



THE KEY THING, ESPECIALLY WITH MUSIC AND STRING PLAYING, IS THAT REAL FEELING COMES FROM INTEGRATION AND ACCURACY.

AS WITH LEARNING TO COPE WITH CLIMATE CHANGE, IT IS A WAR ON ERROR.

**C V Aubrey Meyer**

**Sir Crispin Tickell, former UN Ambassador  
and Director of the Policy Foresight Programme  
James Martin Institute Oxford University**

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**Dr. Julian Salt Director of Climate Solutions**

*"Aubrey Meyer is the most courageous and brilliant climate researcher I have ever met. He is willing to say what other's merely think. He is quite fearless of any audience and the most eloquent of speaker's because he knows that ultimately the concept of Contraction and Convergence [C&C] is indestructible and will in the fullness of time be adopted in some form by the UNFCCC.*

*He has developed his arguments over twenty years with a minimum of funding and has refused to compromise his position in any way for financial gain or glory. He is tireless in his research and quest to understand every nuance of the climate debate. It has been an honour for me to have known and worked with such a brilliant mind and such an honest person as Aubrey. He has much support from very well placed and respectable people and deserves global recognition for his work.*

*He is quite simply a modern-day genius who'll one day be respected for his vision and beliefs. He should be considered for the Nobel Peace prize as his efforts ultimately will save the planet from the ravages of man-induced climate change."*

**UK All Party Parliamentary Group on Climate Change [APPGCC]**

APPGCC commissioned a DVD from Meyer to demonstrate the C&C and support for it. Called *'The Incontestable Truth'* this has been circulated very widely in and beyond the UK.

This All Party Group of MPs went on to nominate Meyer for the Nobel Peace Prize in 1998.

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Aubrey Meyer was born in Bingley YORKS UK, in 1947.

From 1952, he was raised in Cape Town South Africa where at Wynberg Boys' School he was a pupil of the violin and the piano. In his matriculation year he was the leader of the school orchestra, captain of the school sailing team, a member of the rowing team and an accomplished water-skier.

In 1964, he began study at the Music College at Cape Town University for a Bachelor of Music Degree which was awarded in 1968. During this time he became a UCT Sailing 'Blue' for a place result in the South Africa National Sailing Regatta.

Early attempts at composition during this period included a '*Movement for String Sextet*' and a '*Prelude for Orchestra*'. These won him the South African Music Rights Organization (SAMRO) Scholarship for composition with an entitlement to two years further study abroad.

In 1970 in London, at the Royal College of Music, he continued composition study with Phillip Cannon and viola studies with the late Cecil Arronowitz. '*Lila*' his piece for Chamber Orchestra won the International Music Company Prize and his 'Song Cycle' based on poems from '*Gitanjali*' by Tagore won the Stanton Jeffries Music Prize.

To earn a living after leaving college in 1971, he played the viola in various orchestras, by turns as principal viola in the Scottish Theatre Ballet, the Ulster, the Gulbenkian and CAPAB Orchestras.

Composing when time permitted, he conducted the premiere of his Tone Poem '*Kwannon*' in the Nico Malan Opera House in Cape Town in 1978.

A One-Act Ballet '*Exequy*' - a first attempt in this genre - followed and this was finally premiered in Cape Town in 1981. This ballet was well received by the press and was awarded the Nederburg Prize in that year: - reviews at the end of this document. Meyer was awarded a Master of Music degree in composition from University of Cape Town for this work.

In 1980 he returned to London where he continued writing while playing in the Sadlers Wells Royal Ballet and the London Philharmonic Orchestra during the 1980s.

In 1983 '*Choros*' a one-act ballet written in collaboration with David Bintley for the Sadlers Wells Royal Ballet was premiered in London.

It received the '*Evening Standard Award*' and was performed to considerable critical acclaim: - reviews at the end on this document.

In 1988 he was looking for the subject for a musical and came across the story of Chico Mendez and his assassination in the Brazilian Rainforest.

The issues raised - particularly already looming global climate change - diverted him from music to the UK Green Party. Here he co-founded the Global Commons Institute (GCI) in 1990 and a programme to counter the threat based on the founding premise of '*Equity and Survival*'.

From then until the present day, he has devised and run a campaign with the aim of achieving the objective of the United Nations Framework Convention on Climate Change, which is to avoid dangerous rates of global climate change. This has become increasingly influential and likened to '*Ending Global Apartheid*'.

At the request of the Intergovernmental Panel on Climate Change (IPCC) in 1992, he conceived and presented an analysis of '*The Unequal Use of The Global Commons*' to the Policy Working Group of the IPCC which was dubbed '*Expansion and Divergence*'.

In 1995, this analysis became a cause celebre at the UN negotiations. It resulted in a decisive international rejection of the Global Cost Benefit Analysis of Climate Change as conducted by neo-classical economists from the US and the UK, whose methods depended on the unequal valuation of the loss of human life due to climate change.

This was followed by GCI's framework of '*Contraction and Convergence*' (C&C). C&C is a greenhouse gas emissions reconciliation concept which, since its introduction in 1996 has become a central feature of the debate about our common future under conditions of global climate change.

The acknowledgements and advocacy and adoption of the C&C concept, have led to many accolades for Aubrey and this campaign.

A list of these follows along with a list of C&C publications and references.

This year [2008] he was nominated for the Nobel Peace Prize by the UK All Party Parliamentary Group on Climate Change, with whom he has worked closely over the past five years as a strategic advisor.

## AWARDS

### Andrew Lees Memorial Award - 1998

*"Aubrey Meyer, almost single-handedly and with minimal resources, has made an extraordinary impact on the negotiations on the Climate Change Treaty, one of the most important of our time, through his campaign for a goal of equal per capita emissions, which is now official negotiating position of many governments, and is gaining acceptance in developed and developing countries alike."*

### The Schumacher Award - 2000

*"Aubrey Meyer set up his Global Commons Institute (GCI) in 1990, with minimal resources, to campaign to bring the threat of global warming to the attention of the public and to policy makers. For over ten years, with great determination and meticulous attention to scientific detail, he has presented his case counteracting the arguments put forward by corporate interests. Of special significance is his formulation of 'contraction and convergence', a strategy for fairly sharing the rights to emit carbon dioxide worldwide. This is increasingly recognised as the most logical and effective way of preventing climatic catastrophe while promoting justice and equity. It has made an extraordinary impact on the Climate Change Treaty negotiations."*

### A Findhorn Fellowship 2004

*"Aubrey Meyer is a professional violinist who has largely bracketed his music career to address the global challenge of climate change. Having attended the first UN meetings on the subject in the early 90's, he has since fully engaged with the issue and developed the 'Contraction and Convergence' model as an antidote to it. He created and directs the Global Commons Institute in London as a vehicle to advance his formula to virtually all who will listen. He presented it here at the Restore the Earth conference in 2002. Its genius lies in its capacity prospectively to reduce greenhouse emissions by the 60-80% that the UN IPCC (International Panel on Climate Change) say is required to minimise the likely devastating effects of global warming. His views are increasingly endorsed by prominent members of the British establishment. I hope you join me in welcoming Aubrey to the Fellowship and in supporting his remarkable, indeed heroic, initiative. Aubrey Meyer is arguably the world's foremost carbon strategist and to global warming what Michael Moore is to the US electoral saga - a delightful maverick who just might 'save the day'."*

### City of London Life-Time's Achievement Award - 2005

*"From the worlds of business, academia, politics and activism, Aubrey Meyer has made the greatest contribution to the understanding and combating of climate change having led strategic debate or policy formation. In recognition of an outstanding personal contribution to combating climate change at an international level through his efforts to enhance the understanding and adoption of the principle of Contraction and Convergence."*

### Honorary Fellow of Royal Institute of British Architects - 2007

For his challenging and inspirational promotion of environmental issues, in particular his development of the concept of Contraction and Convergence. Architects adopted C&C at RIBA Council in 2006 and asked Aubrey to present C&C at their annual conference in October. There, RIBA's Chairman declared climate change as the dominant agenda for the 21st Century, called for C&C targets and committed RIBA to campaigning for C&C." He was an inspirational speaker at the RIBA's 2006 Annual Conference in Venice and reported the event as follows; *"Meyer, formerly a professional musician, started with a virtuoso performance that was simultaneously moving, terrifying and informative. He played the violin theme to Schindler's List to images of the environmental holocaust he went on to argue that we face."*

### The UNEP FI Global Roundtable Financial Leadership Award - 2007

UNEP FI for the first time recognized executives within the financial services who have contributed in a significant manner to the development of financial ideas, innovative products, institutional change and or the carbon markets themselves through the UNEP FI Carbon Leadership Award. Four executive awards were given for each category of financial services: Banking, Insurance/ Reinsurance, Asset Management/Private Banking and Pension Funds. In addition, an award was given for a representative from civil society who had worked towards the same end. Award winners were selected from a large number of entries by a small group of UNEP FI's long term climate change advisors. The civil society category award for the most impressive commitment and innovative thinking around climate change and the financial sector with the UNEP FI Carbon Leadership Award went to Aubrey Meyer of the Global Commons Institute.

## COMMENTS

### 2002 Michael Meacher, the UK Environment Minister

*"if ever there was an initiative that deserved recognition and support, it is the brilliant and relentless campaign waged by this fiercely independent, creative and apparently tireless individual."*

### 2003 The UN Climate Convention Secretariat

*"Achieving the goal of the climate treaty, inevitably requires contraction and convergence".*

### 2003 The Archbishop of Canterbury

*"C&C appears utopian only if we refuse to contemplate the alternatives honestly."*

### 2003 Sir John Houghton Royal Commission Environmental Pollution

*"Since the formulation of 'Contraction and Convergence', Aubrey Meyer has tirelessly and selflessly argued for and promoted it with great energy and tenacity in scientific, economic and political fora. Admiration is frequently expressed regarding its elegance and simple logic and it has been widely accepted by policy makers and by NGOs as a basis that should underlie the next stage of policy formulation. There is no other proposal in play that meets so many of the required principles and criteria or that has any real chance of succeeding. It is bound to be strongly influential in the crucial round of international negotiations in the FCCC that is about to begin. The personal dedication of Aubrey Meyer, born of a deep concern for global humanity and its future, is what has brought the Contraction and Convergence proposal to the influential position it holds today."*

### In 2003 the Independent on Sunday a UK broadsheet

*[Meyer is] "one of the three most important people in the world."*

### In 2005 a UK Journal the New Statesman

*[Meyer is] "one of the ten people in the world most likely to change it."*

### 2007 UNITAR Seminar

*[Meyer is] "arguably the world's leading carbon strategist" and "the Mandela of Climate Change" for demonstrating the end of global apartheid.*

### 2007 the UK All Party Parliamentary Group on Climate Change

commissioned a DVD from Meyer to demonstrate the C&C argument and support for it. Called *'The Incontestable Truth'* this has been circulated very widely in and beyond the UK. Commendations for Meyer and his work establishing C&C were included in this production.

### 2007 Sir Crispin Tickell, former UN Ambassador

and now the Director of the Policy Foresight Programme James Martin Institute Oxford University: *"Aubrey Meyer has done an amazing job and shown extraordinary persistence and ingenuity in working out a scheme of this kind, and I very much admire him for it. Above all he's laid out a kind of intellectual and legal framework which is what you need if you're going to set global arrangements in place."*

### 2007 Dr. Julian Salt Director of Climate Solutions

*"Aubrey Meyer is the most courageous and brilliant climate researcher I have ever met. He is willing to say what other's merely think. He is quite fearless of any audience and the most eloquent of speaker's because he knows that ultimately the concept of Contraction and Convergence [C&C] is indestructible and will in the fullness of time be adopted in some form by the UNFCCC.*

*He has developed his arguments over twenty years with a minimum of funding and has refused to compromise his position in any way for financial gain or glory. He is tireless in his research and quest to understand every nuance of the climate debate. It has been an honour for me to have known and worked with such a brilliant mind and such an honest person as Aubrey. He has much support from very well placed and respectable people and deserves global recognition for his work. He is quite simply a modern-day genius who will one day be respected for his vision and beliefs.*

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## Some C&C GCI Links

### Publications

<http://www.gci.org.uk/briefings/zew.pdf> [Springer Verlag]  
[http://www.gci.org.uk/briefings/UNFCCC&C\\_A\\_Brief\\_History\\_to1998.pdf](http://www.gci.org.uk/briefings/UNFCCC&C_A_Brief_History_to1998.pdf) [GLOBE]  
[http://www.gci.org.uk/Book/Surviving\\_Climate\\_Change.pdf](http://www.gci.org.uk/Book/Surviving_Climate_Change.pdf) [PLUTO]  
[http://www.schumacher.org.uk/schumacher\\_b5\\_climate\\_change.htm](http://www.schumacher.org.uk/schumacher_b5_climate_change.htm) [Schumacher]

### Briefings

<http://www.gci.org.uk/briefings/ICE.pdf>  
<http://www.gci.org.uk/Endorsements/UNEPFI5f.pdf>  
<http://www.gci.org.uk/briefings/CPI.pdf>  
[www.gci.org.uk/briefings/RSA\\_Occasional\\_Paper.pdf](http://www.gci.org.uk/briefings/RSA_Occasional_Paper.pdf)

### Articles/Interviews

<http://www.gci.org.uk/articles/LEXUS.pdf>  
<http://www.gci.org.uk/articles/React.pdf>  
[http://www.gci.org.uk/articles/New\\_Scientist\\_Interview.pdf](http://www.gci.org.uk/articles/New_Scientist_Interview.pdf)  
[http://www.gci.org.uk/articles/Green\\_Futures\\_CandC.pdf](http://www.gci.org.uk/articles/Green_Futures_CandC.pdf)  
[http://www.gci.org.uk/articles/BMJ\\_Stott.pdf](http://www.gci.org.uk/articles/BMJ_Stott.pdf)  
[http://www.gci.org.uk/articles/Actuary\\_McGuire.pdf](http://www.gci.org.uk/articles/Actuary_McGuire.pdf)  
[http://www.gci.org.uk/articles/British\\_Medical\\_Journal\\_22\\_December\\_2007.pdf](http://www.gci.org.uk/articles/British_Medical_Journal_22_December_2007.pdf)  
[http://www.gci.org.uk/articles/Argus\\_C&C\\_Interview.pdf](http://www.gci.org.uk/articles/Argus_C&C_Interview.pdf)

**COP-3 1997 UNFCCC [Transcript]** - C&C nearly agreed in 1997

[http://www.gci.org.uk/temp/COP3\\_Transcript.pdf](http://www.gci.org.uk/temp/COP3_Transcript.pdf)  
[http://www.gci.org.uk/briefings/AFRICA\\_GROUP.pdf](http://www.gci.org.uk/briefings/AFRICA_GROUP.pdf)

**The United Nations Framework Convention on Climate Change (UNFCCC) administration has said since 2003, "Contraction and Convergence is inevitably required to achieve the objective of the convention": -**

[www.gci.org.uk/UNFCCC/C&C\\_Janos\\_Pasztor\\_UNFCCC.pdf](http://www.gci.org.uk/UNFCCC/C&C_Janos_Pasztor_UNFCCC.pdf)

**A C&C Booklet 13 languages from COP-11 12/2005: -**

<http://www.gci.org.uk/briefings/MONTREAL.pdf>

**Archives covering twenty year history of this campaign: -**

[http://www.gci.org.uk/Archive/Mega\\_Doc\\_1989\\_2004.pdf](http://www.gci.org.uk/Archive/Mega_Doc_1989_2004.pdf)  
[http://www.gci.org.uk/Archive/All\\_2000\\_2007\\_reduced\\_file\\_size.pdf](http://www.gci.org.uk/Archive/All_2000_2007_reduced_file_size.pdf)

**The C&C framework is supported by manifesto commitments from the Welsh Nationalists [Plaid Cymru] and the Scottish Nationalists and the Liberal Democrats and the Greens and the Respect Party.**

[www.gci.org.uk/presentations/RSA\\_C&C\\_G-8\\_Quotes.pdf](http://www.gci.org.uk/presentations/RSA_C&C_G-8_Quotes.pdf)

**Many individual UK Labour Party MPs advocate C&C, some Conservative MPs do too.**

<http://edmi.parliament.uk/EDMi/EDMDetails.aspx?EDMID=29500&SESSION=875>  
<http://edmi.parliament.uk/EDMi/EDMDetails.aspx?EDMID=27350&SESSION=873>  
<http://edmi.parliament.uk/EDMi/EDMDetails.aspx?EDMID=27080&SESSION=873>

**An issue to some is that C&C merely describes generically an 'outcome' of many future aspirational phases of the Kyoto Protocol. This is what the corporations collectively call 'an inadequate patchwork', see slides 20/1 here: -**

[http://www.gci.org.uk/presentations/RSA\\_C&C\\_G-8\\_Quotes.pdf](http://www.gci.org.uk/presentations/RSA_C&C_G-8_Quotes.pdf)

**To cure this very randomness, C&C formally means the structure a of full-term, concentration-target-based framework endowed by GCI from the outset, as accepted for example by DEFRA:**

[www.gci.org.uk/correspondence/Meacher\\_15\\_11\\_02.pdf](http://www.gci.org.uk/correspondence/Meacher_15_11_02.pdf)

and in 2004 by the House of Commons Environmental Audit Committee and result: -

[www.gci.org.uk/correspondence/EAC\\_response\\_GCI\\_300904.pdf](http://www.gci.org.uk/correspondence/EAC_response_GCI_300904.pdf)

**House of Commons Environmental Audit Committee and result 2004: -**

[http://www.gci.org.uk/correspondence/EAC\\_response\\_GCI\\_300904.pdf](http://www.gci.org.uk/correspondence/EAC_response_GCI_300904.pdf)  
[http://www.gci.org.uk/briefings/EAC\\_Final\\_C&C.pdf](http://www.gci.org.uk/briefings/EAC_Final_C&C.pdf)

**C&C briefing to All-Party enquiry into climate-consensus and result May 2006: -**

[http://www.gci.org.uk/briefings/APGCC\\_Evidence\\_single\\_A4\\_pages.pdf](http://www.gci.org.uk/briefings/APGCC_Evidence_single_A4_pages.pdf)  
[http://www.gci.org.uk/briefings/Consensus\\_Report.pdf](http://www.gci.org.uk/briefings/Consensus_Report.pdf)

**The UK House of Commons All Party Parliamentary Group on Climate Change [APPGCC] adopted C&C. A DVD commissioned by the Group presenting Contraction & Convergence was distributed to all UK MPs and Peers. Eminent spokespersons interviewed on the DVD.**

[http://www.gci.org.uk/images/Contraction\\_and\\_Convergence\\_Challen\\_et\\_al.mpg](http://www.gci.org.uk/images/Contraction_and_Convergence_Challen_et_al.mpg)

**C&C Promotional material is here: -**

[http://www.gci.org.uk/Movies/Contraction\\_and\\_Convergence\\_Promo.mpg](http://www.gci.org.uk/Movies/Contraction_and_Convergence_Promo.mpg)

**Key C&C Animation with coupled models/sink-failure here: -**

[http://www.gci.org.uk/Animations/BENN\\_C&C\\_Animation.exe](http://www.gci.org.uk/Animations/BENN_C&C_Animation.exe)

# A MAN FOR ALL SEASONS

FROM HIS LONDON LOUNGE ROOM, CLIMATE CAMPAIGNER AUBREY MEYER MAY JUST SAVE THE WORLD WITH HIS PLAN FOR PER CAPITA GLOBAL CARBON EMISSIONS TARGETS

BY DAVID ADAM | ILLUSTRATION BY PADDY MILLS | PHOTOGRAPHY BY PETER DENCH

THE GLOBAL COMMONS INSTITUTE SOUNDS AS THOUGH IT should be a grand organisation with a fine headquarters. The institute is at the forefront of the fight against the growing threat of global warming and lobbies scientists, the media and politicians to listen to its ideas. It publishes glossy brochures, distributes them at all the key climate events, and its ideas are backed by an impressive roll call of supporters, including presidents and prime ministers.

In fact, the Global Commons Institute is a small association led by one man, working from a plain house in northeast London. That man is Aubrey Meyer, and from his home he has devised the answer to the world's biggest problem. Meyer is not a physicist, economist or green technology guru. He is a musician – a very good one – and his idea to address global warming, called 'Contraction and Convergence' (C&C) is striking a chord across the globe. Britain's *Guardian* newspaper recently named him one of the 50 heroes of the planet and *New Statesman* magazine placed him among the 10 people most likely to change the world.

As awareness of climate change has risen, so has interest in C&C. It sets out a framework to control each country's gas emissions based on the principle that, subject to the overall amount that stabilises the rising concentration of greenhouse gases in the atmosphere (contraction), each person has the right to produce the same quantity each year, wherever they live (convergence).

And as nations struggle to agree a new global treaty to limit carbon emissions that fits all of their respective domestic agendas, Meyer's

idea is increasingly being talked about as the way we should go. Last year, German chancellor Angela Merkel became the latest big-name politician to throw their weight behind a version of it. And the Archbishop of Canterbury said those who thought it Utopian simply hadn't looked honestly at the alternatives.

For the 60-year-old Meyer, such moves vindicate a determined campaign spanning nearly two decades. It's a crusade that began in earnest in 1990 when his then four-year-old daughter turned to him from her cot and asked: 'Daddy, is the planet really dying?' Meyer's response – 'no, don't you worry, we'll sort it out' – illustrates his no-nonsense attitude to the issue. Meyer cares not for political compromises: for him, the existing Kyoto Protocol is a largely ineffective, global deal to regulate carbon pollution, requiring that only rich countries make cuts.

Born in Britain but raised and schooled in apartheid-era South Africa, Meyer is acutely aware of the perils of inequality and of the need for a global agreement to be truly global. 'By definition you can't possibly resolve this situation on a separated basis,' he says. 'Separate development is not sustainable development. Global apartheid doesn't work.'

Instead, Meyer proposes a system of equal-per-capita emissions entitlements that places every citizen in a framework-based market under full-term global emissions control, and keeps below the greenhouse gas concentration target (see 'What is C&C?' on page 47).

Meyer's extraordinary calculating and communication skills have set a standard for the whole debate, although his dogged campaign >>

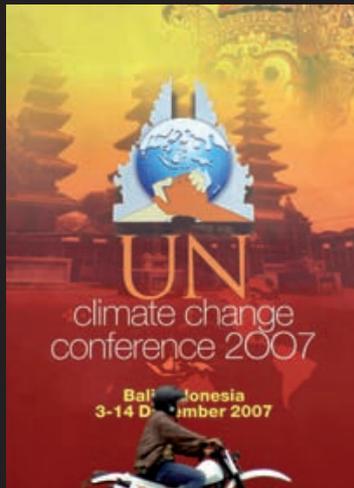




## WHAT IS C&C?

Contraction and Convergence (C&C) starts with the UN objective that global atmospheric concentrations of greenhouse gas cannot be allowed to rise much above the present level. This means that the future total of greenhouse gas emissions to the atmosphere must now be significantly reduced at a rate determined by how quickly we need to stabilise greenhouse gas concentration and hence global temperatures. Working backwards like that gives us a shrinking amount of carbon we can emit overall between now and whenever we would exceed our limit, expressed as an annual, decreasing, carbon ration. This is contraction and it needs to be continually measured in light of the changing relationship between our sources and the declining natural sinks for the gases as revealed in the latest IPCC (Intergovernmental Panel on Climate Change) report.

Treating the atmosphere as a 'global common', C&C would then divide the remaining carbon output available under contraction among every person on the planet. Each would have an equal entitlement in the overall emissions output. Richer countries such as Britain and the US, with higher emissions per person and which emit more than their global share, would converge with poorer nations, such as China and India, who emit less. Subject to the contraction imperative, all nations would agree a future date for their entitlements to become the same per capita. This is the convergence.



Left: Meyer says everyone is integrally part of the environment. Above: C&C was on the agenda at the UN's climate conference in Bali late last year

During this process, as global entitlement decreases, poorer countries would be allowed to increase emissions, while richer nations would be required to reduce them.

Subject to the C&C framework, a market for emissions trading from poorer countries that do not use their full allowance could help richer nations meet their targets, providing revenue for the former. Meyer says: 'It's poetic justice. It corrects fatal poverty and fatal climate change in the same framework.'

has managed to annoy all sides of the green movement in the past. To politicians and economists of the UK and US, the idea had echoes of communism, while hardened eco-warriors disliked the carbon trading aspects of the scheme and thought it too complicated, prescriptive and thus politically unsellable.

Meyer says: 'As soon as you push a per capita argument, people call it communism and as soon as you allow trading, people call you a capitalist. These critics wanted a row and their attitude to me was "who let you in here? Go and get a hair cut." But their dichotomy was a false and discriminatory stitch-up with no understanding of the need for integration and accuracy.'

We talk sitting on the floor of the Global Commons Institute's living room, surrounded by papers that he shuffles through from time to time to illustrate a point, and interrupted by phone calls from his daughter (now 21 and a university student) as she plots her trip home for Christmas.

Has he kept his promise to her to sort out the world? 'We're as close as we ever have been to getting C&C adopted,' he says. 'In that sense, we're probably closer to finding a solution, but in another sense we're in so much deeper trouble now, and a lot of us are beginning to doubt that this problem is really going to be fixed.'

Climate change may have finally hit the mainstream recently, but the science has moved on as well. All the signs suggest we face a greater challenge to limit temperature rise to 2° Celsius than we realised, and that we have less time to slash carbon pollution than we thought. Meanwhile, the international political response drags along at a glacial pace, or perhaps a melting glacial pace.

At United Nations climate talks at the end of last year in Bali, countries pledged to find a way to replace the Kyoto Protocol by 2009. Many people predict that the change in government when George W Bush leaves the White House will smooth the path to such an agreement. But for Meyer, President Bush and the US are not the climate criminals they are often painted. 'Bush acknowledged the problem is real and serious and there are many serious people beyond him.'

'The global apartheid argument is made by the US, who have constantly said that unless China and India are part of the deal then it won't work. However much people want to >>



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vilify the US for being a big, bad bully, in one critical respect [the US has] been right from the word go. The US saw C&C and the US Senate Byrd Hagel Resolution as the same thing and said so in Kyoto.'

And what about the European approach: that developed countries should make unilateral cuts, as specified under Kyoto? 'Kyoto was an attempt to get a process going, but it's essentially picking numbers out of a hat and saying because we're guilty Europeans, we'll reduce our emissions alone. The Americans say we don't care whether we're guilty or not, we want everybody in.'

This is where C&C appeals. 'If you want everybody in, then you must integrate and

have a way of organising it. It has to be global and rights-based. You need to specifically and formally agree to stabilise the atmosphere and agree to move towards equal emissions per capita by a given date.' That gives us a path shared globally where countries either limit or reduce their emissions according to whether their average per capita emissions are below or above the global average.

After studying music at university in South Africa, Meyer returned to Britain, played with the London Philharmonic Orchestra and became a successful composer. In 1988 he turned to environmental politics in a search for answers to questions raised while

researching a musical about Chico Mendes, the assassinated Brazilian rainforest campaigner. A friend, fed up with his newfound curiosity on the environment, suggested he join the Green Party. Two years later, following the question from his daughter that was to change his life, the Global Commons Institute was born.

'From that moment on I thought: this is the end of music,' Meyer says. 'I sold my scores, I sold my viola and used the money to buy a computer to start figuring out how to deal with this issue.'

Has a musical background allowed him to see the problem in a different way? 'The key thing, especially with music and string playing, is that real feeling comes from integration and accuracy.'

It's a war on error. You have to be sure when you're playing that it is the audience that's crying. If you're crying and your tears are all over the fingerboard then you're skidding around and you can't play a damn note. You've got to be ice cold and yet red hot to get it over.'

He adds: 'That's partly the false dichotomy that haunts this debate. There are people who speak this red-hot rhetoric about the defilement of the environment, and others who have this measured commerce approach. Without a really shared discourse, there's error and no possibility of a proportionate response.'

Meyer uses musical metaphors a lot. He compares the difficulty of cutting carbon pollution to learning to play the Sibelius violin concerto – 'It's a tough piece but you learn it; it doesn't learn you.' C&C, like all music, has the disciplined demand of structure: coordination and accuracy in harmony, rhythm and form. He sometimes appears frustrated that words fail to communicate his thoughts and feelings as elegantly as a musical score can.

'Nobody has a choice but to be an environmentalist,' he says. 'We're integrally part of it. It's just that your relationship is determined by how much you surrender to how beautiful [the world around you] is.'

Perhaps drawn by its logic, or driven by the failure of other approaches, Meyer's idea is steadily emerging as a serious political option. In Britain, the Royal Commission on Environmental Pollution and most political parties support Contraction and Convergence. It is the stated basis of policy in India, China and most African countries.

With political recognition has come a raised profile and awards for Meyer, including a City of London lifetime achievement award in 2005, and a UNEP (UN Environment Programme) financial leadership prize last year. Meyer says: 'I've received many awards now. Ten or 15 years ago I would have been proud as hell and worn them on my blazer, but what's most pleasing today is that for all the people in the corridors who have been saying for years that I'm an idiot and rude and have got this really stupid idea, there are now people saying hang on, this is quite a useful argument.' He pauses for a moment. 'But rude? I'll give them that.' □

Visit: [www.gci.org.uk/briefings/ICE.pdf](http://www.gci.org.uk/briefings/ICE.pdf)



## THE NOBEL PEACE PRIZE

After last year's Nobel Peace Prize was awarded to Al Gore and the UN's Intergovernmental Panel on Climate Change for underlining the climate problem, many have said that Aubrey Meyer should be a future recipient of the award for having pioneered and established the solution to it.

But how is the winner decided? Uniquely among the Sweden-based Nobel awards, the Peace Prize is agreed by a Norwegian committee and awarded in Oslo. Alfred Nobel never explained why he wanted this unusual arrangement. The Norwegian parliament appoints a Nobel committee, which invites nominations each year from the great and good around the world, including members of national governments, international courts, university chancellors, leaders of peace institutes and foreign affairs institutes, former winners and

committee members, and professors of social science, history, philosophy, law and theology.

More than a hundred nominations can be received each year. These are supposed to be kept confidential. The committee asks for help from qualified experts in drawing up profiles of the nominees and then decides who, in Nobel's words, has 'done the most or the best work for fraternity between the nations, for the abolition or reduction of standing armies and the holding and promotion of peace congresses.'

Nelson Mandela and FW de Klerk received it for ending South African apartheid through justice without vengeance. With Contraction and Convergence, Meyer could receive it for establishing the template of reconciliation that avoids dangerous rates of climate change by ending 'global apartheid'.



Clockwise: (from above left) Alfred Nobel, who bequeathed funds to establish the eponymous awards; Nobel Peace Prize recipients Nelson Mandela, Al Gore, The Dalai Lama and Mother Theresa

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*HELLO I'm Martin Caton, the Member of Parliament for Gower. Welcome to my website. I hope this will tell you something about me, Gower and my work in Westminster and the constituency and issues that I am giving priority to at present.*

<http://www.martin-caton.co.uk/news?PageId=4ec8ff91-07dd-e3d4-5d47-57362266c35c>



## Martin Nominates Meyer for 2008 Nobel Peace Prize



Gower MP, Martin Caton, together with six other Members of Parliament from across the House, has nominated Aubrey Meyer for the 2008 Nobel Peace Prize.

Martin explained, "Aubrey Meyer may not yet be a household name, here in Britain, or indeed, in many other parts of the world. Yet his work is absolutely central to the global fight against climate change.

"The Nobel Institute recognised how important the climate change challenge is to the future of our planet last year, when it awarded the prize jointly to Al Gore and the Intergovernmental Panel on Climate Change for raising awareness about this environmental threat.

"We believe that it would, now, be right to recognise the man who has done most to provide an international solution to averting the disaster of global warming.

"Aubrey Meyer realised that we need a comprehensive climate change framework if we are to protect our planet. He founded the Global Commons Initiative in 1990 that developed just such a framework known as 'contraction and convergence'.

"This is the logical way forward. The human race reduces its carbon footprint towards zero at the same time as greenhouse gas emissions on a per capita basis in developed and developing nations converge.

"If his initiative was recognised now then it would send exactly the right message to world leaders as we consider what comes after the end of the Kyoto round in 2012."

Martin's fellow nominators of Aubrey Meyer are: -

Colin Challen MP	(Labour),
Peter Ainsworth M P	(Conservative),
Chris Huhne MP	(Liberal Democrat),
Michael Meacher MP	(Labour),
Joan Walley MP	(Labour) and
Tim Yeo MP	(Conservative)

# Fiddling with climate change

Composer and string musician, turned award-winning environmentalist, Aubrey Meyer tells *Nature Climate Change* why he is campaigning for countries to adopt his 'contraction and convergence' model of global development to avoid dangerous climate change.

## ■ What is contraction and convergence?

It is a structured approach to meeting the objective of the United Nations Framework Convention on Climate Change (UNFCCC) to reduce the concentration of greenhouse gases in the atmosphere to a level that is both safe and stable. Contraction refers to the global reduction in greenhouse-gas emissions that is needed to prevent dangerous climate change. Convergence of the world's nations on an equal per-capita entitlement to the global emissions budget is not just the right way to get a global agreement over this contraction, it's the only way.

## ■ Why is the convergence element so crucial?

Without convergence, you will never get contraction. It's as simple as that. The atmosphere is a global commons and everyone has an equal right to emit greenhouse gases into it. If you don't stand for that, you have to defend inequality, which the majority will obviously reject. If that happens, contraction will be too little too late and runaway climate change will be the inevitable outcome. Climate change is an issue of survival, and equity is the price of that survival.

## ■ How did you come to be interested in climate change?

Up until the late 1980s I hadn't cottoned on to green issues at all. I grew up in South Africa, where I studied music at school and university. After I came to the UK in 1968, I spent the next 20 years as a professional musician and composer. I played the viola in the London Philharmonic Orchestra, which was wonderful, and wrote a fair amount of chamber music and two ballet scores. One of these — for the Royal Ballet — did spectacularly well, touring around the world to rave reviews. I was looking for the subject of a musical when I read about the murder of Chico Mendes — a Brazilian social activist trying to protect the Amazon rainforest. It was perfect material for a musical, but the more I researched the issue, the more horrified and dumbstruck I became. I was knocked sideways.

I stopped playing music. I joined the Green Party and, in 1990, with several



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like-minded individuals, founded the Global Commons Institute. I sold my viola, specifically to buy one of the first desktop computers. It was like cutting off an arm, but I didn't think twice about it and I began to use spreadsheets to analyse and visualize climate data.

## ■ How does a professional musician get his head around mathematical modelling of climate change?

A musician never consciously goes round doing mathematics, but music is intensely mathematical. You have a constant length of string at a constant tension. If you halve the length of that string you double the frequency at which it vibrates so you get an octave. If you cut it in thirds you treble the frequency and get an octave and a so-called perfect fifth. This principle, first articulated by Pythagoras, is the entire basis of playing in tune and in time.

## ■ What was the reaction to the contraction and convergence model when you first aired it?

At COP2 [the second Conference of the Parties to the UNFCCC] in Geneva in 1996,

we put up a huge poster-sized graphic of the model — the response was tremendous. It really was. In the run-up to COP3 in Kyoto, I was invited to Washington DC and to Beijing to explain the contraction and convergence model in detail. I was bloody terrified. At that stage, I was still seen as a cute musician, a kind of a drop-out. I didn't know what the hell I was doing in the middle of this manic negotiation except that I was really frightened about the issue. It felt a bit like South Africa under apartheid, with a kind of privileged enclave within a much wider sea of underconsumption.

## ■ What happened in Kyoto in December 1997?

In the final session of negotiations, China, India and the Africa group all came out strongly in favour of contraction and convergence. The United States agreed. At which point, the chairman suspended the meeting out of the blue. So although the Kyoto Protocol paved the way for emissions trading between developed and developing nations, it fell short of addressing the rate for convergence on equal per-capita carbon entitlements. From that day until this, we've had this stupid, fruitless row, with countries simply plucking emission-reduction targets out of a hat. This has simply led to the sum of ill-will and reluctance, and is nothing like the contraction of emissions that's needed to achieve compliance with the UNFCCC objective.

If we pursue that model any further it'll be clear to everybody that we haven't got a hope in hell. The reason for pushing contraction and convergence is not simply because it is nice and it is fair, but because we really don't want to be melted down in a runaway damage curve that will inevitably follow any further disagreement.

## ■ Given this scenario, why has there been so little movement on convergence since the 1990s?

There has been a complete refusal to negotiate over the rate at which nations should converge on equal entitlement. At COP15 in Copenhagen in 2009, the developed nations put forward the Danish Text, which prescribed convergence to equal

"Achieving the goal of the climate treaty [stabilize GHG concentrations] inevitably requires contraction & convergence."

**Joke Waller Hunter UNFCCC Executive Secretary**



"We urgently need a framework, with the necessary targets intelligently applied of the right time-frame that takes us beyond 2012. It can only happen if the US, China and India join with Europe and Japan and others to create such a framework. Will Montreal be another round of division or the sound, rational, science-based unity, which ensures the right legally-binding framework to incentivise sustainable development."

**Tony Blair Former UK Prime Minister**



"Equity guides the route to global ecological recovery. Tradable Emissions Quotas will make matters worse unless set as targets and time-tables for equitable emissions reductions overall. This means convergence at sustainable parity values for consumption on a per capita basis globally."

**Indian Government COP 1 1995**



"When we ask the opinions of people from all circles, many people, in particular the scientists, think the emissions control standard should be formulated on a per capita basis. According to the UN Charter, everybody is born equal, and has inalienable rights to enjoy modern technological civilization."

**China State Counsellor Dr Song Jian, COP 3 1997**



"We support India and propose Contraction & Convergence of global emissions. You cannot talk about trading if there are not entitlements; Contraction & Convergence comes into play when we talk about issues of equity"

**THE AFRICA GROUP Kyoto COP 3 1997**



"It does seem to us that the proposals by India and others who speak to Contraction and Convergence are elements for the future, elements perhaps for a next agreement we may ultimately all seek to engage in."

**UNITED STATES OF AMERICA COP 3 1997**



"A set of common principles must be based on a worldwide binding limit on global emissions consistent with a maximum atmospheric concentration [contraction] with progressive convergence towards an equitable distribution of emissions rights on a per capita basis by an agreed date with across-the-board reductions in emissions rights thereafter."

**European Parliament Resolution 1998**



"Long before the end of the UNFCCC negotiation, GCI presented a proposal on Contraction & Convergence. We all in this room know the model. Level of contraction and timing of convergence should be negotiated on the basis of the precautionary principle. Suggestions for emission reductions are well known and convergence should be achieved at medium term to satisfy legitimacy."

**Raul Estrada – Chairman Kyoto Protocol Negotiations**



Per capita CO2 emissions meet in the middle. "In the final analysis the per capita emissions in emerging economies will meet those of industrialised countries. I cannot imagine the emerging economies will one day be permitted to emit more CO2 per capita than we in the industrialised countries. With this proposal, emerging nations with rapidly expanding economies could be on board the global climate negotiations scheduled for 2009."

**Angela Merkel President of Germany**



"Since 1992, we have fallen too far behind in the fight against global warming. We cannot afford any further delay. Let us start thinking about the post-Kyoto period without further ado. France proposes the convergence of per capita emissions. This principle would durably ensure the effectiveness, equity and solidarity of our efforts."

**President Jaques Chirac, COP 6 2000**



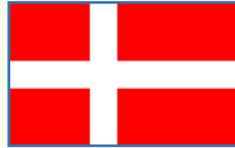


"Sweden strives for a global emissions target converging to equal per capita for all. For poorest countries to continue development requires industrialised countries reduce their emissions."

**Kjell Larsson, Environment Minister 2000**

"Emissions should converge towards a common international emissions target per inhabitant."

**3rd National Climate Communication 2001**



"Contraction & Convergence secures a regime where all nations join efforts to protect our global commons without the risk that any country is deprived of its fair share of the common environmental emission space."

**Svend Auken, Danish Environment Minister 1999**



"We are conscious that in the end, we will have inevitably to evolve towards a more equitable partition between the North and the South of the capacity of our common atmosphere to support greenhouse gases by a gradual convergence of levels of emissions on a per capita basis."

**Olivier Delouze, Belgian Environment Minister 2000**



"If we agree to per capita allowances for all by 2030 [so that global emissions stay below 450 ppm 2<sup>o</sup> global temperature rise] then assigned amounts for Annex One countries would be drastically reduced. However, because all countries would have assigned amounts, maximum use of global emissions trading would strongly reduce the cost of compliance. In such a scenario Industrial Countries would have to do more, but it would be cheaper and easier."

**Jan Pronk COP6 2000 Dutch Environment Minister**



"We do not believe that the ethos of democracy can support any norm other than equal per capita rights to global environmental resources."

**Prime Minister INDIA COP 8 2002**



"To forestall further damage deeper cuts in greenhouse gas emissions than as presently contained in the Kyoto Protocol are urgently required and these must be organised as universal equal entitlements as engraved in the principles of the Contraction & Convergence Framework."

**KENYA GOVERNMENT COP 11 2005**



"Conference recognises the urgent need for action to mitigate climate change given the potentially disastrous consequences for the planet. We pledge to achieve a low carbon emitting society and commit the SNP to supporting the adoption of the internationally-recognised principle of "Contraction and Convergence"."

**Alex Salmond Leader Scottish National Party**



Liberal Democrats argue for the principle of contraction and convergence with the long-term goal of equalising per capita emissions across the world.

**Chris Huhne Liberal democrats**



"I urge the UK Government to provide leadership on climate change by committing itself to Contraction and Convergence as the framework within which future international agreements to tackle climate change are negotiated. I

confirm that the party also supports this pledge."

**Simon Thomas Policy Director Plaid Cymru**



"The Kyoto Protocol says nothing about the future beyond 2012. To address that timescale the Green Party advocates the adoption by the UNFCCC of a framework of Contraction and Convergence (C&C) as the key ingredient in the global political solution to the problem of Climate Change mitigation, and urges the UK and other governments use it as the basis for negotiations in the international fora."

"Any framework which involves radical emission reductions would in practice resemble the Contraction and Convergence approach advocated by the Global Commons Institute. Indeed, in terms of domestic policy aims, the UK Government has already implicitly accepted this approach in adopting the 60% carbon reduction target for 2050; and it is therefore inconsistent not to adopt such an approach internationally. We do not see any credible alternative and none was suggested in evidence to our inquiry. We therefore recommend that the UK Government should formally adopt and promote Contraction and Convergence as the basis for future international agreements to reduce emissions."

**Environmental Audit Committee House of Commons**

"The Government should press for a future global climate agreement based on the Global Commons Institute's "Contraction and Convergence" approach as the international framework within which future international agreements to tackle climate change are negotiated. These offer the best long-term prospect of securing equity, economy and international consensus."

**Royal Commission on Environmental Pollution**

"Contraction & Convergence helps greatly. It is inclusive and makes clear what needs to be achieved. Without such a shared model, there will not be the necessary relationships that create the new and exciting possibilities and the trust for shared action."

**Chris Mottershead Distinguished Advisor Energy & Environment British Petroleum plc**

"Almost any conceivable long-term solution to the climate problem will embody a high degree of contraction and convergence. Atmospheric concentrations of GHGs cannot stabilize unless total emissions contract; and emissions cannot contract unless per capita emissions converge."

**John Ashton UK Climate Ambassador Pew Report**

"The solution to climate change requires a globally equitable model of emissions reductions. The Contraction and Convergence model calls for already large polluting countries to cut their emissions, while newly industrialising countries increase theirs, up to the point that we converge at a sustainable level. That, I hope, will be the ethos that will guide cities around the world."

**Ken Livingstone Mayor of London**

"I admire GCI's Contraction and Convergence model and their now nearly twenty year crusade by to get it established as the international basis of policy to meet the objective of the UN Climate Treaty. Their presentation of it is a dauntingly hard act to follow."

**Nick Butler Director Cambridge Energy Studies**

"I support the concept of Contraction and Convergence as does the Environment Agency"

**Sir John Harman Chairman UK Environment Agency**

"An international agreement is essential. It must be based on the criteria of effectiveness, efficiency and equity. Effectiveness demands a long-term global goal capping global emissions and providing a long-term trajectory for investment in low carbon technologies. This should be at least a halving of global emissions by 2050. A pragmatic principle of equity would require an equalisation of per capita emissions by then. This will require developed countries to cut by around 80%."

**Nicholas Stern UK Government Economist**

". . . there is an emerging proposal here that is important and helpful - a broad long-term commitment to equal per capita emissions. It's a tough proposal. If we take it as part of the progressive agenda to move to that it will be helpful in bringing the world together as it brings the developing countries as part of this effort with an ethical and political commitment, not immediate, but towards convergence in terms of per capita emissions."

**Kemal Dervis Chief Administrator UNDP**





*"Business and government cannot solve the problem alone. Solutions must be global and participation of all major emitters is essential. Companies cannot determine the scale of needed investment without a stabilization threshold for greenhouse gas concentrations. The short-term "patchwork" of the Kyoto Protocol is not cost-effective. A global long term, market-based policy framework in a new partnership with China, India, Brazil, South Africa and Mexico is needed. Emissions rights with common metrics that can be adjusted over time to reflect evolving developments will ensure that a truly global solution to the problem is achieved."*

**G8 Climate Change Roundtable Companies & CEOs**

- ABB, Fred Kindle, CEO
- Alcan, Travis Engen, President and CEO
- BP, John Browne, Group Chief Executive
- British Airways, Martin Broughton, Chairman
- BT, Ben Verwaayen, CEO
- Cinergy, James E. Rogers, Chairman, President & CEO
- Cisco, Robert Lloyd, President, Operations, Europe, M East, Africa
- Deloitte, John Connolly, CEO Global MD, Deloitte, Touche Tohmatsu
- Deutsche Bank, Tessen von Heydebreck, Board of Managing Directors
- E.ON, Burckhard Bergmann, CEO and Member of the Board
- EADS, François Auque, Head of Space Division
- EdF, Pierre Gadonneix, Chairman and CEO
- Eskom, Reuel J. Khoza, Non-Executive Chairman
- Ford, William Clay Ford, Chairman and CEO
- HP, Mark Hurd, President and CEO
- HSBC, Sir John Bond, Group Chairman
- RAO UESR, Anatoly B. Chubais, CEO
- Rio Tinto, Paul Skinner, Chairman
- Siemens, Klaus Kleinfeld, President and CEO
- Swiss Re, Jacques Aigrain, Deputy CEO
- Toyota, Katsuhiko Nakagawa, Vice Chairman
- Vattenfall, Lars G. Josefsson, President and CEO
- Volkswagen, Bernd Pischetsrieder, Chairman

*"A formulation that takes the rights-based approach to its logical conclusion is that of Contraction and Convergence" [GCI]*

**IPCC WG3 Third Assessment Report**

*"The global framework develops so that CO2 concentration in the atmosphere is held at or below 400 ppmv. This long-term climate objective is met by ensuring that short-term targets are linked to and consistent with it, with a gradual transition towards a system of equal per capita rights to use the absorptive capacity of the atmosphere."*

**Stephen Byers MP International Climate Task Force**

*"The Byers report refers to a new basis of equity and common, but differentiated, responsibilities. We need environmental equity with a cap and trade programme. Contraction and Convergence is the name that we must give to it. We must link that battle with the battle against poverty."*

**UK All-Party Parliamentary Group on Climate Change**

*"Policy-makers need consensus on a global framework for climate stability based on principles of precaution and equity such as Contraction and Convergence."*

**UNEP Financial Initiative "**

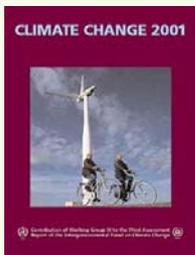
*"To make provision for the adoption of a policy of combating climate change in accordance with the principles of . . .*

*"Contraction and Convergence" and for connected purposes."*

**Colin Challen Chair All-Party Group Climate Change**

*There is no other method of rationally and ethically guiding global reductions in greenhouse gas emissions."*

**Royal Institute of British Architects**



"Contraction and Convergence - The logic is compelling. It is a formula for future global emissions that could, without exaggeration, save the world. Some environment groups such as Greenpeace see the formula as a dead-end. They are profoundly wrong."

**Vote for New Statesman best climate framework**

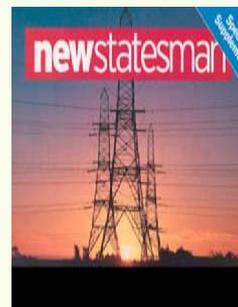
Results January 2008 . . .

2% are saying Kyoto Protocol

81% are saying Contraction and Convergence

12% are saying Kyoto2

5% are saying Greenhouse Development Rights



"A framework involving technology together with social, political and economic change with quantifiable targets is the only way forward. This is why we support the well-known concept of "Contraction and Convergence" (C&C) as proposed by the Global Commons Institute as the basis for the agreement. It satisfies developing countries' demands for equity and US demands that major developing countries such as China and India be involved in any targets."

**Scientists for Global Responsibility**



"The WBGU recommends emissions rights be allocated according to the "Contraction and Convergence" approach."

**German Advisory Council**



"I note what you say about Aubrey Meyer's Contraction and Convergence proposal and I agree that in the fight against climate change C&C makes an important contribution to the debate on how we achieve long-term climate stability taking account of the principles of equity and sustainability."

**Tony Blair UK Prime Minister**



"The Churches can give their backing to Contraction and Convergence publicly and unanimously because at its core, it is just. It appears Utopian only if we refuse to contemplate the alternatives honestly."

**Dr Rowan Williams Archbishop of Canterbury**



"Climate change is likely to impose massive economic costs. The case for being prepared to spend huge resources to limit it is clear as the cost will be repaid many times over by the avoidance of disaster. The developed world does not have the moral right to increase the risk of flooding in Bangladesh. Long term the only sound strategy is that of contraction and convergence cutting greenhouse emissions to the point where they are shared equally, worldwide, on a per capita basis."

**Lord Adair Turner Chairman of Climate Committee**



"We believe contraction and convergence is the best way forward because it recognises that growth in energy use in developing countries will happen. Even if we could achieve a reverse in trends of energy use in developed countries, there is not yet anywhere enough alternative and renewable energy available to get us off of fossil fuels fast enough. For the developing world the situation is even more urgent because that is where most energy intensive industrial and manufacturing activity is heading."

**Tim Smit CEO The EDEN Project**



"An approach receiving significant attention is Contraction and Convergence, the science-based global climate-policy framework proposed by the Global Commons Institute with the objective of realizing safe and stable greenhouse gas concentrations in the atmosphere. It applies principles of precaution and equity, principles identified as important in the UNFCCC but not defined, to provide the formal calculating basis of the C&C framework."

**Bob Watson Former Chairman IPCC**





*"Contraction and Convergence - and its mechanism for financing sustainable development is the only proposal so far which is global, equitable and growth-oriented."*

**Congressman John Porter Chair, GLOBE USA**



*"The idea of 'Contraction and Convergence' is destined to be one of the most important principles governing international relations in the 21st century. It is a powerful ethic that incorporates global justice and sustainability and thereby bridges the dominant concerns of the last century and this one."*

*It is the only way to accommodate the interests, ethical and economic, of developing countries and rich countries in the struggle to find a solution to the most important environmental problem facing the world."*

**Dr Clive Hamilton The Australia Institute**



*"The approach of contraction and convergence presents a new economic development paradigm for the twenty first century and beyond."*

**Mrs. Rungano Karimanzira Chair, Africa Group**



*"The most realistic way to bring about the required reduction in ghg emissions (which will have the combined effect of reducing the damage imposed on the insurance industry and encouraging the transition to renewable energy) is that proposed in the concept of Contraction and Convergence."*

**UK Chartered Insurance Institute**



*"Any political solution to climate change will need to be based on reductions in emissions, otherwise known as contraction. As the climate is*

*owned by no one and needed by everyone, we will also have to move towards equally sharing the atmosphere, known as convergence. Collective survival depends on addressing both."*

**World Disasters Report 2000 International Red Cross/Crescent**

*"The vision of "Contraction and Convergence" combines ecology and equity most elegantly."*

**Heinrich Boell Foundation**

*"The assiduous campaigning over the last decade by the Global Commons Institute - based on its idea of 'contract and converge' - under which the rich nations undertake to reduce emissions even as developing nations are permitted to grow their emissions until such time as per capita*



*emissions converge at the same level, has given this kind of approach some real credibility. So, too, has the readiness of developing countries such as China, Brazil, Indonesia and Argentina to accept emissions targets for their own counties - not least because they are already beginning to feel the impacts of climate change. The real strength of this approach is that it is based upon a trading system, with rich nations needing to purchase additional carbon credits from poorer nations. This appeals a lot to those campaigning for global economic justice: a global trading system in carbon would begin to shift substantial resources from rich countries to poor countries as nations with wasteful, carbon-intensive lifestyles had to purchase additional carbon credits from nations with low-carbon economies."*

**Jonathon Porritt Forum for the Future**



*"There are a number of measures (of varying scale) that can be used to reduce the amount of CO2 that is being emitted, these include: - Contraction and convergence conceived by the Global Commons Institute (GCI) in the early 1990s consists of reducing overall emissions of GHGs to a safe level, 'Contraction', where the global emissions are reduced because every country brings emissions per capita to a level which is equal for all countries, 'Convergence'."*

**BMA 2008 - "How can the impact of climate change be reduced?"**

"Admiration is frequently expressed, regarding the elegance and simple logic of Contraction and Convergence and it has been widely supported by policy makers as a basis that should underlie the next stage of policy formulation."

**Sir John Houghton,  
Former Chair IPCC Working Group One**



"Many governments around the world have accepted the concept of Contraction and Convergence as the only equitable response mechanism to the threat of climate change."

**Grace Akumu  
Director, Climate Network Africa**



In the end, they will need to give much weight to equal per capita rights of emissions. They will need to allow long periods for adjustment towards such positions—within the over-riding requirement to stay within an environmentally responsible global emissions budget. One possible way of bringing these two elements together would be the "contraction and convergence" approach that has been discussed favourably in Germany and India.

**Ross Garnaut  
Climate Strategist Australian Government**



"I not only support the C&C concept, I find it inconceivable that we will avert climate catastrophe without a regime built on some variation of this approach. In the debate about climate change, an impression has been created that the problem is too daunting and complex to prevent. Contraction and Convergence provides a way forward that is both fair and feasible."

**John Ritch  
World Nuclear Association**



"It is absolutely remarkable that the idea of Contraction and Convergence has taken such a firm hold worldwide in such a short space of time."

**Tessa Tennant, Chair Association for Sustainable & Responsible Investment in Asia**



"Contraction and Convergence is an extremely powerful idea and we are moving remorselessly towards it."

**Michael Meacher  
Former UK Environment Minister**

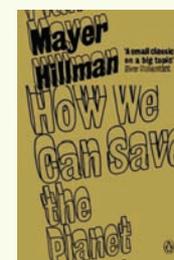


". . . an approach receiving significant attention is Contraction and Convergence [C&C] - a science-based global framework whereby total global emissions are reduced (contraction) to meet a specific agreed target, and the per capita emissions of industrialized and the developing countries converge over a suitably long time period, with the rate and magnitude of contraction and convergence being determined through the UNFCCC negotiating process. It applies principles of precaution and equity; principles identified as important in the UNFCCC but not defined."

**World Bank on Contraction and Convergence**

"A brilliant, imaginative and simple means of reaching a just global agreement on emission reductions is called Contraction and Convergence (C&C). It was first proposed by the Global Commons Institute (GCI) in 1990. Recognition of its unique qualities as a framework for combating climate change has grown at an astonishing rate since that date."

**Mayer Hillman  
Author of How We Can Save the Planet**



"In the light of the long-term perspective two basic requirements must be met: Stabilisation of greenhouse gases in the atmosphere at a level in accordance with the overall objective of the Climate Change Convention. A fair distribution of rights and obligations, by establishing the concept of percapita emission rights for all countries, as proposed in the 'Contraction and Convergence' scheme."

**David Hallman  
World Council of Churches**





*"The Scientific Case for Setting a Long-Term Emission Reduction Target. The framework of this study builds on the RCEP work which uses a contraction and convergence methodology. Contraction and convergence is an international policy framework for dealing with global climate change developed by the London-based Global Commons Institute."*  
**DEFRA on C&C**



*UK building industry leaders wrote to Mr Blair saying this framework-based market is contraction and convergence. "We highlight the point made by the Corporate Leaders Group on Climate Change that getting the right global climate change framework in place is the most urgent action. The Contraction and Convergence Framework, accepted by the UN and by the Royal Commission on Environmental Pollution (amongst others) could well provide a fair structure for the engagement of all nations."*  
**CIBSE and ICE on C&C**



*"The leading model advocating equal per capita emissions rights globally is 'Contraction and Convergence', to which all equity frameworks and proposals owe their existence."*  
**Christian Aid**



*Tearfund wrote to Mr Blair saying this framework-based market is contraction and convergence. "The C&C framework is global, long-term, effective, and, importantly, equitable, without which it would stand no chance of being agreed. From the outset developing countries have a guarantee of equitable allocations and assurance as to when this would happen."*  
**TEARFUND on C&C**



*Contraction & Convergence (C&C) provides a simple framework for globally allocating the right to emit carbon in a way that is consistent with the physical constraints of the biosphere. The approach rests on two simple principles **contraction**: reducing humanity's emissions to a rate that the biosphere can absorb **convergence**: distributing total emissions so that each person ultimately gets the same portion of the 'global budget'. The extension of C&C to all demands on the biosphere is referred to as Shrink & Share.*  
**Jonathon Loh GFN - WWF on C&C**



*"To minimise the danger of global temperature rises exceeding 2°C, a level considered dangerous, a concentration of no more than 400ppm of CO2 in the atmosphere is recommended [Byers Report] . . . and the EU's burden of responsibility to meet this science-based cap should be apportioned on the basis of equal global rights to carbon consumption."*  
**Greenpeace on Byers Report**



*"A recommendation in the Byers report is to build on the global climate change framework of both the UN Framework convention on climate change. It refers to a new basis of equity and common, but differentiated, responsibilities. We need environmental equity with a cap and trade programme. Contraction and convergence is the name that we must give to it. We must link that battle with the battle against poverty."*  
**Colin Challen MP - Byers Report is C&C**



*"Thanks very much for passing on the very nice animation of C&C and risk. One of the things we will be looking at in my newly formed group here at Victoria University in Wellington is burden sharing issues, so the new work on C&C in the UK is of interest to me."*  
**Martin Manning IPCC Technical Support Unit WG1**

*"The commission might have added that contraction and convergence is comprehensive, scientifically based and equitable, unlike the Kyoto Protocol, and that contraction and convergence meets every single objection raised by the United States to Kyoto."*

**Lord Bishop of Hereford**

*Aubrey Meyer has done an amazing job and has shown extraordinary persistence and ingenuity in working out a scheme of this kind, and I very much admire him for it. Above all he's laid out a kind of intellectual and legal framework which is what you need if you're going to see global arrangements in place, and these global arrangements should I believe be fully reflected in the Bill that is now before UK Parliament to regulate Climate Change. It is not the time for half-measures or quarter measures or fiddling with the problem, it's important to lay out the principles and then see how they should best be interpreted to give effect to a common human problem.*

**Sir Crispin Tickell Director of the Policy Foresight Programme James Martin Institute Oxford University**

*Contraction and Convergence includes the identification of a fixed level for stabilisation of greenhouse gas concentrations, and comprehensive global participation. Any framework that incorporates long term targets can offer countries greater certainty about their national targets and provide a clear signal to allow business to plan ahead and help drive investment in new and better technologies.*

**Number 10 Downing Street Website**

*"To make sense of our own actions we need to have an overall direction; contraction and convergence provides that direction."*

**Sunand Prasad President of RIBA**

*"Long-term convergence of per capita emission rates is an important and equitable principle that should be seriously considered in the context of international climate change negotiations."*

**Prime Minister Gordon Brown and Indian Government on C&C**

*Any framework which involves radical emission reductions would in practice resemble the Contraction and Convergence approach advocated by the Global Commons Institute. Indeed, in terms of domestic policy aims, the UK Government has already implicitly accepted this approach in adopting the 60% carbon reduction target for 2050; and it is therefore inconsistent not to adopt such an approach internationally. We do not see any credible alternative and none was suggested in evidence to our inquiry. We therefore recommend that the UK Government should formally adopt and promote Contraction and Convergence as the basis for future international agreements to reduce emissions.*

**Environmental Audit Committee, UK House of Commons 4th Report "The International Challenge of Climate Change"**

*"My colleagues and I at the Royal Commission on Environmental Pollution would like to express our thanks to you and GCI for your remarkable pioneering work in establishing Contraction and Convergence as it is the basis upon which so much of our own work has been established."*

**Sir Tom Blundell; Chairman, RCEP**

*"Contraction and Convergence is the approach with the most merits. It is the buzz phrase now on the negotiator's lips."*

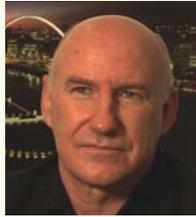
**Sir David King; "The Hot Topic"**





*C&C represents a far greater departure from business as usual than does Kyoto. It is strong medicine for a dire malaise, and as with all strong medicine there are potential side effects. One is that the scheme might eventually do away with world poverty and the north-south divide. Not all aspects of the proposal should displease the conservatives, for by including every human being in existence under its umbrella it obliterates concern about 'free riders' in the developing world that exists under Kyoto.*

**2006 Tim Flannery Author of The Weather Makers**



*When I was RIBA President we looked at Kyoto and saving 60% by 2050 looked a reasonable start. But the thing that attracted about Contraction and Convergence or C&C was that it looked at the global dimension and what is a 'fair share' of carbon emissions for your country. C&C gives a framework within which to address that. We're comfortable supporting C&C and Aubrey Meyer.*

**Jack Pringle Former President of RIBA**



*The fundamental attraction of Contraction and Convergence to me is that it's logically based. It's not based on essentially market issues and arbitrary decisions about how many tons of CO2 permits are going to be allowed. It also doesn't have the risk in my view of one of the real issues with trading that some of the poorer nations and poorer peoples of the world will mortgage their future on a futures market of trading permits.*

**Prof Paul Jowitt President Elect ICE**



*"We need to go to the United Nations and need to say both to our own citizens, our own communities and global communities through the United Nations, C&C is the only real way forward to ensure a healthy future."*

**Angela Mawle CEO Public Health Association**



*"C&C is an excellent virtuous cycle policy tool. There are many benefits to our wellbeing of adopting it. Articulating these benefits, health and other professional groups will offer the hope and inspiration necessary to counter global warming, and so act in accordance with our obligations."*

**Robin Stott Chair Climate and Health Council**



*"The C&C framework is very powerful as it addresses two main issues; one is the scientific basis and the rigour, and the other is our intuitive feeling about the moral needs of our community. Scientifically and in terms of equity it gives us targets, timescale and a transparent fairness that through the convergence enables us to leave our children something better than we have now."*

**Lorna Walker C&C Commissioner**



*We can empower the UN to deliver C&C as a global policy. As climate change is the greatest threat to mankind, what better vehicle through which to get the UN pulling together again. We need to get our own politicians to press our own governments to do this. We need to get our own government to get it delivered by the UN. The great thing about C&C is that it offers the prospect that if you're clever and if you really get to it, you can make this work for you, not just for the world, but for you individually and as a country.*

**Jon Snow Channel Four TV News**



*The benefits of the C&C approach in three words are simplicity, economics and international. With a simple international structure, C&C makes economics kick in which is absolutely fundamental to getting the biggest infrastructural change in human history.*

**Professor Michael Mainelli Director Z/Yen**

## 11. Insurance industry views of C&C

[http://www.gci.org.uk/Animations/BENN\\_C&C\\_Animation.exe](http://www.gci.org.uk/Animations/BENN_C&C_Animation.exe)

*"This animation of C&C and risk is brilliant. The Kyoto Protocol is having negligible effect. If successful, Kyoto will result in a slowdown in the rise of global temperatures by 0.02C to 0.28C. That isn't going to help a great deal and we must decide what comes after Kyoto. It has to have the US, India and China on board. The best hope is a system called contraction and convergence, which works on the premise that everyone on the planet has the right to produce the same amount of greenhouse gas. A level is set for the planet and it is divided by the number of people, so that each country knows how much it can emit per head of population. The overall level is then brought down by agreement."*

Bill McGuire

Director

Benfield Hazard Centre, UCL

*"Even if we do not know the speed or severity of feedback effects, we must consider the probabilities of disastrous acceleration in climate change within very short timescales. Risk assessment is the core activity of the insurance industry, the biggest industry in the world. Assessment of risk must fully include feedback effects. Insurers are the leading experts in risk and risk modeling. C&C demonstrates how this can be done. C&C already has a high profile with insurers. Governments need to listen to the insurance industry and make C&C central to government policy around the world. From a risk management point of view, C&C produces an important assessment of the risks we face from human-induced runaway climate change and how to frame a response at the policy level."*

Prof David Crichton,

Benfield Hazard Centre UCL

*"C&C is so open and transparent. Within the insurance sector it is recognised by CEOs who know they need a long-term global framework within which they can assess their risk. Without C&C they're stuck with a guesswork approach. A stable insurance industry is essential for a stable economy and a stable financial sector. Insurance needs a long term global framework so it can plan for the future. C&C will help bring this about. It needs to be adopted at the highest level, from the UN down through every business sector."*

Dr JULIAN SALT

Director of Climate Solutions

*"Aubrey Meyer's insight into the problem of mitigation of climate change bears the true hallmark of genius: it is simple and robust. His "Contraction and Convergence" model provides a transparent framework that incorporates the clear objective of a safe global level of greenhouse gases, and allocates the responsibility for achieving this internationally with the irresistible logic of equal shares. At the same time, the model recognises the practical need for an adjustment period to permit nations to conform to the new logic and prepare for a climate-friendly economy. It is no doctrinaire solution, but a brilliantly pragmatic and elegant solution."*

Dr Andrew Dlugolecki

Advisory Board Director, Carbon Disclosure Project

Adviser on Climate Change to UNEP Finance Sector Initiative

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### ENQUIRIES ABOUT CARBON COUNTDOWN

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## **EXEQUY Nico Malan Theatre Cape Town**

### **Brilliant score**

*"It was Shaw who said that in music, as in joiner's work, you can take the poorest materials and set the public gaping at them by simply covering them with black cloth and coffin nails. If death therefore is the subject of an artistic exercise; it must be treated with great circumspection and refined feeling in order to meet the ordinary standards of criticism.*

*It has to be exceptional to meet the highest demands of criticism - and of such order is the Aubrey Meyer score for the ballet 'Exequy written upon the death of a friend in the late sixties.*

*Scant notice is given Meyer in the programme. There is no reference to the fact that recently he has been commissioned to write a ballet for Britain's leading company. No matter Meyer's credentials are in his music. This is a well-furnished, brilliant and supple score that is brilliantly mirrored by Furber in his choreography.*

*There is a swirling sea motif in much of the string part, much use of the violas at the more poignant parts of the story. Meyer, who now lives in London, was once principal viola player of the CAPAB Orchestra.*

*The story is simple, but effective: in his fevered imagination the bereaved lover sees his partner come to life. As the partners re-unite there is halycon, tender music. Yet, such is the communicating power from Meyer's pen, we know this instant to be a mirage, a moment of catharsis in the stages of bereavement.*

*This process is brilliantly translated by the psychological development of the score."*

Antoinette Silvestri

### **Meyer's music is "with the living"**

*"AUBREY Meyer's score for Norman Furber's ballet, Exequy contributed in no small way to the impact the work enjoyed recently at the Nico Malan. It was commissioned by Oude Libertas and bears the inscription (quoting Christina Rossetti): "for dear drowned Peter . . . 'sing no sad songs for me' . . . ."*

*That the ballet is concerned with the funereal theme, of recent death is obvious; whether the score captures this thematic content, is less so. Meyer has eschewed conventional funereal music. In this score are no "mournfull sackbuts" of Purcell, nor the vocal grandiloquence of Verdi or Brahms, nor yet the gentle melancholy of Faure. Rather, the overriding concern of the music is with the living, not the dead; anguish and sense of loss, rather than the mood of an In Paradisum or even a Dies Irae.*

*In a ballet which portrays visually the attempt of a bereaved to snatch back to life one departed (in terms of an Indian legend not dissimilar to the Orpheus tradition), the music is mono-charactered in its thrust and less a portrayal of death than of any emotional torment. But this is not to gainsay its effectiveness in the context of the choreography.*

### **Viola solo**

*The core of the score is a viola solo of consummate beauty, to which is danced a haunting pas de deux. The choice of instrument is apt - not merely because, being the first instrument of the composer, he has ensured technically satisfying writing, but also because the instrument has the right timbre for the passionate nature of the conception.*

*Other aspects of the score are perhaps less satisfying. The great pedal-point timpani C sharp crescendo of the opening 20 bars, in slow tempo, is too dominating for the ephemeral quality of the simplistic string and woodwind textures; and the piu moto full orchestra frenzy of the "phantom music", with its cross rhythms of unevenly divided eight-quaver bars, was faintly chaotic in execution.*

*Nonetheless, there are moments of great beauty, too. The horn's announcement of the "man's theme", taken up by other woodwind: the first appearance of the phantoms to the violas' taxing arpeggios: the parting moments, expressed in anguished brass and racing timpani heart-beats; and the chilling string writing as the beloved inexorably moves away - all are effective in construction and execution."*

Gertrude Cooper

## **CHOROS**

**Stephanie Jordan**

**Sadler's Wells Royal Ballet**

**New Statesman 30 September 1983**

***"Aubrey Meyer's music, specially composed, is as crowded with incident, witty and rhythmic; here as elsewhere. The excellent dancers reflect the pleasure that you feel Bintley must have experienced making this ballet."***

*David Bintley's Choros, given its world premiere, cast for nine, copes far better with the stage; but then, a first viewing suggests that this might indeed be Bintley's richest invention to date. Appointed the company choreographer this year, Bintley has made six dances with ancient Greek titles but is unburdened with reference, beyond a whimsical quotation from Arbeau's 16th-century dance manual in the programme: we know nothing of ancient Greek dances and 'there is no need to trouble yourself about them as such manner of dancing is out of date now'.*

*It is as good a starting point as any for an abstract piece. The dances take place within a pristine gymnasium with a white wall-bar surround and elegantly coiled ropes, designed by Terry Bartlett as were also the white and gold tunics and tights. A formal opening and ending that celebrate the symmetry of three trios enclose a variety of moods, among them a subtly phrased, coolly tempered pas de deux for Marion Tait and Michael Batchelor in the Sikinnis, a fast flying Kordax for Sandra Madgwick and three men, a dream-like Emmeleia with its reflections and relationships drawn from stage centre across to the dancers using wall-bars as support at the back, a virtuoso Pyrrhic solo for Roland Price and a white mask. There is more than one reminder of Balanchine here, most clearly the Apollo combination of three Muses and one man and the fan of arabesque legs in the Emmeleia, but also in the Agon recalling, free-hipped style and density of steps in some sections. Bintley has used models and classical forms here to free a formidable choreographic technique, an impressive handling of shapes, rhythms and flow of event. Occasionally he asks the dancers to play cute or showy, thus disguising their material and, probably too, some of his longueurs. The sudden Latin American lapse during the Exodis could be a miscalculation, although Aubrey Meyer's music, specially composed, is as crowded with incident, witty and rhythmic; here as elsewhere. The excellent dancers reflect the pleasure that you feel Bintley must have experienced making this ballet.*

**Exuberant Pleasure JOHN PERCIVAL in on Choros in "Dance and Dancers"**

**Music by Aubrey Meyer**

**Choreography by David Bintley**

**Designs by Terry Bartlett**

**First given Sadler's Wells Royal Ballet Sadler's Wells on 20 September 1983.**

***"Aubrey Meyer (Bradford-born but brought up in South Africa, composer of one previous ballet in Cape Town and various other compositions) has provided a really attractive and fascinating musical base for them. It is vividly scored with lots of bright instrumental colour to underline its always rhythmic but wildly varied sections.***

***Jazzy or hushed, agitated or serene, it has the mixture of impudence, originality, burlesque and vigour that must have made Facade just as startling when that was new.***

CHEEKY beggar! Having let it be announced that his new ballet was based on ancient Greek dances, David Bintley put a quotation from Orchesography (published 1589) in the programme explaining that because of 'the passage of time, the indolence of man or the difficulty of describing them' we actually know nothing about ancient Greek dances; 'besides, there is no need to trouble yourself about them as such manner of dancing is out of date now ... men are such lovers of novelty.'

Well, you cannot blame him for wanting the best of both worlds, and he has ingeniously found a distinctive flavour for Choros by the pretended Greek connexion, while in fact making it bang up to the minute. The individual dances are given Greek names and the action is set in a gymnasium - which Bintley and his designer, Terry Bartlett, pretend to think implied climbing bars round the walls to the Greeks just as it does to us. The Greek athlete idea also allows the men to be dressed mainly in tights coloured like bronzed flesh, over which they wear a few white bands, a codpiece and what might be stockings, leg-armour or a stylised version of a cowhand's leggings.

The first sight of these is disconcerting, and I am still not entirely sure that there is not a tiny hint of sending up machismo, but as I grew used to them I liked them. The women's costumes, short chitons with short draped pieces round the shoulders and a front panel that flaps at the top and resembles a tiny apron below - no, they flap too much for such fast movement as this ballet demands much of the time. Still, the trim bodies, grouped in three trios and surrounded by the high framework of bars, give a pleasant shock of physicality, alert and eager as the curtain rises.

After that, they just dance. Aubrey Meyer (Bradford-born but brought up in South Africa, composer of one previous ballet in Cape Town and various other compositions) has provided a really attractive and fascinating musical base for them. It is vividly scored with lots of bright instrumental colour to underline its always rhythmical but wildly varied sections; jazzy or hushed, agitated or serene, it has the mixture of impudence, originality, burlesque and vigour that must have made Facade just as startling when that was new.

The opening and closing sections of the ballet bring all nine dancers together under the self-explanatory titles of Parados (Parade) and Exodos (Exit). Between whiles, they split up. Roland Price, who acts at times almost like a compere, first introduces Marion Tait and Michael Batchelor. This being the section called Sikinnis (Dances of the Satyr Play), their pas de deux is given an unusual accent by his tendency to catch hold of her by her breast. Later, Lili Griffiths and Tain Webb join in, and the two men bounce Griffiths cheerfully, one to the other. Then the stage is vacated for a while to Price with Clare French and Chenca Williams - less lecherous but still lively.

Price, Webb and Michael O'Hare dance Kordax (Dance of Old Comedy) with Sandra Madgwick - or you might rather say they dance it versus Madgwick, since they spend much of the time carried away by the exuberance of their own up-and-down jumps and little quick batterie, oblivious almost of each other and certainly of her. But she has a splendidly quick, insouciant solo.

Emmleia (Dance of Tragedy) brings a complete change of mood and a little joke, because with different lighting the dancers, behind the bars, use them as their daily exercise barre - so the 'tragedy' in question is the grinding work needed for all this showing off. But having made his point, Bintley does not flog it, and is soon off on another allusive tack instead, since having given himself a cast of one man and three women for this section, he deftly introduces some allusions to Balanchine's Apollo in the way Batchelor partners Tait, French and Williams.

There remains a solo for Price. The almost flat disc he has carried from time to time, which first suggested a Greek theatrical mask, becomes for a moment a discus (quoting one of the most famous of old statues), and then I think perhaps a soldier's little round shield in deference to the dance's title, Pyrrhic (Martial dance - and nothing to do with Pyrrhic victories). This number is very bold and flashing.

Choros lasts almost half an hour, which is long for a one-act all-dancing ballet, but its variety and invention are such that it bowls along and at the end you are sorry it has ended so soon. Bintley is never afraid to stretch his dancers; they all have to work hard, but they have the reward of looking good, at the top of their gifts. Perhaps the fact that all the men have blond hair contributes slightly to the positively sunny effect, but it derives rather more from the sheer zip and energy that everybody puts into the ballet.

The people who complained that Bintley's last creation, *The Swan of Tuonela*, had no steps in it should enjoy themselves this time, and so should those who liked *Swan* for theatricality and originality. The dancing is based entirely on the classical technique, and Bintley's having adopted Balanchine's preferred version of the *pas de chat*, with the leading leg thrown straight out sideways, makes me wonder whether his trip to America earlier this year helped to invigorate his whole approach to it. He makes the dancers use their legs and feet with energetic precision, but the arms and hands are more casually deployed.

There is a sub-text of meaning. When he was starting the ballet, Bintley told me that he wanted to convey the enjoyment he himself gets from dancing - not from his spotlit character roles, but simply from performing steps in a dance. Whether or not it looked good, he said (and indicated that he believed it did not), he had pleasure from it, and wanted to convey that pleasure to an audience. He does, most enjoyably.

**Dazzled By Dance but not quite Greek**  
**David Dougill on Bintley's "Choros"**  
**Sunday Times 25 September 1983.**

**"Aubrey Meyer's specially composed music, which is always rhythmic and takes in lyricism, lushness and mystery as required, here becomes unashamedly raucous."**

"THOROUGHLY modern Bintley", I scribbled in my programme during *Choros*, which the Sadler's Wells Royal Ballet premiered at the Wells on Tuesday. For whatever we expected from David Bintley's new ballet, which takes its title and the names of its six sections from ancient Greek dancing, 'we were in for a big surprise.

The setting of gymnasium is the first witty reference to classical Greece. Terry Bartlett has designed a fine framework of climbing bars and coils of rope which looks stunning in brilliant white, lit with subtle changes by John B. Read; and the dancers of the opening parade ("Parados"), presenting themselves to fanfares and drums; could be the prize troupe of a high-class circus - the men sleek in body-bronze and white leggings, the girls in tunics derived (a bit fussily) from chitons.

From start to finish, we are dazzled with dance: it is astonishing what variety of groupings, of moods and styles, and what sheer energy, Bintley and his excellent cast of nine cram into a mere 30 minutes.

At times the pace seems almost too hectic, but exhilaration is never achieved at the expense of polish. In the section called "Sikinnis" (Dances of the Satyr play), there are grotesque accents in a jazzy dance which fit the title - and Aubrey Meyer's specially composed music, which is always rhythmic and takes in lyricism, lushness and mystery as required, here becomes unashamedly raucous. But Bintley's "headings" are not to be taken too literally. The tricky, bounding and rumbustious "Pyrrhic" Solo for Roland Price is a celebration of dance-athleticism rather than anything warlike.

Many of Bintley's dances are high-spirited and fast, with intricate footwork and soaring jumps – such as the impish passages in "Kordax" (Old Comedy) for Sandra Madgewick with Price, Webb and O'Hare.

But he is equally adept at composing eloquent modern classical pas de deux for Marion Taite and Michael Batchelor (the latter a welcome recruit from the Covent Garden company), whom he uses as his "key couple" in a ballet which, while plotless, allows us tantalising hints of relationships. I saw nothing tragic in "Emmleia"- (tragedy), which begins with "exercises at the barre, but I saw in the beautiful quartet for Batchelor and three girls, Bintley's own tribute to Balanchine's Apollo and the Muses – a potent image in ballet today. Like Balanchine, Bintley is a choreographer who glories in dance, and in his dancers.

**Mary Clarke on Bintley's "Choros"**  
**Guardian 21st September 1983.**

**"It has a commissioned score from Aubrey Meyer which ideally fits Bintley's need for an opening "Parade" four dances of different moods and a concluding section to bring them all together again. It is strong on dance rhythms and theatrically viable."**

David Bintley's new work for Sadler's Wells Royal Ballet is called "Choros" and has a programme note from the famous dance manual by Thoinet Arbeau, the "Orchesographie" of 1589 which reminds us that we know nothing of the dances of ancient Greece and the dances of our father's time are unlike those of today.

What Bintley tells us in his choreography is entirely about the way in which SWRB dancers dance today. It is a happy and affectionate tribute to his colleagues, the young men and girls who are leading the company in 1989.

It has a commissioned score from Aubrey Meyer which ideally fits Bintley's need for an opening "Parade" four dances of different moods and a concluding section to bring them all together again. It is strong on dance rhythms and theatrically viable.

The setting by setting by Terry Bartlett is gymnasium-like, the walls lined with white climbing ladders and a few strands of white rope. The dancers are dressed in white and sunburn colour and the whole ballet is concerned to show them in happy dance contest or, sometimes, tender relationship.

The style of dancing is classical and, of all Bintley's ballets, Choros finds him writing most strongly and positively about the English style of classic dance. He has a good cast, but he uses them with that rare understanding of abilities not before noticed.

It is this gift in a choreographer which makes him such a vital part in the life of his chosen company and it is exciting that Choros should be the first work Bintley has made since being appointed company choreographer to the SWRB in May. All the cast deserve bouquets, especially proud Marion Taite, their ballerina and Michael Betchelor (an invaluable recruit from the Royal Ballet) who dances several sections with her and is glorious in his solo passages.

The other men, the soaring Ian Webb, Roland Price and Michael O'Hare are all quite splendid as are the girls – Lilli Griffiths, Clare French (so elegant) Chenka Williams and Sandra Madgewick (so cheeky). They bring to their dancing above all a marvellous air of enjoyment.

**K Sorley Walker on Bintley's "Choros"**  
**Daily Telegraph, 21st September 1983.**

**"A commissioned score by Aubrey Meyer that is predominantly bright, strident and demanding."**

*David Bintley, has a stimulating range of balletic ideas and "Choros" which was given its premiere by Sadler's Wells last night, is unlike any of his earlier work. It gives the impression that it achieves exactly what he intended but it is an odd and provocative production, often deliberately creating disjointed sequences and distorted movement.*

*He used a commissioned score by Aubrey Meyer that is predominantly bright, strident and demanding and then keeps dance in the ascendancy through choreography that parallels the music with a rapid array of contortions, contractions, unusual curves and angles and staccato changes in direction and tempi. Marion Tait and Michael Batchelor bring classical distinction to the purest and most lyrical section, a smoothly sensitive arrangement for a man and three girls. Roland Price has a clever solo and Sandra Madgwick a number of skimming freestyle entries which she dances with piquancy and precision.*

**Jann Parry on Bintley's "Choros"**  
**Observer, 23st September 1983.**

**"Aubrey Meyer's score with its brilliantly coloured orchestration; altogether a ballet that is a pleasure to watch and to listen to."**

*David Bintley's new work "Choros", for Sadlers Wells Royal Ballet is set, appropriately enough, in a gymnasium. It is a training ballet, giving the young dancers tasks that they cannot, yet, quite accomplish, making them go further and faster than ever before. The Sadlers Wells musicians seem equally stretched by Aubrey Meyer's score with its brilliantly coloured orchestration. Altogether a ballet that is a pleasure to watch and to listen to, and one that is bound to get better with more performances.*

*Terry Bartlett's Set makes the Wells stage look surprisingly spacious. Tall white wall-bars line three sides of the square, offering more opportunities for support than are, in fact, taken up. The arena is kept clear for a series of contests and displays. The title of the ballet and the names of its six sections evoke Greek modes of dancing', but as a quotation from Arbeau's 'Orchesography' (1589) points out, nobody knows what the original dances were like and, in any case, 'there is no need to trouble yourself about them as such manner of dancing, is out of date now.'*

*Ironically, though, Bintley draws on ballet's 'classical' technique' for his inspiration and makes deliberate allusion to Balanchine's neo-classical 'Apollo,' with its apprentice god and attendant muses. The nine dancers are frequently combined in threesomes. A golden trio of young men (Michael O'Hare, Roland Price and Iain Webb) leap in sequence, each trying to outdo the other; when a girl (Sandra Madgwick) intrudes on them, she finds herself thrown around like a rugby ball. Their high spirits are paralleled by a grave and mysterious section for Michael Batchelor and three women (his muses?). Batchelor has a Janus-faced role, for he is also the leading satyr in the Sikkinis dance, literally getting a breast of the action. Marion Tait, to whom the breast belongs, remains cool and unperturbed throughout their jazzy duet. The blaring brass in this section has echoes of Stravinsky, as do the complex rhythms. At other times, the percussion sounds Latin American and the strings imitate Indian sitars. Meyer, like Bintley, rejoices in the freedom provided by our ignorance of early Greek modes of music, as well as dance.*

*The Greeks exercised naked, as the origin of the word 'gymnasium' implies. Terry Bartlett should have kept the dancers as bare as possible. The men's costumes are arresting, with suggestive white leggings over bronze body tights. The women have a matching bronze lapel on their white tunics; but they are required to move at such speed and to be caught in such unexpected places that their draperies are constantly in the way.*

**Clement Crisp on Bintley's "Choros"**  
**Financial Times, 21st September 1983.**

***"The score by Aubrey Meyer, is vividly rhythmic, strong in pulse and shapely in construction and it provides an excellent ground base for a suite of dances that take their title from the antique Greek - Parados, Sikinnis, Kordax, Emmeleia, Pyrrhic, Exodos - but are in every other way brightly new. A fine acquisition to the repertory and must be accounted a great success for choreographer, composer, designer and dancers."***

*The first thing that can be said about David Bintley's "Choros", given its premiere by Sadlers Wells Royal Ballet last night, is that it looks extraordinarily good. Terry Bartlett has designed a paradisaal gymnasium of high-rising parallel bars with doorways on either side with two pendant loops of rope. The cast are handsomely clothed; the four men in versions of gymnasts dress in white and bronze, the five women in white tunic tops with one bronze lapel.*

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*Mr Bintley prefaces the work with a quotation from Arbeau's sixteenth Century Dance Manual, the Orchesography, whose argument is that old dances are lost to us, not least because "men are such lovers of novelty."*

*And novelty, a swiftly joyous sequence of dance, bubbling invention in plotless fashion is the matter of this enjoyable new work. The piece suggests a notable advance in Mr Bintley's command of his craft in the sureness and clarity of the dance image. Whatever the little traces of emotion, the swiftly changing relationships that he contrives amongst his dancers, there is an over-riding sense of unity, a oneness of dynamic tone that unites these sportive and exhibitionist dances.*

*And he is admirably served by his cast, led by Marion Tait, Michael Batchelor and Roland Price. The dance incidents are varied, trios duets quartets and a bravura Pyrrhic solo for Mr Price, crowd one after the other.*

*The impression is at times hectic, as invention floods out, but in its exultant physicality and in the sheer exuberance of step and interpretation "Choros" is exhilarating to watch. It is a tribute to its interpreters - who also include Sandra Madgwick, Clare French, Chenca Williams, Lilli Griffiths, Michael O'Hare and Ian Webb - that it seems exhilarating to dance.*

*There are structural niceties that will become clearer after further evening's viewing, and I note already two mirror quartets, where a buoyant Kordax for a trio of men with Sandra Madgwick is succeeded by the contemplative Emmeleia for the classically ideal Michael Batchelor with three girls that seems like a gloss on Balanchine's Apollo.*

*"Choros" in sum is a fine acquisition to the repertory and must be accounted a great success for choreographer, composer, designer and dancers.*

