that contradict their beliefs. (TOK WOK intuition) The combination of technology and our intuitive biases, exacerbated by the algorithms of such sites as Facebook, has created a dramatic contemporary version of the bubbles of belief within which we live. You might find it relevant to glance back at my post from November 21, 2016, "Thinking beyond the knowledge bubbles".

Beyond the issues of bias in the media sources and bias in our own minds, though, our present day gives us an additional challenge – reports that are outright lies but which feed our biases and spread on current technology at viral speed. (e.g. Pope Francis did not, in fact, endorse Donald Trump. Fake news!) In TOK, we recognize that identifying "facts" can be surrounded by issues of judgement. (You may want to read the article on "The Epistemology of Fact Checking" by Uscinski and Butler, listed at the end.) Yet no ambiguity surrounds some of the stories circulated on the internet that are factually false.

Some solutions to this problem lie with major news platforms and journalists. For instance, First Draft News announced on February 6, 2017 the launch of CrossCheck, a collaborative journalism project with Google News Lab and 17 newsrooms to fight misinformation during the French election. Le Monde, one of its news partners, has already developed Décodex, a database of untrustworthy sites and tools to recognize them. Similarly, Facebook, one of the major platforms for sharing information, announced in December 2016 that it has started working with fact-checking organizations on a system for flagging disputed posts. Mark Zuckerberg of Facebook posted:

> "While we don't write the news stories you read and share, we also recognize we're more than just a distributor of news. We're a new kind of platform for public discourse – and that means we have a new kind of responsibility to enable people to have the most meaningful conversations, and to build a space where people can be informed."

Others potential solutions involve technical fixes, such as code that interprets the algorithms on websites and de-ranks some sources in news feeds, on grounds such as having just been created. However, disputes can arise over the criteria for automated de-ranking. Moreover, perpetrators who generate fake stories are likely to work out means of defeating technical blocks, in what has been referred to as a kind of "arms race". (Good podcast from the BBC: "The War on Fake News: How to fact-check the internet in a post-truth age")

There seems to be no solution, ultimately, that replaces human judgement. We need to be critically alert ourselves.

3. Help students develop relevant skills.

And so, what are the new skills that our students need to face the challenges of fake news in a digital age? Concerned that I was being bypassed by some of the current means of communication, I recently audited an online course on media literacy offered by Stony Brook University. Then, after wandering labyrinths of links through hundreds of good articles and videos, I've picked out three sources that I would most highly recommend for Theory of Knowledge.

1. **The first** is a splendidly TOK-relevant article in the blog "Neverending Search" written by Joyce Valenz of Rutgers School of Information and Communication: Truth, truthiness, triangulation: A news literacy toolkit for a "post-truth" world". She writes for librarians, who are natural allies of TOK teachers in holding the overview of knowledge, thinking critically about "shared knowledge", and evaluating sources. Valenza pulls together central issues in an impressively compact and lucid way in this article, which also bristles with links to further resources.

2. **The second** is a set of lesson plans for teachers, updated in January 2017, from the New York Times: "Evaluating Sources in a 'Post-Truth' World: Ideas for Teaching and Learning About Fake News" I wouldn't suggest simply following these lesson plans: they're too time-consuming for TOK, and they're too heavily American in their examples for those of us keen to resist being sucked down into this national news vortex. However, the site is useful in drawing critical distinctions, providing real life examples, and suggesting activities for students. All of these are applicable to the internet and digital media.

3. **The third** is a goldmine for teaching digital media awareness: the Digital Resource Center of the Center for News Literacy. It offers (free) a series of 14 lessons which deal directly with questions we raise in Theory of Knowledge. Do have a look through its 2017 syllabus outline: News Literacy syllabus. Again, it's American in its media context and examples, and is far too detailed for TOK. However, you'll probably find within this material some useful approaches to analysis and effective examples.

If you followed all the excellent links and suggestions in these resources, you could get lost in there. I certainly felt overwhelmed myself. I had to leave the screen for a couple of days, in order to pull back and regain some of the distant vision that we practise in TOK. I also had to remind myself of the practical limitations of time.

And that's when I figured that, if I were to build evaluation of digital media into my course rather than leave students to raise the topic through presentations, then I'd have to integrate it into what I was doing already. I'd have to treat it as an extension of questions we already raise, and skills we already aim to develop. Me, I'd want students to add to the S-S-S framework from earlier, prompted by specific examples of digital media – both in order to reinforce the original framework and to give them a way of assimilating new approaches. So this is what I figured out, and if you'd find it useful you can download a copy from the end of the list:

Should I believe it?: some additional questions for digital media

This set of questions is a **_supplement_** to those given in the pages excerpted above from Dombrowski, Rotenberg, and Bick, Theory of Knowledge (OUP, 2013), 219-220. The questions below apply to websites and digital media.

SOURCE

• What features of the domain name give an indication of its reliability, or of its status as a news site, blog, or the website of an organization? What does the suffix of the url (.com, .org, .edu?) indicate? Does the domain give accurately the name of an identifiable organization in conventional format, not a "look-alike" name and/or additional suffix (e.g. Note the added suffix: abcnews.com.co)?

• Does the website provide background "About us" and contact information? What can you learn by googling the domain, the writers, the organization – possibly about political affiliation, reputation for reliability, or identity as a satirical site? (useful: wikipedia, Snopes, FactCheck.org)? Is there a "disclaimer" that denies responsibility for the content?

STATEMENTS

• Are other sites, including known and reputable ones, covering this topic and making similar statements?

• Can you check quotations and details with other sites, by googling? Do the sites seem to be independent from each other in what they report, or do they echo another source site or each other? If studies are cited, can you find the original source of the information in order to evaluate it?

• Does the website look amateur in design? Does it use lots of CAPITAL LETTERS, bold headings, banner ads, and pop-ups? Does the headline fit the story that follows it?

• Do sensational statements or unlikely promises (click bait!) tempt you to follow the links, on reflex? Do the statements make you indignant, angry, fiercely patriotic or otherwise emotionally aroused about an issue on which you're not already informed, then suggest actions (e.g. signing petitions, sharing a link, downloading material, donating, voting in a particular way, buying a particular product)? Does an inflammatory article give you sources of information, evidence, and "facts" that you can check?

• Is there any indication that an article (e.g. on Buzzfeed) is a sponsored link (look for acknowledgement in top corners), probably an ad presented in the same format as news?

• What is the date of the information on the webpage? Is the information current? (Some stories circulate endlessly on Facebook!) Is the image current and specific to this report or is it recycled from elsewhere on the web? (Right-click the image for its url, then google it or check with a reverse image search on TinEye)

SELF

• Do you care if what you accept online what you share with others, for instance via Facebook, is true? Why does, or doesn't, it matter to you?

• Are you patient with breaking news, aware that early reports, posted quickly, are more likely to have errors than later, more verified ones?

• Under what circumstances do you share posts to pass on to others reports or images you've received on Facebook, Twitter, or other forms of social media? On reflection, what guidelines would you give yourself in order to be on guard, in a tempted moment, against passing on false "news"?

• On Facebook, does the news posted by friends, or appearing in sponsored space, always support your own point of view? If so, which is more likely: that you're consistently right, or that you are insulated from alternative views?

• Do you have a media-reading strategy that includes a range of sources you have carefully judged reliable across a political spectrum? Do you actively seek out news and evaluate it, and select and sign up for newsletters and feeds on topics on which you want to stay informed?

If you would find this set of questions useful, please feel free to download it and use it in class, with the usual conventions of acknowledging the source.

DOWNLOAD: SSS for digital media

CONCLUSION

It would be easy for our students to tune out – to feel that no politicians and no media are to be trusted, to reject all of them equally en masse, and to turn their attention away from engagement in the issues of their societies. Many commentators insist, in fact, that attacks on the media have exactly this purpose: to confuse the public on the facts so that, not agreeing on what's true, they won't take collective action. The recent storms over "fake news" are today's version of a longer term manufacture of doubt on major issues of science. As we consider "shared knowledge" in Theory of Knowledge, we have to recognize the problems in *how* knowledge is shared.

Students maturing to awareness of their society at this point risk being drawn into what's being called a "post-truth" era: the Oxford Dictionary made "post-truth" their word of 2016 not because truth had ceased to exist, or had become inaccessible, or had been treated as inevitably contestable – but because it had so notably been sidelined as significant for political decisions.

So what do we do about it, as TOK teachers? First, I'd say, we have to refuse to get discouraged ourselves. And then – I think we want to engage our students in some fascinating detective work! Building reliable knowledge (as well as we can) is not a passive activity. It demands active searching and sleuthing. It demands steady development of critical skills in everyday life just as in the methods of areas of knowledge. And that's what we can give our students in TOK – awareness and skills. The current political climate just makes our teaching more obviously relevant than usual to everyday life, and possibly more fun.

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The Statistics of an Emotion: 2017 World Happiness Report
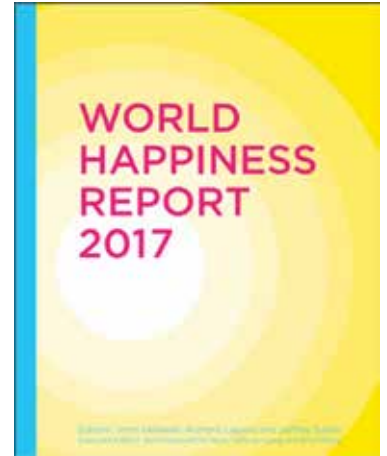
Can we define and measure happiness – put statistics to an emotion? Can we rank countries of the world quantitatively for the degree to which their people are happy? The fifth annual World Happiness Report, released by the United Nations on March 20, 2017 has subject matter likely to appeal to students. For Theory of Knowledge teachers, the report gives an excellent focusing example for discussing ways of knowing and methods of research, particularly for the human sciences.

https://www.youtube.com/watch?v=Se2gfFKp1Iw

Measuring happiness, says the UN website, is a cross-disciplinary topic: "The research on well-being - sometimes called happiness studies - can be found in a wide-range of fields including economics, business, psychology, sociology, political science, and education." The annual happiness report was initiated by the UN General Assembly in 2011, inviting member countries to use the happiness of their people as a measure of development. The first report, issued in April 2012, was under the leadership of Bhutan, the country which has officially adopted "gross national happiness" (not "gross domestic product" GDP) as its measure of development and as the goal of government. This year's is the fifth annual report by the United Nations Sustainable Development Solutions Network, published on March 20, the International Day of Happiness.

1. What is the World Happiness Report? How do we know – or find out?

An effective way to open the topic could be to send your students to the library and/or the web, for a limited amount of time, to gather information. Although gathering information takes more class time than simply filling them in on information yourself, the activity does push them to read more actively and prepare their thoughts for discussion. It's helpful to give them guiding questions before they search, such as:

SOURCES: Why did you look where you did? How are you going to find the most reliable factual information? How are you going to find informed interpretive perspectives on the Happiness Report, to explain it more fully and evaluate it for its flaws and its strengths (according to the writer's criteria)?

COMPARATIVE REPORTS: Did you notice differences in the way the Happiness Report was presented in different media, or by different writers? Did the articles you found outline the historic background of world happiness reports or focus only on this year's results? Did the articles emphasize different parts of the scoring scale (to cheer, or to deplore the results!), or veer off the report onto related issues?

If you have international students who speak different languages, it would be interesting to take a quick sampling of international media coverage of this year's World Happiness Report. (Do some countries ignore the report altogether?) For English media sources, you might find useful the "Media Roundup on World Happiness Report".

Incidentally, I enjoyed the coverage in some Norwegian newspapers. With Norway placed in the top spot as the happiest country in the world, did its national papers brag about victory and metaphorically wave the flag? Not a chance. Having lived in Norway for a couple of years, I came to appreciate the cultural reluctance, shared with other egalitarian Nordic countries, to brag or try to show oneself as better than others. Admittedly, Aftenposten does point out immediately that Norway beat Denmark this year (Nordic rivalry), but without any exuberant national self-congratulation. And Dagbladet's subheading immediately points out that some people are still unhappy. I smile as I wonder how the press in my own country (Canada) or other countries I know would present a result of coming tops!

2. How does rating at the top of the Happiness Report compare with winning the Olympics?

It's entirely possible that students are a bit fuzzy on its rating, especially if they have read articles that present the happiness ranking in terms of competition – who has beaten whom, and who the "winners" are. Myself, I think students could clarify their thoughts in response to a quirky question like this one:

What are the similarities between The Happiness Report and the Olympics? What are the differences?

The similarities of international ranking are pretty superficial compared with the differences – such as the conscious participation in a competition, the clarity of the criteria for winning, the kind of criteria, the number of countries wanting to win according to those criteria, and the significance of the results. A silly comparison? Maybe. But it leads into a more analytical approach to what the measurement means and possibly lays aside some major misconceptions.

3. Can we measure happiness? What are the methods of this study?

The questions that students raise about this report are likely to be affected by when during the TOK course you lead this discussion. Myself, I'd place a discussion of the Happiness Report in context of the human sciences, as part of a consideration of the breadth of this area of knowledge and its methods. I'd want students to compare the nature of WHAT is studied and HOW it is studied with the natural sciences and other fields of the human sciences.

In any case, a broadly inviting question is likely to raise points that you can then sequence for discussion. I'd suggest something like this:

Before you accepted the results of this study as informative and significant, what questions would you want to ask the researchers?

I'd hope that students would generate questions centred on who was doing the survey and their qualifications to do so, what their declared purpose was for doing the study -- and above all the whole methodology of the study. Some evident questions for a TOK teacher to pose include:

EMOTION AS A WAY OF KNOWING: The report is about emotion as a topic, rather than about emotion as a way of knowing something else. What, then, seems to be the role of emotion as a way of knowing in this study, in terms of what is being measured and how it is being measure? (The basic method of study is to ask people to give an evaluation of their lives on a 10-point scale, with 0 being the worst possible.)

LANGUAGE AS A WAY OF KNOWING: What is the role of language as a way of knowing in the methods of this study? How is the central concept defined for measurement ("happiness")? What difficulties might you anticipate in creating equivalent studies in different languages?

Responding to the next question has to involve not speculation but information, possibly already gathered by students in their reading activity.

HOW WAS THE RESEARCH DONE? In what ways have the methods of the happiness reports of the past 5 years used techniques characteristic of the human sciences (even if studying happiness is not a characteristic subject)? To what extent should the conclusions of this study be taken as factual and precise, and to what extent taken as subjective broad indicators?

I recommend going straight to the source for an explanation:

- This United Nations website gives the larger context for this year's Happiness Report: **International Day of Happiness, Measuring Well-Being: Quick Guide**. http://research.un.org/en/happiness

- This website gives the report itself, which can be read online or downloaded in whole or in chapters: Helliwell, J., Layard, R., & Sachs, J. (2017). World Happiness Report 2017, New York: Sustainable Development Solutions Network. http://worldhappiness.report/ed/2017/. Its introduction gives the criteria applied for explanation:

"All of the other countries in the top ten…have high values in all six of the key variables used to explain happiness differences among countries and through time – income, healthy life expectancy, having someone to count on in times of trouble, generosity, freedom and trust, with the latter measured by the absence of corruption in business and government."

- A useful account of the methods is given under the site's "**frequently asked questions**", questions that you can hope that your own students will immediately have posed: "How are the rankings calculated?" http://worldhappiness.report/faq/ (formulation of the question, methods of gaining the survey sample, survey size, number of countries surveyed)

4. What are the implications of the World Happiness Report?

In Theory of Knowledge, we use concepts of "objectivity" and "subjectivity" rather carefully, recognizing different notions of both and the value of both.

For me, I confess, the balance of subjectivity and objectivity in the World Happiness Report provokes conflicting reactions. On the one hand, I'm skeptical: the data on which it is built is subjective, and the individuals doing their life evaluations can apply the 1-10 scale in a way that varies according to such factors as interpretation of language, cultural influences on self-representation, personal expectations of life, personal temperament, and even the circumstances of the day. Although the methods of treating the data may be statistically sound, the data itself is not "hard evidence". Moreover, the study cannot take into account the well-being of future generations, so it needs to be read in the larger context of sustainability.

On the other hand, I am certainly ready to accept as informative surveys that, through large numbers in a sample, give a general tendency and broad comparisons. The human sciences are dealing with human subject matter, and cannot reach the universal conclusions to which the natural sciences aspire.

Moreover, how people evaluate their own lives, seen across large populations groups, is surely significant in any discussion of development goals. The subjectivity of the data, individually and collectively, is what makes the study a valuable addition to an understanding of what people are experiencing in the world. The report (chapter 2) stresses that it is measuring "**subjective well-being"** – with the subjectivity being its significant contribution. It provides a complement or a counter to considering development primarily in terms of money and GDP.

So what, then, are the implications of accepting the 2017 World Happiness Report as sound and informative – as knowledge?

Could it be used by managers in organizations or governments to make the lives of their people better? Such is the goal of this particular study, in context of the United Nations and sustainable development, and, as it says in its introductory overview, "The report, the fifth one to come out since 2012, continues to gain global recognition as governments, organizations and civil society increasingly use happiness indicators to inform their policy-making decisions."

Yet such a generally positive response is not a necessary one: the implications of the study – in terms, that is, of action – rest on how the social factors given in explanation are interpreted and what they are used to justify or promote. And that depends on the political and economic will and power of different players around the world.

But, for TOK, what we care most about is what we ourselves can use the report to justify or promote! Clearly, treating it in class could raise discussion about ways of knowing, methods of research, and characteristics of some parts of

the human sciences. The fact that the report is about happiness, though, is probably its greatest appeal: for me the strongest motivation for using this report as a focusing example for discussion would be the reflections with which a TOK discussion, applied to well-being across the world, would surely leave our students.

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Image: Helliwell, J., Layard, R., & Sachs, J. (2017). World Happiness Report 2017, New York: Sustainable Development Solutions Network. http://worldhappiness.report/wp-content/uploads/sites/2/2017/03/HR17.pdf'

Red lines and "complex moral duality": TOK and ethics of witnessing

By guest blogger Theo Dombrowski.

"*Civilians Attacked by Chemical Weapons*!" Few headlines spark as much outrage. If a TOK class engages students in the questions of knowledge connected with this kind of horrendous event, it can help them feel the importance of the intellectual tools that the course provides for probing into – and reacting to – such events.

A reflective piece in the current edition of Dispatches, a journal of Médecins sans Frontières (MSF) Canada, provides an articulate, subtle, and thoughtful focus for many such questions. (Stephen Cornish, "Red Lines") Easily viewed online, the article is short enough to be used as the basis of a rich and far-reaching discussion. What makes the article particularly effective, too, is that it appeared shortly before the most recent use of chemical weapons in Syria, and thus concerns a whole array of questions perhaps not fully apparent in the most recent news flashes.

Taking the article to class, some teachers first might want to try allowing students to read it and, afterwards, ask what needs to be discussed in TOK terms. Many students may, understandably and even laudably, want to jump right into inveighing against the use of chemical weapons. Others, seeing the term "complex moral duality", might mutter, "aHA", and see in the situation here, something akin to one of the "trolley problems" that they may have discussed in class. A TOK approach can, however, assist them in going beyond initial reactions to see what really is going on here. It could include several topics.

1. Does knowledge bring responsibility?

How much does privileged access to knowledge with broad social repercussions require the individual to share that knowledge?

The article uses the roughly equivalent terms "témoignage", or "bearing witness", to identify the nature of this kind of shared knowledge – though students might have to be told that, in terms of social activism, "bearing witness" is usually used as a preventative tactic. (Most often outsiders make their presence as observers known, with the hope that those in conflict will restrain their use of violence and/or injustice.)

The particular question of "témoignage", of course, has the additional feature of sometimes arising from chance and other times arising from a *calculated and deliberate attempt* for witnesses to put themselves into a position of gaining knowledge. How much and in what ways, therefore, does this kind of responsibility differ from that connected with "whistle blowing", another kind of knowledge that gives a heavy weight of responsibility to those who possess otherwise hidden knowledge?

2. How do we evaluate sources of knowledge?

When the stakes are especially high does the level of certainty need to be likewise especially high – or the reverse? In the absence of direct observation, to what extent is it justifiable to accept the word of "trusted medical colleagues" and, as the writer points out, information that is "second hand"?

How much does the author of the article establish the credibility of the sources?

In the first place, it might be worthwhile looking at his use of terms like "trusted networks", and "eyes and ears on the ground". Second, we might look at the way the author gives particular weight to the current reports by differentiating them from those that, in the past, provided "medical evidence", yes, but evidence that was only "suggesting" the use of chemical weapons. Finally, he adds that these reports, in the past, were "isolated" and "extremely difficult to confirm." Thus, arguably, he lays the ground for establishing himself and MSF as careful and cautious in not jumping to conclusions.

What else does he do to make his claims seem convincing?

1. He gives a specific time and number of cases: "close to 3,600" and all within "three hours"

2. He asserts they all exhibited "neurotoxic symptoms."

3. He points out they were all in "MSF-supported hospitals".

Now, it is true that the author doesn't tell us what the symptoms are, how strong they were, or whether they are unique to chemical weapons. Additionally, he doesn't tell us what it means to say a hospital is "MSF-supported".

In fact, there may be a little irony in the fact that we, as readers, simply have to mirror the kind of source-assessment that MSF itself has done: we must consider the source (MSF), be a little cagey about accepting it uncritically, but, in the end, put our knowledge of MSF into the mix and accord it the respect we might feel it deserves. Thus, with caution, we may well want to accept the "knowledge" we now, ourselves, possess, no longer second hand, but now third hand.

3. What does the article reveal about cause and effect in this real life situation?

Being able to pin down causes and predict effects, to the extent we can, is an achievement of methodology and patience in areas of knowledge. Where human beings are acting in a complex world, entire webs of causes and effects can complicate present understanding and render prediction uncertain. Yet how do we act – and act ethically – making the best prediction we can make based on current knowledge?

Two particular cases of cause and effect seem to be involved here.

1. The first is fairly straightforward and already touched upon. **If** certain chemicals are used on people **then** they exhibit the following "neurotoxic" effects. Doctors, apparently, feel confident in locking on specific causes to specific effects. In this case, importantly, the knowledge involves **biology**. The knowledge of cause and effect is essential scientific knowledge.

2. More important – and, in fact, the very heart of the article – concerns not science/biology but the **human sciences**. Further, it depends on hypothetical cause and effect and speculation on the future: *IF we **do** act **then** ....; IF we **don't** act **then**...*

A class might want to discuss some questions first in general terms, independent of this article. How much can we predict political behaviour? How much is our prediction based on observation of political behaviour in the past, how much on the claims (bluster?) and devious tactics of countries or politicians in the present?

Turning back to this article, we see that the *particular* hypothetical questions that the writer pins down are:

1. "Would speaking out result in US missiles raining down on Syrian cities?"

2. "Would it cause reprisals against our doctors inside Syria, and our expulsion from places where we were directly providing care?"

3. "Would remaining silent...allow it to be repeated in other places?"

Although the writer doesn't have the space for examining in detail the likelihood for any of these concerns, he does point to at least two lines of evidence for #1 and #2. For #1 he points out that the U.S. has said the use of chemical weapons is a "red line". For #2 he points out that already MSF has been forbidden by Syrian officials to work in some areas.

Question: does it seem that these are compelling reasons for real concern that speaking out is likely to have negative effects?

4. How do we know what ethical action to take in face of "complex moral duality"?

How much does this sense of cause and effect play into the principles of "consequentialist" ethics – or deontological alternatives? How much is the article about "a complex moral duality"?

First consider the consequentialist or utilitarian awareness.

Apart from references to international law, and basic human decency, how much does the article primarily emphasize that the better action is that which will produce the greatest good?

Well, we might notice that there seems to be much in the article that suggests that the best course of action is that which would produce the least harm both in the present in the future. The article points to four groups, whose numbers and degree of suffering, all need to be weighed, predicted, and balanced –

1. doctors who might suffer reprisals from Syrian officials

2. civilians who, therefore, might go untreated

3. civilians who might be bombed by the U.S.

4. civilians in other times and places who might suffer without protest in the present.

Of these, the first three groups might be hurt by speaking out – and the fourth by remaining silent.

To what extent is this balanced by deontological concern for universally applicable principles?

What are the implications of the author writing, "Would remaining silent make us complicit....?" Does asserting that a chemical attack is "a mockery of the rules of war" suggest that the "rules" (implicitly based on universal principles) are worth respecting *independent of their consequences*? Does "basic human decency" likewise suggest a universal principle independent of consequences?

And this brings us back to the question of that "trolley problem". To what extent does this article give a particularly harrowing, real life version of that chestnut?

The article does, arguably, therefore show a conflict between acting on universal principle and acting most beneficially. However what makes this article particularly rich and significant is its "real world" complexity.

After all, fundamental to the dilemma faced by the doctors who have learnt of the atrocity, is an issue less of moral tension than *epistemological* uncertainty. When the writer asserts, powerfully, that there is no "clear division between right and wrong", it seems clear that he is painfully aware that the major anxiety lies in choosing a course of action not just that is inherently "right", but, also, that will produce the *most positive* outcome. In the end, MSF has decided that it *must* speak out – and, it seems, because of a combination of deontological reasons and the consequentialist view that not speaking out might cause even more suffering than speaking out.

Thus, MSF seems like all doctors who, in swearing the "Hypocratic oath", embrace the principle, "do no *harm*", yes – but add to it something like "do no *wrong*."

5. What is the role of "history" suggested in the article?

What seems to be the view of the author here about the moral authority and depth of knowledge possessed by history?

At the end of the article, the author claims, "Only history can judge." TOK, of course, examines the ways of knowing open to a historian – and the role of history in furthering the total sum of human knowledge. Some might be more skeptical than others about the authority of history in possessing full factual knowledge, in selecting, reporting and analyzing factual knowledge, or in passing judgment.

Perhaps the answer is not clear. There is some sense, maybe, that by "history", the writer is really speaking of a time in the future when the results of the current "speaking out" will be clear. It probably seems nit picking to point out that only "counter factual history" would try to pin down what not speaking out would have led to. After all, what makes history so different from most of the "social sciences", as TOK emphasizes, is that it is impossible to run experiments, and almost impossible to be sure of a different outcome, in retrospect and in imagination, by changing only one variable.

Conclusion

Clearly, questions can be extracted from the article and discussed independently. Additionally, the method by which the article raises the questions itself can lead to valuable discussion about shared knowledge. What makes the article so powerful, though, is the fact that not only does it show a complex awareness of ways of gaining knowledge and acting on that knowledge, but, crucially, it provides a real-world resource for the TOK teacher who feels it important to discuss with students the connection between knowledge and action.

And, indeed, what could be more central to whole spirit of TOK than the author's words from the conclusion: "we must remain guided by the best knowledge we can gather and a willingness to re-evaluate in the face of new evidence." Now, if only he – and TOK students – could get the rest of the world to agree!

A PS from Eileen Dombrowski: Detachment and Engagement

Please note that the above blog post modeling Theory of Knowledge analysis is written not by me, as usual in this blog, but by [Theo Dombrowski](). While his treatment of the article from *Médicins sans Frontières/Doctors without Borders* shows the detachment we use in TOK to examine knowledge claims, he cares personally about MSF and the issues raised, and he shares the writer's conclusion that we must act "guided by the best knowledge we can gather."

TOK doesn't engage in action itself. It prepares students to take informed and thoughtful action – possibly through the Creativity Action Service program, or using the training CAS provides for ethical and effective action in the world.

But what action? What if we're not doctors, or engineers, or administrators? What can we do to help? One possibility I've always encouraged students to take is Theo's way of helping – that is, doing whatever he can do. In retirement, he is a writer, artist, and illustrator, raising funds to donate to humanitarian work that he can't do himself. He particularly admires and supports MSF.

In dealing with real life issues with our students, I think we want to frame our analysis always in terms of aiming for "the best knowledge we can gather." As we connect our own course in so many ways with the rest of their IB education, we want to nourish the connection with CAS and awareness of the implications of conclusions for action – including our own.

References

The April 2017 edition of the MSF magazine *Dispatches* features "Red Lines", the article by Stephen Cornish examined here, but also a number of other articles on the difficult issue of when to speak out – when to become a witness. Note the articles "The Responsibility to Bear Witness" and "Why Does MSF Speak Out?". Particularly useful in class could be the article "No Easy Answers". It treats three case studies that illuminate the difficulties of making the right decision in a complex world, and the reasons for making the particular decisions in each case. http://sites.msf.ca/dispatches-spring2017/phone/dispatches-spring-2017--msf-canada-magazine---no-easy-answers.html

image: By CDC Global (Dr. Joel Montgomery), Ebola treatment unit in Liberia. October 2014. Photographer Athalia Christie. Image cropped as permitted by license. CC BY 2.0 via Wikimedia Commons. https://commons.wikimedia.org/wiki/File:Dr._Joel_Montgomery.jpg

May 8, 2017

"Moral robots" and that messy human factor

In ethics, it's the dilemmas that grab the headlines. They crash into the news for reasons similar to almost all news: they stand out from a norm of people muddling along in broad accord as they judge right from wrong; they sometimes pit groups of people against each other in noisy conflict; and they often have significant implications for people's lives. Really, wouldn't it be so much better if all dilemmas could be resolved without the conflict? Couldn't we eliminate the messy human factor in ethics by using computer processing to help in our judgments – and wouldn't that improve ethics as an area of knowledge? Wouldn't we be so much better off under the guidance of MORAL ROBOTS? Well….maybe. But…no. Well, no, maybe not!
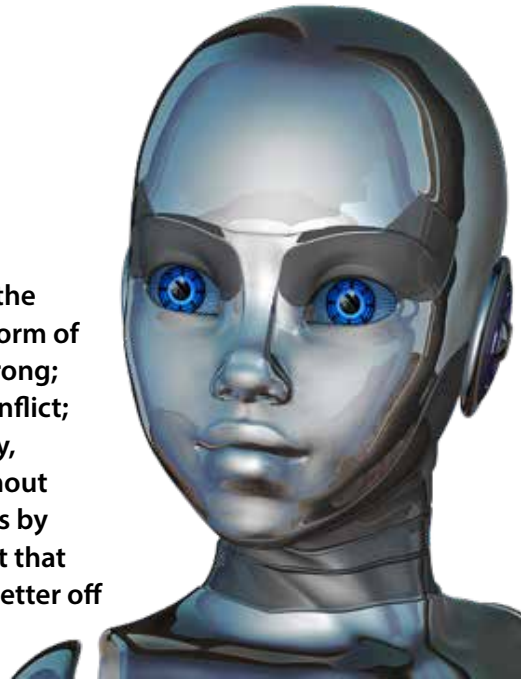
Why not trust the robot?

With amusement, I read an article this week by a team of psychologists who have been considering this very question. ("Why are we reluctant to trust robots?") Their first conclusion isn't likely to surprise most of us: that people don't trust machines to make moral decisions, even if those machines have been fed good information and are superior to humans in being free of fatigue, cognitive biases, and assorted hostilities. We're just not going to trust a computer in matters of morality.

Their second conclusion, though, is the one that catches my interest. It has implications for how we regard different systems of ethical thought: that people don't entirely trust **other people** if they think they make their moral decisions entirely on the basis of calculation. Yet a major ethical system, known as utilitarianism or consequentialism, guides moral decision-making in exactly this way, by evaluating the projected outcomes of a choice, for benefit or harm. As the authors say,

> In a paper published last year in the *Journal of Experimental Psychology: General,* we presented evidence that consequentialism might be a liability when it comes to social relationships. In other words, being a consequentialist makes you less popular.

Nevertheless, people using a consequentialist system were still considered socially acceptable **if they acknowledged feeling a conflict**. It seems that we actually like that messy human factor!

So much for moral robots! They'd never win a popularity contest! As the authors conclude,

> it may not be enough for us that machines make the right judgments – even the ideal judgments. We want those judgments to be made as a result of the same psychological processes that cause us to make them: namely, the emotional reactions and intuitive responses that have evolved to make us distinctly moral creatures.

Normative and experimental ethics

This entire article is relevant to ethics as an area of knowledge in TOK. It identifies central features of systems of *normative ethics*: consequentialism and its major alternative ethical system, deontology, which guides choices not

by evaluating outcomes but by following a set of ethical principles. Yet the authors' own contribution is to add a piece to ongoing research in experimental ethics. This field of ethics does not offer normative arguments over what people should do, ethically, in situations of choice. Instead, it overlaps firmly with psychology as an area of knowledge and the cognitive sciences, in researching how people actually do make their moral decisions.

The moral robot: a class activity?

What ends up appealing to me most, as a teacher always looking for engaging class material, is the possibility of bringing an ethical robot, metaphorically, into class. (It is, after all, an era in which we're beginning to trust artificial intelligence to do practical things like drive our cars, and are even debating the role of AI for decisions in warfare.) I'd give students the following task, in small groups with a time limit:

> **Your mission is to provide a robotics design team with instructions on the most important features of a MORAL ROBOT, which will always make the right ethical decisions. What rules should govern its decisions? What kind of information should the robot be given, and to what further information should it have access? Your group has 30 minutes to work out what instructions to give the designers and to list any problems you face in deciding what they should be.**

I'd ask the small groups to share their thoughts in a full class discussion and expect numerous features of ethical systems to arise, including:

- conflicting possible systems of rules depending on whether they favour weighing outcomes (consequentialism) or following ethical principles (deontology);

- if the robot is given rules based on ethical principles, then what principles, or whose?

- difficulties of "override" rules in cases of dilemma, and whether to allow exceptions;

- uncertainties of predicting future consequences of choices made in the present,

- difficulties, in any case, of assigning particular consequences greater or lesser relative weight in the harm/benefit scales;

- difficulties of uncertainty of information, and further issues of the ethics of access to information.

And then, I wouldn't predict an enthusiastically positive response to the following question:

- Would you trust a moral robot to guide your own ethical decisions and the ethical decisions of your society? Why or why not?

Conclusion

Last week's post in this blog traced the conscientious decision-making of an international humanitarian organization, trying to reach the best-founded factual conclusions about what was happening in the world, and then trying to make the best-founded decisions about what ethical action to take on the basis of its knowledge. They model what we teach in TOK: in a real life situation, with all of the human variables and possible human consequences of choices, we have to try to be informed, critical and thoughtful, to the best of our ability in a complex world.

It would be so much easier if such complex ethical decisions could be computed with clarity and common agreement – if we could treat ethics as though it were mathematics! Yet, personally, I'm reassured by the findings of the team of psychologists whose article I feature this week. I'm glad that I'm not alone in appreciating and valuing the very thing that the creation of a moral robot would aim to eliminate – that messy, messy human factor!

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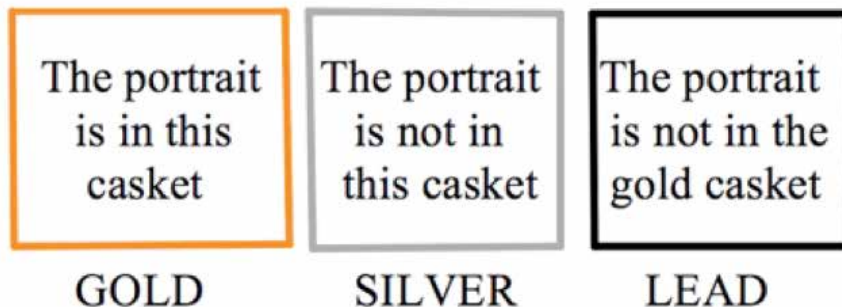
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Love, luck, literature, and logic: Who will win the lady?

Which of her eager suitors will make the right guess in the gamble – and win the beautiful Portia and her fortune? Mathematician Alex Bellos gives us a new twist to a story familiar from Shakespeare's *The Merchant of Venice*: a lovely and virtuous heiress is compelled by her late father's will to marry the man who chooses, out of three caskets, the one which contains her portrait. In a Theory of Knowledge class, love, luck, literature, and logic combine in a quick class activity solving a problem – and thereby clarifying for students the process of deduction and justification through reason and language as ways of knowing. And it's fun.

The puzzle can be found in Alex Bellos' Monday puzzle blog – both the puzzle itself and the solution, with explanations: "Did you solve it? The mystery of Portia's caskets" It's easy enough to be obvious, once you've thought it through, but hard enough to demand that students have to give it their attention to work it out. If at least one of the three statements is true, and at least one of the three is false, then in which of the caskets is Portia's portrait to be found?

When students have given a few minutes to the puzzle, there should be several at least who have the solution and are ready to explain to any classmates who are stalled. The question then, in TOK, is "How do you know?" and "What ways of knowing did you use to reach and justify your conclusion?" Puzzles like this one are a quick-and-easy way to illustrate the power of reason to draw out the logical implications of prior information, in order to create new knowledge.

GOLD — The portrait is in this casket

SILVER — The portrait is not in this casket

LEAD — The portrait is not in the gold casket

Note that it's possible to sign up for notification on Mondays as Bellos publishes his puzzle, and to get a constant supply of ideas for TOK.

What I like about this particular puzzle is its storyline, with the winning logician being so richly rewarded. If you're familiar with The Merchant of Venice, you could suspect that I'm also taken with the love story behind the gamble of the caskets – with its happy ending – and even suspect that the not-so-passive-prize Portia might be one of my favourite literary heroines. That would be mere speculation, not logic. But you'd be right!

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Consuming the news: Is knowing harder than dieting?

Oh no! More suggestion, in an article I'm reading, that gaining reliable knowledge from the media might be even harder than sticking to a diet! Just as we're assaulted with tempting displays of candy and chocolate as we head for the supermarket check-out, we're faced with screaming headlines, awful photos, and our own fear and excitement as we open the news. Alas! I've never been a fan of that smug term "delayed gratification", and I've long felt morose about advice – getting it or giving it – to pause, and think… to counter first intuitions and impulses with the slower responses of reason. Nevertheless, a current analysis of "the terror news cycle" confronts me, yet again, with the importance of not grabbing on impulse but paying attention to what I take in. Resolution for the week: not to go instantly for the tasty or flashy. TOK teachers, beware: this is a spoiler alert!

The article I'm recommending is in the blog of the London Review of Books: "The Terror News Cycle". Amid all the articles in the media by the media about the media these days, it focuses specifically on reporting terror attacks – the rush to get the news out first even if it's sketchy and laced with speculation, the appetite for intimate details of destruction and pain that can overwhelm sensitivity and restraint, and the human tendency of both commentators and readers to fill in the missing bits with their own assumptions and prejudices. *Confirmation bias* goes galloping again! The author of this analysis, Des Freeman, also points out that "there are also papers and commentators who lose no time in using atrocities to whip up anger and to identify potential scapegoats." By then, misinformation and extreme views have entered our minds and are hard to dislodge.

As Freeman notes, "We would all benefit from a slower journalism that didn't resort to tired stereotypes and sought to expand, not to contaminate, our understanding of a violent world. The trouble is that there is neither the business model nor the political will to foster such an approach."

But Freeman exaggerates. Good journalism does exist, despite market forces and political will, just as the food that sustains us exists on supermarket aisles beyond the ones that give us the fast sugar fix. But we have to direct ourselves the right way to find it. We have to develop – and practise! – skills of thinking critically about the media. But I won't rehash what I wrote in this blog on March 27: TOK and "fake news": 3 tips, 2 downloads, and 3 resources.

Altogether, Freeman's article on the terror news cycle does reinforce, for me, four ideas core to Theory of Knowledge teaching. Would you pick out similar ones?

1. Ways of knowing don't necessarily lead to reliable knowledge. We have to become self-aware over how we use them and be on guard against strong emotional appeals that satisfy our biases.

2. The perspectives we notice are often the extreme views, neither representative nor well informed. They get undue attention in the media and our minds.

3. Methodologies of areas of knowledge – methods of gaining, sharing and evaluating knowledge with care – have been developed for a reason. They place checks on our human tendencies to error, and guide us toward more reliable conclusions, collectively.

4. Knowing isn't easy. We have to know ourselves and the ways we think, and be thoughtfully critical of the conclusions we reach.

For me, finally, one urgent question remains. Will practice in consuming the news with attention and control, with concern for where it comes from and what's in it, help me develop better reflexes in face of the ultimate challenge – chocolate mousse? Dieting, I fear, may turn out to be harder than knowing after all.

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Image, creative commons: https://pixabay.com/en/chocolate-candy-sugar-sweet-2202058/

Love, betrayal, and physics: "Everything goes better with narrative"

It's not true to say that all teaching's better with stories – but there's enough truth in this exaggeration that I feel like saying it anyhow, and I hope that even TOK teachers will forgive me my hyperbole. Stories can catch student interest, illustrate points, and open up lots of questions. I've just read one I like for TOK and wanted to pass it on to you. Read it, enjoy it – and bookmark it for future use!

Before you get your hopes up for a crime drama or a racy romance, I must concede that stories useful for Theory of Knowledge rarely contain these elements – though they often do contain mesmerizing mysteries. The title of the one I suggest today invites curiosity about love and betrayal: "Why I left physics for economics". Its subtitle piques interest in human motivation and the flight from excessive order: "I recently decided to abandon the rules that govern nature for the rules that govern people and markets: economics. **Why would I do such a thing?"**

I suggest that this personal testimony from physicist and economist Arthur Turrell provides a light way to treat comparisons between the natural sciences and the human sciences. Even questions on basic comprehension of his article lead to characteristics of the two areas of knowledge:

- Why does Turrell love physics?

- When he was initially drawn to economics, why did he resist? Why did he even start to think about abandoning his first love?

- As he "develops feelings for economics", what attracts him?

- Toward the end, he defends being unfaithful to physics and even suggests that being "interdisciplinary" and "collaborative" is good for both the subjects he has loved. Does he give any reasons that you find convincing?

Comprehension questions on a story are no more than a means, of course, toward broader knowledge questions, as the individual example can be used to illustrate a collective experience.

As we draw comparisons between the natural sciences and the human sciences in TOK, personal stories like this one can help ground the broad generalizations we make about areas of knowledge. Moreover, they can keep in the forefront of our discussion with students an essential feature of knowledge: that it is a human enterprise, undertaken in social context, and driven in large part by the curiosity and excitement of real people with names and narratives.

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Image from creative commons, Pixabay. https://pixabay.com/en/puzzle-heart-love-arrangement-210788/

Controversy in the Canada Day Party: analyzing perspectives for understanding

Differing perspectives are easiest to see when they come into conflict. As a result, it's tempting for Theory of Knowledge students to seize on conflicts as topics for presentations – and for us as teachers to use them as class examples to illustrate differences in perspectives. As I'm about to do here!   I worry a bit, though, that, unless we treat perspectives with nuance and some empathy for the people involved, we could end up entrenching a binary vision of the world, and possibly a static one where we don't reach beyond the conflicts into hope for the future.

https://youtu.be/9uHZ--KPAPo

A conflict in my own country this month over the meaning of Canada Day is a case in point: a specific event gave the media a story and focused attention on conflicting views. It's a good example in various ways to take to a TOK class, but only done well if we place the skill of identifying perspectives within the larger TOK and IB goals of curiosity, openness and desire to understand.

The Event. So this is what happened:

As the celebration party came together on Capital Hill, all the machinery of party-time kicked into gear – flags, stages for performers and speakers, portable toilets and film crews. Alas, poor 2017, there was also a security ring that rivaled an airport's. All of this converged for national festivity over our country's "birthday", Saturday July 1.

BUT – but – but not everyone was celebrating. Jubilation over the founding of a nation was certainly not the response of a group of First Nations activists, representing the views of many Indigenous people across the country. For their people, the creation of Canada was an experience of being conquered and dominated, with an ensuing 150 years of horrific damage and cultural suppression. The activists put up a protest teepee on the grounds of the Parliament Buildings on the Thursday preceding the Saturday celebrations. (A teepee is an iconic traditional dwelling for indigenous people of the prairies.)

And conflict ensued. The police insisted they were trespassing, arrested some members of the group, and told them to move their teepee away. (Just doing their job, right, in context of security? According to regulations, the activists should have applied for a permit.) The activists cried out that the police were violent in removing protestors (as they would expect of the police, right?), and that in fact the land was theirs anyhow, never ceded (and why would they need a permit on their own land?). They were entitled to perform their own traditional ceremonies, with a goal they expressed to the media: "the goal of their 'reoccupation' of Parliament Hill is to highlight how Canada's 150th anniversary is a painful reminder of residential schools, the appropriation of land, and decades of government-sponsored assimilation of Indigenous peoples."

After negotiation, police allowed them to have their teepee on government grounds and to relocate it close to centre stage. Prime Minister Justin Trudeau, immediately contacted, expressed sympathy, "I understand and hear very clearly the issues that a number of people, including the individuals who are setting up the teepee on the hill, are expressing." Ahead of the official event, he said, "As a society, we must acknowledge and apologize for past wrongs, and chart a path forward for the next 150 years." On July 1, Canada Day, he also attended the traditional ceremonies in the teepee.

Is this a useful example for a TOK class?

Personally, I think this incident (as is the case with many incidents like it) becomes a good illustration of perspectives within Theory of Knowledge only if we go beyond the immediately contrasting views of the celebration. If we do so, it seems to me to be rich in possibilities for raising numerous TOK questions.

1. As we look at situations or events to recognize different perspectives, where do we place the beginning and end points of incidents?

It's much simpler for class purposes to clip an event out from its historical context – and my version above is tidily packaged with a beginning, middle, and end – but it would give a much more nuanced treatment of perspectives at least to recognize that the protest can be understood only in terms of the past: it insists that past injustices to indigenous people be recognized in the nation's version of itself. The perspectives in the present are understood only with an awareness of the last couple of centuries, and best understood with some TOK awareness of history as an area of knowledge. Moreover, even though the protest has been successful in gaining attention to its point, its ultimate purpose is achieved only if real action is taken to redress injustice in the future.

Treating an event in the present, one that takes place over a defined three or four days, does help to anchor the whole idea of perspectives. But even if we give attention to the immediate event itself, without concern for the past centuries, we have to enlarge our treatment to take in relevant present background in order to grasp its meaning. A Canada Day newsletter from the Canadian Centre for Policy Alternatives gives a good summary:

> "Today, Indigenous people in this country experience shocking levels of poverty, inadequate access to clean water and housing, disproportionate levels of arrest and incarceration, unequal levels of health care and education, the exploitation of their resources, and the regular abuse of treaty and land rights. Aboriginal women are murdered or go missing at rates far above any other part of the population.

> "In these and other ways, Canada is still a colonial state, a relic of the past. If we can't recognize this reality on the country's 150th anniversary, when is the right time? **If we can't use this moment to celebrate the idea of a better, more equal society, what, exactly, are we celebrating?"**

The issue of beginning and end points doesn't apply just to this particular Canadian example, but to many of the events and situations we might choose to illustrate the way perspectives shape knowledge and knowledge claims. When we deal with real events in the world, we'll always have to choose the time frame to cut out as we pick up our scissors.

2. As we identify different perspectives, how do we identify who holds them?

Is there such a thing, in this example, as a coherent "indigenous perspective"? One justifiable answer is "yes". To a large extent, the often-brutal colonial experience has forged a commonality of experience among indigenous groups -- and thus a broadly common perspective.

But who holds a contrary perspective? In the example of this Canada Day event, Canadians who are celebrating their nation's birthday – and the values and achievements with which they associate it -- do illustrate an attitude toward the day that contrasts that of the indigenous protesters. Although individuals interviewed in the media expressed a variety of views on what the day means to them, their commonality lies in their coming together in a context of celebration.

Yet the perspective to which the indigenous activists are opposed is, more fundamentally, a colonial perspective on their rights, their land, their lives. It's much harder to tie a colonial perspective to any group within the contemporary population, but it lives on in the country's laws and policies and in stereotypes and racism. It may also be argued to live on even in the view of many well-meaning people that indigenous people would be much better off to leave

their grievances behind and "get on with life" – that is, implicitly, give up their history and their land claims, be more like the rest of us… and assimilate (at least to the extent others do in a multicultural society).

The ambiguous and diffused location of a body of colonial beliefs and attitudes makes it messy to deal with as an example of perspectives in TOK. However, dealing with ambiguity explicitly in class does perhaps help students recognize that perspectives can be endemic to a society. For contemporary individuals to deny they hold colonial attitudes does not, in itself, deny historical problems and their present legacy.

3. How do we analyze perspectives to understand their impact on knowledge?

I'd want to deal with the two points above – where we put the end points, and how we identify different groups with their perspectives -- before tackling an analysis. But then an analysis is essential. I've long argued that perspectives are not simply isolated opinions but bodies of thought, and have suggested in my Theory of Knowledge course book and elsewhere that they are usefully examined in terms of these components:

• assumptions

• values

• selected information or knowledge claims (selected as important according to the assumptions and values)

• accepted processes of validating knowledge claims

• implications of accepting the perspective, in terms of further thought and action (pages 28-29)

I won't repeat here what I've gone on about elsewhere, but will simply suggest that, unless we actually see how perspectives work to shape what we know, we'll not be able to come to grips with why people make their particular knowledge claims. We'll also miss out on the human sympathy that comes with recognizing, "Hey! I guess what they think makes sense to them, too. They're not just being contrary!" We might also miss out on seeing how differing theories and other explanations function to gather together coherently the bits and pieces of what we know.

If class time's short, I'd do no more than gesture toward flash points of conflict and extreme views when treating dominant perspectives. However, if there's enough class time, specific flash points that catch media attention can be sort of fun. They catch student attention just as they catch media attention, and they almost always illustrate some worthwhile point about knowledge.

For this particular example of Canada Day, I have two favourites. Stay with me through these anecdotes only if you share my interest in communication breakdowns. Otherwise, I encourage you to **skip to the end and exit**.

One is a moment of indignation and anger. In the protest teepee on Capital Hill, a reporter asks the demonstrators a question. They react with anger and demand that the reporter leave. The reporter, from her point of view, was just asking a question about political responsibility and about the current Prime Minister's record -- a question that would be acceptable in another context. However, from the point of view of the demonstrators, the reporter appeared to be ignoring what they were there to communicate; she was not listening but instead narrowing to her own agenda. She was also using her terms of reference differently: she was referring to Prime Minister Trudeau as an individual politician in the present, while the demonstrators were speaking of the long term role of the government of Canada, of which the Prime Minister is the representative. Moreover, she was taking an argumentative stance about current politics, while they were speaking personally about painful experience, indigenous knowledge that has been both personal knowledge and shared knowledge. Different assumptions, different historical frames, different goals in communication, different styles of speaking: language as a way of knowing works within a context, framed by a perspective! Caring deeply about what they were wanting to communicate, the demonstrators felt insulted:

On Thursday morning, tempers flared during a news conference held by the indigenous demonstrators after they took offence to a question posed by a CBC reporter; they demanded she leave, then ended the conference.

The reporter had asked the speakers how they felt about Trudeau's record on indigenous issues. In response, one of the speakers began to talk about a young indigenous person who had died in Thunder Bay.

"But how can he be blamed for that? You don't think that anything he's doing is helping the situation? Is he an improvement over Stephen Harper? Talk about his record," the reporter said.

"Excuse me? Did I just hear you correctly?" said speaker Jocelyn Wabano-Iahtail. "How can he be blamed for that?"

Their anger escalated quickly after the reporter asked them to answer her question. "We don't want you here. Can you please leave?" said elder Sophie McKeown from Moose Cree First Nation.

After the reporter refused to leave and another reporter from CTV asked a similar question, Wabano-Iahtail accused the reporters in the room of showing their "white privilege" and "white fragility," and eventually ended the news conference.

"You can't take our truth," she said. "Look how many people came to bat for you, white lady. And you're a guest here. Without us, you'd be homeless. This is over."

The second example that catches my attention has similar echoes. The writer feels insulted by apparent assumptions made about him and others like him, and defends himself indignantly:

By the same token, aboriginal activists should try to remember that the Canadian public to whom their appeals for reconciliation and justice are ultimately addressed, often in peremptory language, is not a faceless line of Jeffrey Amherst clones [Amherst gave blankets infected with smallpox germs to indigenous groups to kill them] and abusive residential school staff. A great many of us, or our ancestors, came here fleeing oppression and sometimes encountered it on arrival too, and have long tales of historical woe of our own about which nothing can ever be done.

I speak not only of non-white Canadians. What of Canadian descendants of survivors of the Holocaust, Stalinism, the Armenian genocide or even just French religious persecution?

This complaint will resonate with many people who feel that they have been implicitly accused of terrible things they have never done. We non-indigenous Canadians are not our ancestors, and our ancestors weren't all murderers and child abusers! And some of us don't have ancestors in this country anyhow.

Yet we have to be able to talk about the injustices of the past and the continuing problems of the present. In the process, the people who have benefitted from the legacy of the past could well preserve their patience with those who have been damaged by it. The word much bandied about these days is "privilege" – and it can be invisible to those who have it.

Moreover, it's useful to recognize a feature of language as commonly used. It's a convention to use the pronoun "we" in identification with a group to which one belongs, even historically: "When we [our country] entered the war…" "We [citizens and owners] have great natural beauty in Canada." "We [all people] commonly think that…" The very notion of a national identity, celebrated with flags and fireworks, encourages people to think and talk as "we". It's easy to fall into this usage with thoughtless nationalism -- or to resist it cynically as creeping ideology. In any case, it's a feature of language of which we could encourage our students to be aware, since it's such an identifier of perspective and the collective that's assumed.

Who, after all, is the "we" who speak? For indigenous groups, the "we" does include different experiences, collectively and historically, from the rest of Canadians. "When we were taken from our parents by order of the government and placed in residential schools…." Acknowledging this experience is a basic part of the process of truth and reconciliation process that Canada has undertaken. And the indigenous "we" does suppose a "you"; cultural suppression didn't "just happen" but was done to them.

We benefit from recognizing that language, combined with an assumption of historical continuity for groups, does let people fall into a way of talking that carries generalizations, often hurtful. For all of us to learn to use "we" and "you" with greater awareness of collectives, assumed continuities, and stereotypes -- and less clumsiness in stumbling into insult -- is another step in reconciling.

Conclusion

When we try to apply TOK skills to the real world, one of the hardest things, I feel, is to walk the path between too little and too much detail. Clearly, we need to keep our focus on features of knowledge – in this case, perspectives that bind together whole bodies of knowledge claims – and not get sucked into the details of an example. But as we trace a path, we want to acknowledge, at the very least, some of the nuances and ambiguities over which we are stepping, or which lie just off to the side.

I tried not to write about this particular example because I didn't think I could do it justice. And I haven't.

I remain hopeful, though, that, as one Theory of Knowledge teacher to others, I will find a sympathetic audience in my efforts to figure out the best ways to apply the thinking skills of our course to the real world. It's such an important educational goal! If we can achieve it, to the greatest degree our circumstances allow, perhaps our students can learn to be more open to alternative views and kinder in their response. The point of recognizing perspectives, surely, is not just to list differences but to grow in our understanding of how knowledge is created and claimed, in very human ways.

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Indigenous Knowledge: not a separable area of knowledge

It's easy to miss the point entirely when treating Indigenous Knowledge in TOK. It's not a special "category" of knowledge, even though it is listed in our syllabus in parallel with other areas of knowledge. Clustering up indigenous groups across the world to look at their knowledge does not enable us to treat that knowledge as separate or separable from other areas of knowledge. I'm a big fan of treating Indigenous Knowledge -- but specifically as a particular cultural synthesis of other areas of knowledge and as a cultural perspective within and upon the other areas. Today I'd like to bring attention to three current topics that clearly deal with Indigenous Knowledge but, on consideration, deal equally with history, anthropology, and archeology. I've included links to supporting resources.

1. Controversy over renaming commemorative places: In what ways is knowledge of the past shaped by shifting perspectives in the present?

This is a fresh example of a very familiar issue: shifting historical perspectives bring re-evaluation of the past, and the accompanying question about whether to rename countries, cities, buildings, and streets. We see this all over the world, from Rhodesia to Stalingrad, from British Guiana to East Pakistan. What I like about this contemporary example from my own Canadian context is that the conflicting perspectives on whether to rename Ryerson University in Toronto both put forward good arguments, ones that have the potential to get our TOK students thinking about larger knowledge questions in history as an area of knowledge. Yes, the example does introduce an indigenous perspective. However, that interpretation is within the larger context of historical knowledge, which is never independent of perspectives.

These selected articles from the Canadian Broadcasting Company provide background and arguments:

- **"Why some Ryerson students want the Toronto university to change its name".** As it happens, with Carol Off and Jeff Douglas, CBC News. July 05, 2017 http://www.cbc.ca/radio/asithappens/as-it-happens-wednesday-edition-1.4191090/why-some-ryerson-students-want-the-toronto-university-to-change-its-name-1.4191092

- Michelle McQuigge, **"Students union, Indigenous group want to see Ryerson University change its name**; The demand from both groups has been met with a backlash from the wider student population", CBC News. July 5, 2017. http://www.cbc.ca/news/canada/toronto/ryerson-university-name-change-1.4191614

- Angela Wright, "**Renaming Ryerson University is a poor way to deal with Canada's ugly past**; We shouldn't be eliminating reminders of our fraught history. We should be talking about them", CBC News. July 17, 2017. http://www.cbc.ca/news/opinion/renaming-ryerson-1.4205726?cmp=rss

- Image: Public Domain, https://commons.wikimedia.org/w/index.php?curid=1930067

2. How does Indigenous oral history mesh with written records and artefacts as sources of historical knowledge?

The second example I'm offering here also involves Indigenous Knowledge, but once again not as separate or separable from historical knowledge. Inuit oral history has acted as a source of knowledge within historical research, and its versions of the past have been confirmed by new evidence from artefacts and DNA. I like this example because it comes with a story that would surely catch student interest in class, given the way that so many people's imaginations for more than a century and a half have been gripped by the doomed expedition into the icy North, with rumoured cannibalism adding some sensationalism.

The 1845 the Franklin Expedition to the Arctic set out from Victorian England to navigate and map the legendary Northwest Passage, at a time of British pride in exploration and conquest. It had a prestigious leader and was very well equipped. Yet it vanished into the ice, never to be seen again. Even in the 19th century, tales of cannibalism, taken from Inuit accounts, swirled around the loss of the ships, horrifying British people who believed that no Englishman could be so uncivilized. Recently, the wreckage of the ships has been discovered (HMS Erebus found in 2014 and HMSTerror in 2016) and current museum exhibitions in England and Canada bring artefacts to the public.

The following selected articles give some of the background of the search for the Franklin expedition and the contribution of indigenous oral history to locating the wrecks and confirming the stories of cannibalism. (Image: Public Domain, https://commons.wikimedia.org/wiki/File%3AReward_for_finding_Franklin_Expedition.jpg)

- **"Franklin exhibition in London features shipwreck items, Inuit artifacts"**, CBC News. July 16, 2017. http://www.cbc.ca/news/entertainment/franklin-exhibition-inuit-artifacts-1.4207534

  "We really wanted to give credit where credit was due in the exhibition," said curator Karen Ryan. "The Inuit were in the Arctic long before Europeans went looking for the Northwest Passage….What we know up until now about what happened to the Franklin expedition comes largely from Inuit oral history that has been passed down for 170 years."

  "There's only so much we know right now," Ryan said. "And finding ... where the ships were located, finding Erebus pretty much exactly where the Inuit oral history had talked about seeing an inhabited ship — that really puts a nice note on the accuracy of the oral histories and how they can really be meshed well with historical research and with archaeology."

- **"Role of Inuit oral history in Franklin search highlighted in new Iqaluit exhibit;** Inuit historian Louie Kamookak keynote speaker for exhibit's opening Thursday evening", CBC News. Jan 20, 2017. http://www.cbc.ca/news/canada/north/louie-kamookak-1.3943936

  "Kamookak was instrumental in the discovery of the HMS Erebus, collecting an oral history of the Franklin Expedition over 30 years which eventually helped lead explorers to the long-lost ship. …. Kamookak collected an oral history of the expedition by listening to stories passed down from one generation to the next. By comparing those stories to the journals of other expeditions, he was able to come up with a theory of the ship's location."

- Helen Thompson, "**Franklin's Doomed Arctic Expedition Ended in Gruesome Cannibalism**; New bone analysis suggests crew resorted to eating flesh, then marrow", The Smithsonian. July 27, 2015. http://www.smithsonianmag.com/smart-news/franklins-doomed-arctic-expedition-ended-gruesome-cannibalism-180956054/

3. Should all knowledge be "shared knowledge"? In what ways does the method of research in archeology affect both access to and understanding of artefacts from the past?

This last example of cross-over of Indigenous Knowledge and conventional division of academic disciplines recedes even deeper into the past, where oral histories merge with legend and research shifts from cultural anthropology to archeology's detective work with artefacts. I'm intrigued by two case studies that have come to my attention this month. What brings them together, in my mind, is the way both of them deal with "shared knowledge" – and, in the case of Indigenous Knowledge, what people feel to be appropriately shared. Who owns the knowledge, and how safely can it be shared with outsiders?

The first article is a good one for Theory of Knowledge as an example of challenges facing anthropologists and archeologists -- as the knowledge they pursue eludes them, or as the knowledge they gain is given the shape and significance of their own preconceptions. (Many thanks to my TOK colleague Sue Bastian, who passed this article on for TOK.) It concerns lost ruins in the Mosquitia region of eastern Honduras, an alluring topic for students (and obviously for me!). Do take the time to read the article because it goes beyond the obvious point in the title to treat perspectives and invisible biases in archeology.

Christopher Begby, **"Ancient ruins keep being 'discovered': were they ever lost?"**, Aoen. July 10, 2017. https://aeon.co/ideas/ancient-ruins-keep-being-discovered-were-they-ever-lost

> "Archaeologists often say: 'It's not what you find, it's what you find out.' We are not in pursuit of objects but rather an understanding of the past. My work has never been about finding sites. It's about finding out how leaders gained and maintained power, how these ancient societies interacted with other groups, and how such societies situated themselves across the landscape…. By claiming a non-situated position, as if it were possible to operate free of perspective and bias, archaeologists inherently support and reinforce the status quo; this way of asserting power too often goes unnoticed."

The second article seems to me to present an intriguing contrast to the above tale of lost cities and knowledge shared within cultural context only. In this current case study of an archeological dig in Australia, archeologists have been able to find and investigate thousands of artefacts. The discovery "adds western scientific evidence to Indigenous cultural knowledge about the length of time their ancestors have occupied the land." It's an impressive discovery.

What I find most interesting about this case, though, is that a change in the methodology of research has led to much more effective gaining and sharing of knowledge. The Mirarr people of the region retain full control of their ancient cultural site, so are not threatened by outsiders researching their past or violating ancestral graves.

Helen Davidson and Calla Wahlquist, "**Australian dig finds evidence of Aboriginal habitation up to 80,000 years ago"**, The Guardian. July 19, 2017. https://www.theguardian.com/australia-news/2017/jul/19/dig-finds-evidence-of-aboriginal-habitation-up-to-80000-years-ago?

> "Much of the success of the five-year-long project is credited to a unique and benchmark-setting agreement between the researchers and the Mirarr, who retained total control over the dig and the artefacts."

It is a truism in our Theory of Knowledge course that the methodology of gaining knowledge is central to gaining information effectively and understanding it reliably. This pair of articles could be useful in class as we encourage our students to think about how we gain knowledge in the human sciences about *human beings* – not just about their old artefacts, but about what they mean to people. A methodology that respects ownership of artefacts and ownership of knowledge has, in these cases, led to better results.

Both these case studies also illustrate some of the bounds of shared knowledge. When traditional knowledge has meaning within a cultural context, the people who hold it may not want to share it beyond their own group. It's easy to see this as a problem for anthropologists and archeologists, but it's equally easy (from a different perspective) to see their research as the problem, and their expectations of access to knowledge to which they're not entitled.

CONCLUSION: advantages of treating Indigenous Knowledge in TOK

As I said at the beginning, I'm a big fan of treating Indigenous Knowledge within Theory of Knowledge. If you're interested in what I've previously written on this topic, I suggest you click on "indigenous knowledge" in the tag cloud on this website.

Treating Indigenous Knowledge seems to me to give **three major advantages within our course** on knowledge:

1. It invites us to recognize the way our areas of knowledge are constructed, identified, and divided into contemporary academic categories, in large part by presenting a more holistic conception of knowledge: the boxes in which a contemporary academic system places knowledge do not exist in Indigenous Knowledge.

2. It invites us to grasp more fully the concept of "perspectives" by providing some fine examples of coherent cultural worldviews that shape knowledge, and illuminating by contrast the worldviews buried in much of the knowledge produced otherwise, for example in western history.

3. It invites us to recognize, as a result, the cultural, historical, and political context within which knowledge is forged. Knowledge is not just some floating abstract coming from nowhere. It is created by human beings, within all the dynamics of power and control that we witness in the present world every bit as much as in the past.

It seems to me, consequently, that we have to be careful not to treat Indigenous Knowledge as separate or separable from our conventional areas of knowledge. If we treat it as detachable, we lose all of these major advantages above. They all come from seeing our standard TOK areas of knowledge in interaction and comparison with Indigenous Knowledge, with the illumination that similarities and contrasts can bring. In this regard, it is no different from any of the other areas of the course, which are best understood in relation to each other.

I really welcome comments on treating Indigneous Knowledge in TOK, especially from indigenous teachers and anyone else who has had experience working with indigenous communities. Do you have any thoughts to add?

August 21, 2017

"This is the nature of science."

Today I offer you morsels from a book I'm reading as a delectable snack for your mind. Beautifully written, it reminds me that, in our course, we look at areas of knowledge not just for their description and analysis but also for their wonder. In many ways, I feel TOK to be a celebration of what we can know, and what we do know – almost, at times, in spite of ourselves. Let this reflection on science by Carlo Rovelli give you a bit of refreshment as you guide your students to the kind of vast overview that we aspire to take in IB Theory of Knowledge!
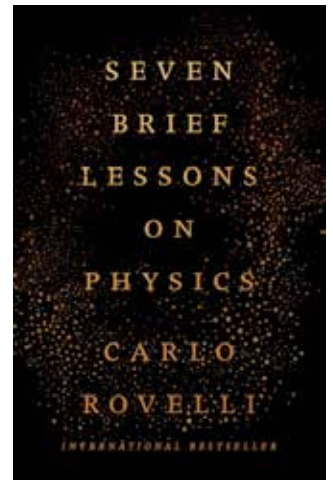
Within the immense ocean of galaxies and stars we are in a remote corner; amid the infinite arabesques of forms that constitute reality, we are merely a flourish among innumerably many flourishes.

The images that we construct of the universe live within us, in the space of our thoughts. Between these images – between what we can reconstruct and understand with our limited means – and the reality of which we are part, there exist countless filters: our ignorance, the limitations of our senses and of our intelligence….

We not only learn, but we also learn to gradually change our conceptual framework and to adapt it to what we learn. And what we are learning to recognize, albeit slowly and hesitantly, is the nature of the real world of which we are part. The images that we construct of the universe may live inside us, in conceptual space, but they also describe more or less well the real world to which we belong. We follow leads to better describe this world.

When we talk about the big bang or the fabric of space, what we are doing is not a continuation of the free and fantastic stories that humans have told nightly around campfires for hundred of thousands of years. It is the continuation of something else: of the gaze of those same men in the first light of day looking at tracks left by antelope in the dust of the savannah – scrutinizing and deducting from the details of reality in order to pursue something that we can't see directly but can follow the traces of. In the awareness that we can always be wrong, and therefore ready at any moment to change direction if a new track appears; but knowing also that if we are good enough we will get it right and will find what we are seeking. This is the nature of science.

Why do I like Rovelli's comments so much? Altogether, I am amazed by science – not really by the details of it, which I always forget, but by its sweep and ingenuity.

Do you, like me, come from a background of literature, the arts and the humanities? Like me, do you feel no yearning for a laboratory, and zero inclination to apply formulae to findings in clever calculations? And yet … and yet … talking *about science* with our students as we do in Theory of Knowledge is talking about curiosity and imagination, keen observation and brilliant connections made by the mind, and an attitude toward knowing -- learning with care, humility and openness to changing one's mind – that anyone with values in accord with TOK will find wholeheartedly admirable.

Besides, this passage from Rovelli's *Seven Brief Lessons on Physics* isn't just a morsel of writing to enjoy privately. It could be useful in class – if you're prepared to take all the poetry out of it.

Possible questions for class:

- "This is the nature of science," claims physicist Carlo Rovelli in this passage from his 2016 book Seven Brief Lessons on Physics. What characteristics of science does he identify here?

- What TOK ways of knowing does he allude to, directly or indirectly, as contributing to science?

- What essential difference does he pick out between the stories of literature and the accounts given by science?

- What important point does he make about being right or wrong in science?

Not being a scientist, I would find it really corny to wax rhapsodic in class about what is amazing about science and knowledge. For authenticity, I'd always depend on colleagues in the science department, or scientists who convey their love of the area they study in their writing or talks. That's why I like Rovelli's writing about science: because he conveys some of the fascination, challenges, and ideals of science. I'll never love Carlo Rovelli as much as I love Carl Sagan, but I guess I'm a fan.

These scientists convey a personal knowledge that we non-scientists can't contribute. But in our TOK classrooms we can use their voices to augment what we are fully able to do: to reinforce a scientific literacy that is essential for understanding not only how the physical world works but how some major world issues are best understood.

PS

Is it corny to be a fan, still, of The Symphony of Science, with its poetic and musical invocation of scientific ideas? If you don't know this resource, I urge you to start with "Science is the poetry of reality", noticing that the speakers/singers are prominent scientists. It's also, with images, on YouTube: https://youtu.be/9Cd36WJ79z4

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August 29, 2017

PS to "This is the nature of science."

Yes, I too found the solar eclipse thrilling, and a little spooky. The summer sunshine grew dim and a chill settled over the garden. Curved bites appeared in the dappled shadows of leaves. Like many others, we peered at light falling through the pinholes of a homemade cardboard box to see the image of the bright circle of the sun largely blotted out by the dark shadow of the moon. Yes, it was thrilling – even though we were not ourselves placed along the swath named so resonantly *"The Path of Totality".*

On August 21, many others threw themselves much more fully than we did into the viewing experience. Have you seen photos like these delightful ones?: "Total solar eclipse across the United States – in pictures"

Many people also posted their photos all over social media, the pictures looking, hardly surprisingly, remarkably similar! Solar eclipses happen somewhere in the world every 18 months, I'm told, so there's a world full of people who might have their own eclipse thrills and a lot of images or memories of… Well, actually it's just one circle passing across another. Is that really so dramatic?

The thrill is clearly not just to our senses, in the novelty, but to our minds. On podcasts, I've heard how people were inspired to become scientists by their amazed childhood response to a past eclipse. Others exclaim about the wonders of science and scientific explanation:

> "It is one of the most formidable testaments to the marvel and achievement of science that we can predict with great confidence, and with accuracy measured in seconds, that such an awe-inspiring phenomenon as a total solar eclipse will happen on August 21, 2017—whether the gods are angry on that particular day or not."

As for me… I just want to add this marvel as a PS to last week's post on conveying to our TOK students some of the wonder of science, and a sense of the brilliant human achievement that is knowledge.

I also wanted to share the laugh of this message posted on Facebook (on The Logic of Science) the day before the eclipse. You might balk as I do at their use of the word "everyone", but, as so often, a laugh makes a point:

> "It interests me that seemingly no one is taking issue with scientists predicting an eclipse. No one is saying, "scientists have been wrong before, so I'm not going to trust them about this." No one is insisting that it is all part of some massive conspiracy. No one is claiming that they can predict eclipses better than scientists because of something they read online. Indeed, everyone seems quite content to admit that scientists are competent and have a realy good understanding of the physical world. Everyone implicitly accepts that scientists know more about science than they do.

> "So then why is it that on topics like climate change, vaccines, evolution, etc. suddenly everyone thinks that they know more than scientists do?"

We can shake our heads ruefully over some of the challenges we face in educating our students, but we TOK teachers certainly do have a role in building, with our colleagues in the sciences, some appreciation of the achievements of science and some essential scientific literacy.

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Image of watchers, creative commons. https://pixabay.com/en/eclipse-solar-eclipse-glasses-2670215/

Standing at the Centre of the World: TOK class discussion (with handout)

"Whoever holds a camera stands at the centre of the world."
Daryl Duke

Standing at the centre of the world: it's a compelling image. But just who or what is at the "centre", and what does planting that centre do to our knowledge? Clearly, this question of "centrism" threads through the Theory of Knowledge course, and there are plenty of good entry points to take students into discussion of its complexities. For one such entry point, I'd like to suggest using the image above, with its claim, "Whoever holds a camera stands at the centre of the world."

Personally, I find this image lively and audacious. The late film director Daryl Dukes would have been fully aware of the resonance of his metaphor – both its persuasive power and its ironies. The concept of a centre to the universe – the "world navel" or "axis mundi" – is an ancient one, and the concept of a centre to our world placed firmly upon ourselves is evident in any survey of world maps.

Our students are probably already starting to recognize how naively we can be egocentric, ethnocentric, and so forth – with the full human array of self-centred biases in our perspectives on the world. A lot of our students are also actively taking and sharing photos, and could appropriately reflect on their own roles and potential impact.

How might this image fit into a TOK class? Some suggestions:

Give students access to the mini-poster either as postcard-sized printouts or as an electronic image projected and shared. It's possible that you could prompt student discussion down many possible lines of thought, depending on when you treat it in context of your own sequencing of TOK course ideas.

If you find this discussion outline useful, feel free to download a handout copy for classroom use at the end of this post.

- **Introductory questions:**
What do you think that filmmaker Daryl Duke means by his quoted assertion, with its metaphor? In what ways would you agree with him? In what ways would you disagree with him?

- **Some follow-up questions:**
In what ways do filmmakers or photographers "stand at the centre" in the sense of imposing control on the raw material of what they observe, from their own vantage points? Taking the camera literally, can you think of ways in which they don't just neutrally record what they see but actively create their versions in the choices they make?

In the metaphor, could "paintbrush" or "pen/keyboard" be substituted meaningfully for "camera" for creative artists in other art forms that give representations of the world?

In what ways is the quotation about *communicating* a particular vision or story, from one spot to the whole rest of the world? In what ways could the camera be argued to be the most powerful contemporary tool for communication in the news media? When is it particularly effective? How do images interact with language in communicating the news?

In what ways is the quotation essentially about *perspectives* on the world? How many cameras are there, and how many centres? How have the mass ownership of digital media (including video) and participation in social media changed the nature of news reports? What ethical responsibility comes with taking photos and sharing them oneself?

How have cameras – or, more broadly, visual imaging – changed methods of creating and communicating knowledge within this century? How do areas of knowledge use images in ways different from the last century?

- **Concluding questions:**

In what ways do perspectives affect the way *knowledge* is directed, created, evaluated, and communicated – for example in interpretations in history and in theoretical explanations within the natural and human sciences? In what ways does the person or the group that holds the camera – the means and choices of recording and communicating – influence what the rest of the world knows?

If you'd find it useful, feel free to download a copy of the image and accompanying questions HERE: TOK STANDING AT THE CENTRE

For further treatment of perspectives and representation, with analysis and activities, have a look at the TOK course book: Theory of Knowledge (OUP 2013).

References

The image of Daryl Duke with the camera is used with permission from Ian Morrison, Daryl Duke Foundation, August 30, 2017. Permission includes teachers using it for discussion in the Theory of Knowledge classroom. Many thanks to the Foundation. http://daryldukeprize.ca/

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September 25, 2017

Sharing knowledge –
effectively!

"Alone we go fast, together we go far." So goes the proverb quoted by a leading neuroscientist involved in <u>a major new project bringing together 21 labs in Europe and the United States for research on the brain</u>. The international team aims to discover "where, when, and how neurons in the brain take information from the outside world, make sense of it, and work out how to respond." What's interesting for the Theory of Knowledge classroom is the commitment undertaken by all the labs to work within a shared framework.

Shared knowledge, as we teach in TOK, is a goal of science. Working within the explanatory framework of a theory held in common, scientists can contribute as individuals and small groups to a larger communal enterprise. Using common models and terminology, they can check each other's work and build *communal knowledge -- shared knowledge*. But this ideal doesn't "just happen" and, while an accepted theory does give a shared understanding, it doesn't necessarily point the way to specific experiments.

What I like about the current example of the International Brain Laboratory (IBL), launched on September 19, is that it gives us a window into the process of making science better – making the sharing more effective by agreeing in advance on common approaches to lab work, analysis, and software:

> "The IBL was born largely out the realisation that many problems in modern neuroscience are too hard for a single lab to crack. But the founding scientists are also frustrated at how research is done today. While many neuroscientists work on the same problems, labs differ in the experiments and data analyses they run, often making it impossible to compare results across labs and build up a confident picture of what is really happening in the brain….

> "The IBL hopes to overcome these flaws. Scientists on the project will work on exactly the same problems in precisely the same way. Animal experiments, for example, will use one strain of mouse, and all will be trained, tested and scored in the same way. It is an obvious strategy, but not a common one in science: in any lab, there is a constant urge to tweak experiments to make them better. "Ultimately, the reason it's worth addressing is in the proverb: 'alone we go fast, together we go far,'" said Churchland, [a neuroscientist involved in the project].

> "The IBL's results will be analysed with the same software and shared with other members immediately. The openness mirrors the way physicists work at <u>Cern</u>, the particle physics laboratory near Geneva that is home to the Large Hadron Collider."

It also illustrates some of the striking characteristics of contemporary science – the involvement of international teams rather than solitary individuals, and the sophisticated use of technology for both research and communication. On the launch page of their project of "global neuroscience collaboration" on September 19, 2017, the new group declared, "We have created a virtual laboratory."

The nature of the problems that the IBL will tackle first is also interesting within our TOK course. The research is directed toward understanding how the brain makes decisions. It will initially focus on sense perception, and how it operates as a way of knowing.

Taking a contemporary example such as this one to class helps students recognize the importance, in science, not just of getting the right results but on refining the process – improving methodology for larger gains in knowledge.

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Image: Creative Commons, Pixabay https://pixabay.com/en/brain-cranium-head-psychology-2750453/

That event in the past: What do we make it signify in the present?

The Franklin Expedition just gets better and better. The present narration, I mean, not the actual expedition in the 19th century. No, *that* **was a wreck in the icy north, costing the lives of all the men! But it's a splendid example for Theory of Knowledge of the way the past can be reframed by our present interests.**

I've touched on the Franklin Expedition before – though if you don't follow my posts on Indigenous Knowledge you're likely to have missed it. Have a look, in that case, back to "Indigenous Knowledge: not a separable area of knowledge" near the end of July. At that time, I gave the background on this doomed British Arctic expedition, with a focus on the role of indigenous oral history as a source for historical knowledge. It was Inuit oral history that provided the clues to locating the wreck of the Franklin ships as Inuit historian Louie Kamookak brought together the stories of the elders with European records.

Today, I'm caught by the shifting narrative of the expedition outlined in a recent article from The Canadian Press: "Historical tug of war: The ever-changing narrative of the lost Franklin expedition". It outlines a succession of interpretations of the Franklin Expedition:

1. **19th century version: heroic scientific expedition**, with the vanished men being martyrs to science and exploration. Lost in the Arctic in 1846, they were seen as heroes in Britain. Tales of cannibalism were treated as outrageous -- impossible for British gentlemen!

2. **A 20th century version: Symbol of British imperialism and arrogance,** in going forth for their own ends to find the fabled Northwest Passage through the Arctic, and refusing to take seriously the local knowledge of the people they encountered. They died as a result. (And recent discovery confirms Inuit stories of the men's cannibalism.)

3. **A 21st century version: an "avatar of Canadian Arctic sovereignty"**: finding the wrecked ships was used by the government to bolster Canada's claims of ownership in the Arctic.

4. **An Inuit version: The wrecks of such expeditions provided resources** such as wood and metal to the Inuit. This Inuit perspective shifts away from the personal histories of the European versions and onto the impact of the debris on goods and trade.

As historian Adriana Craciun says, "There is a set of facts. Those men all died. But there's never just one Franklin disaster."

Her comment has resonance for all treatments of the past. The Franklin Expedition is a particularly engaging example, in my mind, to illustrate shifting perspectives – but recent news brings us many more. I leave it to others to comment, for example, on the meaning of originally erecting and now pulling down the American statue of the Confederacy General Robert E. Lee, and the riots and political controversy that ensued just last month.

But back to the icy north! I'd like to add, myself, the romanticized version familiar to so many Canadians. Would songs with stories also be considered a form of oral history? I think so. I'll end, then, with Stan Rogers' song (1981) "Northwest Passage". If you choose to treat this historical example in your Theory of Knowledge classroom, the song could add an enjoyable soundtrack: https://www.youtube.com/watch?v=TVY8LoM47xI

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October 23, 2017

SPOT and the cloak of invisibility: cognitive biases

With a laugh, I pass on to you today a couple more cognitive biases, ones that students are likely to enjoy. We could, of course, despair over how deep our biases seem to go and what a challenge it is to achieve an open mind, but I find it curiously entertaining to learn about the quirky biases of our human minds. Maybe it even creates some patience with other people – those *others* who are so stubbornly wrong! – if we recognize that we are also naively wrong ourselves.

When considering *reason* as a way of knowing, we Theory of Knowledge teachers have long treated fallacies that derail clear thinking. When considering *intuition* as a way of knowing, we have a wealth of material in all the biases that kick in before we're even consciously thinking. At moments, I've idly wondered whether we could teach the entire TOK course centred on *confirmation* bias, our tendency to notice and accept only information that reinforces what we believe already. Reason and intuition are certainly not the only ways of knowing involved in our cognitive biases!

For what I've written already on cognitive biases, have a look at Theory of Knowledge (OUP 2013) and also hit "cognitive bias" in the tag cloud for this blog. But today I wanted to pass on a couple that are new to me.

They're explained in the BBC podcast All in the Mind (June 20, 2017). The relevant bit starts just after 22:00 and ends at 27:30, so it's five and a half minutes long.

The ones new to me are:

• the **SPOT effect**, whose acronym stands for "spontaneous preference for our own theories". By way of explanation, the podcasters give background also on "the Lake Woebegone effect" (our tendency to think that we're better than average) and refer to self-enhancing biases and confirmation bias

• the **invisibility cloak illusion**, our inclination to think we're the observers, with limited awareness of our also being the observed

It's pretty evident how these cognitive biases could influence how we gain our knowledge. Once again, we encounter persuasive reasons to pay attention to the findings of the cognitive sciences, and for practitioners in relevant areas of knowledge to incorporate this awareness into the constant refining of methodologies.

For our students, exposure to numerous cognitive biases in TOK class could contribute to appreciation that knowledge is an achievement, and that to gain it reliably requires self-awareness and care. I hope that such exposure also adds some humour and human sympathy.

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Image, creative commons: https://pixabay.com/en/coat-clothing-cape-cloak-mantle-145583/

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Do Nobel prizes distort public understanding of scientific knowledge?

"Absurd." "Archaic." These are surely not descriptions most of us would apply to the world's most celebrated prize in science. The Nobel Prize, conferring millions of Swedish krone (more than a million American dollars) and everlasting fame upon its recipients, honours the year's highest achievements in knowledge. Yet even as it grips our imaginations, could this illustrious award simultaneously distort our understanding of how that knowledge works?

The rules of the award, after all, reflect the personal understanding and intentions of its founder Alfred Nobel more than a century ago. He made a fortune as an inventor, with his most famous invention being gunpowder. On his death, he left his money to fund a series of prizes for contributions to knowledge that conferred the greatest benefit to mankind. The categories and rules were broadly established in his will on his death in 1896, and launched prizes that now have a venerable history.

Critics of the Nobel Prize insist that it is time to recognize the problems built right into the historical terms of award and, if possible, "modernize" it. Different commentators seem to focus on two main impacts that the prize has on our understanding, in ways directly relevant to IB Theory of Knowledge.

1. Categorization of knowledge: The prize is awarded according to categories of knowledge that have gone out of date.

Alfred Nobel specified prizes in three scientific categories (physics, chemistry, and physiology & medicine) and two other prizes (literature and peace). In 1986 the Swedish National Bank established a further prize in economics as a Nobel memorial.

Nobel himself chose the original five categories, not aiming to cover all of human knowledge but judging these disciplines to be the ones through which the greatest benefit to humanity would come. Critics of the Nobel Prize categories don't dispute the importance of recognizing merit in general or the worthiness of the specific past recipients, but do point out that the emphasis on inventions and discoveries of three particular disciplines within the sciences does make it challenging to integrate new scientific fields and specializations that have developed since 1896.

"If you were inventing a science prize now with different categories," comments Steven Novella, "I don't think it would be divided up this way."

How, indeed, would you and your TOK class divide up knowledge if you wanted to establish category prizes for knowledge that gave the greatest benefit to humanity?

2. Methodology: The Nobel Prize conveys the archaic notion that scientific discovery is achieved by individuals rather than by teams.

The rules for the Nobel Prize require that it go to individuals – although that rule has been stretched to recognize up to a maximum of three individuals for one prize. This is the sharpest criticism advanced of the Nobel award in science – that it does not fit the way that science actually works, and distorts public perception of science.

As the editors of Scientific American wrote in 2012, "The Nobel committees force a category error: they insist on awarding the prize to a few individuals, while in reality, the nature of the scientific enterprise has changed. Teams now perform the bulk of the highest-impact work."

Kip S Thorne, one of the 2017 recipients of the Nobel Prize for Physics, reflects on this very problem:

> "I was hoping that the prize would go to the LIGO-Virgo collaboration, which made the discovery, or to the LIGO laboratory, the scientists of the LIGO laboratory, who designed and built and perfected the gravitational wave detectors and not to Barish, Weiss and me. We live in an era where some huge discoveries are really the result of giant collaborations, with major contributions coming from very large numbers of people. I hope that in the future the Nobel Prize committee finds a way to award the prize to the large collaborations that make this and not just to the people who may have been seminal to the beginning of the project, as we were."

Steven Novella concurs. "The Nobel prize needs a modernization," he says, "to better communicate how science actually works, to better recognize a broader scope of fields and the collective nature of modern science -- whereas it is frozen in time, this hundred year old award… Because of the archaic rules it just doesn't reflect modern science optimally…" (minute 20:30)

"Instead of honoring science," writes Ed Yong of the awards in "The Absurdity of the Nobel Prizes in Science", "they distort its nature, rewrite its history, and overlook many of its important contributors." (I recommend reading every bit of this article!)

Conclusion

"Perhaps none of this would matter if the Nobels weren't such a massive deal," Yong further points out. And, in the end, it seems to me that this is the biggest problem of the Nobel Prize – public perception that it's a "massive deal".

The Nobel Prize is the one prize that everyone's heard of, so its impact on public understanding of knowledge is huge. In a social context where celebrities and success are celebrated, and in a psychological context where people grasp individual stories better than general overviews, the awarding of prizes to particular people individually, and in disciplines with familiar names, fits with a whole range of our background biases to entrench an inaccurate view of knowledge.

But surely this isn't a terrible problem – at least, *not for us*.

In Theory of Knowledge, we are forever dealing with biases in our understanding of knowledge. The Nobel Prize, in fact, hands us a particularly attractive case study to take to class. It even has some historical examples of flagrant unfairness in the awards – and possibly systemic gender bias – to catch student interest. We can't correct the award's criteria, but in a TOK class we can alert our students to its subjective humanity, its historical legacy, and both its allure and its failings. And it's not every day that we get to think about awarding a gold medal – and awarding it for achievements in knowledge.

A PS on laureates and diversity

PS November 20. After making the post above, I listened to a podcast that gave a couple of interesting angles, so I wanted to pass on the resource to you. *In The Guardian Science Weekly* podcast for October 25, Nicola Davis interviews science podcasters and authors Brian Cox and Robin Ince. The relevant bit is from minutes 24 to 29 when they touch the issue of who is selected for the Nobel Prizes. Cox gives these views:

* In the case of the physics prize, the particular three individuals singled out this year truly deserved their recognition since they pioneered research into gravitational waves in the face of criticism at the time. He feels that, in this case, the award of the prize is "entirely right".

- About the issue of diversity, he acknowledges that the winners are generally white males of a certain age. However, he gives a historical perspective, pointing out that there is a "time lag" in awards as they are usually given later in a scientist's career, so that the current profile of winners is a "snapshot of science" as it was in, say, the 1970s, "when the talent pool was not accessed". He predicts that we'll see increasing diversity in the winners as we move further into this century, with a greater diversity of people at present entering the field.

Worth a listen!

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Signed language, symbolism, and reflections on inclusion

I learned something important from my friend Lynx – something important for how I think about TOK and knowledge. It was almost seven years ago. I was interviewing her, as an experienced New Zealand Sign Language interpreter, on how signed languages worked and what they tell us about the nature of language. I was keenly interested in the ideas – and on using my laptop to make a video for the very first time. Then, when I had finally edited the interview, I passed it to Lynx for her response. It was immediate. "Can we add closed captions?" she asked. I was mystified. Why would we do that? "I wouldn't like to talk about the Deaf community and their knowledge," she explained, "without their having access to what I'm saying." In an abrupt shift of perspective, I suddenly thought about the function of the closed captions I had always ignored – and realized that she was right. I had anchored my thinking entirely in my own TOK community and relationships of *ideas*. As an interpreter between hearing and Deaf groups, Lynx was much more fully attuned to the *people*. She was talking about inclusion and respect.

https://youtu.be/ytzjp0A7R6g

I've often thought of that moment in the past few years as I consider what "shared knowledge" means in TOK, and how it intersects with "personal knowledge". The flow of knowledge between the public and general sphere and a private and personal one can often hit rough patches. I think of access to information held on people, with legal battles sometimes over disclosure. I think of DNA samples taken of populations, and of language and culture recorded and interpreted by outsiders. I think, in my own country, of the indigenous voices currently speaking for themselves, about themselves, and the significance of that perspective. I think of all the world literature I've read and taught, with all the perspectives demanding to be included in any concept of the knowledge of the world. **Inclusion and respect**. As we talk about knowledge, we are also talking about the people who hold it.

And, in rueful moments recently, I have been deeply appreciating those closed captions that for so many years were a feature I scarcely noticed. My personal knowledge now involves greater experience and understanding!

Video interview: Signed languages and knowledge

I'm including here that video that Lynx and I made together back in 2011. Please have patience with my first-ever video, done on my home table! Drawing on her expertise as an interpreter between New Zealand Sign Language and English, Lynx responded to a number of TOK questions in the 36 minutes that I chopped down to 11:

- "Signs" (such as traffic signs) and "language" (such as English or Thai) have different degrees of abstraction and symbolism. Is "signed language" actually a language? Is it a fully symbolic system, with a grammar to operate it?

- Do signed languages influence thought in the ways that spoken languages are argued to do?

- Are signed languages embedded, as other languages are, within cultures?

As Lynx explains, the answer to each of these questions is "yes".

Further resource: Oliver Sacks' *Seeing Voices*

(And, below, I add some notes that I made at the time on a book I was recommending.)

For anyone interested in learning more about sign language and its role for the Deaf, I recommend the book by Oliver Sacks, Seeing Voices. In it, Sack quotes (p. 87) Noam Chomsky, the linguist who first proposed that the deep structure of language, human symbolic capacity, was innate:

> "The potentials for language are in us all – this is easy to understand. But that the potentials for a visual language mode should also be so great – this is astonishing, and would hardly be anticipated if visual language did not actually occur."

Sacks also describes his own reaction, after all his research for his book, when he entered the Deaf community of Gallaudet College. The personal contact changed his knowledge in a way that we appreciate in TOK; even though he was not a member of the community, he felt his theoretical knowledge change with the addition of personal experience:

> "When I had visited Gallaudet in 1986 and 1987, I found it an astonishing and moving experience. I had never before seen an entire community of the deaf, nor had I quite realized (even though I knew this theoretically) that Sign might indeed be a complete language – a language equally suitable for making love or speeches, for flirtation or mathematics. I had to see philosophy and chemistry classes in Sign; I had to see the absolutely silent mathematics department at work; to see deaf bards, Sign poetry, on the campus, and the range and depth of the Gallaudet theater; I had to see the wonderful social scene in the student bar, with hands flying in all directions as a hundred separate conversations proceeded – I had to see all this for myself before I could be moved from my previous 'medicalization' of deafness." (page 129)

In a Theory of Knowledge class, Sign clearly raises a number of knowledge questions – ones regarding the connection between sense perception and language, between language and thought, and between both the latter and cultural perspectives. If we look briefly at how the Deaf have been treated historically, it also raises questions about how we classify ourselves and "others" -- and the negative values often assigned to difference.

Perhaps sign language raises further questions yet about the difficulties of imagining beyond the familiar in our knowledge. In his book, Oliver Sacks muses on the resistance for many years to the idea that signed languages could be true languages and that educational systems should employ them for the Deaf:

> "Our extraordinary difficulty in even imagining a spatial grammar, a spatial syntax, a spatial language – imagining a linguistic use of space – may stem from the fact that we (the hearing, who do not sign), lacking any personal experience of grammaticising space ourselves (and lacking, indeed, any cerebral substrate for it) are physiologically unable to imagine what it is like (any more than we can imagine having a tail or seeing infrared)."

Seeing Voices is a fascinating book, leaving the reader thinking not of what the deaf lack in terms of hearing but of what they possess and demonstrate in terms of alternate human capability.

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December 4, 2017

"Those experts!": cartoon, class discussion activity

Distinguishing Experts from Imposters has always carried a lively edge when their conclusions matter in the real world. Yet it's still a bit of a novelty when views get applause simply because they reject experts! "Those bully experts, telling the rest of us a lot of stuff – just 'cause they actually know! How unfair!" If our students are picking up on the anti-intellectual, anti-knowledge attitudes that echo in some current media, we might prompt them to some reflection on the role of justification – such as boring old evidence! – in making knowledge claims. Would you find the following cartoon and its discussion questions useful in your TOK class to stir such a discussion?

Feel free to download a copy formatted for classroom use by clicking on the link below. My husband Theo and I made this handout for just such a purpose. The questions are detachable on a separate page in case you want to pose them aloud yourself, without giving them in printed form to your students.

DOWNLOAD: EXPERTS!_compressed

THOSE EXPERTS!

Theory of Knowledge Questions on

"Those Experts!"

- When people are described as "experts", what features do you expect them to possess?

- In your own life, when do you turn to experts for your knowledge? Why do you do so?

- Have you come across situations in your life or in the media in which someone is rejecting apparent experts and their conclusions? Do you think that claiming to be a rebel defying "the establishment" makes someone appealing to other people and the media? Do you think that disagreeing with a body of experts makes someone wrong? Does it make someone right?

- How can you best judge who is truly an "expert", whose conclusions contribute reliably to knowledge? Can you suggest at least four features to check and evaluate regarding particular experts and the sources in which they are speaking (e.g. journal, website, news channel)?

- What's the difference between "opinion" and "expert opinion"? What is meant by "scientific consensus"? What does it have in common with "public opinion", and what makes it significantly different?

- In which areas of knowledge do you most, and least, expect specialists in the field to agree? Are there differences in what gives them the status of "expert" in the following: the arts, ethics, history, the natural sciences? Are there features that you would expect to find in common for the experts of all fields?

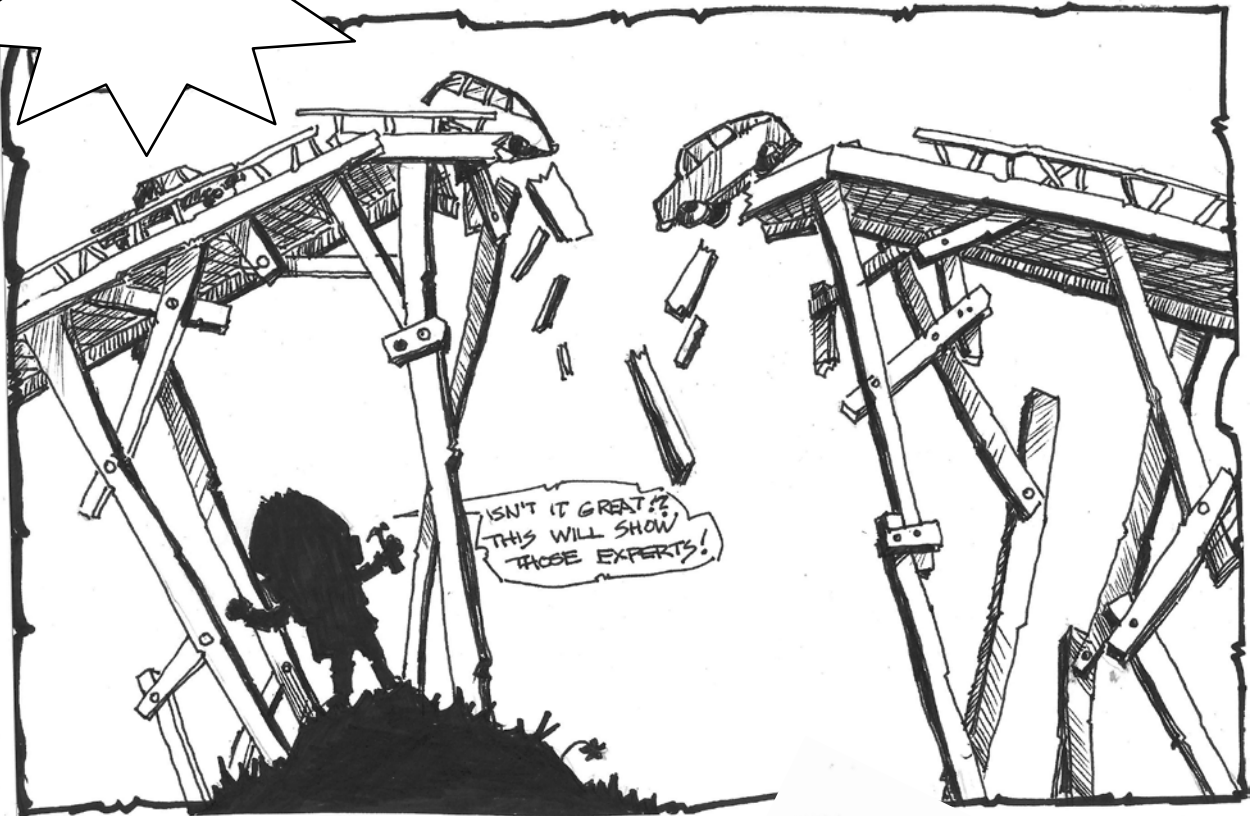*Cartoon and text by Theo and Eileen Dombrowskl*

Those Experts!

Theory of Knowledge Questions on

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In your own life, when do you turn to experts for your knowledge? Why do you do so?

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How can you best judge who is truly an "expert", whose conclusions contribute reliably to knowledge? Can you suggest *at least four features* to check and evaluate regarding particular experts and the sources in which they are speaking (e.g. journal, website, news channel)?

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In which areas of knowledge do you most, *and least,* expect specialists in the field to agree? Are there differences in what gives them the status of "expert" in the following: the arts, ethics, history, the natural sciences? Are there features that you would expect to find in common for the experts of all fields?

"2017, a good year": Wasn't it?

As 2017 comes to a close, what impression will our students have of the world in which they live? Is it of an angry and threatening place? If they follow the news – even if only through social media – they might benefit from ending 2017 or starting 2018 by stepping back from the predominantly shocking or grim events that so often characterize headline news to encounter some of the good news that can easily get lost. For TOK, a class on "good news" reinforces much that we teach about knowledge production – and at the same time offers (perhaps) a little lift of the heart.

In TOK, we encourage students to recognize that knowledge is humanly produced -- accompanied by a purpose, a set of values often explicitly articulated, a method, and a model of appropriate communication. For the sciences, there are parameters that support care and scrutiny. For the news, what are the expectations?

Limitless Questions, Limited Time

Oh, oh. Danger alert. We ask big questions in TOK, but have only limited class time in which to chase them. I recommend, if you want to end 2017 or open 2018 with a class on "good news 2017", that you skirt the edges of the whirlpool of questions and debates that could suck you down, along with your entire class. I suggest that you aim to stay light and – oh yes! – *on the surface!* It has eddies enough!

Admittedly, you might *intend* to deal seriously with the following: journalistic ideals, changing business and production models of journalism and their effects on what knowledge is circulated, media bubbles and polarization of groups in what they know about the world, and issues of truth in charges flung about of "fake news" (or, in history, Hitler's castigation of the "lügenpresse"/lying press). If so, you might like to look back to some of the posts I've written previously by clicking on "**media**" in the tag cloud of this blog. However, in that case I imagine you won't choose "good news" as your entry point!

What I'm proposing is a quicker, lighter, happier reinforcement of principles familiar in TOK (see my TOK course book, page 150), in dealing with representation of the world, in both images and language:

1. What is *selected* to report or represent?

2. Where is the *emphasis* placed in proportion of coverage and techniques of attention?

3. What emotional *colouring* is created through language or photographic techniques?

4. How do we *frame* the story in context, with stated goals, headlines, or associated stories and images?

We can apply similar questioning to content that lifts our hearts as to content that leaves us disturbed. As teachers always looking for material to prompt discussion, we know that aiming to be light and happy does not equate to being trivial!

Goal: quick, light, happy activity

Of course, we can never entirely predict when a lighthearted activity will veer into something else. But as TOK teachers, we know better than to depend on accuracy of prediction – and we're prepared to catch and (probably) enjoy the unexpected. So here's my own approach – as a source of ideas for your own!

1. Prepare a list of good news stories from 2017. You can make your own list. However, Future Crunch, a blog I personally like and follow, has already produced a list you might consider using. If your class time is particularly tight, you might even select a range of 20 or 30 of their good news stories to launch your class:

"99 Reasons 2017 Was A Great Year" with the following subtitle: "If you're feeling despair about the fate of humanity in the 21st century, you might want to reconsider."

The article has a byline (by Angus Hervey) and a place from which it comes (Capetown and Melbourne) – as students should notice. It comes with an overt principle of selection, as they should also notice before they give any attention to the examples: "In 2017, the global media picked up all of the problems, and none of the solutions. To fix that, we spent the past 12 months searching for good news from every corner of the planet…." It even comes with occasional authorial sarcasm, as in #39: "These astonishing achievements were of course, reported by every media outlet on the planet." Is the blog neutral? No, and not intended to be! Indeed, the very existence of a list of "good news" invites instant comments on the principle of selection – the selection within this source, and, as part of its point, in news in general.

2. Set up discussion in advance with some general questions about "good news". These are the ones that occur to me, but you're likely to have others as well.

- What truth is there to the maxim "no news is good news"?

- Why do you think that "good news" does not take a more prominent place in the media? Are there characteristics of much "good news" that make it less "newsworthy" for a competitive daily news source?

- Is it more important for us to know about the "bad news" than the "good news"? Do we have a responsibility to be aware of either, neither, or both as we build our knowledge of the world? Why?

3. When you give students the list to read, prime them in advance with evaluative questions to go beyond the simple "good news"/"bad news" divide that serves as the starting point. Although dealing with happy news generally avoids the rancour that some bad news can trigger, the news selected to be "good news" still does depend on the values behind the perspective.

- Are there any of the news stories that stand out for you as surprising – as events or situations of which you had not heard before? Is there any story that seems to you to be extraordinarily "good news" according to your own interests and concerns?

- Are there any of the stories that you, or others, might NOT consider to be "good news"? From a different perspective, could any of these be considered "bad news"? Can you identify the values that characterize such a perspective, and who is likely to hold it?

- The 99 news items are presented in categories: global health (items1-16), global conservation (17–30), global standard of living (31–39), fossil fuels (40-51), clean energy (52-61), social justice (62-76), global violence (77-87), and animal protection (88-99). The writer is not suggesting that these are the only good news stories or the only categories, but the ones he has gathered together himself. Are there other categories that you might want to add, as important ones on which you would like to see an equivalent list of good news stories?

- What is your reaction to the claim in the blog Future Crunch: "If we want to change the story of the human race in the 21st century, we need to change the stories we tell ourselves."

4. Concluding reflection: To what extent does the daily news represent life in the world? Offering a class this broad final question could summarize a class on "good news" to reinforce ongoing TOK commentary. Running topics include the ones I've suggested above: the influence of perspectives on what gets reported (selection, emphasis, colouring, framing), appreciation and evaluation of conflicting and complementary perspectives, and the larger understanding gained from analyzing the interplay of multiple points of view.

I'd want to close a lesson like this one, though, with an overview of the place of the news in our lives -- largely in order to give students encouragement toward continued interest and engagement in the news and in the world. Too easily can they become overwhelmed by complexity; we need to offer them analytical strategies and appreciation of different perspectives so that they have "a way in" to reading and making sense of the media – and the world it reflects and shapes.

Too easily, too, can they despair over a tainted world and their own helplessness; we need to offer them also the "good news", including fine human achievements, the advance of knowledge, and improvements in many people's lives. In Theory of Knowledge, we don't have a lot of time with students, but, in cooperation with our IB colleagues in other classes and in CAS, we certainly have a place in educating our students not to be cynical and paralyzed but to be thoughtfully engaged and active in the world.

And it's a world in which they, in turn, may contribute to the future "good news."

References

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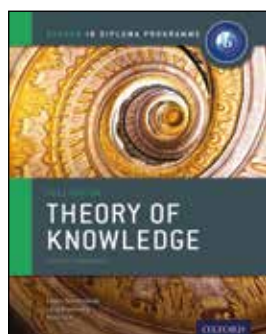
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...and that's it for 2017!

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