

A New Agenda ... Values, World Society, Modelling

<https://sites.google.com/site/gordonburtmathsocsci/home/a-new-agenda>

A New Agenda seeks to explore all aspects of society using all the academic disciplines paying special attention to values ... with special interest in modelling ... not disinterested in practice ... and aspiring to high academic standards.

Commentary, May 2017

No. 41

Note: The May 20th event has been cancelled.

Interdisciplinary Book Festival ... Oxford mathematics ... political pendulum ...
Music Festival

1 Interdisciplinary Book Festival 2017 – ONLINE	2
2 Reflections	4
Preschool and Primary	4
AT LAST	5
A society contains everybody	5
Recent elections	5
The mathematical physics of the pendulum	6
The USA political pendulum, 1912-2017	6
A political Hamiltonian?	7
Catastrophe, chaos and complexity	7
Political scientists, economists, statisticians and physicists	7
Modelling specific complex situations	8
A model of mathematics	9
3 Donald Trump ... wanting a better discourse	10
4 Oxford Mathematics Newsletter	11
5 Poetry: apologies for absence	12
6 Music Festival!?	14
6.1 The Light Programme	14
6.2 The Third Programme	16
Emmanuel Macron on Liszt	
Dorothy Dorow sings Schreker	
Sergei Leiferkus sings Shostakovich	
The Stony Stratford Willis Organ	
David Maxwell's 'Ode to Joy – Environmental'	

1 Interdisciplinary Book Festival 2017 - ONLINE

academics and practitioners ... politics, economics, geography, psychology, mathematics

[Note that the May 20th event has been cancelled. Here is a substitute. Apologies if it is all a bit fanciful.]

Maytime! Catherine and I often go to the Hay Festival in Wales ...

<https://www.hayfestival.com/>

So what about a book festival of our own? And suddenly a lot of books appear! ... written by members of the Council of the Conflict Research Society (CRS). So I start organising a Saturday where the authors can meet the public. Unfortunately not enough people express an interest in attending ...

So here instead is the *Interdisciplinary Book Festival 2017 – ONLINE!* It's on a very modest scale: two talks, a colloquium, three journal articles and nine books – not just by CRS people but by others as well.

We start with a talk which Christine Cheng gave on 26 January 2017:

Gatekeepers and role models: women in politics

Christine Cheng

<https://www.youtube.com/watch?v=o9GBrZjEHHg>

... and with a talk given by Akram Khan just a few days ago:

Journeys into Fundamental & Applied Knowledge

Inaugural Lecture with Professor Akram Khan; 11 May 2017, 18:00 - 19:30

<http://www.brunel.ac.uk/news-and-events/events/2017/Inaugural-Lecture-with-Professor-Akram-Khan>

I imagine the talk will appear on: <http://www.brunel.ac.uk/news-and-events>

Back in March, Glenn Palmer sent me a notice of the *Online Peace Science Colloquium's* latest presentation:

How Information Cascades Cause Refugee Crises: Evidence from Kosovo

Benjamin Laughlin

Watch it live on Friday, March 17th at 10 am (PT) or view it later on our YouTube Channel and our website.

<https://www.youtube.com/watch?v=M4v51HqJbBc>

Abstract: Refugee crises repeatedly surprise the international community with their size and suddenness, yet we know little about what drives them. I develop a theory of refugee crises in which civilians living in conflict zones make individual decisions to flee in response to new information about the risk of victimization in war. The information conveyed by observing refugees fleeing can result in an information cascade, in which waves of refugees fleeing cause other civilians to increase their beliefs about the risk, increasing the numbers of subsequent refugees. To test this theory, I construct a geocoded village-day level dataset of refugee flows, violence against civilians, and the actions of armed groups during the Kosovo war. I develop an instrumental variables estimation strategy using the spatial network of villages connected by roads and the fact that refugees fled toward a single border crossing to estimate the causal spillover effect of refugees fleeing. I find that on average a refugee fleeing causes more than one additional civilian to flee, which is larger than the effect of violence, the dominant explanation for refugee movements in the literature.

Next the journal articles:

Sovereign debt, deficits and defence spending: the case of Greece

Rania Dimitraki and Aris Kartsaklas

Defence and Peace Economics

17 February 2017 <http://www.tandfonline.com/doi/abs/10.1080/10242694.2017.1289497>

Determinants of mediation success in post-conflict Bosnia: a focused comparison

Reina Zenelaj, Nimet Beriker & Emre Hatipoglu.

Australian Journal of International Affairs.

12 May 2015 <http://dx.doi.org/10.1080/10357718.2015.1024200>

Private military and security companies, contract structure, market competition, and violence in Iraq

Benjamin Tkach

Conflict Management and Peace Science

May 4, 2017 | OnlineFirst. **Click on title.**

And now for the books!

Children, youth and development

Nicola Ansell. Routledge (2nd ed.) 2017.

<http://208.254.74.112/books/details/9780415617208/>

Angela Merkel: Europe's Most Influential Leader

Matthew Qvortrup. Duckworth. 2016.

<http://ducknet.co.uk/books/all/Angela%20Merkel>

The Psychology of Conflict. Mediating in a Diverse World

Paul Randolph. London: Bloomsbury. 2016.

<http://www.bloomsbury.com/uk/the-psychology-of-conflict-9781472922984/>

Push back. Sri Lanka's dance with global governance. London: Zed Books. 2016.

Judith Large. London: Zed Books. 2016.

<https://www.zedbooks.net/shop/book/push-back/>

Understanding geography and war. Misperceptions, foundations and prospects.

Steve Pickering. London: Palgrave. 2016.

<http://www.palgrave.com/us/book/9781137522160>

Cognitive Analytic Therapy for People with Intellectual Disabilities and their Carers.

Julie Lloyd and Philip Clayton. London: Jessica Kingsley. 2013.

<http://www.jkp.com/uk/cognitive-analytic-therapy-for-people-with-intellectual-disabilities-and-their-carers.html>

The White Book: Pathways towards sustainable peacebuilding

Sophia Papastavrou and Magda Zenon ... Yeshim Harris ...

http://www.fescyprus.org/media/publications/White_book-WEB.pdf

Values, World Society and Modelling Yearbook, 2014.

Gordon Burt. Newcastle: Cambridge Scholars. 2016.

<http://www.cambridgescholars.com/values-world-society-and-modelling-yearbook-2014>

Values, World Society and Modelling Yearbook, 2015

Gordon Burt. Newcastle: Cambridge Scholars.

(due May/June 2017)

Finally, at our Council Meeting last Saturday, some items came up for general discussion. These prompted a number of thoughts of my own:

World system dynamics

For half a century after World War II, attention focused on superpower rivalry. In recent decades attention has focused on civil wars. Some now see a new era: the return of great power rivalry. One approach is to think in terms of world system dynamics. World society is a multi-level structure with a multi-level dynamics.

‘The world today: tension and volatility in a multi-level geographical structure’

‘World history: progress and destruction, independence and incorporation’

Burt, Gordon. *Values, World Society and Modelling Yearbook, 2014*. Cambridge Scholars: 2016. Chapters 7, 8.

“John Burton, Australia, Korea, 1950s”

John Burton was the founding Chair of the Conflict Research Society.

Google the words quoted above and many items appear. Here are just two of the items:

https://books.google.co.uk/books?id=zwTWCgAAQBAJ&pg=PA132&lpg=PA132&dq=john+Burton+Australia+Korea&source=bl&ots=MZvny2Vbc6&sig=VWNE_M2j2tmgrqdJDU-ETukcCs&hl=en&sa=X&ved=0ahUKEwis4dGxhdzTAhWJL8AKHQmJB30Q6AEILTAC#v=onepage&q=john%20Burton%20Australia%20Korea&f=false ;
<https://books.google.co.uk/books?id=P8HgoMBKi0YC&pg=PA26&lpg=PA26&dq=john+Burton+Australia+Korea&source=bl&ots=mU7aVmcHBr&sig=Bmj1blOp8ntjns4kCc2StpzHB8&hl=en&sa=X&ved=0ahUKEwis4dGxhdzTAhWJL8AKHQmJB30Q6AEIKTAB#v=onepage&q=john%20Burton%20Australia%20Korea&f=false> .

Is research political?

... is it necessarily political? Chapter 15 of Burt (2010) is entitled ‘debating the mathematical social science approach to international relations’ and is headed by quotes from Nicholson, Steve Smith, Fearon & Wendt and Wight. In the chapter I reject Smith’s rejection of Weber.

Burt, Gordon. *Conflict, Complexity and Mathematical Social Science*. Bingley: Emerald Press: 2010.

Smith, Steve. “Singing our world into existence. International relations theory and September 11.” *International Studies Quarterly*, 48, 499-515: 2004.

2 Reflections

It’s frustrating. There are a lot of things I want to think and write about and I can’t do them all at once!

Preschool and Primary

Catherine and I have now clocked up thirty or so child-years of grandparenting. Just ask us if you want to know anything about the ages between minus nine months and twelve years old! ‘Nurturing flourishing’ is what it is all about. In saying this I don’t wish to ignore the fact that it is all a lot of hard work - or indeed that, as the saying has it, “the good thing about being a grandparent is that you can hand them back!” (a saying I dislike).

What I have discovered is that all and more of primary school mathematics is contained in the weekly Premier League table. And the moral tale of ‘nice and true’ can be found in the Granny plays: “Granny is sitting in her armchair at the top of a mountain ...”

AT LAST

Trying to think of an acronym, this is what I have come up with. Love All, Seek Truth, Act Truth. Football again: sometimes the things football fans say about opponents are hateful. It is part of their repertoire. Where can one find an alternative repertoire? The shared religious text of Judaism, Christianity and Islam contains “love thy neighbour” and “love the stranger”; and Christianity contains “love thine enemy”. And that last one I might make more explicit as “love the one you hate”. At last year’s CRS conference in Dublin, Isabel Phillips talked about mediation and cited Elise Boulding’s introduction to a book by Adam Curle – something along the lines of “not only have you got to mediate between them you’ve got to love the so-and-so’s”. It sounds quite a challenge. Also: Elise Boulding: ‘practise love and sustain hope’.

<http://eu.wiley.com/WileyCDA/WileyTitle/productCd-0787958794.html>

A society contains everybody

Recently there have been several bitterly fought elections which have resulted in half the people voting one way and half the people voting the other way. The losing half have been shocked to discover they live in such a society: not only has a hated figure won but half the population have voted for that hated figure - for example Nigel Farage and Brexit, Donald Trump and other nationalistic leaders. And when the hated figure loses, people are still shocked that the figure attracts such large support - for example Geert Wilders, Marie le Pen, etc. Just as ‘modern internationalists’ are shocked by ‘traditional nationalists’, so ‘traditional nationalists’ are shocked by ‘modern internationalists’. The Catholic Church in Ireland was shocked at the success of the Equal Marriages option in that referendum.

The manner in which one side hates not just the leading figure but also the supporters is well captured by Hillary Clinton’s condemnation not just of Donald Trump but also of a section of his supporters as “a basket of deplorables”.

https://en.wikipedia.org/wiki/Basket_of_deplorables

One reaction to losing has been to fight back – an interesting case is the weekly *The New European*:

<http://www.theneweuropean.co.uk/home>

https://en.wikipedia.org/wiki/The_New_European

Other examples include two recent books by Luce and Emmett – but, reflecting a common strand of criticism, Murray criticises both books on the grounds that they “still assume the voters are wrong-headed”.

Murray, Douglas. “Group therapy for liberals.” *The Times. Saturday Review*. May 6, 2017, pp. 14-15.

Luce, Edward. *The Retreat of Western Liberalism*. Little, Brown. 2017.

Emmett, Bill. “The fate of the West. The Battle to Save the World’s Most Successful Political Idea.” Profile 2017.

Don Rumsfeld said: “you go to war with the army you have, not the army you might want or wish to have at a later time.”

<https://www.youtube.com/watch?v=3jPgljRvzQw>

Likewise “you work with the society you have, not the society you might want or wish to have at a later time.” There is a need to recognise that a society contains everybody. It sounds quite a challenge.

Recent elections

Netherlands, France, UK ... Have the far right been kept at bay? Is the political pendulum swinging back? Have UKIP and SNP passed their peak? How low can Labour sink? Can Liberals regain lost ground?

The mathematical physics of the pendulum

position x , velocity v , acceleration a , time t , amplitude k , frequency ω

$$x = k \sin \omega t, v = k \omega \cos \omega t, a = -k \omega^2 \sin \omega t$$

The x & v relationship is an ellipse: $\omega^2 x^2 + v^2 = k^2 \omega^2$.

The x & a relationship is a straight line through the origin: $a = -x$.

The x & v trajectory is orbiting round the ellipse.

The x & a trajectory is oscillating along the straight line.

A damped pendulum has k decreasing over time.

The USA political pendulum, 1912-2017

$x = \text{Democrat proportion} = \text{Democrat} / (\text{Democrat} + \text{Republican})$

velocity:

The x & v relationship is a shrinking circle, a spiral: $(x - 0.5)^2 + v^2 = 0.0225k(t)$

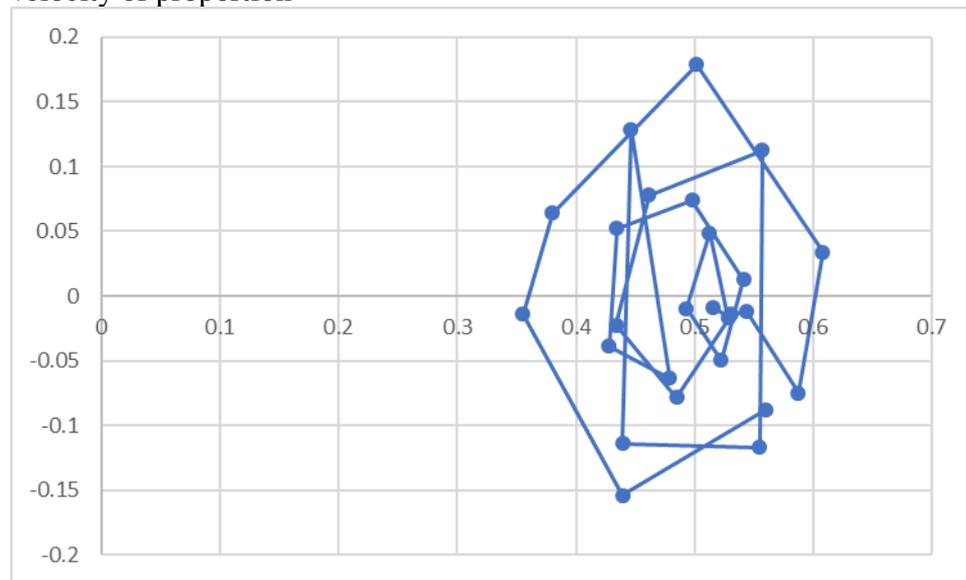
where $k(t)$ starts at 1 and then decreases.

The x & v trajectory is orbiting round the spiral anticlockwise.

$$[x(t, t+1) = (x(t+1) + x(t))/2; v(t, t+1) = x(t+1) - x(t)]$$

Figure 1 Democrat proportion and its velocity, 1912-2017

velocity of proportion



$x = \text{Democrat proportion}$

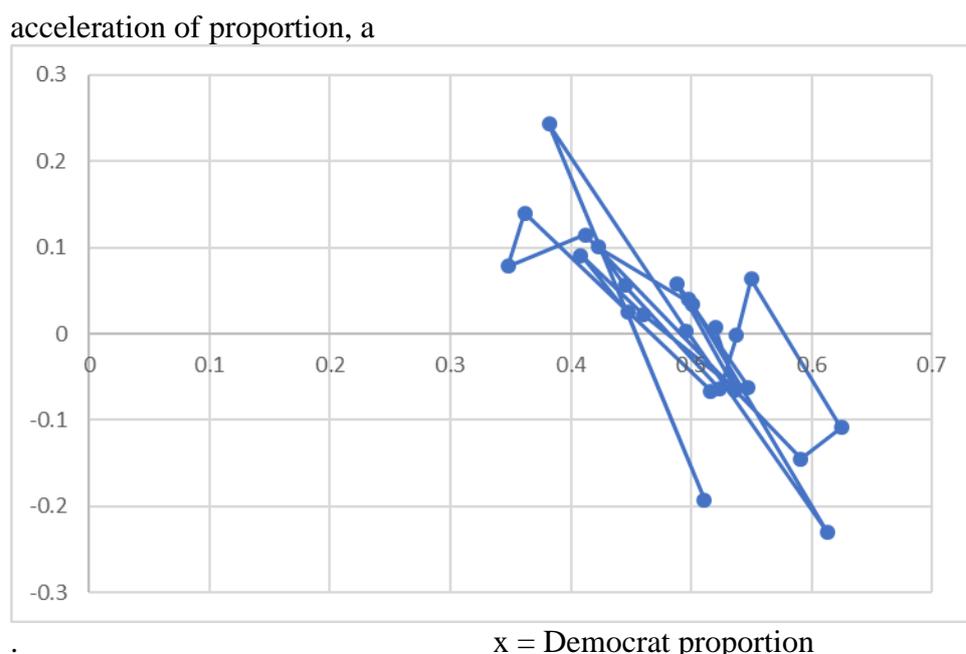
acceleration:

x & a relationship is a straight line through $x = 0.5$: $a = -1.5(x - 0.5)$

x & a trajectory is oscillating along the straight line

$$[x(t+1) \text{ as is}; a(t+1) = v(t+2, t+1) - v(t+1, t)]$$

Figure 2 Democrat proportion and its acceleration, 1912-2017



A political Hamiltonian?

At our Dublin conference last year I talked about William Rowan Hamilton and made reference to the Hamiltonian. Roger Penrose uses the example of a simple pendulum to lead into a discussion of a general Hamiltonian system and small oscillations about a stable equilibrium in the absence of forces which would dampen the oscillations.

Penrose, Roger. *The Road to Reality*. London: Jonathan Cape, 2004, 478-483.

Sbano, Luca. "Periodic orbits of Hamiltonian systems." 1212-1236. In:

Meyers, Robert A. (Ed.) *Mathematics of complexity and dynamical systems*. Springer, 2011.

http://www.springer.com/gb/book/9781461418054?wt_mc=GoogleBooks.GoogleBooks.3.EN&token=gbgen

Catastrophe, chaos and complexity

Last year I noted the death of Chris Zeeman and his work in dynamic systems and catastrophe theory and referred to his model of a dynamic game between hawks and doves. Michael Nicholson organised a workshop on catastrophe theory at the ECPR meeting in Lancaster in 1981. [Only writing this now do I recall that I did something about the catastrophe befalling the Labour Party at that time!] Bob Holt was there. Iain Stewart was there. Here is his Christmas 2016 Oxford Mathematics Public Lecture on the mathematics of visual illusions which is about the catastrophic switch between two different perceptions of the same object:

<https://podcasts.ox.ac.uk/mathematics-visual-illusions>

From catastrophe theory discussion moved on to chaos and complexity theory. There was an IMA conference at Warwick (around 2010?) and Iain Stewart talked about how a horse galloped!

<https://plus.maths.org/content/walk-trot-gallop>

Political scientists, economists, statisticians and physicists

There are interesting debates between political scientists, economists, statisticians and physicists about modelling the social world. In March I noted the death of Kenneth

Arrow and his work on equilibrium in economics and in social choice. Politics and the economy are dynamical systems moving near or far from equilibrium. Economists commonly discuss dynamics in terms of the statistics of time series analysis. However their models have been challenged by those looking towards physics and proposing instead complexity models.

1995: <https://ideas.repec.org/a/ecj/econjl/v105y1995i431p881-96.html>

2009: <https://ideas.repec.org/a/eee/jeborg/v72y2009i2p638-655.html>

This contrast is present on a modest scale in my approach to modelling the USA presidential election time series. Thinking in terms of time series analysis I thought of a simple autogressive model. Thinking in terms of physics I thought of instantaneous velocity and acceleration. (I need to understand a bit more to know whether differencing time series produces quite the same result). The comment by Alain Goriely on BIG DATA may also be relevant here – see Section 4.

Reintegrating the Social Sciences: The Dahlem Group

‘Social science disciplines see themselves as distinct, with their own territory, their own methods, and their own framework. Within such an environment multidisciplinary work involves enormous conflict and translation problems. This situation is no longer acceptable. Dealing with modern problems requires researchers with broad transdisciplinary knowledge and with the ability to communicate with other social science researchers in a way that will allow them to arrive at transdisciplinary recommendations. Complex issues such as healthcare, income distributions, crime prevention, industrial policy, agriculture require not only insights from multiple social disciplines, but the integration of those insights. This document offers a proposal for training social science researchers. Specifically, it proposes reintegrating the social sciences by modifying the current system of training—which provides completely separate training for researchers in each sub-discipline—to incorporate a common first year “core” of training for all social science researchers. If implemented, the proposal will reduce the babble that currently characterizes much of the interdisciplinary conversations.’

<https://ideas.repec.org/p/mdl/mdlpap/1033.html>

Modelling specific complex situations

How should we model specific complex situations? Game theory, metagames, hypergames, drama theory. That was the intellectual journey travelled by CRS colleagues Michael Nicholson, Nigel Howard, Peter Bennett and Jim Bryant. Jim ran two IMA conferences in Oxford and another at Sandhurst. At the 2004 conference Steve Brams talked about his theory of moves.

2004, Oxford: <https://ima.org.uk/1135/06-28-ima-conference-analysing-conflict-resolution/>

2010, Oxford: <https://ima.org.uk/1223/4th-ima-conference-analysing-conflict-transformation/>

2012, Sandhurst: <https://ima.org.uk/1259/5th-ima-international-conference-influence-conflict/>

Jim Bryant, drama theory

<https://www.crcpress.com/Acting-Strategically-Using-Drama-Theory/Bryant/p/book/9781482245318>

Steve Brams, theory of moves.

<https://www.acsu.buffalo.edu/~fczagare/Game%20Theory/Theory%20of%20Moves.pdf>;

https://books.google.co.uk/books/about/Theory_of_Moves.html?id=Wzfn3IO44AwC&redir_esc=y

Prompted by Jim’s drama theory I have been having a look at Shakespeare:

[http://www.emeraldinsight.com/doi/abs/10.1108/S1572-8323\(2012\)0000020006](http://www.emeraldinsight.com/doi/abs/10.1108/S1572-8323(2012)0000020006)

And ever since the Oxford conferences and Steve Brams’ *Theory of Moves*, I have been thinking about chess. The work of Adriaan De Groot around the 1950s; Bobby Fischer’s ‘rich treasury of experience’; “A structured knowledge of chess positions enables a grandmaster to spot the correct move quickly.” A chess situation involves a

configuration of pieces and a series of moves involves configuration dynamics. Chess knowledge involves a set of structured configuration dynamics with values and probabilities.

<https://wimse.fsu.edu/media/expert-mind.pdf>

<http://en.chessbase.com/post/adriaan-de-groot-che-psychologist-1914-2006->

A model of mathematics

Process and output. Production and product. Mathematical inquiry and completed mathematical knowledge.

Burt, Gordon. *Conflict, Complexity and Mathematical Social Science*. Bingley: Emerald. 2010. 35-46.

Mathematical inquiry. Hadamard on the psychology of invention in the mathematical field; Polya’s several books on mathematical reasoning and on problem solving; Newell and Simon’s first step in the field of AI with their computer proving Principia Mathematica and their subsequent correspondence with Bertrand Russell; their work on human problem solving ... Andrew Wiles:

“Nor do proofs come just because one has been born with mathematical perfect pitch. There is no such thing. One has to spend years mastering the problem so that it becomes second nature. Then, and only then, after years of preparation is one’s intuition so strong that the answer can come in a flash ... These Eureka moments are what a mathematician lives for; the bursts of creativity that are all the more precious for the years of hard work that go into them. The moment in the morning of September 1994 when I resolved my last problem is a moment I will never forget.”

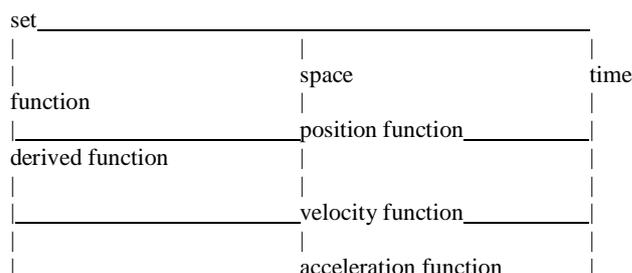
Oxford Mathematics Newsletter 16, Spring 2017, p. 1.

https://www.maths.ox.ac.uk/system/files/media/Maths%20News%202017%20%5B4%5D_0.pdf

Completed mathematical knowledge. The structure of mathematical knowledge includes a structure of concepts, a structure of statements, a structure of arguments and a structure of contexts. Mathematical logic is an attempt to express the nature of completed mathematical knowledge. Propositional calculus concerns the truth values of statements in arguments. Predicate calculus considers how a language is to express statements about mathematical structures involving sets, functions and relations. Figure 3 presents a structure of concepts. One example of an argument as a structure of statements is present in the discussion of the simple pendulum:

if $x = k \sin \omega t$, then $v = k \omega \cos \omega t$, then $a = -k \omega^2 \sin \omega t$.

Figure 3 A structure of concepts: position, velocity and acceleration



3 Donald Trump ... wanting a better discourse

Some people dislike Donald Trump because they think what he says is nasty. Other people dislike him because they think what he says is of low intellectual quality:

“Then Trump discovers Twitter, a bird-brained medium designed, as one of its inventors admitted, to broadcast ‘short bursts of inconsequential information’”.

Conrad, Peter. “How the Donald stays tweets ahead of his rivals. This trawl through Trump’s Twitter account illuminates his method of bigging himself up while trashing his rivals.” *The Observer. The New Review*. 36. May 7 2017.

Obourne, Peter and Roberts, Tom. *How Trump Thinks: His Tweets and the Birth of a New Political Language*. Head of Zeus. 2017.

Cadwalladr, Carole. “The great British Brexit robbery: how a secret network of computer scientists hijacked our democracy.” *The Observer. The New Review*. 12-15. May 7 2017.

My interest here is in the quality of discourse. In my mind I think of a quality continuum. My initial thought is that Donald Trump’s twitter is at one extreme and mathematics is at the other with most discourse being somewhere in the middle. So not all discourse is of high quality. This prompts the question: can we improve the quality of existing discourse? ... can we produce high quality discourse?

Figure 4 The quality of discourse continuum

low quality discourse

high quality discourse

In order to explain my thinking, let me be a bit autobiographical. After my mathematics degree I briefly worked in OR at a steelworks in 1968, before working even more briefly in programmed learning for Product Knowledge Limited. I then did a degree in psychology. Programmed learning had its basis in the psychology of learning and in educational (and training) psychology. The question was: how could teaching be designed to bring about learning most effectively? The key thing was to analyse the structure of what was to be taught and then use this to structure the process of teaching. So a key question was: what was the structure of knowledge? In 1970 I joined a department at the Open University the work of which included the Knowledge Structure Project. Key figures were Gordon Pask and Brian Lewis. In link 5, Lewis “describes some recent thinking on an educational problem of central importance to the whole enterprise – namely the problem of ensuring that the O.U.’s teaching materials have that hard-to-define something called Quality”.

[Brian Lewis in 1970-1972 explaining the then new concept of the Open University.

1 <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8535.1971.tb00539.x/abstract> ;

2 <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8535.1971.tb00554.x/full>

3 <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8535.1971.tb00562.x/full>

4 <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8535.1972.tb00580.x/full>

5 Brian Lewis on ‘quality’: <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8535.1973.tb00614.x/full>

Gordon Pask: https://en.wikipedia.org/wiki/Gordon_Pask ;]

In 1974 Lewis and his colleagues produced a report for the Ford Foundation. They argued that ‘... the knowledge conveyed by teachers, and by textbooks in higher education, tends, especially in the social and behavioural sciences, to be essentially fragmentary in nature’. They made a distinction between grounded and ungrounded knowledge and they analysed the content of teaching materials for ‘argumentative

manoeuvres' - instances of what might be described as slack writing or inconsistent writing.

Pages 1 to 20 of the report:

- 1.0 Introductory remarks
- 1.1 Some comments on teacher competence
- 1.2 Grounded versus ungrounded knowledge
- 1.3 Analysis, analysis, analysis
- 1.4 The problem of synthesis
- 1.5 Some trouble with textbooks
- 1.6 Beyond behavioural objectives
- 1.7 Concluding remarks

Pages 79 to 95 of the report:

Opinions masquerading as facts
Understatements and overstatements
Misleading analogies, 'glossing' in general
Irrelevant comments and digressions
Arguments that loop and change
Failure to differentiate between important and unimportant content
Misuse of modifiers
The presenting of unexplained lists

Failure to develop and/or relate ideas
Failure to ground assertions in theories
Non-systemic (improvised) conceptual frameworks

Implication hunting - searching for overall consistency

Lewis, B. N., Byrne, C., Hawkrige, D., Neil, M., Pask, G. and Roberts, O. et al. (1974) *New methods of assessment and stronger methods of curriculum design*. The first annual report on a research project sponsored by the Ford Foundation. Institute of Educational Technology, UK Open University.

Lewis and his colleagues wanted to see a better discourse. Interestingly this was mirrored in the students' aspirations: the Open University's students were mature students and they too in a sense wanted a better discourse. In a line from *Educating Rita*, the play about the Open University – and the subsequent film starring Michael Caine and Julie Walters – the student Rita explains her motivation: “that’s what I’m trying to do, isn’t it – to sing a better song”.

The clip: <https://www.youtube.com/watch?v=T5sjvVP8Eg>

The film: [https://en.wikipedia.org/wiki/Educating_Rita_\(film\)](https://en.wikipedia.org/wiki/Educating_Rita_(film))

The play: https://en.wikipedia.org/wiki/Educating_Rita

4 Oxford Mathematics Newsletter

Our daughter Katrin did mathematics at Oxford in the late 1990s. A few weeks ago she was sent the Oxford Mathematics Newsletter and she passed it on to me. It contains a number of fascinating items.

https://www.maths.ox.ac.uk/system/files/media/Maths%20News%202017%20%5B4%5D_0.pdf

Andrew Wiles was awarded the 2016 Abel Prize “for his stunning proof of Fermat’s Last Theorem by way of the modularity conjecture for semistable elliptic curves, opening a new era in number theory”. p. 1.

https://en.wikipedia.org/wiki/Fermat%27s_Last_Theorem

https://en.wikipedia.org/wiki/Wiles%27s_proof_of_Fermat%27s_Last_Theorem

Nigel Hitchin looks back on his career. “In the 1970s ... strange new words began to appear on the seminar board like ‘solitons’ and ‘instantons’. ... Now as I retire it’s clear that whole tracts of geometry, algebra and topology are influenced by ideas from quantum field theory.” p. 2.

<https://en.wikipedia.org/wiki/Soliton>

<https://en.wikipedia.org/wiki/Instanton>

Ehud Hrushovski is a model theorist. “... one of model theory’s great achievements is that it now provides powerful tools in many areas of modern mathematics.” p. 3.

https://en.wikipedia.org/wiki/Model_theory

Roger Heath-Brown notes that cryptography depends on ideas from number theory. The RSA system is based on the ease with which two prime numbers, P and Q can be multiplied to form $N=PQ$; but the difficulty of identifying the component factors of some given number N. If and when the quantum computer comes will it easily solve NP problems? p. 4.

[https://en.wikipedia.org/wiki/RSA_\(cryptosystem\)](https://en.wikipedia.org/wiki/RSA_(cryptosystem))

[https://en.wikipedia.org/wiki/NP_\(complexity\)](https://en.wikipedia.org/wiki/NP_(complexity))

https://en.wikipedia.org/wiki/Quantum_computing

Alain Goriely notes the initial hopes for BIG DATA approaches: empirical analyses of the data would solve problems. “Quite the opposite is happening. The success of many methods has shed a bright light on the need to understand the underlying mathematical structure of both data and methods.” p. 5.

https://en.wikipedia.org/wiki/Big_data

<https://ima.org.uk/3213/2nd-ima-conference-on-the-mathematical-challenges-of-big-data/>

In 2014 Maryam Mirzakhani was the first woman to win a Fields Medal. Oxford’s Mirzakhani Society had a joint meeting with Cambridge’s Emmy Noether Society. p. 8.

<https://www.maths.ox.ac.uk/node/16035>

<http://emmynoethersoc.tumblr.com/post/96179072783/about>

<https://www.maths.ox.ac.uk/study-here/undergraduate-study/women-oxford>

Finally the editor of the newsletter is Robin Wilson. A dramatization of C. L. Dodgson’s mathematical activities featured Robin Wilson as Dodgson and Roger Penrose as the Mock Turtle! p. 8.

Robin Wilson. *Lewis Carroll in Numberland*. Penguin. 2009.

<https://www.penguin.co.uk/books/54855/lewis-carroll-in-numberland/>

5 Poetry: apologies for absence

Is it really permissible for a husband to miss his wife’s birthday – even when there is the excellent excuse that it is the Annual General Meeting of the Conflict Research Society? What else can a dutiful daughter do other than take her mother off for a weekend holiday in Bruges? Here, as apologies to Catherine and Rona for my absence, are a couple of poems.

We're off to Bruges

It's a little hush-hush,
Have you heard the news?
No, there's no rush,
We're off to Bruges!

Wash one's hair,
Slap on the rouge,
Down the stair,
We're off to Bruges!

Pilates first,
In Cannon Mews.
Coffee for thirst,
We're off to Bruges!

Get in the car.
I won't refuse.
It's not that far.
We're off to Bruges!

Euston, St. Pancras
On the choo-choos.
Ne'er gone so fast,
We're off to Bruges!

Down in the tunnel
Sea breezes we lose,
No sight of a funnel.
We're off to Bruges!

My tingling corpuscles
Tell me the news.
We're now in Brussels
And bound for Bruges!

We're here in the Markt, We're here in the Markt,
Our feelings are huge.
Menu a la carte,
We're here in Bruges!

Would I were in Bruges

[From Hotel Severno, Newport Pagnell to Bruges, 6 May 2017]

... would I were
In Bruges, in Bruges,
Where many feet

Tread cobbled street,
Where gabled squares
Find marv'ling stares,
Where grand canals
Are filled with sails,
Where author's quills
Do pen windmills,
Where centigrade
Invites the shade ...

... as shadows lengthen, penchants strengthen,
What is the time? - 'twould be sublime ...
Now strikes the Markt the hour of three
And there are croissants still for tea!

The Old Vicarage, Grantchester

[From *Café des Westens, Berlin, May 1912* to The Old Vicarage, Grantchester]

“... would I were
In Grantchester, in Grantchester!—
...
Stands the Church clock at ten to three?
And is there honey still for tea?”

Rupert Brooke

<http://www.bartleby.com/232/701.html>

6 Music Festival!?

For the Queen's Coronation in 1953, people would go to the one person on the street who had a TV set and watch it there. In our case we hopped over the fence to Mrs Rose's. Television was for the few. What people did was listen to the radio. There were three different stations. The Home Service was for news, discussion and other talking. The Light Programme was for popular music. The Third Programme was for more highbrow stuff.

6.1 The Light Programme

My Xmas newsletter had it that I would think of a different song each day. Well that hasn't happened. But ...

Prelude

The end of last year I was visiting Derek and took in a few UTube line dances and songs

Line dance: Gypsy Queen

You can choose either the British Grannies and the odd Grandpa version, or the young Californian ladies version

California

<https://www.youtube.com/watch?v=gQwvN1byins>

UK

<https://www.youtube.com/watch?v=OBxFujpCu8Y>

Line dance: Ribbon of Highway

<https://www.youtube.com/watch?v=rRnndN4TsE4>

Line dance: O Sole Mio

<https://www.youtube.com/watch?v=JmiL2hLnPdw>

Song: O Sole Mio

<https://www.youtube.com/watch?v=F1CZgBMQKkE>

... a couple of weeks ago we were in visiting Derek and, given his line dancing and music background, we were recalling various songs from bygone years and singing them.

Week 1

I bought a child's musical keyboard from John Lewis. I got the song sheets for a couple of songs and took it all into Derek and played:

Singin' in the Rain, 1952

<https://www.youtube.com/watch?v=D1ZYhVpdXbQ>

La Mer, 1946

<https://www.youtube.com/watch?v=PXQh9jTww0A>

Week 2

I tried to think what song Derek might like. I thought a trumpet player like Derek would like the lazy:

Summertime ... from Porgy and Bess, 1935

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

I had made the right choice! As I left, I asked Derek what was his request for next week. He mentioned a song from 1930, 'Exactly Like You'. The title didn't mean anything to me.

Week 3

"Exactly Like You" is a [popular song](#), with music written by [Jimmy McHugh](#) and lyrics by [Dorothy Fields](#), and published in 1930. The song was introduced by [Harry Richman](#) and [Gertrude Lawrence](#) in the 1930 Broadway show *Lew Leslie's International Revue* which also featured McHugh and Fields's "[On the Sunny Side of the Street](#)".^[1]

[https://en.wikipedia.org/wiki/Exactly_Like_You_\(song\)](https://en.wikipedia.org/wiki/Exactly_Like_You_(song))

Here are Harry Richman, Louis Armstrong and Nina Seymone.

Harry Richman, 1930

<http://www.whosampled.com/Harry-Richman/Exactly-Like-You/>

Louis Armstrong, 1930

<http://www.whosampled.com/cover/360401/Louis-Armstrong-Exactly-Like-You-Harry-Richman-Exactly-Like-You/>

Nina Simone, 1959

<https://www.youtube.com/watch?v=6KXHJ7ooFNU>

Not really knowing very much at all, I was interested that the first emphasised the voice, the second the band and the third the piano ... but that may be just my lack of knowledge.

6.2 The Third Programme

There should really be contributions here from Isabel Phillips and Julie Lloyd about music events in Berlin and Barcelona ...

Emmanuel Macron on Liszt

Macron: “The incandescence of [Liszt’s] *Années de pèlerinage* remains intact after so many years.”

The music: <https://www.youtube.com/watch?v=Aj2gFk0FoKo>

The news item: <http://www.npr.org/sections/therecord/2017/05/09/527577050/something-you-didnt-know-about-emmanuel-macron-hes-a-pianist>

Dorothy Dorow sings Schreker

The music: <https://www.youtube.com/watch?v=Z9ZBV71msOY>

Obituary: <http://www.telegraph.co.uk/obituaries/2017/05/07/dorothy-dorow-soprano-obituary/>

Dorothy Dorow: https://en.wikipedia.org/wiki/Dorothy_Dorow

Franz Schreker : https://en.wikipedia.org/wiki/Franz_Schreker

Sergei Leiferkus sings Shostakovich

At the start of the book, it is 1941 and Shostakovich is struggling to compose his work on the English poets.

Quigley, Sarah. *The Conductor*. London: Head of Zeuss. 2011.

The music: <https://www.youtube.com/watch?v=tIwXBxFWJoY>

The Stony Stratford Willis Pipe Organ

https://en.wikipedia.org/wiki/Henry_Willis_%26_Sons

The next Friends of Stony Library talk at Stony Stratford Library: Anna Page on Tuesday 6 June at 7 p.m.

The Father Willis pipe organ in St Mary and St Giles Church has a fascinating history which is reflected in the social and economic history of its two homes of Edinburgh and Stony Stratford. Anna will discuss the building, musical use and evolution of the organ, the circumstances which led to its leaving Edinburgh, and the interesting social and cultural parallels between the two church communities that have used it. The organ was built in 1882 and enlarged in 1896 and 1932 by three generations of Henry Willis organ builders. Anna's talk celebrates 50 years of the Willis organ in Milton Keynes during #MK50 year.

Anna Page was the first person to volunteer to raise funds for the restoration of the organ in 2006 and became chair of the Pipe Organ Restoration Action Group. She has led the group, which has evolved into Music for All @ SMSG, through ten years of fund-raising and the three-year Heritage Lottery Fund project that enabled the restoration and associated educational outreach activities to take place. She has greatly enjoyed leading the research into the history of the instrument that has been part of the project. Anna has worked full-time at the Open University for more than 24 years, currently with a Senior Producer role in Open Media and Open Learning.

<http://www.musicforallsmg.org>

David Maxwell's 'Ode to Joy – Environmental' ...

Choir: <https://www.youtube.com/watch?v=XFX8S9aAgvw>

Schiller: https://en.wikipedia.org/wiki/Ode_to_Joy

David Maxwell played a crucial role in the survival of the Conflict Research Society, working as Secretary with the Chair, Cedric Smith, just before Cedric's death in 2002. David was instrumental in securing Jim Bryant as the new Chair. And now much later, the monthly issues of *Commentary* are a branching out from David's CRS Newsletters.

Recently David has been revising 'Ode to Joy':

... updating Schiller's words,

... arranging Beethoven's music for 4 soloists, 6 instrumentalists amplified, and audience participation.

"I read the Centre for Alternative Technology's "Zero Carbon Britain" with delight when it came out. As a retired English teacher and a pianist and choral singer, I was especially pleased with sections 4.6 and 5.8 seeing a role for the Arts.

I have spent the last two years alongside committee work with the Bedfordshire Climate Change Forum, writing alternative words to Beethoven's Choral Symphony which updates Schiller's words and arranges Beethoven's music for 4 soloists, 6 instrumentalists amplified, and audience participation. Here is a taster of the words:

*Schiller in the 1780s rescuing a drowning boy
Crowd-funded to raise his school fees. On a high wrote Ode to Joy.
Saving one lad inspired Schiller. Helping Nature's now our task
Greenhouse gases are the killer. Cutting carbon's what we ask*

*Look for these signs. Where the sun shines, that's a source of energy.
Where the wind blows, stream and tide flows, each a source of energy.
Future energy's electric – not from coal or gas or oil
Their effects cause global warming. World too hot and it will spoil.*

*Schiller said, "Embrace the whole world". Do that with your shopping choice.
Change your energy supplier to a clean one and rejoice.
Think! All rooftops solar-panelled – carbon free 'lectricity
See the wind made visible in turbines turning gracefully.*

Gordon Cree, a 39 year old professional Scottish musician, married to an opera singer, likes my words. He has arranged music for Scottish Opera."

David applied to JRCT for funding but unfortunately was not successful. David would be happy to be in touch with musicians for their reactions ...
... And he promises to sing the whole thing to me when he and I meet up after the election!